



801

GR	2515.5	0.	2515.7	83.	2498.7	217.	2498.7	267.	2505.3	423.	320
GR	2506.2	455.	2500.3	455.	2497.4	475.	2491.8	487.	2490.4	489.	330
GR	2504.6	489.	2504.6	490.	2490.4	490.	2489.9	495.	2490.0	499.	340
GL	2488.0	505.	2488.0	509.	2489.0	515.	2492.2	520.	2495.1	525.	350
GR	2506.4	525.	2508.3	575.	2508.4	625.	2508.3	644.	2508.1	658.	360
GR	2515.2	678.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	370
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	570.00	0.0	0.0	380
X1	0.21	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	390
X2	0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	400
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	570.00	0.0	0.0	410
X1	0.25	16.	476.	527.	1.	1.	1.	0.0	0.0	0.	420
GR	2515.5	0.	2506.7	83.	2498.7	217.	2498.7	359.	2497.5	433.	430
GR	2496.2	476.	2497.9	489.	2488.2	500.	2488.2	516.	2491.8	525.	440
GR	2498.2	527.	2499.1	587.	2500.3	629.	2508.3	644.	2508.1	664.	450
GR	2515.2	678.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	460
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	570.00	0.0	0.0	470
X1	0.25	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	480
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	570.00	0.0	0.0	490
X1	0.27	0.	11.	0.	150.	150.	150.	0.0	0.0	0.	500
NC	0.070	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	510
QT	5.	4780.	8040.	9250.	12850.	9250.	0.	0.	0.	0.	520
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	365.00	0.0	0.0	530
X1	0.55	11.	275.	357.	1320.	1420.	1400.	0.0	0.0	0.	540
GR	2515.9	0.	2502.2	97.	2502.3	275.	2496.1	294.	2491.8	306.	550
GR	2491.8	330.	2495.8	343.	2502.3	357.	2504.4	398.	2508.2	413.	560
GR	2515.7	429.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	570
NC	0.070	0.100	0.040	0.0	0.0	0.0	0.0	0.	0.	0.	580
QT	5.	4770.	8000.	9170.	12730.	9170.	0.	0.	0.	0.	590
ET	0.	0.0	0.0	0.0	0.0	7.11	75.00	135.00	0.0	0.0	600
X1	0.84	22.	88.	154.	1380.	1560.	1520.	0.0	0.0	0.	610
GR	2521.5	0.	2511.5	31.	2511.2	50.	2510.5	72.	2509.2	88.	620
GR	2499.9	95.	2497.4	105.	2497.4	138.	2500.0	149.	2506.9	154.	630
GR	2508.3	167.	2508.9	180.	2512.5	202.	2516.0	216.	2516.6	228.	640
GR	2517.0	233.	2517.6	265.	2517.1	307.	2517.7	325.	2518.3	351.	650
GR	2519.3	364.	2521.3	399.	0.0	0.	0.0	0.	0.0	0.	660
NC	0.080	0.090	0.040	0.0	0.0	0.0	0.0	0.	0.	0.	670
QT	5.	4760.	770.	9080.	12590.	9080.	0.	0.	0.	0.	680
ET	0.	0.0	0.0	0.0	0.0	7.11	80.00	135.00	0.0	0.0	690
X1	1.16	19.	92.	163.	1460.	1460.	1440.	0.0	0.0	0.	700
GR	2526.0	0.	2521.5	15.	2515.8	45.	2513.6	68.	2513.9	92.	710
GR	2505.9	107.	2503.5	118.	2503.5	148.	2505.9	157.	2509.2	166.	720
GR	2510.5	210.	2512.4	236.	2515.2	250.	2517.0	263.	2517.3	266.	730
GR	2520.7	271.	2521.5	287.	2532.5	292.	2534.6	308.	0.0	0.	740
NC	0.090	0.070	0.040	0.0	0.0	0.0	0.0	0.	0.	0.	750
QT	5.	4750.	7940.	9000.	12440.	9000.	0.	0.	0.	0.	760
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	770

C01

X1	1.45	24.	215.	278.	1340.	1340.	1360.	0.0	0.0	0.	780
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	790	
GR 2527.1	117.	2517.0	142.	2514.4	162.	2512.2	207.	2511.5	215.	800	
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	810	
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	820	
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	830	
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	840
X1	1.45	24.	185.	295.	40.	40.	40.	0.0	0.0	0.	850
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2525.0	2518.0	0.	860
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	870	
GR 2527.1	117.	2517.0	142.	2513.2	185.	2512.2	207.	2511.5	215.	880	
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	890	
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	900	
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	910	
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	920
X1	1.45	31.	195.	300.	1.	1.	1.	0.0	0.0	0.	930
BT	15.0	35.0	2527.9	0.0	170.0	2527.8	0.0	185.0	2527.6	0.0	940
BT	165.0	2527.1	2534.8	220.0	2527.0	2524.3	260.0	2526.0	2523.2	300.0	950
BT	2524.0	2521.4	300.0	2524.0	0.0	321.0	2523.0	0.0	371.0	2520.0	960
BT	0.0	392.0	2519.3	0.0	413.0	2519.3	0.0	427.0	2526.0	0.0	970
BT	443.0	2530.6	0.0	459.0	2533.4	0.0	0.0	0.0	0.0	0.0	980
GR 2530.4	0.	2527.9	33.	2527.8	170.	2527.7	182.	2524.8	185.	990	
GR 2523.4	185.	2517.0	189.	2513.8	199.	2512.1	215.	2511.5	215.	1000	
GR 2509.3	220.	2524.4	220.	2524.3	222.	2509.0	222.	2507.6	230.	1010	
GR 2507.0	240.	2507.0	250.	2507.8	260.	2523.3	260.	2523.2	262.	1020	
GR 2507.9	282.	2508.2	264.	2518.9	300.	2524.0	300.	2523.0	321.	1030	
GR 2520.0	371.	2519.3	392.	2519.3	413.	2526.0	427.	2527.6	443.	1040	
GR 2533.4	459.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	1050	
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	1060
X1	1.45	0.	0.	0.	30.	30.	7.	0.0	0.0	0.	1070
X2	0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	1080
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	1090
X1	1.45	24.	185.	295.	1.	1.	1.	0.0	0.0	0.	1100
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2527.0	2520.0	0.	1110
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	1120	
GR 2527.1	117.	2517.0	142.	2513.2	185.	2512.2	207.	2511.5	215.	1130	
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	1140	
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	1150	
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	1160	
ET	0.	0.0	0.0	0.0	0.0	7.11	175.00	350.00	0.0	0.0	1170
X1	1.45	24.	215.	278.	40.	40.	40.	0.0	0.0	0.	1180
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	1190	
GR 2527.1	117.	2517.0	142.	2514.4	162.	2512.2	207.	2511.5	215.	1200	
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	1210	
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	1220	
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	1230	
MC	0.070	0.090	0.040	0.0	0.0						1240
QT	5.	4745.	7910.	8930.	12350.	8930.	0.	0.	0.	0.	1250

D01

001

ET	0.	0.0	0.0	0.0	0.0	7.11	140.00	290.00	0.0	0.0	1270
X1	1.70	31.	227.	278.	1300.	1300.	1330.	0.0	-2.30	0.	1270
GR 2536.8	0.	2534.5	20.	2532.1	30.	2530.1	33.	2529.2	43.	1280	
GR 2527.7	59.	2525.1	74.	2519.9	96.	2519.9	96.	2519.2	101.	1290	
GR 2518.0	111.	2518.5	129.	2519.3	143.	2517.9	166.	2519.2	180.	1300	
GR 2519.9	146.	2518.3	197.	2518.0	211.	2517.8	227.	2516.9	232.	1310	
GR 2514.2	234.	2512.6	245.	2512.6	255.	2512.6	265.	2514.2	275.	1320	
GR 2516.6	278.	2516.6	290.	2529.0	299.	2577.2	314.	2539.2	328.	1330	
GR 2541.1	335.	0.0	0.	0.0	0.	0.	0.	0.0	0.	1340	
NC 0.070	0.090	0.040	0.0	0.0	0.	0.	0.	0.	0.	1350	
QT	5.	4740.	7900.	8900.	12300.	8900.	0.	0.	0.	1360	
ET	7.	0.0	0.0	0.0	0.0	7.11	140.00	0.00	0.0	0.0	1370

X1	1.78	29.	227.	278.	360.	360.	360.	0.0	0.0	0.	1380
GR 2536.8	0.	2534.5	20.	2532.1	30.	2530.1	33.	2529.2	43.	1390	
GR 2527.7	59.	2525.1	74.	2519.9	96.	2519.2	101.	2518.0	111.	1400	
GR 2518.3	129.	2519.3	143.	2517.9	166.	2519.2	180.	2519.9	185.	1410	
GR 2518.0	197.	2518.0	211.	2517.8	227.	2516.9	232.	2514.2	234.	1420	
GR 2512.6	245.	2512.6	255.	2512.6	265.	2514.2	275.	2516.6	278.	1430	
GR 2516.6	290.	2519.0	297.	2521.3	350.	2537.0	377.	0.0	0.	1440	
ET	0.	0.0	0.0	0.0	0.0	7.11	140.00	0.00	0.0	0.0	1450

X1	1.78	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	1460
X3	0.	0.0	0.0	0.	0.0	0.	0.0	2522.5	2520.0	0.	1470
SB	1.25	1.60	3.00	0.	52.00	2.00	475.00	0.0	2513.0	2513.0	1480
ET	0.	0.0	0.0	0.0	0.0	7.11	140.00	0.00	0.0	0.0	1490

X1	1.78	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	1500
X2	0.	0.0	1.	2522.5	2524.7	0.0	0.	0.0	0.0	0.	1510
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2525.4	2520.0	0.	1520
BT	11.0	0.0	2536.8	0.0	20.0	2534.5	0.0	29.0	2532.4	0.0	1530
BT	215.0	2525.4	0.0	225.0	2525.3	0.0	225.0	2527.0	0.0	282.0	1540
BT	2526.2	0.0	282.0	2524.8	0.0	292.0	2524.3	0.0	410.0	2525.5	1550
BT	0.0	574.	2528.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1560
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	650.00	0.0	0.0	1570

X1	1.78	34.	483.	534.	40.	40.	40.	3.0	-0.50	0.	1580
GR 2537.9	0.	2532.9	20.	2528.3	38.	2525.7	61.	2523.0	87.	1590	
GR 2522.9	139.	2524.7	204.	2523.6	280.	2521.7	361.	2522.3	390.	1600	
GR 2522.3	422.	2522.4	454.	2522.4	476.	2521.9	483.	2517.0	492.	1610	
GR 2513.1	500.	2513.1	510.	2513.1	520.	2517.0	528.	2522.4	534.	1620	
GR 2521.4	545.	2520.9	567.	2520.5	610.	2520.5	650.	2520.6	673.	1630	
GR 2522.4	699.	2526.1	735.	2529.7	757.	2535.1	771.	2533.8	785.	1640	
GR 2534.4	790.	2534.1	810.	2533.2	822.	2542.1	832.	0.0	0.	1650	
NC 0.070	0.070	0.040	0.0	0.0	0.	0.	0.	0.	0.	1660	
QT	5.	4600.	7800.	8850.	12100.	8850.	0.	0.	0.	0.	1670
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	650.00	0.0	0.0	1680

X1	1.95	0.	0.	0.	810.	770.	810.	0.0	0.50	0.	1690
NC 0.070	0.070	0.040	0.0	0.0	0.0	0.	0.	0.	0.	0.	1700
QT	5.	4300.	7640.	8770.	12040.	8770.	0.	0.	0.	0.	1710
ET	0.	0.0	0.0	0.0	0.0	7.11	300.00	900.00	0.0	0.0	1720

E01

X1	2.19	42.	577.	628.	1260.	1260.	1280.	0.0	0.0	0.	1730
GR	2550.5	0.	2546.0	15.	2538.8	34.	2534.5	18.	2531.4	71.	1740
GR	2529.5	96.	2528.8	110.	2528.5	159.	2528.0	191.	2527.8	232.	1750
GR	2527.8	245.	2529.1	264.	2528.8	288.	2528.3	329.	2528.1	384.	1760
GR	2527.7	425.	2527.1	442.	2528.7	451.	2528.7	455.	2528.7	476.	1770
GR	2526.9	491.	2526.6	515.	2526.6	539.	2527.6	546.	2527.6	558.	1780
GR	2525.9	577.	2524.4	583.	2519.3	590.	2519.3	600.	2519.3	610.	1790
GR	2524.4	619.	2525.9	628.	2525.4	667.	2526.3	718.	2526.4	821.	1800
GR	2526.7	908.	2529.7	971.	2533.1	1035.	2536.9	1071.	2544.1	1110.	1810
GR	2549.1	1151.	2540.4	1157.	0.0	0.	0.0	0.	0.0	0.	1820
QT	5.	4270.	750.	8725.	11950.	8725.	0.	0.	0.	0.	1830
NH	5.	0.070	750.	0.040	810.	0.060	1180.	0.070	1270.	0.080	1840
NH	1550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	1850
ET	0.	0.0	0.0	0.0	0.0	7.11	650.00	1300.00	0.0	0.0	1860

X1	2.32	28.	756.	810.	200.	640.	640.	0.0	0.0	0.	1870
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	1880
GR	2528.5	656.	2528.9	743.	2525.0	756.	2523.4	764.	2523.4	788.	1890
GR	2528.5	810.	2528.3	847.	2528.3	885.	2528.7	953.	2530.1	1071.	1900
GR	2530.8	1180.	2525.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	1910
GR	2524.0	1233.	2524.8	1250.	2531.7	1270.	2531.8	1286.	2531.8	1336.	1920
GR	2533.8	1396.	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	1930
NH	5.	0.070	756.	0.040	796.	0.060	1200.	0.070	1250.	0.080	1940
NH	1550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	1950
ET	0.	0.0	0.0	0.0	0.0	7.11	650.00	1300.00	0.0	0.0	1960

X1	2.32	32.	756.	796.	1.	1.	1.	0.0	0.0	0.	1970
BT	16.0	444.0	2529.0	0.0	547.0	2528.8	0.0	656.0	2528.5	0.0	1980
BT	756.0	2529.0	0.0	756.0	2529.0	2528.0	796.0	2528.7	2527.6	796.0	1990
BT	2528.7	0.0	847.0	2528.3	0.0	885.0	2528.3	0.0	953.0	2528.7	2000
BT	0.0	1071.0	2530.1	0.0	1200.0	2531.0	0.0	1200.0	2531.0	2529.9	2010
BT	1250.0	2531.7	2529.7	1250.0	2531.7	0.0	1286.0	2531.8	0.0	0.0	2020
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	2030
GR	2528.5	656.	2529.0	756.	2525.0	756.	2523.4	764.	2523.4	788.	2040
GR	2524.8	796.	2528.7	796.	2528.3	847.	2528.3	885.	2528.7	953.	2050
GR	2530.1	1071.	2531.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	2060
GR	2523.5	1224.	2529.8	1224.	2529.8	1226.	2523.6	1226.	2524.0	1233.	2070
GR	2524.8	1250.	2531.7	1250.	2531.8	1286.	2531.8	1336.	2533.8	1396.	2080
GR	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	0.0	0.	2090
ET	0.	0.0	0.0	0.0	0.0	7.11	650.00	1300.00	0.0	0.0	2100

X1	2.32	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	2110
X2	0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	2120
NH	5.	0.070	743.	0.040	810.	0.060	1180.	0.040	1270.	0.080	2130
NH	1550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	2140
ET	0.	0.0	0.0	0.0	0.0	7.11	650.00	1300.00	0.0	0.0	2150

X1	2.32	28.	756.	810.	1.	1.	1.	0.0	0.0	0.	2160
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	2170
GR	2528.5	656.	2528.9	743.	2525.0	756.	2523.4	764.	2523.4	788.	2180
GR	2528.5	810.	2528.3	847.	2528.3	885.	2528.7	953.	2530.1	1071.	2190
GR	2510.0	1180.	2525.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	2200
GR	2524.0	1233.	2524.8	1250.	2531.7	1270.	2531.8	1286.	2531.8	1336.	2210
GR	2533.8	1396.	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	2220
ET	0.	0.0	0.0	0.0	0.0	7.11	650.00	1300.00	0.0	0.0	2230

F01

QT	5.	4200.	7500.	8700.	11900.	8700.	0.	0.	0.	0.	2240
X1	2.40	0.	0.	0.	500.	400.	500.	0.0	0.0	0.	2250
NC	0.050	0.050	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2260
ET	0.	0.0	0.0	0.0	0.0	7.11	50.00	740.00	0.0	0.0	2270
X1	2.40	13.	330.	550.	40.	40.	40.	0.0	-10.00	0.	2280
GR	2572.6	24.	2567.4	106.	2564.6	130.	2561.5	330.	2561.5	550.	2290
GR	2565.3	615.	2567.1	650.	2569.7	750.	2571.0	850.	2571.0	950.	2300
GR	2569.8	1050.	2569.4	1150.	2570.0	1218.	0.0	0.0	0.0	0.	2310
SB	1.25	1.60	3.00	0.	1.00	0.01	0.10	0.0	2551.5	2551.5	2320
ET	0.	0.0	0.0	0.0	0.0	7.11	50.00	740.00	0.0	0.0	2330
X1	2.40	0.	0.	0.	30.	30.	30.	0.0	10.00	0.	2340
X2	0.	0.0	1.	2551.6	2561.5	0.0	0.	0.0	0.0	0.	2350
X5	5.	2565.00	2566.50	2566.70	2567.60	2566.70	0.0	0.0	0.0	0.0	2360
BT	37.0	27.0	2572.6	0.0	108.0	2567.4	0.0	330.0	2567.4	0.0	2370
BT	330.0	2567.4	2565.6	359.0	2567.4	2565.6	359.0	2567.4	0.0	361.0	2380
BT	2567.4	0.0	361.0	2567.4	2565.6	391.0	2567.4	2565.6	391.0	2567.4	2390
BT	0.0	393.0	2567.4	0.0	393.0	2567.4	2565.6	421.0	2567.4	2565.6	2400
BT	421.0	2567.4	0.0	423.0	2567.4	0.0	423.0	2567.4	2565.6	456.0	2410
BT	2567.4	2565.6	456.0	2567.4	0.0	458.0	2567.4	0.0	458.0	2567.4	2420
BT	2565.6	488.0	2567.4	2565.6	488.0	2567.4	0.0	488.0	2567.4	0.0	2430
BT	488.0	2567.4	2565.6	520.0	2567.4	2565.6	520.0	2567.4	0.0	522.0	2440
BT	2567.4	0.0	522.0	2567.4	2565.6	550.0	2567.4	2565.6	550.0	2567.4	2450
BT	0.0	550.0	2567.1	0.0	750.0	2569.7	0.0	850.0	2571.0	0.0	2460
BT	930.0	2571.0	0.0	1050.0	2569.8	0.0	1150.0	2569.4	0.0	1218.0	2470
BT	2570.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2480
ET	0.	0.0	0.0	0.0	0.0	7.11	10.00	750.00	0.0	0.0	2490
QT	5.	5150.	8300.	9900.	13350.	9900.	0.	0.	0.	0.	2500
X1	2.40	6.	10.	1240.	10.	10.	10.	0.0	0.0	0.	2510
GR	2580.0	0.	2562.0	10.	2560.0	10.	2560.0	1240.	2562.0	1240.	2520
GR	2580.0	1250.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2530
NC	0.050	0.050	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2540
QT	5.	5000.	8160.	9810.	13190.	9810.	0.	0.	0.	0.	2550
ET	0.	0.0	0.0	0.0	0.0	7.11	35.00	425.00	0.0	0.0	2560
X1	3.23	16.	41.	391.	4180.	4180.	4180.	0.0	0.0	0.	2570
GR	2579.9	0.	2577.4	11.	2574.5	23.	2570.4	31.	2566.3	36.	2580
GR	2565.0	41.	2560.2	50.	2553.0	55.	2555.0	375.	2560.2	380.	2590
GR	2563.8	391.	2566.6	439.	2570.9	474.	2576.1	502.	2580.4	524.	2600
GR	2581.9	532.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2610
NC	0.080	0.080	0.035	0.1	0.5	0.0	0.0	0.0	0.0	0.0	2620
QT	5.	5040.	8090.	9760.	13100.	9760.	0.	0.	0.	0.	2630
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	310.00	0.0	0.0	2640
X1	3.69	29.	168.	306.	2200.	2200.	2200.	0.0	0.0	0.	2450
GR	2579.8	41.	2572.6	83.	2574.2	118.	2573.5	121.	2570.9	181.	2660
GR	2571.4	188.	2566.3	195.	2561.8	200.	2560.8	200.	2559.0	204.	2670
GR	2554.6	209.	2553.3	218.	2553.0	230.	2552.8	240.	2553.0	250.	2680
GR	2556.0	270.	2557.8	280.	2558.3	290.	2559.8	295.	2561.0	302.	2690
GR	2561.5	305.	2561.8	305.	2562.6	306.	2562.5	376.	2569.9	393.	2700
GR	2570.4	400.	2570.4	448.	2577.8	500.	2579.8	500.	0.0	0.	2710

601

NC	0.080	0.080	0.040	0.1	0.5							2720
QT	5.	5030.	8070.	9740.	13080.	9740.	0.	0.	0.	0.	0.	2730
ET	0.	0.0	0.0	0.0	0.0	7.11	285.00	410.00	0.0	0.0	0.0	2740

X1	3.81	24.	290.	447.	600.	570.	560.	0.0	0.0	0.	2750
GR	2573.2	1.	2572.0	50.	2566.9	265.	2565.1	290.	2564.2	301.	2760
GR	2562.0	302.	2559.1	307.	2559.1	313.	2557.4	320.	2557.5	322.	2770
GR	2558.0	328.	2558.4	343.	2556.8	351.	2556.9	353.	2560.5	358.	2780
GR	2559.8	368.	2562.0	383.	2564.9	384.	2565.2	396.	2565.8	407.	2790
GR	2566.7	447.	2567.4	498.	2572.0	600.	2575.0	650.	0.0	0.	2800
ET	0.	0.0	0.0	0.0	0.0	7.11	285.00	410.00	0.0	0.0	2810

X1	3.81	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	2820
SB	1.25	1.60	3.00	0.	85.00	10.00	800.00	0.42	2556.9	2556.9	2830
ET	0.	0.0	0.0	0.0	0.0	7.11	285.00	410.00	0.0	0.0	2840

X1	3.81	0.	0.	0.	60.	60.	60.	0.0	0.0	0.	2850
X2	0.	0.0	1.	2567.0	2571.8	0.0	0.	0.0	0.0	0.	2860
BT	9.0	1.0	2573.2	0.0	50.0	2572.0	0.0	200.0	2571.8	0.0	2870
BT	290.0	2571.8	0.0	290.0	2573.2	0.0	446.0	2573.2	0.0	446.0	2880
BT	2571.8	0.0	600.0	2572.0	0.0	650.0	2575.0	0.0	0.0	0.0	2890
ET	0.	0.0	0.0	0.0	0.0	7.11	290.00	415.00	0.0	0.0	2900

X1	3.81	13.	332.	395.	20.	20.	20.	0.0	0.0	0.	2910
GR	2585.0	30.	2580.0	90.	2570.0	290.	2565.0	310.	2563.5	332.	2920
GR	2556.2	350.	2556.2	379.	2564.0	395.	2565.0	405.	2570.0	435.	2930
GR	2571.9	500.	2571.7	560.	2579.0	600.	0.0	0.	0.0	0.	2940
NC	0.120	0.120	0.045	0.0	0.0						2950
QT	5.	5020.	8050.	9730.	13050.	9730.	0.	0.	0.	0.	2960
ET	0.	0.0	0.0	0.0	0.0	7.11	225.00	355.00	0.0	0.0	2970

X1	3.97	26.	276.	350.	780.	760.	740.	0.0	0.0	0.	2980
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2570.0	185.	2990
GR	2565.0	260.	2564.0	276.	2559.2	276.	2558.8	278.	2559.8	293.	3000
GR	2559.2	294.	2558.8	296.	2558.8	299.	2562.2	302.	2561.8	306.	3010
GR	2560.8	310.	2560.5	320.	2560.4	321.	2558.8	324.	2558.8	325.	3020
GR	2561.9	327.	2558.8	328.	2558.8	350.	2564.0	350.	2565.0	370.	3030
GR	2581.9	420.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	3040
ET	0.	0.0	0.0	0.0	0.0	7.11	225.00	355.00	0.0	0.0	3050

X1	3.97	33.	276.	351.	40.	40.	40.	0.0	0.0	0.	3060
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2571.0	250.	3070
GR	2571.5	276.	2559.2	277.	2558.8	278.	2558.8	293.	2559.2	294.	3080
GR	2558.8	296.	2558.8	299.	2562.2	300.	2571.2	300.	2571.2	302.	3090
GR	2562.2	302.	2561.8	306.	2560.8	310.	2560.3	320.	2560.4	321.	3100
GR	2558.8	324.	2558.8	325.	2571.2	325.	2571.2	327.	2561.9	327.	3110
GR	2558.8	328.	2558.8	350.	2570.2	351.	2570.1	370.	2571.8	375.	3120
GR	2572.2	385.	2572.9	395.	2581.9	420.	0.0	0.	0.0	0.	3130
ET	0.	0.0	0.0	0.0	0.0	7.11	225.00	355.00	0.0	0.0	3140

X1	3.97	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	3150
ET	0.	0.0	0.0	0.0	0.0	7.11	225.00	355.00	0.0	0.0	3160

H01

H01

X1	3.97	26.	276.	350.	10.	10.	10.	0.0	0.0	0.	3170
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2570.0	185.	3180
GR	2565.0	260.	2564.0	276.	2559.2	276.	2558.8	278.	2558.8	293.	3190
GR	2559.2	294.	2558.8	296.	2558.8	299.	2562.2	302.	2561.8	306.	3200
GR	2560.8	310.	2560.3	320.	2560.4	321.	2558.8	324.	2558.8	325.	3210
GR	2561.9	327.	2558.8	328.	2558.8	350.	2564.0	350.	2565.0	370.	3220
GR	2581.9	420.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	3230
NC	0.120	0.120	0.045	0.0	0.0						3240
QT	5.	5010.	8010.	9710.	13010.	9710.	0.	0.	0.	0.	3250
ET	0.	0.0	0.0	0.0	0.0	7.11	590.00	790.00	0.0	0.0	3260

X1	4.14	22.	630.	686.	780.	940.	940.	0.0	0.0	0.	3270
GR	2590.0	330.	2580.0	362.	2571.0	390.	2567.6	400.	2567.7	450.	3280
GR	2568.0	550.	2565.4	618.	2564.3	630.	2562.8	634.	2562.7	681.	3290
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3300
GR	2580.3	900.	2582.3	1000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3310
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3320
ET	0.	0.0	0.0	0.0	0.0	7.11	590.00	790.00	0.0	0.0	3330

X1	4.14	22.	603.	782.	40.	40.	40.	0.0	0.0	0.	3340
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2577.0	2577.0	0.	3350
GR	2590.0	330.	2580.0	362.	2571.0	390.	2567.6	400.	2567.7	450.	3360
GR	2568.0	550.	2565.9	603.	2564.3	630.	2562.8	634.	2562.7	681.	3370
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3380
GR	2580.3	900.	2582.3	1000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3390
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3400
SB	1.25	1.60	3.00	0.	131.00	6.00	1740.00	1.24	2562.8	2562.8	3410
ET	0.	0.0	0.0	0.0	0.0	7.11	590.00	790.00	0.0	0.0	3420

X1	4.14	0.	0.	0.	115.	115.	115.	0.0	0.0	0.	3430
X2	0.	0.0	1.	2575.2	2577.2	0.0	0.	0.0	0.0	0.	3440
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2578.9	2578.9	0.	3450
BT	15.0	330.0	2590.0	0.0	356.0	2581.8	0.0	450.0	2580.0	0.0	3460
BT	542.0	2578.8	0.0	585.0	2578.8	0.0	602.0	2578.9	0.0	602.0	3470
BT	2582.2	0.0	800.0	2581.1	0.0	800.0	2579.7	0.0	900.0	2580.3	3480
BT	0.0	1000.0	2582.3	0.0	1100.0	2583.4	0.0	1200.0	2583.8	0.0	3490
BT	1300.0	2584.1	0.0	1400.0	2586.3	0.0	1500.0	2589.0	0.0	0.0	3500
ET	0.	0.0	0.0	0.0	0.0	7.11	500.00	800.00	0.0	0.0	3510

X1	4.14	22.	630.	686.	10.	30.	30.	0.0	0.0	0.	3520
GR	2590.0	330.	2580.0	362.	2571.0	390.	2567.6	400.	2567.7	450.	3530
GR	2568.0	550.	2565.4	618.	2564.3	630.	2562.8	634.	2562.7	681.	3540
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3550
GR	2580.3	900.	2582.3	1000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3560
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3570
NC	0.100	0.100	0.045	0.0	0.0						3580
QT	5.	4295.	6990.	8660.	11925.	8660.	0.	0.	0.	0.	3590
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	3600

X1	4.28	28.	353.	400.	600.	710.	710.	0.0	0.0	0.	3610
GR	2585.5	8.	2580.6	90.	2574.4	160.	2572.1	163.	2569.2	173.	3620
GR	2569.2	192.	2568.9	210.	2568.2	228.	2567.9	246.	2567.7	264.	3630
GR	2568.2	281.	2570.3	350.	2570.0	353.	2564.6	360.	2562.4	369.	3640
GR	2563.6	375.	2563.6	383.	2564.6	391.	2569.2	400.	2570.0	421.	3650



GR	2569.4	456.	2569.8	475.	2570.4	493.	2571.3	511.	2571.1	528.	3660
GR	2572.2	546.	2573.8	560.	2585.5	680.	0.0	0.0	0.0	0.0	3670
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	3680

X1	4.28	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	3690
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	3700

X1	4.28	58.	353.	400.	1.	1.	1.	0.0	0.0	0.	3710
BT	43.0	8.0	2585.5	0.0	90.0	2580.6	0.0	160.0	2574.4	0.0	3720
BT	163.0	2572.1	0.0	173.0	2572.4	0.0	173.0	2572.4	2570.9	192.0	3730
BT	2572.4	2570.9	210.0	2572.4	2571.1	228.0	2572.4	2571.1	245.0	2572.5	3740
BT	2571.2	246.0	2572.5	2571.2	264.0	2572.6	2571.4	280.0	2572.8	2571.6	3750
BT	281.0	2572.8	2571.6	300.0	2572.9	2571.8	314.0	2572.9	2571.8	315.0	3760
BT	2572.9	2571.9	349.0	2573.1	2571.9	350.0	2573.1	2571.9	353.0	2573.1	3770
BT	2572.0	353.0	2574.0	2572.0	360.0	2574.0	2572.0	369.0	2574.0	2572.0	3780
BT	375.0	2574.0	2572.1	383.0	2574.0	2572.1	391.0	2574.0	2572.1	400.0	3790
BT	2574.0	2572.2	400.0	2573.1	2572.2	421.0	2573.2	2572.2	422.0	2573.2	3800
BT	2572.2	439.0	2573.4	2572.1	456.0	2573.4	2572.1	457.0	2573.4	2572.1	3810
BT	475.0	2573.4	2572.2	492.0	2573.7	2572.4	493.0	2573.7	2572.4	511.0	3820
BT	2573.8	2572.5	528.0	2573.7	2572.5	529.0	2573.7	2572.6	546.0	2573.7	3830
BT	2572.6	546.0	2573.7	0.0	560.0	2573.8	0.0	680.0	2585.5	0.0	3840
GR	2585.5	8.	2580.6	90.	2574.4	160.	2572.1	163.	2569.2	173.	3850
GR	2569.2	192.	2568.9	209.	2571.0	209.	2571.0	210.	2568.9	210.	3860
GR	2568.2	228.	2567.9	245.	2571.2	245.	2571.2	246.	2567.9	246.	3870
GR	2567.8	264.	2568.1	280.	2571.6	280.	2571.6	281.	2568.2	281.	3880
GR	2568.8	300.	2569.3	314.	2571.8	314.	2571.8	315.	2569.3	315.	3890
GR	2570.3	349.	2571.9	349.	2571.9	350.	2570.3	350.	2570.0	353.	3900
GR	2564.6	360.	2562.4	369.	2563.6	375.	2563.6	383.	2564.6	391.	3910
GR	2569.2	400.	2570.0	421.	2572.2	421.	2572.2	422.	2570.0	422.	3920
GR	2569.6	439.	2569.4	456.	2572.1	456.	2572.1	457.	2569.4	457.	3930
GR	2569.8	475.	2570.4	492.	2572.4	492.	2572.4	493.	2570.4	493.	3940
GR	2571.3	511.	2571.1	528.	2572.5	528.	2572.5	529.	2571.2	529.	3950
GR	2572.2	546.	2573.8	560.	2585.5	680.	0.0	0.0	0.0	0.0	3960
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	3970

X1	4.28	0.	0.	0.	5.	5.	5.	0.0	0.0	0.	3980
X2	0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	3990
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	4000

X1	4.28	28.	353.	400.	1.	1.	1.	0.0	0.0	0.	4010
GR	2585.5	8.	2580.6	90.	2574.4	160.	2572.1	163.	2569.2	173.	4020
GR	2569.2	192.	2568.9	210.	2568.2	228.	2567.9	246.	2567.7	246.	4030
GR	2568.2	281.	2570.3	350.	2570.0	353.	2564.6	360.	2562.4	369.	4040
GR	2563.6	375.	2563.6	383.	2564.6	391.	2569.2	400.	2570.0	421.	4050
GR	2569.4	456.	2564.8	475.	2570.4	493.	2571.3	511.	2571.1	528.	4060
GR	2572.2	546.	2573.8	560.	2585.5	680.	0.0	0.0	0.0	0.0	4070
ET	0.	0.0	0.0	0.0	0.0	7.11	240.00	510.00	0.0	0.0	4080

X1	4.28	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	4090
NC	0.120	0.060	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	4100
QT	5.	4395.	7115.	8465.	11540.	8465.	0.	0.	0.	0.	4110
ET	0.	0.0	0.0	0.0	0.0	7.11	85.00	260.00	0.0	0.0	4120

X1	4.43	17.	110.	150.	715.	735.	735.	0.0	-5.30	0.	4130
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J01

GR	2593.8	35.	2577.4	80.	2577.3	110.	2572.7	118.	2571.8	125.	4140
GR	2571.7	130.	2571.5	135.	2572.6	150.	2577.0	159.	2576.6	200.	4150
GR	2577.5	250.	2582.1	284.	2582.4	291.	2584.4	414.	2587.5	446.	4160
GR	2587.5	477.	2588.2	487.	0.0	0.	0.0	0.	0.0	0.	4170
QT	5.	4275.	6950.	8475.	11600.	8475.	0.	0.	0.	0.	4180
ET	0.	0.0	0.0	0.0	0.0	7.11	85.00	240.00	0.0	0.0	4190
X1	4.63	0.	0.	0.	1000.	1000.	1000.	0.0	5.30	0.	4200
NC	0.120	0.070	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.	4210
QT	5.	4260.	6920.	8375.	11420.	8375.	0.	0.	0.	0.	4220
ET	0.	0.0	0.0	0.0	0.0	7.11	120.00	240.00	0.0	0.0	4230
X1	4.82	14.	152.	208.	1100.	940.	940.	0.0	0.0	0.	4240
GR	2507.4	35.	2583.9	68.	2582.4	152.	2577.2	163.	2576.0	175.	4250
GR	2575.7	185.	2576.0	190.	2577.2	200.	2584.2	208.	2584.7	214.	4260
GR	2584.4	224.	2585.8	235.	2590.8	297.	2592.2	312.	0.0	0.	4270
NC	0.070	0.080	0.055	0.0	0.0	0.0	0.0	0.0	0.0	0.	4280
QT	5.	4250.	6900.	8300.	11290.	8300.	0.	0.	0.	0.	4290
ET	0.	0.0	0.0	0.0	0.0	7.11	310.00	450.00	0.0	0.0	4300
X1	4.96	18.	370.	433.	660.	610.	610.	0.0	0.0	0.	4310
GR	2610.0	30.	2596.0	150.	2595.0	178.	2595.0	290.	2585.2	312.	4320
GR	2581.3	370.	2581.1	380.	2579.4	392.	2579.3	409.	2579.2	415.	4330
GR	2582.0	430.	2591.5	433.	2597.5	450.	2599.5	462.	2600.1	485.	4340
GR	2604.1	500.	2608.1	630.	2610.0	675.	0.0	0.	0.0	0.	4350
ET	0.	0.0	0.0	0.0	0.0	7.11	310.00	450.00	0.0	0.0	4360
X1	4.96	18.	312.	468.	40.	40.	40.	0.0	0.0	0.	4370
GR	2610.0	30.	2596.0	150.	2594.0	200.	2587.2	220.	2585.2	312.	4380
GR	2581.3	370.	2581.1	380.	2579.4	392.	2579.3	409.	2579.2	415.	4390
GR	2582.0	430.	2591.5	433.	2597.5	450.	2599.5	462.	2600.1	485.	4400
GR	2604.1	500.	2608.1	630.	2610.0	675.	0.0	0.	0.0	0.	4410
SB	1.25	1.60	3.00	0.	54.00	4.00	1510.00	1.18	2579.2	2579.2	4420
ET	0.	0.0	0.0	0.0	0.0	7.11	310.00	450.00	0.0	0.0	4430
X1	4.96	0.	0.	0.	15.	15.	15.	0.0	0.0	0.	4440
X2	0.	0.0	1.	2597.5	2598.0	0.0	0.	0.0	0.0	0.	4450
BT	10.0	30.0	2610.0	0.0	103.0	2601.0	0.0	150.0	2599.2	0.0	4460
BT	220.0	2598.0	0.0	310.0	2598.8	0.0	355.0	2600.0	0.0	355.0	4470
BT	2602.6	0.0	468.0	2605.6	0.0	468.0	2603.2	0.0	630.0	2608.2	4480
BT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4490
ET	0.	0.0	0.0	0.0	0.0	7.11	380.00	450.00	0.0	0.0	4500
X1	4.96	13.	382.	450.	10.	10.	10.	0.0	0.0	0.	4510
GR	2602.5	198.	2596.7	261.	2597.8	312.	2597.9	339.	2596.9	382.	4520
GR	2580.7	400.	2579.9	406.	2579.6	415.	2579.8	425.	2580.7	435.	4530
GR	2589.4	450.	2592.6	479.	2602.5	490.	0.0	0.	0.0	0.	4540
NC	0.080	0.090	0.055	0.0	0.0	0.0	0.0	0.0	0.0	0.	4550
ET	0.	0.0	0.0	0.0	0.0	7.11	380.00	450.00	0.0	0.0	4560
X1	4.96	0.	0.	0.	60.	60.	60.	0.0	0.0	0.	4570
NC	0.100	0.080	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.	4580
QT	5.	4240.	6880.	8180.	11220.	8180.	0.	0.	0.	0.	4590

KG1

ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	420.00	0.0	0.0	4600
X1	5.10	16.	258.	394.	900.	750.	750.	0.0	0.0	0.	4610
GR	2630.0	80.	2601.2	153.	2601.1	168.	2601.0	178.	2592.5	200.	4620
GR	2591.0	226.	2589.9	238.	2589.1	258.	2586.4	272.	2585.6	277.	4630
GR	2589.7	394.	2590.8	408.	2591.0	431.	2590.4	500.	2590.0	540.	4640
GR	2630.0	615.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	4650
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	420.00	0.0	0.0	4660

X1	5.10	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	4670
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2600.0	2598.0	0.	4680
NC	0.090	0.100	0.050	0.0	0.0	0.	0.	0.	0.	0.	4690
SB	1.25	1.60	3.00	0.	95.00	18.00	1350.00	1.63	2584.2	2584.2	4700
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	420.00	0.0	0.0	4710

X1	5.10	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	4720
X2	0.	0.0	1.	2597.8	2599.1	0.0	0.	0.0	0.0	0.	4730
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2601.0	2599.5	0.	4740
BT	10.0	80.0	2630.0	0.0	153.0	2601.2	0.0	169.0	2601.1	0.0	4750
BT	200.0	2600.9	0.0	260.0	2600.4	0.0	385.0	2599.4	0.0	430.0	4760
BT	2599.2	0.0	500.0	2599.1	0.0	558.0	2599.1	0.0	615.0	2630.0	4770
BT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4780
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	420.00	0.0	0.0	4790

X1	5.10	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	4800
NC	0.080	0.100	0.040	0.0	0.0	0.	0.	0.	0.	0.	4810
BT	5.	4190.	6810.	8110.	11115.	8110.	0.	0.	0.	0.	4820
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	420.00	0.0	0.0	4830

X1	5.20	16.	258.	320.	460.	460.	460.	0.0	0.0	0.	4840
GR	2630.0	80.	2601.2	153.	2601.1	168.	2601.0	178.	2592.5	200.	4850
GR	2591.0	226.	2589.9	238.	2589.1	258.	2586.4	272.	2585.6	277.	4860
GR	2587.0	320.	2590.8	408.	2591.0	431.	2590.4	500.	2590.0	540.	4870
GR	2630.0	615.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	4880
ET	0.	0.0	0.0	0.0	0.0	7.11	300.00	610.00	0.0	0.0	4890

X1	5.49	21.	546.	605.	1530.	1530.	1530.	0.0	0.0	0.	4900
GR	2612.5	173.	2607.5	185.	2602.2	197.	2599.0	309.	2600.0	368.	4910
GR	2601.2	385.	2603.3	400.	2603.9	485.	2603.9	508.	2602.8	546.	4920
GR	2595.9	553.	2594.8	563.	2595.2	573.	2595.8	600.	2600.9	605.	4930
GR	2601.9	620.	2607.8	632.	2610.2	642.	2611.8	646.	2608.6	651.	4940
GR	2615.2	660.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	4950
QT	5.	4175.	6790.	8090.	11085.	8090.	0.	0.	0.	0.	4960
NC	0.080	0.120	0.040	0.0	0.0	0.	0.	0.	0.	0.	4970
ET	0.	0.0	0.0	0.0	0.0	7.11	220.00	610.00	0.0	0.0	4980

X1	5.58	21.	546.	605.	360.	360.	360.	0.0	0.0	0.	4990
GR	2612.5	173.	2607.5	185.	2602.2	197.	2599.0	309.	2600.0	368.	5000
GR	2601.2	385.	2603.3	400.	2603.9	485.	2603.9	508.	2602.8	546.	5010
GR	2596.5	553.	2596.5	563.	2596.5	573.	2596.5	600.	2600.9	605.	5020
GR	2601.9	620.	2607.8	632.	2610.2	642.	2609.8	646.	2608.6	651.	5030
GR	2615.2	660.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	5040
ET	0.	0.0	0.0	0.0	0.0	7.11	220.00	610.00	0.0	0.0	5050

L01

X1	5.58	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	5060
NC	0.070	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5070
SB	1.25	1.60	3.00	0.	41.20	0.01	408.00	0.0	2596.5	2596.5	5080
ET	0.	0.0	0.0	0.0	0.0	7.11	630.00	1070.00	0.0	0.0	5090

X1	5.58	15.	920.	977.	35.	35.	35.	0.0	0.0	0.	5100
X2	0.	0.0	1.	2606.4	2606.9	0.0	0.0	0.0	0.0	0.0	5110
BT	12.0	500.0	2605.4	0.0	600.0	2605.3	0.0	700.0	2604.9	0.0	5120
BT	786.0	2605.7	0.0	800.0	2605.9	0.0	900.0	2608.3	0.0	952.0	5130
BT	2609.7	0.0	952.0	2611.1	0.0	993.0	2611.3	0.0	993.0	2609.7	5140
BT	0.0	1050.0	2609.0	0.0	1082.0	2614.0	0.0	0.0	0.0	0.0	5150
GR	2603.2	450.	2603.4	850.	2604.7	920.	2598.9	927.	2596.5	930.	5160
GR	2596.5	942.	2596.5	944.	2596.5	947.	2596.6	966.	2599.9	967.	5170
GR	2604.4	977.	2604.5	1019.	2603.3	1118.	2606.5	1134.	2606.8	1150.	5180
ET	0.	0.0	0.0	0.0	0.0	7.11	630.00	1070.00	0.0	0.0	5190

X1	5.58	18.	920.	1019.	40.	40.	40.	0.0	0.0	0.	5200
GR	2603.2	450.	2603.4	850.	2604.7	920.	2598.9	927.	2597.4	935.	5210
GR	2598.4	938.	2598.5	944.	2598.9	947.	2600.1	956.	2599.9	967.	5220
GR	2599.4	973.	2599.2	993.	2599.4	1000.	2599.9	1038.	2604.5	1019.	5230
GR	2603.3	1118.	2606.5	1134.	2606.8	1150.	0.0	0.	0.0	0.	5240
NC	0.070	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5250
QT	5.	4160.	8765.	8065.	11050.	8065.	0.	0.	0.	0.	5260
ET	0.	0.0	0.0	0.0	0.0	7.11	300.00	780.00	0.0	0.0	5270

X1	5.64	32.	600.	658.	340.	340.	340.	0.0	-1.50	0.	5280
GR	2631.5	12.	2619.5	81.	2616.0	100.	2613.8	124.	2611.2	150.	5290
GR	2609.5	160.	2608.0	200.	2606.5	300.	2606.5	400.	2606.8	490.	5300
GR	2604.5	495.	2606.9	498.	2606.5	550.	2606.9	595.	2607.5	600.	5310
GR	2606.5	622.	2602.0	630.	2601.0	650.	2601.1	653.	2606.5	658.	5320
GR	2606.0	705.	2609.5	785.	2611.5	805.	2612.3	864.	2612.4	922.	5330
GR	2614.4	935.	2614.5	940.	2613.0	947.	2617.3	952.	2617.3	963.	5340
GR	2624.0	977.	2632.8	1045.	0.0	0.	0.0	0.	0.0	0.	5350
ET	0.	0.0	0.0	0.0	0.0	7.11	300.00	700.00	0.0	0.0	5360

X1	5.71	0.	0.	0.	350.	350.	350.	0.0	1.50	0.	5370
NC	0.040	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5380
QT	5.	4135.	8730.	8030.	10995.	8030.	0.	0.	0.	0.	5390
ET	0.	0.0	0.0	0.0	0.0	7.11	600.00	850.00	0.0	0.0	5400

X1	5.91	24.	655.	718.	900.	900.	900.	0.0	0.0	0.	5410
GR	2623.5	235.	2613.2	250.	2618.0	352.	2630.0	352.	2630.0	603.	5420
GR	2616.5	603.	2613.3	655.	2605.8	666.	2606.0	684.	2607.2	692.	5430
GR	2607.7	701.	2616.0	718.	2613.3	733.	2613.5	800.	2613.7	850.	5440
GR	2614.0	900.	2614.4	979.	2616.0	992.	2616.2	997.	2615.8	1024.	5450
GR	2613.8	1028.	2614.8	1030.	2615.8	1092.	2617.0	1131.	0.0	0.	5460
NC	0.035	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5470
QT	5.	4130.	8710.	8020.	10975.	8020.	0.	0.	0.	0.	5480
ET	0.	0.0	0.0	0.0	0.0	7.11	170.00	500.00	0.0	0.0	5490

X1	5.97	24.	393.	451.	280.	280.	280.	0.0	0.0	0.	5500
GR	2624.5	45.	2619.0	65.	2616.0	75.	2615.5	100.	2616.6	200.	5510

M01

GR	2616.3	300.	2618.2	364.	2617.7	393.	2610.3	400.	2609.3	407.	5520
GR	2609.3	417.	2609.3	428.	2610.3	440.	2614.8	451.	2615.7	477.	5530
GR	2615.3	500.	2625.0	500.	2625.0	650.	2616.0	650.	2615.3	700.	5540
GR	2615.4	719.	2616.8	796.	2618.8	797.	2630.0	817.	0.0	0.	5550
NC	0.031	0.070	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5560
QT	5.	4115.	6700.	8000.	10930.	8000.	0.	0.	0.	0.	5570
ET	0.	0.0	0.0	0.0	0.0	7.11	405.00	815.00	0.0	0.0	5580

X1	6.06	19.	560.	605.	340.	340.	340.	0.0	0.0	0.	5590
GR	2618.8	12.	2618.5	21.	2618.4	100.	2618.1	200.	2617.9	300.	5600
GR	2618.0	317.	2617.2	491.	2617.1	522.	2622.3	555.	2619.5	560.	5610
GR	2610.6	577.	2609.2	560.	2609.2	597.	2610.5	600.	2619.6	605.	5620
GR	2617.9	657.	2618.2	795.	2617.7	836.	2617.6	950.	0.0	0.	5630
NC	0.080	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5640
QT	5.	4110.	6690.	7990.	10935.	7990.	0.	0.	0.	0.	5650
ET	0.	0.0	0.0	0.0	0.0	7.11	635.00	1110.00	0.0	0.0	5660

X1	6.12	27.	850.	908.	280.	280.	280.	0.0	0.0	0.	5670
X5	1.	2621.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5680
GR	2629.0	215.	2625.0	235.	2621.5	250.	2621.0	300.	2620.8	400.	5690
GR	2620.8	415.	2630.0	415.	2630.0	585.	2620.5	585.	2620.1	603.	5700
GR	2619.3	617.	2619.3	657.	2621.2	687.	2631.5	687.	2631.5	757.	5710
GR	2621.0	757.	2620.7	811.	2620.7	850.	2612.9	861.	2612.3	872.	5720
GR	2612.2	882.	2611.8	892.	2613.0	900.	2619.8	908.	2621.6	954.	5730
GR	2621.3	978.	2618.1	1100.	0.0	0.	0.0	0.	0.0	0.	5740
NC	0.050	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5750
QT	5.	4105.	6685.	7985.	10925.	7985.	0.	0.	0.	0.	5760
ET	0.	0.0	0.0	0.0	0.0	7.11	700.00	1130.00	0.0	0.0	5770

X1	6.16	22.	940.	1020.	160.	160.	160.	0.0	0.0	0.	5780
GR	2635.7	380.	2634.0	390.	2631.8	400.	2630.0	410.	2625.8	435.	5790
GR	2623.8	551.	2623.8	586.	2625.8	680.	2625.2	805.	2624.4	820.	5800
GR	2622.8	902.	2624.5	935.	2621.5	940.	2614.5	950.	2613.4	965.	5810
GR	2613.7	975.	2614.2	986.	2614.7	1000.	2619.7	1020.	2620.7	1126.	5820
GR	2625.2	1140.	2625.4	1160.	0.0	0.	0.0	0.	0.0	0.	5830
ET	0.	0.0	0.0	0.0	0.0	7.11	700.00	1100.00	0.0	0.0	5840

X1	6.16	0.	0.	0.	50.	50.	50.	0.0	0.0	0.	5850
SB	1.25	1.60	3.00	0.	51.00	6.00	632.00	5.94	2615.0	2615.0	5860
ET	0.	0.0	0.0	0.0	0.0	7.11	700.00	1100.00	0.0	0.0	5870

X1	6.16	0.	0.	0.	50.	50.	50.	0.0	0.0	0.	5880
X2	0.	0.0	1.	2622.2	2624.5	0.0	0.	0.0	0.0	0.	5890
BT	13.0	460.0	2625.3	0.0	600.0	2625.0	0.0	700.0	2624.8	0.0	5900
BT	750.0	2624.6	0.0	770.0	2624.8	0.0	850.0	2624.2	0.0	900.0	5910
BT	2624.1	0.0	900.0	2626.0	0.0	1062.0	2628.1	0.0	1062.0	2626.5	5920
BT	0.0	1075.0	2626.6	0.0	1260.0	2634.0	0.0	1290.0	2639.5	0.0	5930
ET	0.	0.0	0.0	0.0	0.0	7.11	710.00	1020.00	0.0	0.0	5940

X1	6.16	29.	885.	1005.	40.	40.	40.	0.0	0.0	0.	5950
GR	2635.0	350.	2632.0	370.	2630.0	379.	2628.1	383.	2628.1	385.	5960
GR	2627.4	386.	2621.3	405.	2627.5	496.	2625.8	400.	2623.8	645.	5970
GR	2621.5	710.	2625.4	722.	2625.5	760.	2635.0	740.	2635.0	805.	5980
GR	2625.5	805.	2625.8	822.	2624.4	875.	2624.3	885.	2616.8	900.	5990

A02

GR	2615.8	910.	2615.2	920.	2616.2	936.	2616.8	950.	2617.8	955.	6000
GR	2617.7	975.	2624.0	1005.	2628.8	1054.	2632.8	1150.	0.0	0.	6010
NC	0.100	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4020
QT	5.	4100.	6675.	7975.	10915.	7975.	0.	0.	0.	0.	6050
ET	0.	0.0	0.0	0.0	0.0	7.11	700.00	910.00	0.0	0.0	6040
X1	6.20	25.	830.	895.	90.	90.	90.	0.0	0.0	0.	6050
GR	2624.8	400.	2624.8	413.	2623.8	443.	2623.3	470.	2623.0	568.	6060
GR	2632.0	568.	2632.0	595.	2623.1	595.	2623.1	622.	2623.2	640.	6070
GR	2623.0	650.	2622.7	674.	2630.0	674.	2630.0	700.	2622.4	700.	6080
GR	2621.7	810.	2623.2	830.	2616.8	850.	2614.9	861.	2614.7	876.	6090
GR	2615.7	880.	2616.9	888.	2624.4	895.	2628.6	950.	2635.6	995.	6100
QT	5.	4085.	6835.	7955.	10880.	7955.	0.	0.	0.	0.	6110
ET	0.	0.0	0.0	0.0	0.0	7.11	270.00	570.00	0.0	0.0	6120
X1	6.31	31.	500.	540.	480.	480.	480.	0.0	0.0	0.	6130
GR	2626.4	31.	2626.9	62.	2626.4	90.	2626.3	119.	2626.0	166.	6140
GR	2625.6	244.	2625.6	285.	2625.4	312.	2624.6	363.	2625.3	392.	6150
GR	2625.3	412.	2625.3	437.	2626.2	497.	2626.6	497.	2626.6	500.	6160
GR	2623.0	500.	2620.0	505.	2617.5	513.	2617.0	517.	2618.2	523.	6170
GR	2620.0	530.	2622.0	540.	2626.6	604.	2630.0	651.	2629.5	682.	6180
GR	2626.9	741.	2626.9	841.	2627.4	888.	2627.2	898.	2629.6	918.	6190
GR	2629.6	922.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6200
NC	0.100	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6210
QT	5.	4065.	6625.	7920.	10835.	7920.	0.	0.	0.	0.	6220
ET	0.	0.0	0.0	0.0	0.0	7.11	270.00	1040.00	0.0	0.0	6230
X1	6.48	31.	308.	393.	1000.	1000.	1000.	0.0	0.0	0.	6240
GR	2638.0	30.	2642.5	70.	2638.2	102.	2638.2	133.	2638.0	150.	6250
GR	2637.3	174.	2631.2	174.	2631.2	200.	2631.0	300.	2631.0	308.	6260
GR	2626.0	312.	2626.2	326.	2626.7	340.	2626.2	340.	2626.2	370.	6270
GR	2626.7	381.	2627.1	381.	2631.0	393.	2630.0	400.	2631.5	440.	6280
GR	2631.0	500.	2632.2	568.	2632.0	600.	2660.0	600.	2660.0	980.	6290
GR	2632.8	980.	2632.9	990.	2632.8	1000.	2633.0	1008.	2633.4	1035.	6300
GR	2633.1	1050.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6310
NC	0.100	0.120	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6320
QT	5.	4045.	6595.	7900.	10795.	7900.	0.	0.	0.	0.	6330
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	830.00	0.0	0.0	6340
X1	6.61	33.	340.	405.	580.	580.	580.	0.0	0.0	0.	6350
GR	2658.3	0.	2650.3	150.	2645.4	228.	2638.0	250.	2637.5	255.	6360
GR	2637.0	310.	2633.0	340.	2631.3	340.	2629.2	345.	2627.5	349.	6370
GR	2627.5	353.	2629.3	365.	2629.3	374.	2629.0	387.	2628.5	395.	6380
GR	2630.5	395.	2630.5	400.	2633.0	405.	2636.0	412.	2637.0	430.	6390
GR	2638.0	466.	2680.0	466.	2680.0	795.	2636.8	795.	2637.5	845.	6400
GR	2637.4	876.	2638.0	900.	2638.2	920.	2660.0	920.	2660.0	1086.	6410
GR	2646.5	1086.	2647.2	1100.	2654.0	1200.	0.0	0.	0.0	0.	6420
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	830.00	0.0	0.0	6430
X1	6.61	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	6440
SB	1.25	1.60	3.00	0.	45.00	2.00	402.00	0.0	2628.5	2628.5	6450
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	830.00	0.0	0.0	6460
X1	6.61	33.	340.	405.	30.	30.	30.	0.0	0.0	0.	6470

X2	0.	0.0	1.	2637.9	2636.3	0.0	0.	0.0	0.0	0.	6480
BT	26.0	0.0	2658.3	0.0	150.0	2650.3	0.0	228.0	2643.4	0.0	6490
BT	250.0	2638.0	0.0	255.0	2637.5	0.0	300.0	2638.6	0.0	335.0	6500
BT	2640.4	0.0	335.0	2641.0	0.0	366.0	2641.4	0.0	400.0	2641.0	6510
BT	1.0	400.0	2640.4	0.0	428.0	2642.0	0.0	466.0	2680.0	0.0	6520
BT	720.0	2637.0	0.0	720.0	2636.3	0.0	750.0	2636.8	0.0	795.0	6530
BT	2636.8	0.0	800.0	2637.0	0.0	845.0	2637.5	0.0	876.0	2637.5	6540
BT	0.0	0.0	0.0	0.0	920.0	2638.3	0.0	1000.0	2641.5	0.0	6550
BT	1086.0	0.0	0.0	1100.0	2647.2	0.0	1200.0	2654.0	0.0	0.0	6560
GR	2658.3	0.0	0.0	150.	2645.4	228.	2635.0	250.	2637.5	255.	6570
GR	2637.0	315.	2633.0	340.	2631.3	340.	2629.2	345.	2627.5	349.	6580
GR	2627.5	353.	2629.3	365.	2629.3	374.	2629.0	387.	2628.5	395.	6590
GR	2630.5	375.	2630.5	400.	2633.0	405.	2636.0	412.	2637.0	430.	6600
GR	2638.0	466.	2680.0	466.	2680.0	720.	2656.2	720.	2638.8	750.	6610
GR	2636.8	800.	2637.5	845.	2637.4	87.	2638.0	900.	2638.2	920.	6620
GR	2641.5	1000.	2647.4	1100.	2654.0	1200.	0.0	0.	0.0	0.	6630
ET	0.	0.0	0.0	0.0	0.0	7.11	250.00	630.00	0.0	0.0	6640

X1	6.61	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	6650
NC	0.100	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	6660
QT	5.	4030.	6565.	7860.	10730.	7860.	0.	0.	0.	0.	6670
ET	0.	0.0	0.0	0.0	0.0	7.11	280.00	640.00	0.0	0.0	6680

X1	6.74	26.	368.	406.	220.	220.	220.	0.0	0.0	0.	6690
GR	2653.7	170.	2641.0	185.	2641.8	255.	2641.3	305.	2655.0	305.	6700
GR	2655.0	355.	2641.7	355.	2639.7	368.	2632.8	376.	2631.4	388.	6710
GR	2631.7	395.	2632.8	402.	2635.5	405.	2639.1	408.	2637.0	408.	6720
GR	2655.0	538.	2641.8	538.	2641.3	559.	2641.4	591.	2640.0	627.	6730
GR	2640.7	645.	2640.6	658.	2641.4	668.	2641.4	678.	2639.0	694.	6740
GR	2643.0	700.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6750
NC	0.100	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	6760
QT	5.	4020.	6550.	7840.	10705.	7840.	0.	0.	0.	0.	6770
ET	0.	0.0	0.0	0.0	0.0	7.11	280.00	640.00	0.0	0.0	6780

X1	6.79	25.	368.	408.	680.	680.	680.	0.0	0.0	0.	6790
GR	2653.7	170.	2646.0	185.	2641.8	255.	2641.3	305.	2641.7	355.	6800
GR	2639.7	368.	2632.8	376.	2631.4	388.	2631.7	395.	2632.8	402.	6810
GR	2635.5	408.	2639.1	408.	2639.2	410.	2655.0	410.	2655.0	537.	6820
GR	2641.7	537.	2641.3	558.	2641.4	591.	2640.8	627.	2640.7	645.	6830
GR	2640.6	658.	2641.4	668.	2641.4	678.	2639.9	694.	2643.0	700.	6840
ET	0.	0.0	0.0	0.0	0.0	7.11	280.00	640.00	0.0	0.0	6850

X1	6.79	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	6860
SB	1.25	1.60	3.00	0.	28.00	3.00	365.00	1.80	2634.0	2634.0	6870
ET	0.	0.0	0.0	0.0	0.0	7.11	160.00	450.00	0.0	0.0	6880

X1	6.79	31.	340.	385.	50.	50.	50.	0.0	0.0	0.	6890
X2	0.	0.0	1.	2642.8	2641.7	0.0	0.	0.0	0.0	0.	6900
BT	10.0	60.0	2640.0	0.0	98.0	2644.6	0.0	115.0	2648.0	0.0	6910
BT	145.0	2641.5	0.0	220.0	2643.0	0.0	250.0	2644.0	0.0	300.0	6920
BT	2645.5	0.0	330.0	2646.0	0.0	330.0	2648.0	0.0	400.0	2648.1	6930
BT	0.0	400.0	2646.0	0.0	449.0	2644.0	0.0	455.0	2650.0	0.0	6940
BT	460.0	2648.5	0.0	495.0	2652.3	0.0	511.0	2652.2	0.0	530.0	6950
BT	2659.0	0.0	545.0	2662.0	0.0	0.0	0.0	0.0	0.0	0.0	6960
GR	2660.0	60.	2644.8	98.	2648.0	115.	2640.0	150.	2641.0	160.	6970

C02

GR	2642.5	225.	2642.5	250.	2643.0	255.	2642.0	265.	2640.5	340.	6980
GR	2636.5	345.	2634.8	355.	2634.8	345.	2634.0	365.	2634.0	379.	6990
GR	2636.0	380.	2635.0	362.	2636.0	365.	2641.1	387.	2642.5	403.	7000
GR	2641.5	408.	2642.0	425.	2644.4	435.	2644.4	438.	2642.3	445.	7010
GR	2650.0	455.	2648.5	460.	2652.4	495.	2652.2	511.	2659.0	530.	7020
GR	2662.0	545.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	7030
ET	0.	0.0	0.0	0.0	0.0	7.11	140.00	450.00	0.0	0.0	7040
X1	6.79	0.	0.	0.	10.	10.	0.	0.0	0.0	0.	7050
NC	0.120	0.110	0.045	0.0	0.0	0.	0.	0.	0.	0.	7060
QT	5.	3990.	6500.	7780.	10600.	1700.	0.	0.	0.	0.	7070
ET	0.	0.0	0.0	0.0	0.0	7.11	750.00	1020.00	0.0	0.0	7080
X1	7.06	35.	825.	905.	1080.	1080.	1080.	0.0	0.0	0.	7090
GR	2645.0	10.	2653.9	60.	2652.5	132.	2649.3	200.	2649.0	300.	7100
GR	2649.4	400.	2648.8	480.	2651.7	515.	2651.9	541.	2650.0	555.	7110
GR	2650.0	600.	2649.2	650.	2649.0	825.	2644.0	837.	2642.0	853.	7120
GR	2643.1	875.	2643.1	890.	2644.0	900.	2646.5	905.	2645.5	920.	7130
GR	2649.5	935.	2649.5	950.	2649.0	990.	2649.0	1075.	2651.0	1086.	7140
GR	2651.8	1098.	2651.5	1125.	2651.5	1145.	2655.0	1400.	2663.0	1660.	7150
NC	0.120	0.110	0.045	0.0	0.0	0.	0.	0.	0.	0.	7160
QT	5.	3955.	6440.	7710.	10485.	7710.	0.	0.	0.	0.	7170
ET	0.	0.0	0.0	0.0	0.0	7.11	210.00	650.00	0.0	0.0	7180
X1	7.23	25.	318.	400.	1220.	1220.	1220.	0.0	0.0	0.	7190
GR	2680.0	70.	2669.0	100.	2659.0	140.	2659.5	153.	2659.0	170.	7200
GR	2660.0	250.	2659.4	300.	2657.0	318.	2657.5	355.	2654.5	360.	7210
GR	2653.5	370.	2655.0	395.	2657.0	400.	2660.7	460.	2639.4	500.	7220
GR	2659.5	665.	2659.0	700.	2661.7	918.	2663.8	986.	2664.0	1000.	7230
GR	2665.2	1055.	2665.0	1072.	2665.2	1090.	2680.0	1092.	0.0	0.	7240
ET	0.	0.0	0.0	0.0	0.0	7.11	210.00	650.00	0.0	0.0	7250
X1	7.23	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	7260
SP	1.25	1.80	3.00	0.	53.00	3.00	402.00	2.60	2653.5	2653.5	7270
ET	0.	0.0	0.0	0.0	0.0	7.11	210.00	650.00	0.0	0.0	7280
X1	7.23	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	7290
X1	0.	0.0	1.	2659.6	2658.9	0.0	0.0	0.0	0.0	0.	7300
DT	21.0	70.0	2680.0	0.0	103.0	2659.0	0.0	140.0	2659.0	0.0	7310
DT	153.0	2659.5	0.0	170.0	2660.0	0.0	170.0	2662.0	0.0	318.0	7320
BT	2643.5	0.0	318.0	2664.9	0.0	400.0	2664.9	0.0	400.0	2663.5	7330
BT	0.0	460.0	2660.7	0.0	600.0	2659.4	0.0	665.0	2659.5	0.0	7340
LT	700.0	2659.0	0.0	918.0	2661.7	0.0	986.0	2663.8	0.0	1000.0	7350
BT	2664.0	0.0	1055.0	2665.2	0.0	1072.0	2665.0	0.0	1080.0	2665.2	7360
BT	0.0	1092.0	2680.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7370
NC	0.120	0.120	0.045	0.0	0.0	0.	0.	0.	0.	0.	7380
ET	0.	0.0	0.0	0.0	0.0	7.11	210.00	650.00	0.0	0.0	7390
X1	7.23	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	7400
NC	0.080	0.110	0.050	0.0	0.0	0.	0.	0.	0.	0.	7410
QT	5.	3920.	6385.	7640.	10370.	7640.	0.	0.	0.	0.	7420
ET	0.	0.0	0.0	0.0	0.0	7.11	270.00	430.00	0.0	0.0	7430



## D02

X1	7.46	21.	295.	343.	1120.	1120.	1120.	0.0	0.0	0.	7440
GR	2672.7	0.	2669.4	187.	2669.4	187.	2668.0	190.	2668.3	216.	7450
GR	2668.6	242.	2668.6	267.	2668.3	295.	2661.5	300.	2660.4	304.	7460
GR	2660.6	310.	2660.6	314.	2661.5	327.	2663.5	342.	2666.3	343.	7470
GR	2664.5	408.	2667.0	476.	2670.7	500.	2670.7	613.	2671.4	650.	7480
GR	2673.4	695.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	7490
NC	0.090	0.110	0.050	0.0	0.0	0.	0.0	0.	0.0	0.	7500
QT	5.	3910.	3385.	7620.	10330.	7620.	0.	0.	0.	0.	7510
ET	0.	0.0	0.0	0.0	0.0	7.11	220.00	400.00	0.0	0.0	7520

X1	7.54	31.	250.	327.	420.	420.	420.	0.0	0.0	0.	7530
GR	2677.6	0.	2676.6	41.	2673.6	91.	2673.3	115.	2673.8	154.	7540
GR	2672.5	170.	2665.0	170.	2665.0	200.	2671.0	200.	2669.6	245.	7550
GR	2671.0	250.	2665.5	260.	2664.3	272.	2665.3	288.	2664.3	300.	7560
GR	2665.5	315.	2664.5	320.	2668.5	327.	2668.5	329.	2668.5	337.	7570
GR	2668.5	347.	2668.5	400.	2671.0	450.	2674.6	503.	2690.0	503.	7580
GR	2690.0	693.	2674.3	693.	2672.1	708.	2676.4	727.	2676.0	742.	7590
GR	2685.5	800.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	7600
NC	0.090	0.110	0.050	0.0	0.0	0.	0.0	0.	0.0	0.	7610
QT	5.	3830.	6260.	7495.	10195.	7495.	0.	0.	0.	0.	7620
ET	0.	0.0	0.0	0.0	0.0	7.11	640.00	890.00	0.0	0.0	7630

X1	7.78	27.	795.	858.	1240.	1240.	1240.	0.0	0.0	0.	7640
GR	2689.0	0.	2687.0	2.	2688.0	100.	2685.0	200.	2684.0	300.	7650
GR	2683.3	400.	2682.8	430.	2682.6	500.	2682.3	600.	2682.5	700.	7660
GR	2681.6	795.	2678.5	855.	2675.7	825.	2676.0	845.	2677.3	855.	7670
GR	2682.0	858.	2682.2	900.	2683.0	920.	2682.5	1000.	2682.0	1020.	7680
GR	2681.5	1100.	2682.0	1200.	2683.8	1300.	2686.0	1400.	2687.0	1500.	7690
GR	2687.5	1575.	2692.0	1590.	0.0	0.	0.0	0.	0.0	0.	7700
NC	0.100	0.110	0.050	0.0	0.0	0.	0.0	0.	0.0	0.	7710
QT	5.	3750.	6165.	7380.	10080.	7380.	0.	0.	0.	0.	7720
ET	0.	0.0	0.0	0.0	0.0	7.11	500.00	780.00	0.0	0.0	7730

X1	7.97	34.	518.	600.	940.	940.	940.	0.0	0.0	0.	7740
GR	2713.0	47.	2700.5	70.	2700.5	100.	2696.0	300.	2693.0	450.	7750
GR	2693.5	475.	2687.5	518.	2685.5	525.	2686.0	532.	2682.0	548.	7760
GR	2682.0	555.	2684.0	560.	2685.0	570.	2686.0	573.	2690.5	600.	7770
GR	2691.5	700.	2692.5	740.	2695.0	800.	2694.5	900.	2692.6	980.	7780
GR	2693.7	1100.	2694.5	1200.	2696.0	1230.	2695.0	1300.	2696.0	1400.	7790
GR	2698.2	1500.	2698.8	1509.	2699.9	1510.	2700.0	1545.	2701.8	1600.	7800
GR	2703.0	1700.	2702.0	1800.	2702.4	1845.	2704.5	1855.	0.0	0.	7810
ET	0.	0.0	0.0	0.0	0.0	7.11	500.00	780.00	0.0	0.0	7820

X1	7.97	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	7830
NC	0.080	0.080	0.050	0.0	0.0	0.	0.0	0.	0.0	0.	7840
SB	1.25	1.60	3.00	0.	29.00	4.00	506.00	1.90	2682.0	2682.0	7850
ET	0.	0.0	0.0	0.0	0.0	7.11	485.00	765.00	0.0	0.0	7860

X1	7.97	19.	508.	560.	30.	30.	30.	0.0	0.0	0.	7870
X2	0.	0.0	1.	2693.1	2692.6	0.0	0.	0.0	0.0	0.	7880
BT	28.0	47.0	2713.0	0.0	70.0	2700.5	0.0	100.0	2700.5	0.0	7890
BT	300.0	2696.0	0.0	400.0	2696.5	0.0	450.0	2696.5	0.0	475.0	7900
BT	2696.0	0.0	500.0	2696.7	0.0	500.0	2698.5	0.0	595.0	2698.0	7910
BT	0.0	595.0	2696.0	0.0	800.0	2695.0	0.0	900.0	2694.3	0.0	7920
BT	980.0	2692.6	0.0	1100.0	2693.7	0.0	1200.0	2694.5	0.0	1230.0	7930

## E02

## E02

BT	2696.0	0.0	1300.0	2695.0	0.0	1400.0	2698.0	0.0	1500.0	2698.2	7940
ET	0.0	1509.0	2698.8	0.0	1510.0	2699.9	0.0	1545.0	2700.0	0.0	7950
BT	1600.0	2701.8	0.0	1700.0	2703.0	0.0	1800.0	2702.0	0.0	1845.0	7960
BT	2702.4	0.0	1855.0	2704.5	0.0	0.0	0.0	0.0	0.0	0.0	7970
GR	2697.0	400.	2695.5	410.	2695.3	424.	2692.0	508.	2683.7	520.	7980
GR	2683.0	525.	2682.2	534.	2682.0	542.	2683.7	550.	2693.6	560.	7990
GR	2693.6	580.	2693.8	590.	2694.1	614.	2694.8	718.	2694.6	843.	8000
GR	2692.6	850.	2692.8	873.	2693.6	950.	2694.1	1042.	0.0	0.	8010
ET	0.	0.0	0.0	0.0	0.0	7.11	485.00	765.00	0.0	0.0	8020
X1	7.97	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	8030
MC	0.120	0.120	0.045	0.0	0.0						8040
QT	5.	3520.	5800.	6950.	9520.	6950.	0.	0.	0.	0.	8050
ET	0.	0.0	0.0	0.0	0.0	7.11	740.00	860.00	0.0	0.0	8060
X1	8.20	28.	775.	855.	1170.	1170.	1170.	0.0	0.0	0.	8070
GR	2720.5	0.	2721.0	10.	2717.0	15.	2716.5	75.	2718.0	155.	8080
GR	2717.5	175.	2711.0	320.	2711.0	350.	2710.2	375.	2709.5	425.	8090
GR	2708.5	475.	2703.5	575.	2702.0	675.	2700.8	725.	2700.3	775.	8100
GR	2697.5	805.	2694.2	834.	2694.2	845.	2699.5	855.	2701.8	875.	8110
GR	2702.5	948.	2701.4	975.	2703.0	1075.	2703.2	1175.	2705.5	1275.	8120
GR	2706.0	1375.	2706.8	1475.	2708.0	1575.	0.0	0.	0.0	0.	8130
ET	0.	0.0	0.0	0.0	0.0	7.11	740.00	860.00	0.0	0.0	8140
X1	8.20	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	8150
SB	1.25	1.60	3.00	0.	34.00	4.00	670.00	3.92	2694.2	2694.2	8160
ET	0.	0.0	0.0	0.0	0.0	7.11	740.00	860.00	0.0	0.0	8170
X1	8.20	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	8180
X2	0.	0.0	1.	2704.0	2706.7	0.0	0.	0.0	0.0	0.	8190
BT	11.0	250.0	2709.2	0.0	2709.0	2709.4	0.0	500.0	2708.0	0.0	8200
BT	750.0	2706.9	0.0	750.0	2708.0	0.0	878.0	2708.0	0.0	878.0	8210
BT	2706.9	0.0	1050.0	2706.8	0.0	1150.0	2706.7	0.0	1250.0	2706.7	8220
BT	0.0	1400.0	2707.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8230
ET	0.	0.0	0.0	0.0	0.0	7.11	740.00	860.00	0.0	0.0	8240
X1	8.20	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	8250
MC	0.090	0.100	0.045	0.0	0.0						8260
QT	5.	3215.	5340.	6425.	8810.	6425.	0.	0.	0.	0.	8270
ET	0.	0.0	0.0	0.0	0.0	7.11	385.00	525.00	0.0	0.0	8280
X1	8.27	30.	418.	488.	340.	340.	340.	0.0	0.0	0.	8290
GR	2714.5	27.	2711.2	82.	2711.0	100.	2709.7	136.	2722.0	136.	8300
GR	2720.0	165.	2709.5	165.	2708.2	231.	2705.0	350.	2705.5	365.	8310
GR	2703.8	372.	2702.8	403.	2704.0	418.	2700.4	420.	2699.3	428.	8320
GR	2699.2	436.	2700.5	450.	2701.8	481.	2705.0	488.	2703.4	491.	8330
GR	2703.7	515.	2708.2	527.	2708.5	675.	2706.0	682.	2708.0	690.	8340
GR	2708.0	703.	2710.7	800.	2709.5	850.	2711.8	900.	2711.3	950.	8350
MC	0.070	0.090	0.045	0.0	0.0						8360
QT	5.	3185.	5295.	6370.	8735.	6370.	0.	0.	0.	0.	8370
ET	0.	0.0	0.0	0.0	0.0	7.11	480.00	600.00	0.0	0.0	8380
X1	8.41	24.	500.	574.	660.	660.	660.	0.0	0.0	0.	8390

F02

GR	2724.2	15.	2719.8	62.	2717.8	133.	2716.8	170.	2715.9	220.	8400
GR	2715.9	270.	2714.9	275.	2716.2	278.	2716.2	296.	2716.6	313.	8410
GR	2713.4	400.	2711.8	425.	2713.0	500.	2706.2	510.	2706.4	522.	8420
GR	2707.5	532.	2708.0	540.	2708.8	550.	2713.4	574.	2713.8	603.	8430
GR	2713.9	700.	2714.4	800.	2715.1	850.	2717.4	950.	0.0	0.	8440
NC	0.120	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8450
QT	5.	3135.	5205.	6270.	8590.	6270.	0.	0.	0.	0.	8460
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	310.00	0.0	0.0	8470
X1	8.67	19.	250.	291.	1280.	1280.	1280.	0.0	0.0	0.	8480
GR	2752.2	20.	2739.4	35.	2737.2	57.	2730.3	68.	2731.8	74.	8490
GR	2731.8	90.	2732.0	145.	2742.5	145.	2742.5	172.	2730.8	172.	8500
GR	2730.0	250.	2721.3	260.	2720.2	266.	2721.3	281.	2723.7	284.	8510
GR	2727.0	297.	2728.3	312.	2737.4	350.	2737.8	362.	0.0	0.	8520
NC	0.070	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8530
QT	5.	3110.	5165.	6215.	8520.	6215.	0.	0.	0.	0.	8540
ET	0.	0.0	0.0	0.0	0.0	7.11	200.00	335.00	0.0	0.0	8550
X1	8.80	17.	250.	277.	600.	600.	600.	0.0	0.0	0.	8560
GR	2755.0	35.	2740.0	57.	2737.7	71.	2736.5	150.	2735.8	228.	8570
GR	2733.6	237.	2734.3	250.	2729.2	265.	2729.2	268.	2729.3	272.	8580
GR	2730.3	275.	2731.8	277.	2732.7	322.	2733.7	335.	2737.9	341.	8590
GR	2739.0	351.	2740.0	374.	0.0	0.	0.0	0.	0.0	0.	8600
NC	0.090	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8610
QT	5.	1780.	2975.	3615.	5150.	3615.	0.	0.	0.	0.	8620
ET	0.	0.0	0.0	0.0	0.0	7.11	400.00	480.00	0.0	0.0	8630
X1	8.92	16.	425.	478.	520.	520.	520.	0.0	0.0	0.	8640
GR	2770.0	50.	2748.0	90.	2744.3	200.	2742.2	300.	2740.8	400.	8650
GR	2741.5	425.	2738.3	435.	2737.2	440.	2737.0	447.	2737.0	455.	8660
GR	2737.1	460.	2737.3	465.	2738.0	473.	2741.5	478.	2762.0	520.	8670
GR	2762.0	550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	8680
NC	0.120	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8690
QT	5.	1720.	2895.	3515.	5015.	3515.	0.	0.	0.	0.	8700
ET	0.	0.0	0.0	0.0	0.0	7.11	400.00	510.00	0.0	0.0	8710
X1	9.06	0.	0.	0.	730.	730.	730.	0.0	4.50	0.	8720
ET	0.	0.0	0.0	0.0	0.0	7.11	125.00	235.00	0.0	0.0	8730
X1	9.06	14.	187.	224.	20.	20.	20.	0.0	-3.40	0.	8740
GR	2784.3	8.	2754.3	37.	2754.0	50.	2753.7	100.	2753.7	157.	8750
GR	2751.8	166.	2754.0	180.	2753.5	187.	2750.8	195.	2750.8	204.	8760
GR	2750.8	218.	2754.9	224.	2755.0	227.	2755.5	253.	0.0	0.	8770
ET	0.	0.0	0.0	0.0	0.0	7.11	125.00	235.00	0.0	0.0	8780
X1	9.06	14.	187.	224.	20.	20.	20.	0.0	-3.40	0.	8790
GR	2784.3	8.	2754.3	37.	2754.0	50.	2753.7	100.	2753.7	157.	8800
GR	2751.8	166.	2754.0	180.	2753.5	187.	2748.0	203.	2748.3	204.	8810
GR	2748.7	214.	2754.9	224.	2755.0	227.	2755.0	253.	0.0	0.	8820
NC	0.110	0.110	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8830
QT	5.	1690.	2855.	3470.	4945.	3470.	0.	0.	0.	0.	8840
ET	0.	0.0	0.0	0.0	0.0	7.11	125.00	235.00	0.0	0.0	8850

602

X1	9.15	0.	0.	0.	450.	450.	450.	0.0	3.40	0.	8860
ET	0.	0.0	0.0	0.0	0.0	7.11	430.00	580.00	0.0	0.0	8870
X1	9.26	22.	460.	510.	520.	520.	520.	0.0	0.0	0.	8880
GR	2783.3	55.	2771.5	100.	2764.0	140.	2768.0	155.	2766.8	200.	8890
GR	2767.2	200.	2767.0	210.	2762.0	230.	2761.3	255.	2760.7	340.	8900
GR	2762.3	345.	2761.5	400.	2761.5	429.	2761.2	400.	2755.5	470.	8910
GR	2754.2	472.	2754.2	480.	2754.0	485.	2754.2	500.	2760.5	510.	8920
GR	2760.1	535.	2761.0	700.	0.0	0.	0.0	0.	0.0	0.	8930
ET	0.	0.0	0.0	0.0	0.0	7.11	430.00	580.00	0.0	0.0	8940
X1	9.26	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	8950
SB	1.25	1.60	3.00	0.	42.70	2.00	305.00	0.0	2754.0	2754.0	8960
ET	0.	0.0	0.0	0.0	0.0	7.11	430.00	580.00	0.0	0.0	8970
X1	9.26	31.	460.	510.	30.	30.	30.	0.0	0.0	0.	8980
X2	0.	0.0	1.	2781.5	2761.8	0.0	0.	0.0	0.0	0.	8990
BT	17.0	112.0	2768.8	0.0	300.0	2765.0	0.0	400.0	2764.5	0.0	9000
BT	460.0	2763.5	0.0	500.0	2763.5	0.0	600.0	2761.9	0.0	700.0	9010
BT	2761.8	0.0	815.0	2762.5	0.0	925.0	2765.0	0.0	955.0	2766.5	9020
BT	0.0	1000.0	2766.8	0.0	1100.0	2769.3	0.0	1125.0	2769.5	0.0	9030
BT	1128.0	2768.2	0.0	1132.0	2771.2	0.0	1160.0	2771.0	0.0	1195.0	9040
BT	2782.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9050
GR	2783.5	55.	2774.0	90.	2767.1	120.	2764.0	140.	2768.0	155.	9060
GR	2766.7	200.	2767.2	200.	2766.8	210.	2762.0	231.	2761.5	250.	9070
GR	2760.6	340.	2762.3	345.	2761.5	400.	2761.5	430.	2761.1	460.	9080
GR	2754.2	472.	2754.3	480.	2754.0	485.	2754.2	500.	2760.3	510.	9090
GR	2760.1	535.	2761.0	700.	2764.0	900.	2766.2	953.	2766.8	1000.	9100
GR	2789.3	1100.	2769.5	1125.	2768.2	1128.	2771.2	1132.	2771.0	1180.	9110
GR	2782.8	1195.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	9120
NC	0.110	0.110	0.035	0.0	0.0						9130
ET	0.	0.0	0.0	0.0	0.0	7.11	430.00	580.00	0.0	0.0	9140
X1	9.26	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	9150
NC	0.110	0.110	0.045	0.0	0.0						9160
QT	5.	1660.	2810.	3410.	4870.	3410.	0.	0.	0.	0.	9170
ET	0.	0.0	0.0	0.0	0.0	7.11	330.00	470.00	0.0	0.0	9180
X1	9.39	42.	363.	400.	700.	700.	700.	0.0	0.0	0.	9190
GR	2792.5	0.	2768.2	46.	2767.4	150.	2767.4	200.	2768.5	251.	9200
GR	2767.2	275.	2777.0	275.	2777.0	325.	2766.6	325.	2766.1	363.	9210
GR	2760.8	372.	2758.2	378.	2758.7	383.	2760.8	386.	2766.1	400.	9220
GR	2765.9	418.	2765.8	446.	2766.8	478.	2780.0	478.	2780.0	505.	9230
GR	2766.9	505.	2767.4	537.	2767.4	550.	2767.6	581.	2780.0	581.	9240
GR	2780.0	616.	2767.3	616.	2767.2	630.	2767.5	695.	2767.8	716.	9250
GR	2780.0	716.	2780.0	752.	2768.2	752.	2769.2	788.	2770.8	795.	9260
GR	2771.2	807.	2771.0	810.	2781.0	845.	2781.5	855.	2782.0	875.	9270
GR	2780.7	883.	2789.0	900.	0.0	0.	0.0	0.	0.0	0.	9280
NC	0.110	0.110	0.045	0.0	0.0						9290
QT	5.	1605.	2740.	3320.	4740.	3320.	0.	0.	0.	0.	9300
ET	0.	0.0	0.0	0.0	0.0	7.11	400.00	350.00	0.0	0.0	9310
X1	9.50	28.	535.	560.	850.	850.	850.	0.0	-0.80	0.	9320
GR	2800.0	85.	2790.0	100.	2778.5	118.	2775.0	200.	2775.0	300.	9330

## H02

GR	2774.5	400.	2773.5	500.	2774.1	535.	2770.2	540.	2770.2	545.	9340
GR	2770.2	550.	2770.2	558.	2774.1	530.	2774.3	570.	2774.5	600.	9350
GR	2774.2	640.	2775.5	700.	2775.5	738.	2775.6	745.	2776.9	785.	9360
GR	2779.0	795.	2781.0	795.	2782.6	805.	2783.0	830.	2781.5	835.	9370
GR	2783.5	840.	2785.0	855.	2800.0	935.	0.0	0.	0.0	0.	9380
ET	0.	0.0	0.0	0.0	0.0	7.11	400.00	650.00	0.0	0.0	9390

X1	9.55	0.	0.	0.	250.	250.	250.	0.0	0.00	0.	9400
NC	0.110	0.110	0.047	0.0	0.0	0.0	0.0	0.0	0.0	0.	9410
GT	5.	1545.	2665.	3230.	4610.	3230.	0.	0.	0.	0.	9420
ET	0.	0.0	0.0	0.0	0.0	7.11	480.00	610.00	0.0	0.0	9430

X1	9.82	23.	568.	587.	640.	640.	640.	0.0	0.0	0.	9440
GR	2813.3	34.	2794.5	50.	2794.0	60.	2791.7	67.	2794.0	75.	9450
GR	2799.5	150.	2795.5	182.	2795.5	226.	2792.0	281.	2790.5	350.	9460
GR	2789.9	450.	2788.8	540.	2789.0	550.	2788.5	568.	2788.0	569.	9470
GR	2782.0	575.	2782.0	585.	2783.8	587.	2789.0	620.	2792.0	655.	9480
GR	2792.2	676.	2802.0	725.	2808.5	772.	0.0	0.	0.0	0.	9490
NC	0.100	0.110	0.047	0.0	0.0	0.0	0.0	0.	0.	0.	9500
GT	5.	1500.	2600.	3150.	4500.	3150.	0.	0.	0.	0.	9510
ET	0.	0.0	0.0	0.0	0.0	7.11	230.00	380.00	0.0	0.0	9520

X1	10.00	31.	235.	273.	960.	960.	960.	0.0	0.0	0.	9530
GR	2821.5	23.	2809.5	68.	2804.2	100.	2803.5	115.	2803.5	124.	9540
GR	2804.0	135.	2804.5	160.	2805.0	160.	2805.2	164.	2804.5	165.	9550
GR	2804.0	210.	2802.0	225.	2793.5	235.	2792.8	237.	2792.8	250.	9560
GR	2792.8	260.	2792.8	265.	2795.3	273.	2795.3	280.	2795.3	300.	9570
GR	2796.5	343.	2796.8	407.	2797.0	450.	2797.1	500.	2800.0	580.	9580
GR	2800.0	590.	2803.2	600.	2803.5	605.	2803.5	626.	2802.8	630.	9590
GR	2820.0	660.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	9600
ET	0.	0.0	0.0	0.0	0.0	7.11	265.00	350.00	0.0	0.0	9610
NC	0.070	0.120	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	9620

X1	10.09	36.	265.	300.	420.	420.	420.	0.0	0.0	0.	9630
GR	2813.0	25.	2812.2	68.	2812.0	140.	2808.5	265.	2807.3	265.	9640
GR	2804.9	267.	2800.0	272.	2799.4	277.	2799.0	282.	2799.0	286.	9650
GR	2800.0	290.	2803.5	298.	2804.9	300.	2805.5	300.	2805.8	330.	9660
GR	2814.0	330.	2814.0	340.	2805.7	340.	2805.8	365.	2814.0	365.	9670
GR	2814.0	375.	2805.8	375.	2805.9	390.	2806.0	405.	2814.0	405.	9680
GR	2814.0	415.	2806.1	415.	2806.4	440.	2814.0	440.	2814.0	450.	9690
GR	2806.0	450.	2807.0	500.	2807.8	550.	2811.0	600.	2813.9	630.	9700
GR	2813.7	653.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	9710
ET	0.	0.0	0.0	0.0	0.0	7.11	160.00	230.00	0.0	0.0	9720
NC	0.080	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	9730

X1	10.21	13.	160.	230.	680.	680.	680.	0.0	0.0	0.	9740
GR	2828.3	23.	2818.0	53.	2818.0	137.	2817.5	150.	2815.0	160.	9750
GR	2809.4	175.	2809.5	180.	2808.5	190.	2809.5	210.	2814.3	230.	9760
GR	2816.0	250.	2820.3	350.	2821.3	418.	0.0	0.	0.0	0.	9770
ET	0.	0.0	0.0	0.0	0.0	7.11	370.00	465.00	0.0	0.0	9780
NC	0.080	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.	9790

X1	10.28	16.	371.	465.	360.	360.	360.	0.0	0.0	0.	9800
GR	2837.4	0.	2834.3	100.	2831.5	200.	2831.0	250.	2827.5	283.	9810



\*PROF 1

CCHV= 0.100 CEHV= 0.500

\*SECNO .050

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELY.	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
0.05	9400.	629.	4117.	4654.	0.25	0	835.		
2500.30	0.0	407.	745.	2016.	0.50	0	2498.30		
13.80	2500.30	1.55	5.53	2.31	0.0	2500.55	2495.60		
0.002065	0.0	0.070	0.055	0.070	0.0	-0.00	136.27		
	2486.50	0.	0.	0.	251.	584.	971.42		0.

\*SECNO .230

0.23	9335.	4432.	4800.	103.	0.59	2	419.		
2502.25	0.0	1321.	601.	47.	0.34	0	2495.80		
14.45	0.0	3.35	7.99	2.19	2.12	2502.84	2497.80		
0.003759	0.056	0.070	0.055	0.070	0.17	-0.00	128.80		
	2487.80	760.	800.	760.	373.	47.	548.15		45.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23	9335.	4544.	4681.	110.	0.54	2	425.		
2502.45	0.0	1392.	611.	31.	-0.06	0	2495.80		
14.65	0.0	3.26	7.66	2.14	0.14	2502.99	2497.80		
0.003376	0.056	0.070	0.055	0.070	0.01	-0.00	124.26		
	2487.80	40.	40.	40.	377.	48.	549.11		47.

\*SECNO .230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.23	9335.	2111.	7224.	0.	1.96	3	264.		
2501.85	2501.85	386.	582.	0.	1.42	13	2506.20		
13.85	0.0	5.47	12.41	0.0	0.01	2503.81	2506.90		
0.023557	0.056	0.070	0.055	0.070	0.71	-0.00	146.61		

K02

2488.00 1. 1. 1. 343. 35. 525.00 47.

\*SECNO .230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLCB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

0.23	9335.	3452.	5883.	0.	0.81	4	342.	
2503.54	0.0	781.	699.	0.	-1.15	0	2506.20	
15.54	0.0	4.42	8.42	0.0	0.43	2504.35	2506.90	
0.009533	0.056	0.070	0.055	0.070	0.12	-0.00	108.83	
	2488.00	30.	30.	30.	381.	35.	525.00	48.

\*SECNO .230

3301 HV CHANGED MORE THAN HVINS

0.23	9335.	4546.	3551.	1239.	0.22	2	542.	
2504.20	0.0	1888.	680.	537.	-0.59	0	2496.20	
16.00	0.0	2.41	5.22	2.31	0.00	2504.41	2498.20	
0.001361	0.056	0.070	0.055	0.070	0.06	-0.00	94.08	
	2488.20	1.	1.	1.	407.	135.	636.32	48.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23	9335.	4548.	3548.	1239.	0.22	2	542.	
2504.21	0.0	1890.	680.	537.	-0.00	0	2496.20	
16.01	0.0	2.41	5.22	2.31	0.01	2504.42	2498.20	
0.001357	0.056	0.070	0.055	0.070	0.00	-0.00	93.95	
	2488.20	10.	10.	10.	408.	135.	636.33	49.

\*SECNO .270

\*\*\* GR CARDS REPEATED

0.27	9335.	4604.	3469.	1261.	0.20	0	547.	
2504.42	0.0	1968.	691.	560.	-0.02	0	2496.20	
16.22	0.0	2.44	5.02	2.25	0.19	2504.62	2498.20	
0.001233	0.056	0.070	0.055	0.070	0.00	-0.00	89.41	
	2488.20	150.	150.	150.	412.	135.	636.71	60.



L02

\*SECNO .550

3301 HV CHANGED MORE THAN HVINS

0.55	9250.	1254.	7719.	278.	0.95	2	272.	
2506.58	0.0	476.	920.	137.	0.73	0	2502.30	
14.78	0.0	2.63	8.39	2.03	2.52	2507.51	2502.30	
0.002730	0.049	0.070	0.045	0.060	0.37	-0.00	134.01	
	2491.80	1500.	1400.	1420.	182.	90.	405.76	139.

\*SECNO .840

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRYAL	IDC	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	MSLK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	MTN	XNL	XNCH	XNR	GLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				
0.84	9170.	49.	8968.	155.	1.95	2	136.		
2510.98	0.0	29.	792.	88.	1.02	0	2508.20		
13.58	0.0	1.67	11.32	1.77	4.91	2512.92	2506.90		
0.003931	0.046	0.070	0.040	0.100	0.51	-0.00	57.14		
	2497.40	1380.	1520.	1360.	64.	72.	192.67	181.	

\*SECNO 1.160

3301 HV CHANGED MORE THAN HVINS

1.16	9080.	194.	7566.	1319.	1.15	2	219.	
2516.36	0.0	112.	810.	473.	-0.80	0	2513.90	
13.06	0.0	1.74	9.34	2.79	4.71	2517.71	2509.20	
0.002750	0.044	0.080	0.040	0.090	0.08	-0.00	41.00	
	2503.50	1480.	1440.	1460.	88.	131.	259.82	219.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	9000.	1054.	5342.	2604.	0.57	3	280.	
2520.02	0.0	466.	716.	819.	-0.58	0	2511.50	
12.82	0.0	2.28	7.46	3.18	2.82	2520.59	2513.20	
0.001626	0.043	0.090	0.040	0.070	0.06	-0.00	134.52	
	2507.20	1360.	1360.	1340.	112.	168.	414.51	272.

\*SECNO 1.450

3495 OVBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2525.00 ELREA= 2518.00

1.45	9000.	0.	6869.	241.	0.51	3	230.	
2520.14	0.0	0.	1079.	7.0.	-0.05	0	2513.20	
12.94	0.0	0.0	6.37	3.00	0.06	2520.66	2511.80	
0.001427	0.043	0.090	0.040	0.070	0.01	-0.00	185.00	
	2507.20	40.	40.	40.	55.	175.	414.76	274.

\*SECNO 1.450

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	9000.	0.	8993.	7.	1.54	2	140.	
2519.63	0.0	0.	903.	9.	1.03	0	2524.80	
12.63	0.0	0.0	9.98	0.80	0.00	2521.17	2524.00	
0.007133	0.043	0.090	0.040	0.070	0.51	-0.00	187.35	
	2507.00	1.	1.	1.	55.	171.	413.70	274.

\*SECNO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOP MID BANK ELEV		
Q	ALOB	ACH	AROB	HV	ITRIAL	IDC	EG	LEFT/RIGHT	
CRIS	VLOB	VCH	VROB	DHV	HL	CORAR	SSTA	ENDST	VOL
WSELK	XNL	XNCH	XNR	WDL	WSDR				
WTN	XL0BL	XLCH	XL0BR						
SLOPE	ELMIN								

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	9000.	0.	8976.	24.	1.41	2	151.	
2519.97	0.0	0.	939.	21.	-0.13	0	2524.80	
12.97	0.0	0.0	9.55	1.14	0.20	2521.39	2524.00	
0.006344	0.043	0.090	0.040	0.070	0.01	-0.00	187.14	
	2507.00	30.	30.	30.	55.	172.	414.41	274.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2527.00 ELREA= 2520.00

1.45	9000.	0.	6774.	2226.	0.41	7	232.	
2521.07	0.0	0.	1181.	822.	-1.00	0	2513.20	
13.87	0.0	0.0	5.74	2.71	0.00	2521.49	2511.80	
0.001026	0.043	0.090	0.040	0.070	0.10	-0.00	185.00	
	2507.20	1.	1.	1.	55.	177.	416.70	274.

\*SECNO 1.450

1.45	9000.	1137.	5126.	2737.	0.42	2	285.	
2521.11	0.0	555.	785.	969.	0.01	0	2511.50	
13.91	0.0	2.05	6.53	2.83	0.04	2521.53	2513.20	
0.001104	0.043	0.090	0.040	0.070	0.01	-0.00	131.83	

A03

2507.20 40. 40. 40. 115. 170. 416.78 276.

\*SECNO 1.700

1.70 8930. 3299. 5243. 388. 0.80 2 223.  
 2522.94 0.0 934. 590. 131. 0.37 0 2515.50  
 12.64 0.0 3.53 8.89 2.97 2.01 2523.74 2514.30  
 0.002336 0.043 0.070 0.040 0.090 0.19 -0.00 75.21  
 2510.30 1300. 1300. 1300. 179. 44. 296.27 336.

\*SECNO 1.780

1.78 8900. 2307. 4294. 2299. 0.55 3 480.  
 2524.04 0.0 753. 529. 1129. -0.25 0 2517.80  
 11.44 0.0 3.06 8.12 2.04 0.83 2524.59 2516.60  
 0.002257 0.043 0.070 0.040 0.090 0.02 -0.00 78.50  
 2512.60 360. 360. 360. 174. 306. 558.95 352.

\*SECNO 1.780

\*\*\* GR CARDS REPEATED

RICHLAND CREEK 100 YEAR FLOOD 08/01/51  
 MILE 0 QLOB QCH QROB HV ITRIAL TOPMID  
 ELEV CRIWS ALOB ACH AROB DHV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB HL EG LEFT/RIGHT  
 SLOPE WTH XNL XNCH XNR XLOSS CORAR SSTA  
 ELMIN XL0BL XLCH XL0BR WSDL WSDR ENDST VOL  
 1.78 8900. 2321. 4243. 2336. 0.52 2 481.  
 2524.16 0.0 771. 535. 1163. -0.03 0 2517.80  
 11.56 0.0 3.01 7.94 2.01 0.09 2524.68 2516.60  
 0.002121 0.043 0.070 0.040 0.090 0.00 -0.00 77.99  
 2512.60 40. 40. 40. 175. 307. 559.35 355.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2521.30 NOT 2524.16  
 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB HK XKOR COFQ RDLEN BMC BWP BAREA SS  
 1.25 1.60 3.00 0.0 52.00 2.00 475.00 7.0  
 ELCHU ELCHD  
 2513.00 2513.00

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
 PRESSURE AND WEIR FLOW

EGPRS EGLAC H3 QWEIR QPR BAREA TAREA ELLC  
 2532.88 2525.61 0.0 3110. 5792. 475. 475. 2522.50  
 ELTRD  
 2524.70

1.78 8900. 2587. 3263. 3050. 0.15 2 512.

E03

2527.71	0.0	1332.	716.	2182.	-0.37	0	2517.80	
15.11	0.0	1.94	4.58	1.40	3.18	2527.85	2516.60	
0.000413	0.043	0.070	0.040	0.090	0.0	-0.00	58.93	
	2512.60	30.	30.	30.	194.	318.	570.95	357.

\*SECTO 1.780

1.78	0900.	3663.	3158.	2098.	0.16	2	708.	
2527.72	0.0	2223.	643.	1359.	0.01	0	2521.40	
15.12	0.0	1.65	4.88	1.54	0.02	2527.88	2521.90	
0.000467	0.042	0.070	0.040	0.090	0.01	-0.00	38.68	
	2512.60	40.	40.	40.	470.	239.	747.15	361.

\*SECTO 1.950

\*GR CARDS REPEATED

1.95	8850.	3418.	2918.	2514.	0.13	2	709.	
2528.24	0.0	2231.	644.	1363.	-0.02	0	2521.90	
15.14	0.0	1.53	4.53	1.84	0.49	2528.38	2522.40	
0.000574	0.042	0.070	0.040	0.070	0.00	-0.00	38.52	
	2513.10	810.	810.	770.	470.	239.	747.28	438.

\*SECTO 2.190

3301 HV CHANGED MORE THAN HVINS

2.19	8770.	1631.	3858.	3281.	0.73	3	876.	
2529.55	0.0	743.	394.	1020.	0.60	0	2525.90	
10.25	0.0	2.19	9.80	3.22	1.60	2530.28	2525.90	
0.004953	0.042	0.070	0.040	0.070	0.30	-0.00	95.44	
	2519.30	1260.	1260.	1260.	507.	369.	971.75	531.

1490 NH CARD USED

\*SECTO 2.320

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOS	QCH	QROB	HV	ITRIAL	TOPMID		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOS	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XHL	XNCH	XNR	QLOSS	CORAR	SSTA		
	EL MIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL
2.32	8725.	2707.	2375.	3642.	0.22	2	1000.		
2531.71	0.0	1390.	386.	1413.	-0.51	0	2525.00		
8.31	0.0	1.95	6.16	2.58	1.61	2531.93	2528.50		
0.002037	0.042	0.070	0.040	0.065	0.05	-0.00	269.94		
	2523.40	200.	640.	640.	513.	487.	1270.17		559.

1490 NH CARD USED

\*SECTO 2.320

3370 NORMAL GRAD=MRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	8725.	3758.	1066.	3900.	0.14	2	1067.	
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C03

2531.80	0.0	1412.	282.	1283.	-0.08	0	2529.00
8.40	0.0	2.66	3.78	3.04	0.00	2531.94	2528.70
0.003752	0.042	0.070	0.040	0.055	0.01	-116.44	269.46
	2523.40	1.	1.	1.	507.	130.	1336.12
							559.

\*SECNO 2.320

\*\*\* GR CARDS REPEATED

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	8725.	3780.	1032.	3913.	0.13	2	1071.
2531.92	0.0	1469.	287.	1347.	-0.01	0	2529.00
8.52	0.0	2.57	3.60	2.90	0.11	2532.05	2528.70
0.003328	0.042	0.070	0.040	0.055	0.00	-116.44	268.91
	2523.40	30.	30.	30.	507.	564.	1339.67
							561.

1490 NH CARD USED

\*SECNO 2.320

2.32	8725.	2501.	1962.	4262.	0.16	1	1071.
2531.91	0.0	1495.	398.	1521.	0.03	0	2525.00
8.51	0.0	1.67	4.94	2.80	0.00	2532.07	2528.50
0.001255	0.042	0.067	0.040	0.048	0.02	-0.00	268.93
	2523.40	1.	1.	1.	514.	557.	1339.52
							561.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

2.40	8700.	2639.	1807.	4254.	0.11	2	1088.
2532.42	0.0	1740.	425.	1791.	-0.04	0	2525.00
9.02	0.0	1.52	4.26	2.38	0.46	2532.53	2528.50
0.000855	0.042	0.067	0.040	0.049	0.00	-0.00	266.60
	2523.40	500.	500.	400.	516.	572.	1354.60
							600.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			100 YEAR FLOOD			08/01/81		
MILE	Q	GLOB	GCH	ARCB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	ARCB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VACB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

2.40	8700.	1332.	7027.	340.	1.22	20	478.
2554.80	2554.80	350.	726.	93.	1.11	21	2551.50
3.30	0.0	3.81	9.68	3.66	0.08	2556.02	2551.50
0.007783	0.042	0.050	0.030	0.050	0.55	-0.00	128.30
	2551.50	40.	40.	40.	312.	166.	606.42
							602.

D03

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	1.00	2.01	0.10	0.0
	ELCHU	ELCHD						
	2551.50	2551.50						

\*SECNO 2.400  
WATER EL=X5 CARD= 2566.700

\*\*\* GR CARDS REPEATED

2.40	8700.	1913.	6252.	536.	0.36	0	530.
2566.70	0.0	749.	1144.	234.	0.10	0	2561.50
5.20	0.0	2.55	5.46	2.29	0.08	2567.06	2561.50
0.001351	0.042	0.050	0.030	0.050	0.09	-0.00	112.00
	2561.50	30.	30.	30.	328.	202.	642.22
							603.

\*SECNO 2.400

2.40	9900.	2.	9897.	2.	0.02	2	1236.
2567.08	0.0	7.	8703.	7.	-0.34	0	2562.00
7.08	0.0	0.21	1.14	0.21	0.00	2567.10	2562.00
0.000039	0.042	0.050	0.030	0.050	0.03	-0.00	7.18
	2560.00	10.	10.	10.	618.	618.	1242.82
							605.

\*SECNO 3.230

3.23	9810.	3.	9762.	45.	0.09	2	410.
2567.28	0.0	9.	4124.	101.	0.07	0	2565.00
12.28	0.0	0.36	2.37	0.44	0.23	2567.36	2563.80
0.000087	0.039	0.050	0.030	0.050	0.03	-0.00	34.81
	2555.00	4180.	4180.	4180.	181.	228.	444.48
							1226.

CCHV= 0.100 CEHV= 0.500  
\*SECNO 3.690

3301 HV CHANGED MORE THAN HVINS

3.69	9760.	0.	9084.	676.	0.76	0	194.
2567.42	0.0	0.	1255.	538.	0.67	0	2571.40
14.62	0.0	0.0	7.24	1.63	0.48	2568.18	2562.60
0.001257	0.039	0.080	0.035	0.080	0.34	-0.00	193.47
	2552.80	2200.	2200.	2200.	54.	140.	387.29
							1374.

CCHV= 0.100 CEHV= 0.500  
\*SECNO 3.810

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				
3.81	9740.	224.	9375.	141.	1.39	3	321.		
2568.44	0.0	111.	1774.	83.	0.62	0	2565.10		

## E03

11.64	0.0	2.01	9.62	1.70	1.34	2569.83	2566.70	
0.006185	0.039	0.080	0.040	0.080	0.51	-0.00	199.93	
	2556.80	600.	560.	570.	169.	153.	521.14	1392.

## \*SECMO 3.810

## \*\*\* GR CARDS REPEATED

3.81	9740.	301.	9225.	213.	1.14	3	353.	
2568.93	0.0	160.	1051.	122.	-0.25	0	2565.10	
12.13	0.0	1.88	8.78	1.75	0.21	2570.07	2566.70	
0.004654	0.039	0.080	0.040	0.080	0.02	-0.00	179.37	
	2556.80	40.	40.	40.	189.	163.	531.96	1393.

## SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	85.00	10.00	800.00	0.42
	ELCHU	ELCHD						
	2556.90	2556.90						

## \*SECMO 3.810

## \*\*\* GR CARDS REPEATED

## 3301 HV CHANGED MORE THAN HVINS

## PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC	
2572.61	2570.37	0.51	350.	9337.	800.	800.	2567.00	
	ELYRD							
	2571.80							
3.81	9740.	893.	8174.	673.	0.38	2	546.	
2571.94	0.0	684.	1523.	478.	-0.76	0	2565.10	
15.14	0.0	1.31	5.37	1.41	2.25	2572.32	2566.70	
0.001061	0.039	0.080	0.040	0.080	0.0	-0.00	52.63	
	2556.80	60.	60.	60.	316.	230.	598.62	1396.

## \*SECMO 3.810

## 3301 HV CHANGED MORE THAN HVINS

3.81	9740.	752.	8448.	547.	1.40	2	224.	
2571.46	0.0	259.	833.	225.	1.02	0	2563.50	
15.26	0.0	2.90	10.14	2.40	0.03	2572.86	2564.00	
0.002544	0.039	0.080	0.040	0.080	0.51	-0.00	260.81	
	2556.20	20.	20.	20.	103.	121.	484.92	1397.

## \*SECMO 3.970

## 3301 HV CHANGED MORE THAN HVINS

F03

3.97	9730.	1331.	7794.	605.	0.68	2	269.	
2573.86	0.0	739.	1059.	303.	-0.72	0	2564.00	
15.06	0.0	1.80	7.36	1.99	1.61	2574.54	2564.00	
0.001859	0.039	0.120	0.045	0.120	0.07	-0.00	127.23	
	2558.80	760.	740.	760.	186.	83.	396.21	1427.

\*SECNO 3.970

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITR1AL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
3.97	9730.	439.	9087.	205.	1.18	2	269.	
2573.75	0.0	293.	1009.	112.	0.49	0	2571.50	
14.93	0.0	1.50	9.00	1.83	0.12	2574.90	2570.20	
0.005437	0.039	0.120	0.045	0.120	0.25	-0.00	128.34	
	2558.80	40.	40.	40.	185.	84.	397.30	1428.

\*SECNO 3.970

\*\*\* GR CARDS REPEATED

3.97	9730.	504.	9000.	226.	1.11	2	272.	
2573.96	0.0	328.	1027.	123.	-0.07	0	2571.50	
15.16	0.0	1.54	6.76	1.84	0.16	2575.07	2570.20	
0.005035	0.039	0.120	0.045	0.120	0.01	-0.00	126.35	
	2558.80	30.	30.	30.	187.	84.	397.95	1429.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	9730.	1453.	7645.	632.	0.59	2	277.	
2574.56	0.0	846.	1111.	337.	-0.52	0	2564.00	
15.76	0.0	1.72	6.88	1.88	0.03	2575.15	2564.00	
0.001524	0.039	0.120	0.045	0.120	0.05	-0.00	121.30	
	2558.80	10.	10.	10.	192.	85.	398.29	1430.

\*SECNO 4.140

4.14	9710.	3704.	4436.	1570.	0.29	2	420.	
2576.04	0.0	2118.	732.	901.	-0.30	0	2564.30	
13.36	0.0	1.75	6.06	1.74	1.17	2576.34	2566.70	
0.001137	0.039	0.120	0.045	0.120	0.03	-0.00	374.28	
	2562.70	760.	940.	940.	284.	136.	794.44	1489.

\*SECNO 4.140

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2577.00 ELREA= 2577.00

4.14	9710.	0.	9710.	0.	0.42	2	179.	
2576.04	0.0	0.	1876.	0.	0.13	0	2565.90	
13.36	0.0	0.0	5.18	0.0	0.04	2576.45	2567.90	
0.001085	0.039	0.120	0.045	0.120	0.06	-0.00	603.00	
	2562.70	40.	40.	40.	90.	90.	782.00	1491.



SPECIAL BRIDGE

SB	HK	XKOR	COFR	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	131.00	6.00	1740.00	1.24
	ELCMV	ELCHD						
	2562.80	2562.80						

\*SECTO 4.140

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

					100 YEAR FLOOD		08/01/81	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	INC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE FLOW

EGPRS	EGLMC	H3	WWEIR	QPR	BAREA	TAREA	ELLC
2576.81	2576.49	0.04	0.	0710.	1740.	1741.	2575.20
ELTRD							
2577.20							

3495 OVERBANK AREA ASSIMED NON-EFFECTIVE, ELREA= 2578.90 ELREA= 2578.90

4.14	9710.	0.	9710.	0.	0.39	2	179.	
2576.42	0.0	0.	1945.	0.	-0.03	0	2565.90	
13.72	0.0	0.0	4.99	0.0	0.36	2576.81	2567.90	
0.000961	0.039	0.120	0.045	0.120	0.0	-0.00	603.00	
	2562.70	115.	115.	115.	90.	90.	782.00	1496.

\*SECTO 4.140

4.14	9710.	3764.	4352.	1594.	0.25	2	423.	
2576.60	0.0	2280.	783.	982.	-0.14	0	2564.30	
13.90	0.0	1.67	5.71	1.66	0.03	2576.85	2566.70	
0.000954	0.039	0.120	0.045	0.120	0.01	-0.00	372.57	
	2562.70	30.	30.	30.	285.	137.	795.28	1498.

\*SECTO 4.280

4.28	8660.	3330.	3333.	1997.	0.23	2	469.	
2577.31	0.0	1662.	589.	1150.	-0.02	0	2570.00	
14.91	0.0	2.00	5.65	1.74	0.68	2577.54	2569.20	
0.001104	0.040	0.100	0.045	0.100	0.00	-0.00	127.13	
	2562.40	600.	710.	710.	242.	220.	596.01	1554.

\*SECTO 4.280

\*\*\* GR CARDS REPEATED

4.28	8660.	3333.	3325.	2002.	0.22	0	470.
2577.36	0.0	1671.	591.	1158.	-0.00	0	2570.00
14.96	0.0	1.99	5.62	1.73	0.04	2577.58	2569.20

N03

0.001088 0.040 0.100 0.045 0.100 0.00 -0.00 126.67  
 2562.40 40. 40. 40. 250. 220. 596.43 1557.

\*SECNO 4.280

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28 8660. 3318. 3341. 2000. 0.32 2 469.  
 2577.31 0.0 1406. 499. 960. 0.09 0 2570.00  
 14.91 0.0 2.36 6.75 2.08 0.00 2577.63 2569.20  
 0.007887 0.040 0.100 0.045 0.100 0.05 -514.52 127.11  
 2562.40 1. 1. 1. 249. 220. 596.03 1557.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED  
 RICHLAND CREEK

100 YEAR FLOOD 08/01/81

MILE	Q	QLOB	GCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRHS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28 8660. 3321. 3330. 2009. 0.31 2 470.  
 2577.36 0.0 1416. 501. 968. -0.01 0 2570.00  
 14.96 0.0 2.35 6.65 2.07 0.04 2577.67 2569.20  
 0.007725 0.040 0.100 0.045 0.100 0.00 -514.52 126.61  
 2562.40 5. 5. 5. 250. 220. 596.49 1557.

\*SECNO 4.280

4.28 8660. 3339. 3304. 2017. 0.22 2 472.  
 2577.47 0.0 1697. 597. 1181. -0.10 0 2570.00  
 15.07 0.0 1.97 5.54 1.71 0.00 2577.68 2569.20  
 0.001042 0.040 0.100 0.045 0.100 0.01 -0.00 125.38  
 2562.40 1. 1. 1. 251. 221. 597.61 1557.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

4.28 8660. 3339. 3302. 2018. 0.21 2 472.  
 2577.48 0.0 1700. 597. 1183. -0.00 0 2570.00  
 15.08 0.0 1.96 5.53 1.71 0.01 2577.69 2569.20  
 0.001038 0.040 0.100 0.045 0.100 0.00 -0.00 125.25  
 2562.40 10. 10. 10. 251. 221. 597.72 1558.

\*SECNO 4.430

4.43 8465. 518. 4452. 3494. 0.71 2 310.  
 2578.42 0.0 246. 526. 814. 0.49 0 2572.00  
 12.22 0.0 2.11 8.47 4.29 1.19 2579.13 2571.70  
 0.002956 0.040 0.120 0.045 0.060 0.25 -0.00 62.66  
 2566.20 715. 735. 735. 72. 238. 372.18 1600.

N03

\*SECNO 4.630

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

4.63	8475.	456.	4935.	3084.	1.25	3	220.	
2582.23	0.0	178.	453.	564.	0.54	0	2577.30	
10.73	0.0	2.56	10.90	5.47	4.08	2583.48	2577.00	
0.005981	0.040	0.120	0.045	0.060	0.27	-0.00	66.76	
	2571.50	1000.	1000.	1000.	68.	152.	286.96	1632.

\*SECNO 4.820

RICHLAND CREEK

100 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRYAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VL0B	VCH	VROB	IL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XL0BR	WSDL	WSDR	ENDST	VOL
4.82	8375.	1236.	6443.	695.	1.48	2	222.	
2588.08	0.0	436.	586.	196.	0.23	0	2582.40	
12.38	0.0	2.83	10.99	3.54	5.97	2589.56	2584.20	
0.006529	0.040	0.120	0.050	0.070	0.11	-0.00	57.77	
	2575.70	1100.	940.	940.	122.	100.	279.63	1659.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96	8300.	2806.	5494.	0.	0.74	2	137.	
2591.88	0.0	549.	718.	0.	-0.74	0	2581.30	
12.66	0.0	5.11	7.65	0.34	2.96	2592.60	2591.50	
0.003617	0.041	0.070	0.055	0.080	0.07	-0.00	297.06	
	2579.20	660.	610.	610.	104.	33.	434.01	1677.

\*SECNO 4.960

4.96	8300.	1746.	6554.	0.	0.35	2	231.	
2592.38	0.0	609.	1282.	0.	-0.39	0	2585.20	
13.18	0.0	2.87	5.11	0.0	0.10	2592.73	2599.50	
0.001710	0.041	0.070	0.055	0.080	0.04	-0.00	204.75	
	2579.20	40.	40.	40.	185.	46.	435.51	1679.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	K/P	BAREA	SS
	1.25	1.60	3.00	0.0	54.00	4.00	1310.00	1.18
	EI.CHU	ELCHD						
	2579.20	2579.20						

\*SECNO 4.960

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

J03

3420 BRIDGE W.S. = 2592.16 BRIDGE VELOCITY = 9.81  
 CALCULATED CHANNEL AREA = 846.  
 EGPRS EGLMC H3 QHEIR QPR BAREA TAREA ELLE  
 0.0 2592.77 0.05 0. 8300. 1310. 1310. 2597.50

ELTRD  
 2598.00

4.96	8300.	1754.	6546.	0.	0.34	0	231.
2592.43	0.0	613.	1288.	0.0	-0.00	0	2585.20
13.23	0.0	2.86	5.08	0.0	0.04	2592.77	2599.50
0.001684	0.041	0.070	0.055	0.080	0.0	-0.00	204.82
	2579.20	15.	15.	15.	185.	46.	435.63
							1679.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
CRWS	ALOB	ACH	AROB	DHV	IDC	EG	LEFT/RIGHT	
WSELK	VLOB	VCH	VROB	HL	EG	CORAR	SSTA	
WTN	XNL	XNCH	XNR	OLOSS	CORAR	WSDR	ENDST	VOL
ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			

7185 MINIMUM SPECIFIC ENERGY  
 3720 CRITICAL DEPTH ASSUMED

4.96	8300.	0.	8286.	14.	4.06	4	72.
2590.64	2590.64	0.	512.	7.	3.72	11	2596.90
11.04	0.0	0.0	16.18	2.08	0.04	2594.70	2589.40
0.023980	0.041	0.070	0.055	0.080	1.86	-0.00	388.96
	2579.60	10.	10.	10.	27.	45.	461.21
							1680.

\*SECNO 4.960

with GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
CRWS	ALOB	ACH	AROB	DHV	IDC	EG	LEFT/RIGHT	
WSELK	VLOB	VCH	VROB	HL	EG	CORAR	SSTA	
WTN	XNL	XNCH	XNR	OLOSS	CORAR	WSDR	ENDST	VOL
ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			

4.96	8300.	0.	8064.	236.	1.97	4	95.
2593.74	0.0	0.	707.	60.	-2.09	0	2596.90
14.14	0.0	0.0	11.41	2.94	0.80	2595.71	2589.40
0.008481	0.041	0.080	0.055	0.090	0.21	-0.00	385.51
	2579.60	60.	60.	60.	30.	64.	480.26
							1681.

\*SECNO 5.100

3301 HV CHANGED MORE THAN HVINS

K03

5.10	8180.	644.	5465.	2071.	0.20	4	366.	
2597.30	0.0	413.	1320.	1036.	-1.77	0	2589.10	
11.70	0.0	1.56	4.14	2.00	1.61	2597.50	2589.70	
0.000940	0.041	0.100	0.050	0.080	0.18	-0.00	187.56	
	2585.60	900.	750.	750.	138.	228.	553.70	1712.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2600.00 ELREA= 2598.00

5.10	8180.	0.	8180.	0.	0.62	2	136.	
2597.14	0.0	0.	1298.	0.	0.42	0	2589.10	
11.54	0.0	0.0	6.30	0.0	0.06	2597.76	2589.70	
0.002227	0.041	0.100	0.050	0.080	0.21	-0.00	258.00	
	2585.60	40.	40.	40.	68.	68.	394.00	1714.

SPECIAL BRIDGE

SB	MK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	95.00	18.00	1350.00	1.63
	ELCHU	ELCHD						
	2584.20	2584.20						

\*SECNO 5.100

\*\*\* GR CARDS REPEATED  
PRESSURE FLOW

EGPRS	EGLIC	H3	QWEIR	OPK	BAREA	TAREA	ELLC
2598.06	2598.01	0.28	0.	8180.	1350.	1349.	2597.80

ELTRD  
2599.10

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2601.00 ELREA= 2599.50

5.10	8180.	0.	8180.	0.	0.57	2	136.	
2597.48	0.0	0.	1345.	0.	-0.04	0	2589.10	
11.88	0.0	0.0	6.08	0.0	0.30	2598.06	2589.70	
0.001982	0.041	0.090	0.050	0.100	0.0	-0.00	258.00	
	2585.60	30.	30.	30.	68.	68.	394.00	1715.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

5.10	8180.	775.	5622.	1783.	0.18	2	369.	
2597.92	0.0	457.	1404.	1136.	-0.39	0	2589.10	
12.32	0.0	1.70	4.00	1.57	0.01	2598.11	2589.70	
0.000810	0.041	0.090	0.050	0.100	0.04	-0.00	185.96	
	2585.60	10.	10.	10.	140.	229.	554.86	1715.

L03

\*SECNO 5.200

RICHLAND CREEK

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
5.20	8110.	940.	3900.	3264.	0.21	2	370.	
2598.27	0.0	482.	723.	1903.	0.05	0	2509.10	
12.67	0.0	1.95	3.39	1.72	0.37	2598.51	2587.00	
0.000803	0.041	0.080	0.040	0.100	0.01	-0.00	185.08	
	2585.60	460.	460.	460.	104.	266.	355.50	1747.

\*SECNO 5.490

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

5.49	8110.	2443.	5591.	76.	1.83	20	333.	
2603.48	2603.48	638.	636.	34.	1.59	16	2602.80	
8.68	0.0	3.93	12.82	2.23	2.93	2605.31	2600.90	
0.009216	0.041	0.080	0.040	0.100	0.79	-0.00	154.10	
	2594.80	1530.	1530.	1530.	381.	48.	623.22	1821.

\*SECNO 5.580

3301 HV CHANGED MORE THAN HVINS

5.58	8090.	4063.	3888.	139.	0.42	2	442.	
2606.38	0.0	1641.	550.	95.	-1.41	0	2602.80	
9.88	0.0	2.48	7.07	1.46	1.35	2606.80	2600.90	
0.002020	0.041	0.080	0.040	0.120	0.14	-0.00	187.54	
	2596.50	360.	360.	360.	388.	54.	629.11	1835.

\*SECNO 5.580

\*\*\* GR CARDS REPEATED

5.58	8090.	4093.	3857.	141.	0.40	2	442.	
2606.48	0.0	1677.	556.	95.	-0.02	0	2602.80	
9.98	0.0	2.44	6.94	1.44	0.08	2606.88	2600.90	
0.001918	0.041	0.080	0.040	0.120	0.00	-0.00	187.31	
	2596.50	40.	40.	40.	388.	54.	629.31	1838.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHU	ELCHD						
	2596.50	2596.50						

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.80 FEET

PRESSURE AND WEIR FLOW

EGPNS	EGLWC	H3	WEIR	GPR	BAREA	TAREA	ELLC
2608.19	2607.95	0.00	740.	3315.	408.	408.	2606.40
ELTRD							
2604.90							
5.58	8090.	4209.	2939.	942.	0.19	2	700.
2608.00	0.0	2155.	555.	626.	-0.21	0	2604.70
11.50	0.0	1.95	5.29	1.51	1.31	2608.19	2604.40
0.001122	0.041	0.070	0.040	0.080	0.0	-0.00	450.00
	2596.50	35.	35.	35.	499.	202.	1150.00
							1840.

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.86 FEET

RICHLAND CREEK			100 YEAR FLOOD			08/01/81		
MILE	Q	QLOB	QCH	QCRB	HV	ITRIAL	TOPRID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VCRB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNCR	QLOSS	CORAR	STTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
5.58	8090.	3801.	3630.	659.	0.16	1	700.	
2608.07	0.0	2187.	824.	486.	-0.03	0	2604.70	
10.67	0.0	1.74	4.40	1.36	0.04	2608.23	2604.50	
0.000872	0.041	0.070	0.040	0.080	0.00	-0.00	450.00	
	2597.40	40.	40.	40.	520.	181.	1150.00	1843.

*SECNO 5.640	5.64	8065.	3678.	3575.	812.	0.55	1	637.
	2608.42	0.0	1309.	425.	346.	0.39	0	2606.00
	9.42	0.0	2.81	8.41	2.34	0.55	2608.97	2605.00
	0.003904	0.041	0.070	0.040	0.080	0.20	-0.00	157.56
		2599.00	340.	340.	340.	471.	160.	789.15
								1865.

\*SECNO 5.710

*** GR CARDS REPEATED	5.71	8065.	3632.	3634.	799.	0.59	2	630.
	2609.82	0.0	1269.	420.	335.	0.04	0	2607.50

AD4

9.32	0.0	2.86	8.66	2.39	1.42	2610.41	2606.50	
0.004207	0.041	0.070	0.040	0.080	0.02	-0.00	158.09	
	2600.50	350.	350.	350.	471.	159.	788.25	1881.

\*SECTO 5.910

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MPLE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDR	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

5.91	8030.	172.	5532.	2326.	1.33	7	569.	
2618.61	2618.61	75.	503.	854.	0.74	8	2615.30	
10.81	0.0	2.31	11.00	2.69	4.54	2617.94	2616.00	
0.006156	0.041	0.040	0.040	0.080	0.37	-0.00	247.46	
	2605.80	900.	900.	900.	439.	432.	1118.23	1917.

\*SECTO 5.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

5.97	8020.	3145.	3533.	1342.	0.52	3	581.	
2618.77	0.0	713.	471.	524.	-0.81	0	2617.70	
9.47	0.0	4.41	7.50	2.26	1.27	2619.28	2614.80	
0.003467	0.041	0.035	0.045	0.080	0.08	-0.00	65.77	
	2609.30	280.	280.	280.	356.	375.	796.98	1927.

\*SECTO 6.060

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 2.41 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MPLE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDR	WSDR	ENDST	VOL

6.06	8000.	4149.	2547.	1304.	0.38	2	919.	
2620.01	0.0	1085.	354.	696.	-0.13	0	2619.50	
10.81	0.0	3.82	7.20	1.87	1.09	2620.39	2619.60	
0.002996	0.041	0.035	0.040	0.070	0.01	-0.00	12.00	



804

2609.20 340. 340. 340. 571. 368. 950.00 1943.

\*SECNO 6.120

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 4.38 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCII	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XL	XLCH	XLROB	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLROB	USDL	WSDR			

3685 20 TRIALS ATTEMPTED WSEL, CWSEL  
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.12	7970.	1437.	5478.	1075.	1.27	20	614.		
2622.48	2622.48	678.	507.	445.	0.88	6	2620.70		
10.68	0.1	2.12	10.80	2.41	1.09	2625.74	2619.80		
0.005240	0.04	0.080	0.040	0.080	0.44	-0.00	245.81		
	2611.80	280.	280.	280.	633.	221.	1100.00		1955.

\*SECNO 6.160

3265 DIVIDED FLOW

6.16	7985.	14.	6875.	1096.	1.57	2	231.		
2623.29	0.0	11.	639.	338.	0.31	0	2621.50		
9.89	0.0	1.24	10.77	3.25	0.96	2624.86	2619.70		
0.006986	0.041	0.050	0.045	0.080	0.15	-0.00	877.03		
	2613.40	160.	160.	160.	103.	154.	1134.05		1960.

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.16	7985.	96.	6588.	1301.	1.17	3	344.		
2624.02	0.0	68.	697.	422.	-0.40	0	2621.50		
10.62	0.0	1.41	9.45	3.08	0.29	2625.19	2619.70		
0.004794	0.041	0.050	0.045	0.080	0.04	-0.00	538.46		
	2613.40	50.	50.	50.	442.	156.	1136.32		1961.

SPECIAL BRIDGE

HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
1.25	1.60	3.00	0.0	51.00	6.00	632.00	5.94
ELCHU	ELCHD						

2615.00 2615.00

\*SECTO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.16 EXTENDED 0.25 FEET

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2627.98	2625.35	0.33	2156.	5865.	632.	632.	2622.20
ELTRD							
2624.50							
6.16	7985.	910.	5564.	1121.	0.51	2	679.
2625.64	0.0	528.	828.	623.	-0.66	0	2621.50
12.24	0.0	1.70	6.72	2.44	0.97	2626.16	2619.70
0.001925	0.041	0.050	0.045	0.080	0.0	-0.00	443.44
	2613.40	50.	50.	50.	537.	180.	1160.00 1963.

\*SECTO 6.160

3265 DIVIDED FLOW

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV
ELEV	CRWS	ALOB	ACH	AROB	DI/V	EG	CORAR	LEFT/RIGHT
DEPTH	WSELK	VLOB	VCH	VROB	HL	OLOSS	WSDR	SSTA
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	WSDR	ENDST
	ELMIN	XLOBL	XLCH	XLOBR	WSDL			VOL
6.16	7985.	936.	7037.	13.	0.87	2	350.	
2625.57	0.0	295.	894.	13.	0.36	0	2623.30	
10.37	0.0	3.18	7.87	1.00	0.11	2626.74	2621.00	
0.001024	0.041	0.050	0.045	0.080	0.18	76.00	105.16	
	2615.20	40.	40.	40.	340.	76.	1021.08	1964.

\*SECTO 6.200

3265 DIVIDED FLOW

3280 CROSS SECTION 6.20 EXTENDED 1.12 FEET

6.20	7975.	2583.	5378.	14.	1.02	2	462.
2625.92	0.0	1122.	553.	15.	0.15	0	2623.20
11.22	0.0	2.30	9.73	0.92	0.42	2626.91	2624.40
0.005485	0.041	0.100	0.045	0.100	0.08	-0.00	400.00
	2614.70	90.	90.	90.	463.	52.	914.89 1967.

D04

\*SECNO 6.310

3265 DIVIDED FLOW

3280 CROSS SECTION 6.31 EXTENDED 2.40 FEET

6.31	7955.	3109.	3522.	1324.	0.64	2	817.	
2628.79	0.0	1422.	376.	656.	-0.38	0	2626.60	
11.79	0.0	2.19	9.36	2.02	2.46	2629.43	2622.00	
0.004792	0.041	0.100	0.045	0.100	0.04	-0.00	31.00	
	2617.00	480.	480.	480.	489.	391.	911.32	1990.

\*SECNO 6.480

3265 DIVIDED FLOW

3280 CROSS SECTION 6.48 EXTENDED 0.91 FEET

6.48	7920.	905.	5720.	1295.	1.01	2	496.	
2634.01	0.0	388.	610.	610.	0.36	0	2631.00	
8.01	0.0	2.33	9.37	2.12	5.40	2635.01	2631.00	
0.006128	0.041	0.100	0.045	0.100	0.18	-0.00	174.00	
	2626.00	1000.	1000.	1000.	177.	700.	1050.00	2037.

\*SECNO 6.610

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	ALOB	ACH	AROB	HV	ITRIL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VL OB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.61	7900.	289.	7462.	150.	2.61	2	307.	
2637.84	2637.84	118.	580.	110.	1.60	11	2633.00	
10.34	0.0	2.45	13.32	1.36	4.51	2640.44	2633.00	
0.010216	0.041	0.100	0.045	0.120	0.80	-0.00	251.65	
	2627.50	580.	580.	580.	121.	521.	893.42	2052.

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

E04

E04

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLCB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XHL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDBT	VOL
6.61	7900.	599.	6693.	608.	1.32	5	346.	
2639.51	0.0	272.	669.	476.	-1.28	0	2633.00	
12.01	0.0	2.20	10.00	1.46	0.26	2640.83	2633.00	
0.004540	0.041	0.100	0.045	0.120	0.13	-0.00	245.50	
	2627.50	40.	40.	40.	127.	543.	920.00	2053.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2636.85 NOT 2639.51  
 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHU	ELCHD						
	2628.50	2628.50						

\*SECNO 6.610  
 6870 P.S. ENERGY OF 2640.83 HIGHER THAN COMPUTED ENERGY OF 2640.71

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC	
2640.71	2640.44	0.06	5119.	2800.	402.	404.	2637.90	
	ELTRD							
	2636.30							
6.61	7900.	620.	6221.	1059.	1.00	3	461.	
2639.83	0.0	302.	690.	746.	-0.32	0	2633.00	
12.33	0.0	2.05	9.02	1.42	0.0	2640.83	2633.00	
0.003543	0.041	0.100	0.045	0.120	0.0	-0.00	244.55	
	2627.50	30.	30.	30.	128.	587.	959.59	2055.

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.61	7900.	626.	6198.	1076.	0.98	1	462.	
2639.88	0.0	307.	693.	759.	-0.02	0	2633.00	
12.38	0.0	2.04	8.95	1.42	0.04	2640.87	2633.00	
0.003471	0.041	0.100	0.045	0.120	0.00	-0.00	244.42	
	2627.50	10.	10.	10.	128.	588.	960.62	2055.

F04

\*SECNO 6.740

3265 DIVIDED FLOW

3280 CROSS SECTION 6.74 EXTENDED 1.17 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XML	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

6.74	7860.	556.	5801.	1503.	2.12	20	304.	
2644.17	2644.17	223.	430.	495.	1.13	8	2639.70	
12.77	0.0	2.50	13.48	3.04	1.19	2646.28	2655.00	
0.009568	0.041	0.100	0.045	0.100	0.57	-0.00	215.57	
	2631.40	220.	220.	220.	172.	312.	700.00	2062.

\*SECNO 6.790

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.02 FEET

3301 HV CHANGED MORE THAN HVINS

6.79	7840.	1815.	3872.	2153.	0.35	3	392.	
2648.02	0.0	1037.	594.	1144.	-1.76	0	2639.70	
16.62	0.0	1.75	6.52	1.88	1.91	2648.37	2639.10	
0.001320	0.041	0.100	0.045	0.100	0.18	-0.00	181.07	
	2631.40	680.	680.	680.	207.	312.	700.00	2093.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.08 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XML	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

G04

6.79	7840.	1825.	3856.	2159.	0.35	2	392.
2648.08	0.0	1048.	596.	1154.	-0.01	0	2639.70
16.68	0.0	1.74	6.47	1.87	0.05	2648.42	2639.10
0.001292	0.041	0.100	0.045	0.100	0.00	-0.00	180.96
	2631.40	40.	40.	40.	207.	312.	700.00

2095.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790  
 PRESS FLOW BECAUSE EGLWC OF 2648.46 EXCEEDS 1.5 DEPTH  
 PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2659.54	2648.46	0.04	6015.	1829.	365.	359.	2642.80

ELTRD  
 2641.70

6.79	7840.	2972.	4142.	726.	0.44	2	363.
2648.26	0.0	1452.	586.	382.	0.09	0	2640.50
14.26	0.0	2.05	7.06	1.90	0.28	2648.70	2636.00
0.001670	0.041	0.100	0.045	0.100	0.0	-0.00	89.34
	2634.00	50.	50.	50.	273.	90.	452.74

2093.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

6.79	7840.	2975.	4139.	727.	0.44	0	363.
2648.28	0.0	1455.	587.	383.	-0.00	0	2640.50
14.28	0.0	2.04	7.05	1.90	0.02	2648.72	2636.00
0.001663	0.041	0.100	0.045	0.100	0.00	-0.00	89.31
	2634.00	10.	10.	10.	273.	90.	452.76

2099.

\*SECNO 7.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.00	7780.	1437.	5558.	785.	0.99	3	883.
2651.04	0.0	1049.	592.	407.	0.55	0	2649.00
9.04	0.0	1.37	9.38	1.95	3.03	2652.02	2646.50
0.005762	0.041	0.120	0.045	0.110	0.28	-0.00	163.19
	2642.00	1080.	1080.	1080.	702.	221.	1086.48

2154.

\*SECNO 7.230

RICHLAND CREEK			100 YEAR FLOOD	08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID

H04

ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XLN	XLCH	XNR	QLOSS	CORAR	SSTA	VOL
	ELMIN	XLOBL		XLOBR	K'OL	WSDR	ENDST	
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
7.23	7710.	555.	5774.	1381.	1.29	11	767.	
2661.44	2661.44	329.	551.	795.	0.30	12	2657.00	
7.94	0.0	1.69	10.48	1.74	8.23	2662.73	2657.00	
0.008019	0.042	0.120	0.045	0.110	0.15	-0.00	130.25	
	2653.50	1220.	1220.	1220.	229.	538.	896.77	2207.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MI	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XLN	XLCH	XNR	QLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL		XLOBR	WSDL	WSDR		
7.23	7710.	758.	4961.	1991.	0.64	4	813.	
2662.37	0.0	505.	627.	1280.	-0.65	0	2657.00	
8.87	0.0	1.50	7.91	1.56	0.21	2663.00	2657.00	
0.003848	0.042	0.120	0.045	0.110	0.06	-0.00	126.54	
	2653.50	40.	40.	40.	232.	560.	939.49	2208.

SPECIAL BRIDGE

SB	HK	XKOR	COFA	RDLN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
ELCHU		ELCHD						
2653.50		2653.50						

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

PRESS FLOW BECAUSE EGLWC OF 2663.09 EXCEEDS 1.5 DEPTH  
6870 D.S. ENERGY OF 2663.00 HIGHER THAN COMPUTED ENERGY OF 2662.86  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2671.51	2663.09	0.09	5933.	1800.	402.	402.	2659.60
ELTRD							
	2658.90						
7.23	7710.	759.	4954.	1996.	0.63	3	813.
2662.37	0.0	506.	628.	1284.	-0.00	0	2657.00
8.87	0.0	1.50	7.89	1.55	0.0	2663.00	2657.00
0.003824	0.042	0.120	0.045	0.110	0.0	-0.00	126.51

2653.50 30. 30. 30. 232. 581. 939.77 2210.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

7.23	7710.	782.	5041.	1887.	0.66	1	814.	
2662.40	0.0	512.	630.	1301.	0.03	0	2657.00	
8.90	0.0	1.53	8.00	1.45	0.04	2663.06	2657.00	
0.003907	0.042	0.120	0.045	0.120	0.01	-0.00	126.39	
	2653.50	10.	10.	10.	233.	582.	940.75	2211.

\*SECNO 7.460

3301 HV CHANGED MORE THAN HVINS

RICKLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.46	7640.	438.	4851.	2351.	1.69	5	378.	
2669.79	2669.79	177.	380.	586.	1.03	8	2668.30	
9.39	0.0	2.48	12.75	4.01	7.39	2671.48	2668.30	
0.013549	0.042	0.080	0.050	0.110	0.51	-0.00	116.27	
	2640.40	1120.	1120.	1120.	203.	175.	494.12	2257.

\*SECNO 7.540

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.54	7620.	508.	5360.	1752.	0.79	3	396.	
2673.95	0.0	225.	643.	683.	-0.90	0	2671.00	
9.65	0.0	2.26	8.34	2.57	3.17	2674.74	2660.50	
0.004804	0.042	0.090	0.050	0.110	0.09	-0.00	83.19	
	2664.30	420.	420.	420.	203.	426.	714.01	2270.

\*SECNO 7.780

RICKLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.78	7495.	1570.	4284.	1642.	0.89	5	1029.	
2684.14	2684.14	724.	436.	823.	0.10	13	2681.60	
8.44	0.0	2.17	9.83	2.00	7.90	2685.02	2682.00	



J04

0.108892 0.042 0.090 0.050 0.110 0.05 -0.00 286.28  
 2675.70 1240. 1240. 1240. 1240. 520. 469. 1315.53 2320.

\*SECTO 7.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97 7380. 300. 6653. 427. 1.79 4 305.  
 2692.83 2692.27 102. 589. 222. 0.91 11 2687.50  
 10.83 0.0 2.94 11.29 1.92 9.14 2694.62 2690.50  
 0.010697 0.042 0.100 0.050 0.110 0.45 -0.00 479.77  
 2682.00 940. 940. 940. 940. 79. 447. 1005.53 2351.

\*SECTO 7.970

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97 7380. 402. 6109. 868. 1.05 3 585.  
 2693.95 0.0 187. 680. 538. -0.75 0 2687.50  
 11.95 0.0 2.15 8.98 1.61 0.30 2694.99 2690.50  
 0.005595 0.042 0.100 0.050 0.110 0.07 -0.00 402.94  
 2682.00 40. 40. 40. 40. 156. 571. 1130.15 2352.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2690.51 NOT 2693.95  
 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB HK XROB COFO RLEN BWC BWP BAREA SS  
 1.25 1.60 3.00 0.0 29.00 4.00 506.00 1.90  
 ELCMU ELCHD  
 2682.00 2682.00

\*SECTO 7.970

3280 CROSS SECTION 7.97 EXTENDED 1.46 FEET

RICHLAND CREEK 100 YEAR FLOOD 08/01/81  
 MILE Q QLOB QCH GROB HV ITRIAL TOPWID  
 ELEV CRIMS ALOB ACH AROB DNV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB In EG LEFT/RIGHT  
 SLOPE WTH XNL XNCH XNR XLOSS CORAR SSTA  
 ELMIN XLOBL XLCH XLOBR WSDL WSDR ENDST VOL

PRESSURE AND WEIR FLOW

EGPRS EGLWC ILS QWEIR QPR BAREA TAREA ELLC  
 2695.65 2695.35 0.28 3209. 4188. 506. 512. 2693.10

K04

ELTRD  
2692.60

3685 20 TRIALS ATTEMPTED WSEL, CWSEL  
3710 WSEL ASSUMED BASED ON MIN DIFF

7.97	7380.	351.	5523.	1506.	1.19	20	632.	
2695.56	2695.49	163.	549.	737.	0.15	13	2692.00	
13.56	0.0	2.16	10.07	2.04	0.17	2696.75	2693.60	
0.005860	0.042	0.080	0.050	0.080	-0.17	0.0	409.62	
	2682.00	30.	30.	30.	124.	508.	1042.00	2353.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION

7.97 EXTENDED 1.88 FEET

7.97	7380.	428.	5067.	1885.	0.86	5	635.	
2695.97	0.0	205.	571.	941.	-0.33	0	2692.00	
13.97	0.0	2.09	8.88	2.00	0.05	2696.83	2693.60	
0.004324	0.042	0.080	0.050	0.080	0.03	-0.00	406.79	
	2682.00	10.	10.	10.	127.	508.	1042.00	2354.

\*SECNO 8.200

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOP MID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	CORAR	SSTA	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	WSDR	ENDST	VOL
SLOPE	WTN	XNL	XNCH	XNR	OLOSS				
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

8.20	6930.	642.	5742.	566.	1.51	3	615.	
2703.53	2703.53	334.	531.	380.	0.65	14	2700.30	
9.33	0.0	1.92	10.81	1.49	6.93	2705.04	2699.50	
0.008817	0.042	0.120	0.045	0.120	0.32	-0.00	574.37	
	2694.20	1170.	1170.	1170.	241.	374.	1189.43	2394.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

8.20	6930.	907.	5002.	1041.	7.75	4	683.	
2704.60	0.0	559.	616.	761.	-0.76	0	2700.30	
10.40	0.0	1.62	8.12	1.37	0.23	2705.35	2699.50	
0.004076	0.042	0.120	0.045	0.120	0.08	-0.00	553.07	
	2694.20	40.	40.	40.	262.	374.	1235.71	2395.

L04

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BHC	BWP	BAREA	CS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
	ELCHU	ELCHD						
	2694.20	2694.20						

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC
2707.27	2705.42	0.14	237.	6694.	670.	670.	2704.00

ELTRD  
2706.70

8.20	6950.	1251.	3868.	1831.	0.21	2	973.	
2706.87	0.0	1115.	798.	1858.	-0.54	0	2700.30	
12.67	0.0	1.12	4.84	0.99	1.73	2707.08	2699.50	
0.001029	0.042	0.120	0.045	0.120	0.0	-0.00	507.59	
	2694.20	30.	30.	30.	307.	666.	1480.86	2397.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

8.20	6950.	1253.	3860.	1836.	0.21	1	975.	
2706.88	0.0	1120.	800.	1869.	-0.00	0	2700.30	
12.68	0.0	1.12	4.83	0.98	0.01	2707.09	2699.50	
0.001019	0.042	0.120	0.045	0.120	0.00	-0.00	507.23	
	2694.20	10.	10.	10.	308.	667.	1482.38	2398.

\*SECNO 8.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

8.27	6425.	978.	5145.	352.	1.85	6	249.	
2706.87	2706.78	267.	426.	104.	1.64	14	2704.00	
7.67	0.0	3.47	12.07	3.40	0.81	2708.72	2705.00	
0.012698	0.042	0.090	0.045	0.100	0.82	-0.00	280.53	
	2699.20	340.	340.	340.	172.	232.	685.47	2416.

\*SECNO 8.410

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOB	XLCH	XLOBR	WSDL	WSDR			

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

8.41	6370.	1177.	4764.	429.	1.28	4	539.		
2715.04	2715.04	351.	460.	262.	-0.57	8	2713.00		
8.84	0.0	3.35	10.37	1.64	7.03	2716.32	2713.40		
0.009041	0.042	0.070	0.045	0.090	0.06	-0.00	274.29		
	2706.20	660.	660.	660.	263.	37.	845.83		2430.

\*SECNO 8.670

3235 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMJ	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOB	XLCH	XLOBR	WSDL	WSDR			

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

8.67	6270.	387.	5369.	514.	2.46	11	238.		
2732.53	2732.53	225.	396.	140.	1.18	11	2730.00		
12.33	0.0	1.72	13.34	3.68	11.86	2734.99	2727.00		
0.009508	0.043	0.120	0.045	0.100	0.59	-0.00	64.45		
	2720.20	1280.	1280.	1280.	206.	59.	329.65		2457.

\*SECNO 8.800

3301 HV CHANGED MORE THAN HVINS

8.80	6215.	1878.	2560.	1777.	0.95	2	291.		
2739.12	0.0	505.	229.	413.	-1.51	0	2734.30		
9.92	0.0	3.72	11.18	4.30	4.93	2740.07	2731.80		
0.007164	0.043	0.070	0.045	0.100	0.15	-0.00	62.36		
	2729.20	600.	600.	600.	201.	90.	353.76		2470.

\*SECNO 8.920

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		

A05

ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
7185 MINIMUM SPECIFIC ENERGY 3720 CRITICAL DEPTH ASSUMED								
8.92	3615.	604.	3006.	5.	1.50	2	234.	
2743.30	2743.30	264.	281.	3.	0.55	11	2741.50	
6.30	0.0	2.29	10.71	1.57	4.10	2744.80	2741.50	
0.009415	0.043	0.090	0.040	0.080	0.27	-0.00	247.38	
	2737.00	520.	520.	520.	204.	30.	481.70	2480.

\*SECNO 9.060

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

9.06	3515.	688.	2816.	11.	0.91	3	281.	
2748.74	0.0	451.	330.	8.	-0.58	0	2746.00	
7.24	0.0	1.53	8.53	1.48	4.79	2749.65	2746.00	
0.004802	0.042	0.120	0.040	0.080	0.06	-0.00	202.81	
	2741.50	730.	730.	730.	249.	32.	483.62	2491.

\*SECNO 9.060

3280 CROSS SECTION 9.06 EXTENDED 0.98 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	NL	EG	SSTA	
SLOPE	MTN	XNL	XNCH	XNR	QLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

3685 20 TRIALS ATTEMPTED WSEL,CWSEL  
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED								
9.06	3515.	1189.	2238.	88.	1.46	20	218.	
2753.08	2753.08	426.	187.	37.	0.54	15	2750.10	
5.68	0.0	2.79	11.98	2.40	0.15	2754.54	2751.50	
0.012665	0.042	0.120	0.040	0.080	0.27	-0.00	34.89	
	2747.40	20.	20.	20.	171.	48.	253.00	2492.

\*SECNO 9.060

3280 CROSS SECTION 9.06 EXTENDED 1.84 FEET

3301 HV CHANGED MORE THAN HVINS

9.06	3515.	1146.	2242.	127.	0.81	4	219.	
2753.94	0.0	557.	252.	62.	-0.65	0	2750.10	
9.04	0.0	2.06	8.91	2.06	0.15	2754.75	2751.50	
0.004877	0.042	0.120	0.040	0.080	0.06	-0.00	34.06	
	2744.90	20.	20.	20.	171.	48.	253.00	2492.

\*SECNO 9.150

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 9.15 EXTENDED 1.19 FEET

9.15	3470.	1189.	2214.	67.	0.97	3	218.	
2756.69	0.0	457.	228.	43.	0.17	0	2753.50	
8.39	0.0	2.60	9.73	1.57	2.83	2757.66	2754.90	
0.008426	0.042	0.110	0.045	0.110	0.08	-0.00	34.69	
	2748.30	450.	450.	450.	171.	48.	253.00	2500.

\*SECNO 9.260

3265 DIVIDED FLOW

3280 CROSS SECTION 9.26 EXTENDED 0.86 FEET

RICHLAND CREEK

100 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLCB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

9.26	3470.	106.	2985.	379.	1.24	2	433.	
2761.86	2761.86	111.	311.	255.	0.26	11	2761.20	
7.86	0.0	0.95	9.61	1.48	4.31	2763.10	2760.50	
0.008155	0.043	0.110	0.045	0.110	0.13	-0.00	235.02	
	2754.00	520.	520.	520.	250.	215.	700.00	2509.

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 9.26 EXTENDED 1.80 FEET

3301 HV CHANGED MORE THAN HVINS

9.26	3470.	339.	2520.	611.	0.57	4	473.	
2762.81	0.0	323.	358.	435.	-0.67	0	2761.20	
8.81	0.0	1.05	7.04	1.40	0.21	2763.37	2760.50	
0.003627	0.043	0.110	0.045	0.110	0.07	-0.00	226.79	
	2754.00	40.	40.	40.	258.	215.	700.00	2509.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	42.70	2.00	305.00	0.0
	ELCHU	ELCHD						
	2754.00	2754.00						

005

\*SECNO 9.260

RICKLAND CREEK

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	HZ	QWEIR	QPR	BAREA	TAREA	ELLC		
2766.02	2763.46	0.09	1686.	1785.	305.	305.	2761.50		

ELTRD  
2761.80

9.26	3470.	437.	2227.	806.	0.34	2	630.		
2763.32	0.0	442.	386.	717.	-0.23	0	2761.10		
9.32	0.0	0.99	5.77	1.12	0.28	2743.66	2760.30		
0.002196	0.043	0.110	0.045	0.110	0.0	-0.00	225.20		
	2754.00	30.	30.	30.	260.	370.	855.11	2510.	

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

9.26	3470.	362.	2435.	672.	0.44	2	627.		
2763.29	0.0	433.	384.	703.	0.10	0	2761.10		
9.29	0.0	0.84	6.35	0.96	0.02	2763.73	2740.30		
0.001618	0.043	0.110	0.035	0.110	0.05	-0.00	225.38		
	2754.00	10.	10.	10.	260.	367.	852.36	2511.	

\*SECNO 9.390

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICKLAND CREEK

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

9.39	3410.	331.	2419.	660.	1.07	20	568.		
2768.49	2768.49	250.	246.	385.	0.63	8	2766.10		
10.29	0.0	1.32	9.83	1.71	2.14	2769.56	2766.10		
0.008014	0.043	0.110	0.045	0.110	0.32	-0.00	45.45		
	2758.20	700.	700.	700.	336.	381.	762.37	2530.	

\*SECNO 9.500

005

3301 HV CHANGED MORE THAN HVINS

9.50	3320.	1441.	1255.	624.	0.46	4	614.	
2775.81	0.0	737.	147.	352.	-0.61	0	2773.30	
6.41	0.0	1.95	8.56	1.77	6.65	2776.27	2773.30	
0.007438	0.043	0.110	0.045	0.110	0.06	-0.00	162.27	
	2769.40	850.	850.	850.	385.	229.	776.09	2551.

\*SECNO 9.550

\*\*\* GR CARDS REPEATED

9.55	3320.	1589.	1017.	734.	0.21	2	641.	
2777.32	0.0	1007.	164.	510.	-0.26	0	2774.10	
7.12	0.0	1.56	6.19	1.44	1.23	2777.53	2774.10	
0.003434	0.043	0.110	0.045	0.110	0.03	-0.00	145.69	
	2770.20	250.	250.	250.	402.	239.	786.99	2559.

\*SECNO 9.820

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
SLEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

9.82	3230.	1150.	1723.	356.	1.09	20	358.	
2791.72	2791.72	481.	154.	136.	0.88	12	2788.50	
9.72	0.0	2.39	11.22	2.61	3.72	2792.80	2788.80	
0.012212	0.043	0.110	0.047	0.110	0.44	-0.00	66.95	
	2782.00	640.	640.	640.	511.	74.	651.71	2577.

\*SECNO 10.000

3301 HV CHANGED MORE THAN HVINS

10.00	3150.	36.	1769.	1345.	0.50	5	335.	
2799.37	0.0	20.	239.	727.	-0.59	0	2793.50	
6.57	0.0	1.76	7.40	1.85	7.01	2799.87	2795.30	
0.004805	0.043	0.100	0.047	0.110	0.06	-0.00	228.09	
	2792.80	960.	960.	960.	26.	309.	562.60	2596.

\*SECNO 10.090

3265 DIVIDED FLOW



E05

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

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

10.09	3150.	0.	2576.	574.	1.50	20	247.		
2807.94	2807.94	0.	238.	329.	1.00	15	2808.50		
8.94	0.0	0.0	10.84	1.74	2.84	2809.44	2805.50		
0.010247	0.043	0.070	0.045	0.120	0.50	0.0	265.00		
	2799.00	420.	420.	420.	18.	270.	552.19	2604.	

\*SECNO 10.210

10.21	3150.	0.	3144.	6.	1.41	3	82.		
2815.21	0.0	0.	330.	5.	-0.09	0	2815.00		
6.71	0.0	0.02	9.52	1.14	7.17	2816.62	2814.30		
0.010842	0.043	0.080	0.045	0.080	0.01	-0.00	159.16		
	2808.50	680.	680.	680.	36.	46.	240.69	2611.	

\*SECNO 10.280

10.28	3150.	0.	3150.	0.	1.44	2	72.		
2819.24	0.0	0.	327.	0.	0.03	0	2822.50		
6.24	0.0	0.0	9.63	0.0	4.05	2820.68	2824.00		
0.011657	0.043	0.080	0.045	0.080	0.02	-0.00	378.44		
	2813.00	360.	360.	360.	40.	32.	450.19	2614.	

\*SECNO 10.390

RICHLAND CREEK		100 YEAR FLOOD			08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

7185 MINIMUM SPECIFIC ENERGY  
 3720 CRITICAL DEPTH ASSUMED

10.39	3150.	0.	2576.	574.	1.63	2	183.		
2825.80	2825.80	0.	229.	234.	0.19	15	2826.50		
9.40	0.0	0.0	11.26	2.45	6.14	2827.43	2817.00		
0.011095	0.043	0.100	0.050	0.100	0.09	-0.00	122.81		
	2816.40	540.	540.	540.	15.	168.	305.68	2619.	

F05

THIS RUN EXECUTED 08/01/81 8:19:12

\*\*\*\*\*  
HEC2 RELEASE DATED NOV 76 UPDATED JULY1979  
ERROR CORR - 01,02,03  
MODIFICATION - 50,51,52,53,54  
\*\*\*\*\*

T1 WAYNESVILLE NC 9920  
T2 100 YEAR FLOODWAY 9930  
T3 RICHLAND CREEK 100 YEAR FLOODWAY 9940

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	F0	
	0.	6.	0.	0.	0.0	0.	0.0	0.	2501.30	0.0	9950
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	YTRACE	
	15.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	9960

\*PROF 2

CCHV= 0.100 CEHV= 0.500

\*SECNO .050

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
0	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	250.0	750.0	TYPE=	1	TARGET=	500.000		
0.05	9400.	615.	4735.	4051.	0.31	0	500.	
2501.30	0.0	311.	819.	1534.	0.50	0	2498.30	
14.80	2500.30	1.98	5.78	2.64	0.0	2501.61	2495.60	
0.001992	0.0	0.070	0.055	0.070	0.0	-0.00	250.00	
	2486.50	0.	0.	0.	137.	363.	750.00	0.

\*SECNO .230

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	4401.	4790.	144.	0.57	2	312.	
2503.07	0.0	1250.	643.	66.	0.24	0	2495.80	
15.27	2502.25	3.52	7.45	2.18	1.88	2503.61	2497.80	
0.002989	0.056	0.070	0.055	0.070	0.11	-0.00	240.00	
	2487.80	760.	800.	760.	262.	51.	552.05	41.

\*SECNO .230

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	4456.	4728.	150.	0.51	2	313.	
2503.22	0.0	1285.	650.	70.	-0.03	0	2495.80	
15.42	2502.45	3.47	7.27	2.15	0.12	2503.72	2497.80	
0.001802	0.056	0.070	0.055	0.070	0.00	-0.00	240.00	
	2487.80	40.	40.	40.	262.	51.	552.75	43.

\*SECNO .230

3700. BRIDGE STENCL= 240.00 STENCR= 570.00

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	1499.	7836.	0.	2.17	11	183.	
2502.39	0.0	261.	620.	0.	1.66	0	2506.20	
14.39	2501.85	5.74	12.65	0.0	0.01	2504.56	2506.90	
0.023383	0.056	0.070	0.055	0.070	0.83	-0.00	240.00	

H05

2488.00 1. 1. 1. 250. 35. 525.00 43.

\*SECTO .230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			100 YEAR FLOODWA			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	7.78	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORA.	SSTA	
	ELMIN	XLOBL	XLC	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2/98.10 MAX EL.C= 2505.00

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	2357.	6978.	0.	1.16	4	221.	
2503.99	0.0	473.	729.	0.	-1.01	0	2506.20	
15.99	2503.54	4.99	9.57	0.0	0.49	2505.15	2506.90	
0.011974	0.056	0.070	0.055	0.070	0.10	-0.00	240.00	
	2488.00	30.	30.	30.	250.	35.	525.00	44.

\*SECTO .230

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	4602.	4023.	710.	0.28	3	330.	
2504.96	0.0	1601.	719.	277.	-0.88	0	2496.20	
16.76	2504.20	2.87	5.60	2.56	0.00	2505.24	2498.20	
0.001454	0.056	0.070	0.055	0.070	0.09	-0.00	240.00	
	2488.20	1.	1.	1.	262.	68.	570.00	44.

\*SECTO .230

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	240.0	570.0	TYPE=	1	TARGET=	330.000		
0.23	9335.	4606.	4019.	710.	0.28	2	330.	
2504.98	0.0	1605.	719.	278.	-0.00	0	2496.20	
16.78	2504.21	2.87	5.59	2.56	0.01	2505.25	2498.20	
0.001445	0.056	0.070	0.055	0.070	0.00	-0.00	240.00	
	2488.20	10.	10.	10.	262.	68.	570.00	44.

\*SECTO .270

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=								240.0	570.0	TYPE=	1	TARGET=	330.000
0.27	9335.	4677.	5959.	719.	0.26	0	330.						
2505.20	0.0	1656.	730.	287.	-0.02	0	2496.20						
17.00	2504.42	2.81	5.42	2.51	0.21	2505.46	2498.20						
0.001333	0.056	0.070	0.055	0.070	0.00	-0.00	240.00						
	2488.20	150.	150.	150.	262.	68.	570.00					53.	

\*SECNO .550

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=								200.0	365.0	TYPE=	1	TARGET=	165.000
0.55	9250.	1126.	8050.	74.	0.92	2	165.						
2507.36	0.0	383.	984.	39.	0.66	0	2502.30						
15.56	2506.58	2.94	8.18	1.91	2.49	2508.28	2502.30						
0.002772	0.049	0.070	0.045	0.080	0.33	-0.00	200.00						
	2491.80	1500.	1400.	1420.	116.	49.	365.00					121.	

\*SECNO .840

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK								100 YEAR FLOODWA		08/01/81	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID				
ELEV	CRWS	ALEZ	ACH	AROB	DHV	IDC	BANK ELEV				
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT				
SLOPE	WTN	XNL	XNCH	XPRO	OLOSS	CORAR	SSTA				
	ELMIN	XLOBL	XNCH	XLOBR	WSDL	WSDR	ENDST				VOL

3470 ENCROACHMENT STATIONS=								75.0	175.0	TYPE=	1	TARGET=	90.000
0.84	9170.	56.	9038.	47.	1.89	2	90.						
2511.28	0.0	28.	812.	42.	0.97	0	2508.20						
13.88	2510.98	2.00	11.12	1.84	4.40	2513.18	2506.90						
0.003674	0.046	0.070	0.040	0.100	0.49	-0.00	75.00						
	2497.40	1380.	1520.	1560.	46.	44.	165.00					161.	

\*SECNO 1.160

3470 ENCROACHMENT STATIONS=								80.0	205.0	TYPE=	1	TARGET=	125.000
1.16	9080.	62.	8205.	814.	1.42	2	125.						
2516.68	0.0	34.	818.	269.	-0.47	0	2513.90						
13.18	2516.56	1.80	10.03	3.03	4.88	2518.10	2509.20						
0.003125	0.044	0.080	0.040	0.090	0.05	-0.00	80.00						
	2503.50	1460.	1440.	1460.	49.	76.	205.00					194.	

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=								175.0	350.0	TYPE=	1	TARGET=	175.000
1.45	9000.	784.	6074.	2142.	0.74	2	175.						
2520.58	0.0	313.	751.	611.	-0.68	0	2511.50						
13.38	2520.02	2.50	8.09	3.51	3.15	2521.32	2513.20						

J05

0.001793 0.043 0.090 0.040 0.070 0.07 -0.00 175.00  
2507.20 1360. 1360. 1340. 72. 103. 350.00 237.

\*SECNO 1.450

3470 ENCROACHMENT STATIONS= 175.0 350.0 TYPE= 1 TARGET= 175.000

3495 OVBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2525.00 ELREA= 2518.00

1.45 9000. 0. 7479. 1321. 0.57 2 165.  
2520.84 0.0 0. 1155. 492. -0.17 0 2513.20  
13.64 2520.14 0.0 6.47 3.09 0.06 2521.40 2511.80  
0.001793 0.043 0.090 0.040 0.070 0.02 -0.00 185.00  
2507.20 40. 40. 40. 55. 110. 350.00 239.

\*SECNO 1.450

3700. BRIDGE STENCL= 175.00 STENCR= 350.00

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

3470 ENCROACHMENT STATIONS= 175.0 350.0 TYPE= 1 TARGET= 175.000  
1.45 9000. 0. 9000. 0. 1.27 10 109.  
2520.49 0.0 0. 995. 0. 0.70 0 2524.80  
13.49 2519.63 0.0 9.04 0.0 0.00 2521.76 2524.00  
0.005419 0.043 0.090 0.040 0.070 0.35 -0.00 186.82  
2507.00 1. 1. 1. 56. 58. 300.00 239.

\*SECNO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK 100 YEAR FLOODWA 08/01/81  
MILE 0 QLOS QCH QROB HV ITRIAL TOPMID  
ELEV CRIMS ALOS ACH AROB PHV IDC BANK ELEV  
DEPTH WSELK VLOS VCH VROB HL EG LEFT/RIGHT  
SLOPE WTN XML XNCH XNR OLOSS CORAR SSTA  
ELMIN XLOBL XLCH XLOBR WSDL WSDR ENDST VOL

3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

3470 ENCROACHMENT STATIONS= 175.0 350.0 TYPE= 1 TARGET= 175.000  
1.45 9000. 0. 9000. 0. 1.21 2 109.  
2520.71 0.0 0. 1020. 0. -0.06 0 2524.80  
13.71 2519.97 0.0 8.82 0.0 0.16 2521.92 2524.00  
0.005063 0.043 0.090 0.040 0.070 0.01 -0.00 186.68  
2507.00 30. 30. 30. 57. 58. 300.00 239.

K05

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 175.0 350.0 TYPE= 1 TARGET= 175.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2527.00 ELREA= 2520.00

1.45	9000.	0.	7464.	1536.	0.50	2	165.	
2521.49	0.0	0.	1228.	529.	-0.71	0	2513.20	
14.29	2521.07	0.0	6.08	2.90	0.00	2521.99	2511.80	
0.001093	0.043	0.090	0.040	0.070	0.07	-0.00	185.00	
	2507.20	1.	1.	1.	55.	110.	350.00	240.

\*SECNO 1.450

3470 ENCROACHMENT STATIONS= 175.0 350.0 TYPE= 1 TARGET= 175.000

1.45	9000.	811.	5988.	2201.	0.62	2	175.	
2521.48	0.0	349.	808.	676.	0.12	0	2511.50	
14.28	2521.11	2.32	7.47	3.28	0.05	2522.10	2513.20	
0.001365	0.043	0.090	0.040	0.070	0.06	-0.00	175.00	
	2507.20	40.	40.	40.	72.	103.	350.00	241.

\*SECNO 1.701

3470 ENCROACHMENT STATIONS= 140.0 290.0 TYPE= 1 TARGET= 150.000

1.70	8930.	2586.	6061.	283.	1.07	2	150.	
2523.63	0.0	643.	825.	112.	0.45	0	2515.50	
13.33	2522.94	4.02	9.70	2.55	2.37	2524.70	2514.30	
0.002571	0.043	0.070	0.040	0.090	0.23	-0.00	140.00	
	2510.30	1300.	1300.	1300.	113.	37.	290.00	289.

\*SECNO 1.780

3470 ENCROACHMENT STATIONS= 140.0 450.0 TYPE= 1 TARGET= 310.000

1.78	8900.	1855.	4786.	2260.	0.64	2	310.	
2524.94	0.0	558.	575.	954.	-0.43	0	2517.80	
12.34	2524.04	3.32	8.32	2.37	0.84	2525.58	2516.60	
0.002116	0.043	0.070	0.040	0.090	0.04	-0.00	140.00	
	2512.60	360.	360.	360.	113.	197.	450.00	303.

\*SECNO 1.780

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		100 YEAR FLOODWA		08/01/81				
MILE	Q	GLOB	QCH	QROB	HV	ITRIAL	TOP/ID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WIN	XNL	XNCH	XNR	QLOSS	CORAR	STA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS= 140.0 450.0 TYPE= 1 TARGET= 310.000

1.78 8900. 1862. 4762. 2276. 0.62 0 310.

L05

2525.04	0.0	565	579	969	-0.02	0	2517.80	
12.44	2524.16	3.30	8.22	2.35	0.08	2525.66	2516.60	
0.002043	0.043	0.070	0.040	0.090	0.00	-0.00	140.00	
	2512.60	40.	40.	40.	113.	197.	450.00	305.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	52.00	2.00	475.00	0.0
	ELCHU	ELCHD						
	2513.00	2513.00						

\*SECNO 1.700  
3700. BRIDGE STENCL= 140.00 STENCR= 450.00

\*\*\* GR CARDS REPEATED  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	NS	GWEIR	GPR	BAREA	TAREA	ELLC
2533.77	2525.73	0.07	3597.	5341.	475.	475.	2522.50

ELTRD  
2524.70

3470 ENCROACHMENT STATIONS=	140.0	450.0	TYPE=	1	TARGET=	310.000		
1.78	8900.	2053.	4172.	2675.	0.28	2	310.	
2527.91	0.0	815.	726.	1463.	-0.34	0	2517.80	
15.31	2527.71	2.32	5.75	1.83	2.52	2528.19	2516.60	
0.000740	0.043	0.070	0.040	0.090	0.0	-0.00	140.00	
	2512.60	30.	30.	30.	113.	197.	450.00	307.

\*SECNO 1.780

3470 ENCROACHMENT STATIONS=	200.0	650.0	TYPE=	1	TARGET=	450.000		
1.78	8900.	3337.	3881.	1882.	0.27	1	450.	
2527.95	0.0	1595.	655.	885.	-0.01	0	2521.40	
15.35	2527.72	2.09	5.92	1.90	0.03	2528.22	2521.90	
0.000960	0.042	0.070	0.040	0.090	0.00	-0.00	200.00	
	2512.60	40.	40.	40.	309.	141.	650.00	310.

\*SECNO 1.950

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	200.0	650.0	TYPE=	1	TARGET=	450.000		
1.95	8850.	3210.	3597.	2043.	0.22	2	450.	
2528.69	0.0	1662.	667.	912.	-0.05	0	2521.90	
15.59	2528.24	1.93	5.39	2.24	0.69	2528.92	2522.40	
0.000775	0.042	0.070	0.040	0.070	0.01	-0.00	200.00	
	2513.10	810.	810.	770.	309.	141.	650.00	368.

\*SECNO 2.190



M05

3470 ENCROACHMENT STATIONS= 300.0 900.0 TYPE= 1 TARGET= 600.000  
 2.19 8770. 1677. 3657. 3436. 0.54 2 600.  
 2530.29 0.0 712. 433. 1113. 0.31 0 2525.90  
 10.99 2529.55 2.35 8.45 3.09 1.76 2530.83 2525.90  
 0.003255 0.042 0.070 0.040 0.070 0.16 -0.00 300.00  
 2519.30 1260. 1260. 1260. 303. 297. 900.00 448.

1490 NH CARD USED  
 \*SECNO 2.320

RICHLAND CREEK 100 YEAR FLOODWA 08/01781  
 MILE 9 QLOB QCH QROB HV ITRIAL TOPWID  
 ELEV CRIBS ALOB ACH AROB DHV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB HL EG LEFT/RIGHT  
 SLOPE WTN XNL XNCH XNR OLOSS CORAR SSTA  
 ELMIN XLOBL XLCH XLOBR WSDR WSDR ENDSY VOL

3470 ENCROACHMENT STATIONS= 650.0 1300.0 TYPE= 1 TARGET= 650.000  
 2.32 8725. 966. 2896. 4863. 0.35 3 650.  
 2532.13 0.0 387. 409. 1620. -0.19 0 2525.00  
 8.73 2531.71 2.49 7.08 3.00 1.63 2532.48 2528.50  
 0.002488 0.042 0.070 0.040 0.065 0.02 -0.00 650.00  
 2523.40 200. 640. 640. 133. 517. 1300.00 477.

1490 NH CARD USED  
 \*SECNO 2.320

3700. BRIDGE STENCL= 650.00 SYFNCR= 1300.00

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

3470 ENCROACHMENT STATIONS= 650.0 1300.0 TYPE= 1 TARGET= 650.000  
 2.32 8725. 1366. 1434. 5935. 0.26 10 650.  
 2532.23 0.0 371. 300. 1502. -0.09 0 2529.00  
 8.83 2531.80 3.65 4.79 3.95 0.00 2532.49 2528.70  
 0.005561 0.042 0.070 0.040 0.055 0.01 -116.44 650.00  
 2523.40 1. 1. 1. 126. 524. 1300.00 477.

\*SECNO 2.320

\*\*\* GR CARDS REPEATED

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

3470 ENCROACHMENT STATIONS= 650.0 1300.0 TYPE= 1 TARGET= 650.000  
 2.32 8725. 1363. 1381. 5981. 0.23 2 650.  
 2532.42 0.0 390. 307. 1591. -0.03 0 2529.00  
 9.02 2531.92 3.49 4.50 3.76 0.15 2532.65 2528.70  
 0.004768 0.042 0.070 0.040 0.055 0.00 -116.44 650.00  
 2523.40 30. 30. 30. 126. 524. 1300.00 478.

1490 NH CARD USED  
 \*SECNO 2.320

3470 ENCROACHMENT STATIONS= 650.0 1300.0 TYPE= 1 TARGET= 650.000

A06

2.32	9725.	952.	2321.	5451.	0.22	0	670.	
2532.42	0.0	418.	425.	1783.	-0.00	0	2525.00	
9.02	2531.91	2.28	5.47	5.09	0.00	2532.65	2528.50	
0.001410	0.042	0.061	0.040	0.049	0.00	-0.00	650.00	
	2523.40	1.	1.	1.	133.	517.	1300.00	478.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	650.0	1300.0	TYPE=	1	TARGET=	650.000		
2.40	8700.	986.	2179.	5535.	0.17	2	650.	
2532.99	0.0	479.	456.	2044.	-0.06	0	2525.00	
9.59	2532.42	2.06	4.78	2.71	0.51	2533.16	2528.50	
0.000983	0.042	0.061	0.040	0.049	0.01	-0.00	650.00	
	2523.40	500.	500.	400.	133.	517.	1300.00	506.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST VOL

3675 20 TRIALS ATTEMPTED WSEL, CWSEL  
 3703 PROBABLE MINIMUM SPECIFIC ENERGY  
 3700 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	50.0	740.0	TYPE=	1	TARGET=	690.000		
2.40	8700.	1331.	7029.	340.	1.22	20	478.	
2554.90	2554.80	349.	725.	93.	1.05	20	2551.50	
3.30	2554.80	3.81	9.70	3.68	0.09	2556.02	2551.50	
0.007811	0.042	0.050	0.030	0.050	0.53	-0.00	128.33	
	2551.50	40.	40.	40.	312.	166.	606.37	508.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.80	3.00	0.0	1.00	0.01	0.10	0.0
	ELCHU	ELCHD						
	2551.50	2551.50						

\*SECNO 2.400

WATER EL=X5 CARD= 2566.700  
 3700. BRIDGE STENCL= 50.00 STENCR= 740.00

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	50.0	740.0	TYPE=	1	TARGET=	690.000	
2.40	8700.	1913.	6252.	536.	0.36	0	530.
2566.70	0.0	749.	1144.	234.	0.10	0	2561.50
5.30	2566.70	2.55	5.46	2.29	0.08	2567.06	2561.50

B06

0.001351	0.042	0.050	0.030	0.050	0.09	-0.00	112.00	
	2561.50	30.	30.	30.	328.	207.	642.22	509.

\*SECNO 2.400

3470 ENCROACHMENT STATIONS=								
	10.0		750.0	TYPE=	1	TARGET=	740.000	
2.40	9900.	0.	9900.	0.	0.06	2	740.	
2567.04	0.0	0.	5207.	0.	-0.30	0	2562.00	
7.04	2567.07	0.0	1.90	0.0	0.00	2567.09	100000.00	
0.000112	0.042	0.050	0.030	0.050	0.03	-0.00	10.00	
	2560.00	10.	10.	10.	615.	125.	750.00	510.

\*SECNO 3.230

3470 ENCROACHMENT STATIONS=								
	35.0		425.0	TYPE=	1	TARGET=	391.000	
3.23	9810.	4.	9762.	45.	0.08	3	390.	
2567.42	0.0	10.	4177.	90.	0.03	C	2565.00	
12.42	2567.28	0.37	2.34	0.50	0.40	2567.51	2563.80	
0.000084	0.039	0.050	0.030	0.050	0.01	-0.00	35.00	
	2555.00	4180.	4180.	4180.	181.	209.	425.00	965.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.690

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=								
	200.0		310.0	TYPE=	1	TARGET=	110.000	
3.69	9760.	0.	9737.	23.	0.95	2	110.	
2567.47	0.0	0.	1243.	19.	0.87	0	100000.00	
14.67	2567.42	0.0	7.83	1.19	0.48	2568.42	2562.60	
0.001442	0.039	0.080	0.035	0.080	0.43	-0.00	200.00	
	2552.80	2200.	2200.	2200.	47.	63.	310.00	1105.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.810

3301 HV CHANGED MORE THAN HVINS

RICH. AND CREEK								
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TRIPID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BAR. ELEV	
DEPTH	WSELK	VLOB	VCH	VRGB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=								
	285.0		410.0	TYPE=	1	TARGET=	125.000	
3.81	9740.	38.	9702.	0.	1.78	2	125.	
2568.52	0.0	16.	905.	0.	0.83	0	2565.10	
11.72	2568.44	2.33	10.72	0.0	1.47	2570.30	100000.00	
0.006182	0.039	0.080	0.040	0.080	0.41	-0.00	285.00	
	2556.80	600.	560.	570.	84.	41.	410.00	1119.

\*SECNO 3.810

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=		285.0	410.0	TYPE=	1	TARGET=	125.000	
3.81	9740.	41.	9699.	0.	1.59	2	125.	
2568.95	0.0	18.	956.	0.	-0.19	0	2565.10	
12.15	2568.93	2.23	10.14	0.0	0.23	2570.54	100000.00	
0.005167	0.039	0.080	0.040	0.080	0.02	-0.00	285.00	
	2556.80	40.	40.	40.	84.	41.	410.00	1120.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	ROLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	85.00	10.00	800.00	0.47
ELCHU	ELCHD							
2556.90	2556.90							

\*SECNO 3.810  
3700. BRIDGE STENCL= 285.00 STENCR= 410.00

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESURE AND WEIR FLOW

EGPRS	EGWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2572.64	2571.13	0.89	12.	9748.	800.	800.	2567.00
ELTRD							
2571.80							

\*\*\* NOTE: QWEIR IS GREATER THAN 0 AND ELEV IS LESS THAN ELTRD \*\*\*

3470 ENCROACHMENT STATIONS=		285.0	410.0	TYPE=	1	TARGET=	125.000	
3.81	9740.	54.	9686.	0.	0.86	2	125.	
2571.78	0.0	33.	1276.	0.	-0.73	0	2565.10	
14.98	2571.94	1.65	7.48	0.0	2.10	2572.64	100000.00	
0.001927	0.039	0.080	0.040	0.080	0.0	-0.00	285.00	
	2556.80	60.	60.	60.	84.	41.	410.00	1121.

\*SECNO 3.810

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		290.0	415.0	TYPE=	1	TARGET=	125.000	
3.81	9740.	748.	9617.	374.	1.47	2	125.	
2571.52	0.0	240.	837.	127.	0.61	0	2563.50	
15.32	2571.46	3.11	10.29	2.95	0.06	2572.99	2564.00	
0.002608	0.039	0.080	0.040	0.080	0.30	-0.00	290.00	
	2556.20	20.	20.	20.	74.	51.	415.00	1122.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		225.0	355.0	TYPE=	1	TARGET=	130.000	
3.97	9730.	958.	8707.	65.	0.94	2	130.	
2573.92	0.0	427.	1064.	49.	-0.53	0	2564.00	
15.12	2573.86	2.77	8.18	1.32	1.81	2574.86	2564.00	
0.002286	0.039	0.120	0.045	0.120	0.05	-0.00	225.00	
	2558.87	780.	740.	760.	88.	42.	355.00	1146.

\*SECNO 3.970

RICHLAND CREEK			100 YEAR FLOODMA	08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XVL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=		225.0	355.0	TYPE=	1	TARGET=	130.000	
3.97	9730.	237.	9472.	21.	1.30	2	130.	
2573.87	0.0	136.	1021.	15.	0.36	0	2571.50	
15.07	2573.73	1.74	9.28	1.44	0.14	2575.18	2573.20	
0.005697	0.039	0.120	0.045	0.120	0.18	-0.00	225.00	
	2558.80	40.	40.	40.	89.	41.	355.00	1147.

\*SECNO 3.970

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=		225.0	355.0	TYPE=	1	TARGET=	130.000	
3.97	9730.	262.	9445.	22.	1.25	2	130.	
2574.10	0.0	148.	1037.	16.	-0.05	0	2571.50	
15.30	2573.96	1.78	9.11	1.43	0.17	2575.35	2570.20	
0.005367	0.039	0.120	0.045	0.120	0.01	-0.00	225.00	
	2558.80	30.	30.	30.	89.	41.	355.00	1148.

\*SECNO 3.970

3470 ENCROACHMENT STATIONS=		225.0	355.0	TYPE=	1	TARGET=	130.000	
3.97	9730.	998.	8667.	65.	0.85	2	130.	
2574.57	0.0	455.	1112.	52.	-0.40	0	2564.00	
15.77	2574.56	2.19	7.79	1.34	0.03	2575.42	2564.00	
0.001954	0.039	0.120	0.045	0.120	0.04	-0.00	225.00	
	2558.80	10.	10.	10.	88.	42.	355.00	1148.

\*SECNO 4.140

3470 ENCROACHMENT STATIONS=		590.0	790.0	TYPE=	1	TARGET=	200.000	
4.14	9710.	1061.	6345.	2304.	0.74	2	200.	
2576.54	0.0	437.	759.	945.	-0.11	0	2564.30	
13.84	2576.06	2.43	8.36	2.44	1.85	2577.28	2566.70	
0.002061	0.039	0.120	0.045	0.120	0.01	-0.00	590.00	
	2562.70	760.	940.	940.	88.	132.	790.00	1187.

E06

\*SECNO 4.140

3470 ENCROACHMENT STATIONS=		590.0	790.0	TYPE=	1	TARGET=	200.000		
4.14	9710.	160.	9506.	44.	0.33	3	200.		
2577.04	0.0	142.	2056.	52.	-0.42	0	2565.90		
14.34	2576.04	1.13	4.62	0.85	0.05	2577.37	2567.90		
0.000766	0.039	0.120	0.045	0.120	0.04	-0.00	590.00		
	2562.70	40.	40.	40.	103.	97.	790.00		1189.

SPECIAL BRIDGE

SB	HC	XKOR	COFQ	RDLEN	BMC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	131.00	6.00	1740.00	1.24
ELCHU	ELCHD							
2562.80	2562.80							

\*SECNO 4.140

3700. BRIDGE STENCL= 590.00 STENCR= 790.00

\*\*\* GR CARDS REPEATED

\*\*ERROR\*\* ELTRD.LT.MIN ROAD ELEV, ELTRD SET EQUAL TO MIN ROAD ELEV  
 RICHLAND CREEK 100 YEAR FLOODWA 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2577.81	2577.41	0.03	0.	7539.	1740.	1741.	2575.20

ELTRD  
2578.83

3470 ENCROACHMENT STATIONS= 590.0 790.0 TYPE= 1 TARGET= 200.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2578.90 ELREA= 2578.90

4.14	9710.	0.	9710.	0.	0.32	2	179.		
2577.49	0.0	0.	2137.	0.	-0.00	0	2565.90		
14.79	2576.42	0.0	4.54	0.0	0.45	2577.81	2567.90		
0.000703	0.039	0.120	0.045	0.120	0.0	-0.00	603.00		
	2562.70	115.	115.	115.	90.	90.	782.00		1194.

\*SECNO 4.140

3470 ENCROACHMENT STATIONS=		500.0	800.0	TYPE=	1	TARGET=	300.000		
4.14	9710.	2577.	5151.	1982.	0.36	1	297.		
2577.50	0.0	1366.	814.	1061.	0.04	0	2564.30		
14.80	2576.60	1.89	6.33	1.87	0.03	2577.86	2566.70		
0.001078	0.039	0.120	0.045	0.120	0.02	-0.00	500.00		
	2562.70	30.	30.	30.	158.	139.	796.66		1196.

F06

\*SECNO 4.280

3470 ENCROACHMENT STATIONS=		240.0	510.0	TYPE=	1	TARGET=	270.000	
4.28	8660.	2533.	4123.	2004.	0.35	2	270.	
2578.31	0.0	1076.	636.	924.	-0.00	0	2570.00	
15.91	2577.31	2.35	6.48	2.17	0.80	2578.66	2569.20	
0.001311	0.039	0.100	0.045	0.100	0.00	-0.00	240.00	
	2562.40	600.	710.	710.	137.	133.	510.00	1241.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=		240.0	510.0	TYPE=	1	TARGET=	270.000	
4.28	8660.	2535.	4117.	2008.	0.35	0	270.	
2578.36	0.0	1082.	638.	930.	-0.00	0	2570.00	
15.96	2577.36	2.34	6.45	2.16	0.65	2578.71	2569.20	
0.001291	0.039	0.100	0.045	0.100	0.00	-0.00	240.00	
	2562.40	40.	40.	40.	137.	133.	510.00	1244.

\*SECNO 4.280

3700. BRIDGE STENCL= 240.00 STENCR= 510.00

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

3470 ENCROACHMENT STATIONS=		240.0	510.0	TYPE=	1	TARGET=	270.000	
4.28	8660.	2571.	4117.	1972.	0.48	9	270.	
2578.30	0.0	937.	545.	798.	0.13	0	2570.00	
15.90	2577.31	2.74	7.55	2.47	0.00	2578.78	2569.20	
0.008895	0.039	0.100	0.045	0.100	0.06	-335.36	240.00	
	2562.40	1.	1.	1.	137.	133.	510.00	1244.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOS	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

3470 ENCROACHMENT STATIONS=		240.0	510.0	TYPE=	1	TARGET=	270.000	
4.28	8660.	2574.	4110.	1976.	0.47	2	270.	
2578.35	0.0	943.	547.	804.	-0.01	0	2570.00	
15.95	2577.36	2.73	7.51	2.46	0.04	2576.82	2569.20	
0.008739	0.039	0.100	0.045	0.100	0.00	-335.36	240.00	
	2562.40	5.	5.	5.	137.	133.	510.00	1244.

\*SECNO 4.280

606

3470 ENCROACHMENT STATIONS=	240.0	510.0	TYPE=	1	TARGET=	270.000
4.28	8660.	2542.	4098.	2019.	0.34	270.
2578.50	0.0	1099.	645.	946.	-0.13	2570.00
16.10	2577.47	2.31	6.35	2.15	0.00	2578.84
0.001234	0.039	0.100	0.045	0.100	0.01	-0.00
	2562.40	1.	1.	1.	137.	133.
						510.00
						1244.

\*SECHO 4.280

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	240.0	510.0	TYPE=	1	TARGET=	270.000
4.28	8660.	2543.	4097.	2020.	0.34	270.
2578.51	0.0	1100.	646.	947.	-0.00	2570.00
16.11	2577.48	2.31	6.34	2.15	0.01	2578.85
0.001229	0.039	0.100	0.045	0.100	0.00	-0.00
	2562.40	10.	10.	10.	137.	133.
						510.00
						1245.

\*SECHO 4.430

3470 ENCROACHMENT STATIONS=	85.0	260.0	TYPE=	1	TARGET=	175.000
4.43	8465.	353.	4569.	3543.	0.65	175.
2579.34	0.0	187.	581.	786.	0.32	2572.00
13.34	2578.42	1.89	7.87	4.51	1.18	2580.19
0.002236	0.040	0.120	0.045	0.060	0.16	-0.00
	2566.20	715.	735.	735.	50.	125.
						260.00
						1280.

\*SECHO 4.630

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	85.0	240.0	TYPE=	1	TARGET=	155.000
4.63	8475.	342.	5353.	2780.	1.45	155.
2582.62	0.0	132.	472.	485.	0.80	2577.30
11.12	2582.23	2.59	11.34	5.98	3.48	2584.07
0.006129	0.040	0.120	0.045	0.060	0.40	-0.00
	2571.50	1000.	1000.	1000.	50.	105.
						24.00
						1310.

\*SECHO 4.820

RICHLAND CREEK		100 YEAR FLOODWA		08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VL0B	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST
							VOL

3470 ENCROACHMENT STATIONS=	120.0	240.0	TYPE=	1	TARGET=	120.000
4.82	8375.	578.	7254.	542.	1.89	120.
2588.62	0.0	190.	616.	129.	0.45	2582.40
12.92	2588.08	3.05	11.78	4.22	6.22	2590.51
0.007036	0.040	0.120	0.050	0.070	0.22	-0.00
						120.00



H06

2575.70 1100. 940. 940. 60. 60. 240.00 1332.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	310.0	450.0	TYPE=	1	TARGET=	140.000		
4.96	8300.	2795.	5504.	1.	0.66	2	123.	
2592.65	0.0	559.	768.	2.	-1.24	0	2581.30	
13.45	2591.86	5.00	7.16	0.67	2.67	2593.31	2591.50	
0.002902	0.041	0.070	0.055	0.080	0.12	-0.00	310.00	
	2579.20	660.	610.	610.	92.	35.	436.26	1349.

\*SECNO 4.960

3470 ENCROACHMENT STATIONS=	310.0	450.0	TYPE=	1	TARGET=	140.000		
4.96	8300.	22.	8278.	0.	0.59	2	127.	
2592.83	0.0	15.	1337.	0.	-0.07	0	2585.20	
13.63	2592.38	1.42	6.19	0.0	0.11	2593.42	100000.00	
0.002405	0.041	0.070	0.055	0.080	0.01	-0.00	310.00	
	2579.20	40.	40.	40.	80.	47.	436.76	1350.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	54.00	4.00	1310.00	1.18
	ELCHJ	ELCHD						
	2579.20	2579.20						

\*SECNO 4.960

3700. BRIDGE STENCL= 310.00 STENCR= 450.00

\*\*\* GR CARDS REPEATED CLASS A LOW FLOW

3420 BRIDGE W.S.=	2592.63	BRIDGE VELOCITY=	9.39					
CALCULATED CHANNEL AREA=	584.							
ESPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC	
0.0	2593.50	0.09	0.	8300.	1310.	1310.	2597.50	
ELTRD								
2598.00								

3470 ENCROACHMENT STATIONS=	310.0	450.0	TYPE=	1	TARGET=	140.000		
4.96	8300.	22.	8278.	0.	0.59	0	127.	
2592.92	0.0	15.	1349.	0.	-0.01	0	2585.20	
13.72	2592.43	1.40	6.14	0.0	0.08	2593.50	100000.00	
0.002344	0.041	0.070	0.055	0.080	0.0	-0.00	310.00	
	2579.20	15.	15.	15.	80.	47.	437.02	1350.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		380.0	450.0	TYPE=	1	TARGET=	70,000		
4.96	8300.	0.	8300.	0.	3.25	3	62.		
2591.63	0.0	0.	574.	0.	2.67	0	2596.90		
12.03	2590.64	0.0	14.47	0.0	0.05	2594.89	100000.00		
0.017707	0.041	0.070	0.055	0.080	1.33	-0.00	387.85		
	2579.60	10.	10.	10.	28.	34.	450.00		1351.

\*SECNO 4.960

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODHA			08/02/81			
MILE	Q	QLOB	QCH	QRCB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	ARCB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VRCB	KL	EG	LEFT/RIGHT	
SLOPE	MTN	XML	XICH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLCBR	WDDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=		380.0	450.0	TYPE=	1	TARGET=	70,000		
4.96	8300.	0.	8300.	0.	2.21	3	64.		
2593.57	0.0	0.	695.	0.	-1.04	0	2596.90		
13.97	2593.74	0.0	11.94	0.0	0.79	2595.78	100000.00		
0.010184	0.041	0.080	0.055	0.090	0.10	-0.00	385.71		
	2579.60	60.	60.	60.	30.	34.	450.00		1351.

\*SECNO 5.100

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		250.0	420.0	TYPE=	1	TARGET=	170,000		
5.10	8180.	103.	7614.	463.	0.43	4	170.		
2597.89	0.0	89.	1400.	192.	-1.78	0	2589.10		
12.29	2597.30	1.50	5.44	2.42	2.37	2598.33	2589.70		
0.001500	0.041	0.100	0.050	0.080	0.18	-0.00	250.00		
	2585.60	900.	750.	750.	76.	94.	420.00		1372.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS= 250.0 420.0 TYPE= 1 TARGET= 170,000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA=		2600.00	ELREA=	2598.00					
5.10	8180.	0.	8180.	0.	0.53	4	136.		
2597.91	0.0	0.	1402.	0.	0.10	0	2589.10		
12.31	2597.14	0.0	5.83	0.0	0.06	2598.44	2589.70		
0.001723	0.041	0.100	0.050	0.080	0.05	-0.00	258.00		
	2585.60	40.	40.	40.	68.	68.	394.00		1373.

SPECIAL BRIDGE

SB	WK	FOR	COFQ	RDLEN	BWC	DWP	BAREA	SS
	1.25	1.83	3.00	0.0	95.00	18.00	1350.00	1.63
	ELCHU	ELCHD						
	2584.20	2584.20						

\*SECNO 5.10C

3700. BRIDGE STENCL= 250.00 STENCR= 420.00

\*\*\* GR CARDS REPEATED

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2598.82	2598.64	0.22	0.	8180.	1350.	1349.	2597.80

ELTRD  
2599.10

3470 ENCROACHMENT STATIONS= 250.0 420.0 TYPE= 1 TARGET= 170.000

3/95 OVBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2601.00 ELREA= 2599.50

5.10	8180.	0.	8180.	0.	0.49	2	136.
2598.33	0.0	0.	1460.	0.	-0.04	0	2589.10
12.73	2597.48	0.0	5.60	0.0	0.38	2598.82	2589.70
0.001505	0.041	0.090	0.050	0.100	0.0	-0.00	258.00
	2585.60	30.	30.	30.	68.	68.	394.00 1374.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS= 250.0 420.0 TYPE= 1 TARGET= 170.000

5.10	8180.	115.	7682.	383.	0.40	2	170.
2598.45	0.0	75.	1475.	206.	-0.09	0	2589.10
12.85	2597.92	1.57	5.21	1.86	0.01	2598.84	2589.70
0.001283	0.041	0.090	0.050	0.100	0.01	-0.00	250.00
	2585.60	10.	10.	10.	76.	94.	420.00 1375.

\*SECNO 5.200

RICHLAND CREEK

100 YEAR FLOODWA 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRIS	ALOB	ACH	AROB	DHV	IOC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOBR	MSDL	MSDR	ENDST VOL

3470 ENCROACHMENT STATIONS= 250.0 420.0 TYPE= 1 TARGET= 170.000

5.20	8110.	143.	5566.	2402.	0.59	2	170.
2598.95	0.0	78.	766.	982.	0.19	0	2589.10
13.35	2598.27	1.84	7.27	2.45	0.61	2599.55	2587.00
0.001350	0.041	0.080	0.040	0.100	0.10	-0.00	250.00

K06

2585.60 460. 460. 460. 39. 131. 420.00 1394.

\*SECHO 5.490

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREL		100 YEAR FLOODWA		08/01/81				
MILE	Q	QLOP	WCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	WORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=		300.0	610.0	TYPE=	1	TARGET=	310.000	
5.49	8110.	1833.	6245.	32.	2.19	4	310.	
2604.02	2604.02	459.	468.	15.	1.60	16	2602.80	
9.22	2603.48	4.00	13.35	2.17	4.31	2606.20	2600.90	
0.009110	0.041	0.080	0.040	0.100	0.80	-0.00	300.00	
	2594.80	1530.	1530.	1530.	276.	34.	610.00	1442.

\*SECHO 5.580

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		220.0	610.0	TYPE=	1	TARGET=	390.000	
5.58	8090.	4188.	3893.	29.	0.36	2	390.	
2607.15	0.0	1768.	595.	30.	-1.82	0	2602.80	
10.65	2606.38	2.36	6.54	0.97	1.12	2607.51	2600.90	
0.001556	0.041	0.080	0.040	0.120	0.18	-0.00	220.00	
	2596.50	360.	360.	360.	356.	34.	610.00	1456.

\*SECHO 5.580

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=		220.0	610.0	TYPE=	1	TARGET=	390.000	
5.58	8090.	4185.	3876.	29.	0.36	2	390.	
2607.22	0.0	1791.	599.	31.	-0.01	0	2602.80	
10.72	2606.48	2.34	6.47	0.95	0.06	2607.57	2600.90	
0.001506	0.041	0.080	0.040	0.120	0.00	-0.00	220.00	
	2596.50	40.	40.	40.	356.	34.	610.00	1458.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2606.77 NOT 2607.22  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HA	XKOR	COFQ	RDLEN	BWC	BMP	BAREA	SS
	1.25	1.60	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHU	ELCHD						
	2596.50	2596.50						

L06

\*SECNO 5.580  
 3700. BRIDGE STENCL= 630.00 STENCR= 1020.00  
 3280 CROSS SECTION 5.58 EXTENDED 1.89 FEET

PRESSURE AND HEIR FLOW

EGPRS EGLWC H3 QHEIR QPR BAREA TAREA ELLC  
 2609.07 2608.70 0.00 4569. 3528. 408. 408. 2606.40

ELTRD  
 2604.90

3470 ENCROACHMENT STATIONS= 630.0 1020.0 TYPE= 1 TARGET= 390.000  
 5.58 8090. 3788. 3930. 351. 0.38 2 390.  
 2608.69 0.0 1502. 595. 182. 0.03 0 2604.70  
 12.19 2608.00 2.52 6.64 1.92 1.50 2609.07 2604.40  
 0.001610 0.041 0.070 0.040 0.080 0.0 -0.00 630.00  
 2596.50 35. 35. 35. 319. 71. 1020.00 1460.

\*SECNO 5.580  
 3280 CROSS SECTION 5.58 EXTENDED 2.05 FEET

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81		TCPWID		
Q	ALOB	ACH	ARCB	DHV	IDC	EG	CORAR	SSTA	VOL
CRIMS	VL08	VCH	VROB	HL	CORAR	WSDR	ENDST		
WSELK	XL	XNCH	XNR	WSDL	WSDR	ENDST			
WTN	XL08L	XLCH	XLOBR						
ELMIN									

3470 ENCROACHMENT STATIONS= 630.0 1020.0 TYPE= 1 TARGET= 390.000  
 5.58 8090. 3314. 4774. 2. 0.29 2 390.  
 2608.85 0.0 1348. 902. 4. -0.10 0 2604.70  
 11.45 2608.07 2.14 5.29 0.54 0.05 2609.14 2604.50  
 0.001116 0.041 0.070 0.040 0.080 0.01 -0.00 630.00  
 2597.40 40. 40. 40. 340. 50. 1020.00 1462.

\*SECNO 5.640

3470 ENCROACHMENT STATIONS= 300.0 780.0 TYPE= 1 TARGET= 480.000  
 5.64 8065. 3514. 3517. 1035. 0.43 1 480.  
 2609.33 0.0 1267. 477. 453. 0.14 0 2606.00  
 10.33 2608.42 2.77 7.38 2.28 0.53 2609.76 2605.00  
 0.002562 0.041 0.070 0.040 0.080 0.07 -0.00 300.00  
 2599.00 340. 340. 340. 329. 151. 780.00 1480.

\*SECNO 5.710

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS= 300.0 700.0 TYPE= 1 TARGET= 400.000  
 5.71 8065. 3592. 3994. 479. 0.69 2 400.

M06

2610.32	0.0	1116.	448.	170.	0.26	0	2607.50	
9.82	2609.82	3.22	8.91	2.82	1.12	2611.00	2608.50	
0.004079	0.041	0.070	0.040	0.080	0.13	-0.00	300.00	
	2600.50	350.	350.	350.	329.	71.	700.00	1496.

\*SECNO 5.910

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	WSDR	SSTA	
SLOPE	WTN	XML	XNCH	XNR	OLOSS	WSDR	WSDR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	600.0	850.0	TYPE=	1	TARGET=	250.000		
5.91	8030.	119.	6478.	1433.	2.07	247.		
2616.70	2616.70	42.	308.	407.	1.38	2615.30		
10.90	2616.61	2.88	12.74	3.52	5.03	2618.77	2616.00	
0.008133	0.041	0.040	0.040	0.080	0.69	-0.00	603.00	
	2605.80	900.	900.	900.	84.	163.	850.00	1524.

\*SECNO 5.970

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	170.0	500.0	TYPE=	1	TARGET=	330.000		
5.97	8020.	3143.	4290.	587.	0.73	330.		
2619.64	0.0	616.	521.	209.	-1.34	2617.70		
10.34	2618.77	5.10	8.23	2.81	1.47	2620.37	2614.80	
0.003645	0.041	0.035	0.045	0.080	0.13	-0.00	170.00	
	2609.30	280.	280.	280.	252.	78.	500.00	1531.

\*SECNO 6.060

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 3.32 FEET

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	C/RAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	WSDR	SSTA	
SLOPE	WTN	XML	XNCH	XNR	OLOSS	WSDR	WSDR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	405.0	815.0	TYPE=	1	TARGET=	410.000	
6.06	8000.	2860.	3614.	1526.	6.82	399.	
2620.92	0.0	468.	395.	571.	0.07	2619.50	
11.72	2620.01	6.11	9.15	2.67	1.33	2621.74	2619.60

A07

0.004190 0.041 0.035 0.040 0.070 0.04 -0.00 405.00  
 2609.20 340. 340. 340. 178. 232. 815.00 1542.

\*SECNO 6.120

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 4.52 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRIMS	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	MTN	XNCH	XNR	CLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	WSDL	WSDR	ENDST	VOL	

7185 MINIMUM SPECIFIC ENERGY  
 3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 635.0 1110.0 TYPE= 1 TARGET= 475.000  
 6.12 7990. 747. 5988. 1254. 1.60 3 395.  
 2622.62 2622.62 314. 515. 472. 0.78 10 2620.70  
 10.82 2622.48 2.38 11.62 2.66 1.39 2624.21 2619.80  
 0.005941 0.041 0.080 0.040 0.080 0.39 0.0 635.00  
 2611.80 280. 280. 280. 244. 221. 1100.00 1551.

\*SECNO 6.160

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 1130.0 TYPE= 1 TARGET= 430.000  
 6.16 7985. 72. 6648. 1265. 1.23 2 272.  
 2623.90 0.0 48. 688. 403. -0.36 0 2621.50  
 10.50 2623.29 1.50 9.67 3.14 0.88 2625.13 2619.70  
 0.005101 0.041 0.050 0.045 0.080 0.04 -0.00 845.52  
 2613.40 160. 160. 160. 34. 150. 1130.00 1555.

\*SECNO 6.160

\*\*\* JR CARDS REPEATED

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 1100.0 TYPE= 1 TARGET= 400.000  
 6.16 7985. 112. 6429. 1044. 1.26 2 258.  
 2624.13 0.0 68. 706. 324. 0.03 0 2621.50  
 10.73 2624.02 1.65 9.67 3.22 0.25 2625.39 2619.70  
 0.004932 0.041 0.050 0.045 0.080 0.02 -0.00 833.83  
 2613.40 50. 50. 50. 146. 120. 1100.00 1557.

807

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	51.00	6.00	632.00	5.94
	ELCHU	ELCHD						
	2615.00	2615.00						

\*SECNO 6.160  
3700. BRIDGE STENCL= 700.00 STENCR= 1100.00

\*\*\* GR CARDS REPEATED  
3200 CROSS SECTION 6.16 EXTENDED 0.49 FEET

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2628.10	2625.60	0.37	1760.	6191.	632.	632.	2622.20

ELTRD  
2624.50

3470 ENCROACHMENT STATIONS=	700.0	1100.0	TYPE=	1	TARGET=	400.00		
6.16	7985.	715.	6042.	1227.	0.62	3	400.	
2625.69	0.0	339.	847.	465.	-0.64	0	2621.50	
12.49	2625.64	2.11	7.13	2.64	7.12	2626.51	2619.70	
0.002104	0.041	0.050	0.045	0.080	0.0	-0.00	700.00	
	2613.40	50.	50.	50.	280.	120.	1100.00	1558.

\*SECNO 6.160

3265 DIVIDED FLOW

RICHLAND CREEK			100 YEAR FLOODWA	08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	710.0	1020.0	TYPE=	1	TARGET=	310.000		
6.16	7985.	183.	7782.	20.	1.09	2	263.	
2625.78	0.0	93.	918.	16.	0.47	0	2624.30	
10.58	2625.57	1.97	8.48	1.26	0.12	2626.87	2624.00	
0.004500	0.041	0.050	0.045	0.080	0.23	-0.00	710.00	
	2615.20	50.	50.	47.	235.	75.	1020.00	1560.

\*SECNO 6.200

3301 HV CHANGED MORE THAN HVINS



C07

3470 ENCROACHMENT STATIONS=	700.0	910.0	TYPE=	1	TARGET=	210.000	
6.20	7975.	1581.	637.	20.	1.65	2	210.
2626.01	0.0	507.	559.	16.	0.56	0	2623.20
11.31	2625.92	3.12	11.41	1.29	0.51	2627.66	2624.40
0.007430	0.041	0.100	0.045	0.100	0.28	-0.00	700.00
	2614.70	90.	90.	90.	163.	47.	910.00
							1562.

\*SECNO 6.310  
3280 CROSS SECTION 6.31 EXTENDED 0.12 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	270.0	570.0	TYPE=	1	TARGET=	300.000	
6.31	7955.	2899.	4370.	686.	1.02	3	300.
2629.72	0.0	1002.	413.	199.	-0.63	0	2626.60
12.72	2628.79	2.89	10.58	3.44	3.02	2630.74	2622.07
0.005398	0.041	0.100	0.045	0.100	0.06	-0.00	270.00
	2617.00	480.	480.	480.	250.	50.	570.00
							1577.

\*SECNO 6.480  
3265 DIVIDED FLOW  
3280 CROSS SECTION 6.48 EXTENDED 1.70 FEET

3470 ENCROACHMENT STATIONS=	270.0	1040.0	TYPE=	1	TARGET=	770.000	
6.48	7920.	326.	5833.	1760.	0.87	3	390.
2634.80	0.0	144.	678.	815.	-0.15	0	2631.00
8.80	2634.01	2.27	8.60	2.16	4.91	2635.67	2631.00
0.004489	0.041	0.100	0.045	0.100	0.02	-0.00	270.00
	2626.00	1000.	1000.	1000.	81.	689.	1040.00
							1614.

\*SECNO 6.610  
3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	250.0	830.0	TYPE=	1	TARGET=	580.000	
6.01	7900.	269.	7510.	121.	2.73	4	238.
2637.72	2637.59	108.	553.	78.	1.86	11	2633.00
10.22	2637.84	2.49	13.54	1.56	3.85	2640.45	2633.00
0.010820	0.041	0.100	0.045	0.120	0.93	-0.00	252.79
	2627.50	560.	580.	580.	120.	457.	830.00
							1630.

\*SECNO 6.610  
\*\*\* GR CARDS REPEATED

D07

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RIGHLAND CREEK			100 YEAR FLOODWA		08/01/01			
MILE	Q	QLOB	QCH	QROB	HV	ITIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHY	IDC	BANK ELEV	
DEPTH	NSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	OLSS	CORAR	SSTA	
	ELMIN	XLOOL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	250.0	830.0	TYPE=	1	TARGET=	580.000		
6.61	7900.	577.	6951.	372.	1.54	5	251.	
2639.32	0.0	252.	657.	230.	-1.19	0	2633.00	
11.82	2639.51	2.29	10.58	1.62	0.29	2640.86	2633.00	
0.005205	0.041	0.100	0.045	0.120	0.12	-0.00	250.00	
	2627.50	40.	40.	40.	123.	457.	830.00	1631.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2636.85 NOT 2639.32  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFB	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHU	ELCHD						
	2628.50	2628.50						

\*SECNO 6.610  
3700. BRIDGE STENCL= 250.00 STENCR= 830.00

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC
2641.17	2640.74	0.11	4444.	3463.	402.	404.	2637.90
	ELTRD						
	2636.30						

3470 ENCROACHMENT STATIONS=	250.0	830.0	TYPE=	1	TARGET=	580.000		
6.61	7900.	690.	6308.	902.	0.98	3	328.	
2640.19	0.0	329.	713.	578.	-0.56	0	2633.00	
12.69	2639.83	2.09	8.85	1.56	0.31	2641.17	2633.00	
0.003264	0.041	0.100	0.045	0.120	0.0	-0.00	250.00	
	2627.50	30.	30.	30.	123.	457.	830.00	1632.

\*SECNO 6.610

E07

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS=	250.0	830.0	TYPE=	1	TARGET=	580.000		
6.61	7900.	896.	6293.	912.	0.97	0	326.	
2640.23	0.0	333.	716.	585.	-0.01	0	2633.00	
12.73	2639.88	2.09	8.79	1.56	0.03	2641.20	2633.00	
0.003209	0.041	0.100	0.045	0.120	0.00	-0.00	250.00	
	2627.50	10.	10.	10.	123.	457.	830.00	1632.

\*SECNO 6.740

3265 DIVIDED FLOW

3280 CROSS SECTION 6.74 EXTENDED 1.36 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODMA			08/01/81			
MILE	Q	GLOB	QCH	GR0B	HV	ITRIAL	TOPWID	
ELEV	CRWS	AL0B	ACH	AR0B	DHV	IDC	SANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

3470 ENCROACHMENT STATIONS=	260.0	640.0	TYPE=	1	TARGET=	380.000		
6.74	7860.	517.	4323.	1019.	2.63	20	200.	
2644.36	2644.36	175.	438.	320.	1.66	8	2635.70	
12.96	2644.17	2.95	14.43	3.19	1.18	2646.99	2655.00	
0.010763	0.041	0.100	0.045	0.100	0.83	-0.00	260.00	
	2631.40	220.	220.	220.	128.	252.	640.00	1638.

\*SECNO 6.790

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.87 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODMA			08/01/81			
MILE	Q	GLOB	QCH	GR0B	HV	ITRIAL	TOPWID	
ELEV	CRWS	AL0B	ACH	AR0B	DHV	IDC	SANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	260.0	640.0	TYPE=	1	TARGET=	380.000		
6.79	7840.	1692.	4308.	1641.	0.49	4	253.	
2648.87	0.0	805.	628.	807.	-2.14	0	2639.70	
17.47	2648.02	2.10	7.17	2.03	2.15	2649.35	2639.10	
0.001485	0.041	0.100	0.045	0.100	0.21	-0.00	260.00	
	2631.40	680.	680.	680.	128.	252.	640.00	1663.

F07

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.93 FEET

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRHS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	HSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=		260.0	640.0	TYPE=	1	TARGET=	380.000	
6.79	7840.	1700.	4493.	1647.	0.48	2	253.	
2648.93	0.0	812.	631.	814.	-0.01	0	2639.70	
17.53	2648.07	2.09	7.12	2.02	0.06	2649.41	2639.10	
0.001456	0.041	0.100	0.045	0.100	0.00	-0.00	260.00	
	2631.40	40.	40.	40.	128.	252.	640.00	1665.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEW	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790

3700. BRIDGE STENCL= 140.00 SYENCR= 450.00  
 PRESS FLOW BECAUSE EGLWC OF 2649.48 EXCEEDS 1.5 DEPTH  
 PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	WEIR	QPR	BAREA	TAREA	ELLC
2660.40	2649.48	0.06	8132.	1715.	365.	359.	2642.80
	ELTRD						
	2641.70						

3470 ENCROACHMENT STATIONS=		140.0	450.0	TYPE=	1	TARGET=	310.000	
6.79	7840.	3012.	4036.	792.	0.36	2	310.	
2649.12	0.0	1499.	625.	435.	-0.13	0	2640.50	
15.12	2648.26	2.01	6.46	1.82	0.07	2649.48	2636.00	
0.001283	0.041	0.100	0.045	0.100	0.0	-0.00	140.00	
	2634.00	50.	50.	50.	223.	87.	450.00	1668.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS= 140.0 450.0 TYPE= 1 TARGET= 310.000

607

6.79	7840.	3014.	4034.	792.	0.36	0	310	
2649.13	0.0	1501.	628.	436.	-0.00	0	2640.50	
15.13	2648.28	2.01	6.45	1.82	0.01	2649.50	2636.00	
0.001277	0.041	0.100	0.045	0.100	0.00	-0.00	140.00	
	2634.00	10.	10.	10.	225.	87.	450.00	1669.

\*SECNO 7.000

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	750.0	1020.0	TYPE=	1	TARGET=	270.000		
7.00	7780.	301.	6714.	766.	1.63	3	270.	
2651.26	0.0	167.	611.	310.	1.27	0	2649.00	
9.26	2651.04	1.80	10.99	2.47	2.77	2652.89	2646.50	
0.007589	0.041	0.120	0.045	0.110	0.63	-0.00	750.00	
	2642.00	1080.	1030.	1080.	115.	155.	1020.00	1714.

\*SECNO 7.230

3470 ENCROACHMENT STATIONS=	210.0	650.0	TYPE=	1	TARGET=	440.000		
7.23	7710.	410.	6347.	954.	1.67	12	440.	
2661.50	2661.46	210.	556.	466.	0.04	15	2657.00	
8.00	2661.44	1.95	11.41	2.05	10.26	2663.18	2657.00	
0.009380	0.041	0.120	0.045	0.110	0.02	-0.00	210.00	
	2653.50	1220.	1220.	1220.	149.	291.	650.00	1746.

\*SECNO 7.250

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	GLOB	GCH	GR0B	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AR0B	DHV	IDC	BANK ELEV	
DEPTH	WSLK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS=	210.0	650.0	TYPE=	1	TARGET=	440.000		
7.23	7710.	582.	5723.	1404.	0.92	4	440.	
2662.59	0.0	328.	645.	712.	-0.75	0	2657.00	
9.09	2662.37	1.78	8.87	1.91	0.26	2663.51	2657.00	
0.004660	0.041	0.120	0.045	0.110	0.08	-0.00	210.00	
	2653.50	40.	40.	40.	149.	291.	650.00	1748.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
	ELCHU	ELCHD						
	2653.50	2653.50						

H07

\*SECNO 7.230

3700. BRIDGE STENCL= 210.00 STENCR= 600.00

\*\*\* GR CARDS REPEATED

PRESS FLOW BECAUSE EGLWC OF 2663.66 EXCEEDS 1.5 DEPTH PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2671.73	2663.66	0.15	4856.	2854.	402.	402.	2659.60

ELTRD  
2658.90

3470 ENCROACHMENT STATIONS=	210.0	650.0	TYPE=	1	TARGET=	440.000		
7.23	7710.	651.	5473.	1586.	0.71	3	440.	
2663.13	0.0	386.	690.	873.	-0.21	0	2657.00	
9.63	2662.37	1.69	7.93	1.82	0.33	2663.84	2657.00	
0.003403	0.041	0.120	0.045	0.110	0.0	-0.00	210.00	
	2653.50	30.	30.	30.	149.	291.	650.00	1749.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	210.0	650.0	TYPE=	1	TARGET=	440.000		
7.23	7710.	666.	5556.	1488.	0.73	1	440.	
2663.15	0.0	389.	693.	881.	0.03	0	2657.00	
9.63	2662.40	1.71	8.02	1.69	0.03	2663.89	2657.00	
0.003465	0.041	0.120	0.045	0.120	0.01	-0.00	210.00	
	2653.50	10.	10.	10.	149.	291.	650.00	1749.

\*SECNO 7.460

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	270.0	430.0	TYPE=	1	TARGET=	160.000		
7.46	7640.	106.	5625.	1909.	2.56	4	160.	
2669.84	2669.84	35.	383.	397.	1.83	8	2668.30	
9.44	2669.79	3.01	14.70	4.81	7.46	2672.40	2668.30	
0.017871	0.042	0.080	0.050	0.110	0.92	-0.00	270.00	
	2660.40	1120.	1120.	1120.	49.	111.	430.00	1785.

\*SECNO 7.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		220.0	400.0	TYPE=	1	TARGET=	180,000	
7.34	7620.	399.	5906.	1314.	0.85	3	180.	
2674.88	0.0	145.	714.	466.	-1.71	0	2671.00	
10.58	2673.95	2.75	8.27	2.82	3.15	2675.73	2668.50	
0.004106	0.042	0.090	0.050	0.110	0.17	-0.00	220.00	
	2664.30	420.	420.	420.	69.	111.	400.00	1795.

\*SECNO 7.780

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA		08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
5720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=		640.0	890.0	TYPE=	1	TARGET=	250,000	
7.78	7495.	1334.	5928.	234.	1.99	2	250.	
2684.68	2684.68	385.	470.	83.	1.14	15	2681.60	
8.98	2684.14	3.46	12.61	2.80	8.36	2686.67	2682.00	
0.013215	0.042	0.090	0.050	0.110	0.57	-0.00	640.00	
	2675.70	1240.	1240.	1240.	187.	63.	890.00	1828.

\*SECNO 7.970

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		500.0	780.0	TYPE=	1	TARGET=	280,000	
7.97	7380.	280.	6351.	749.	1.20	4	272.	
2693.85	0.0	92.	672.	380.	-0.79	0	2687.50	
11.35	2692.83	3.05	9.45	1.97	8.30	2695.05	2690.50	
0.006283	0.042	0.100	0.050	0.110	0.08	-0.00	500.00	
	2682.00	940.	940.	940.	59.	213.	772.32	1850.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=		500.0	780.0	TYPE=	1	TARGET=	280,000	
7.97	7380.	284.	6216.	881.	1.02	2	280.	
2694.27	0.0	99.	707.	456.	-0.18	0	2687.50	
12.27	2693.95	2.86	8.79	1.93	0.23	2695.29	2690.50	
0.005083	0.042	0.100	0.050	0.110	0.02	-0.00	500.00	
	2682.00	40.	40.	40.	59.	221.	780.00	1851.

SPECIAL BRIDGE

J07

5227 DOWNSTREAM ELEV IS 2690.51 NOT 2694.27  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	29.00	4.00	506.00	1.90
	ELCHU	ELCHD						
	2682.00	2682.00						

\*SECNO 7.970  
3700. BRIDGE STENCL= 485.00 STENCR= 765.00  
3280 CROSS SECTION 7.97 EXTENDED 1.46 FEET

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2697.60	2696.67	0.64	1508.	5853.	506.	512.	2693.10
ELTRD							
2692.60							

3470 ENCROACHMENT STATIONS= 485.0 765.0 TYPE= 1 TARGET= 280.000  
7.97 7380. 241. 6632. 507. 2.05 5 280.  
2695.55 0.0 71. 548. 249. 1.03 0 2692.00  
13.55 2695.56 3.38 12.09 2.04 2.30 2697.60 2693.60  
0.008455 0.042 0.080 0.050 0.080 0.0 -0.00 485.00  
2682.00 30. 30. 30. 49. 231. 765.00 1852.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 7.97 EXTENDED 2.04 FEET

3470 ENCROACHMENT STATIONS= 485.0 765.0 TYPE= 1 TARGET= 280.000  
7.97 7380. 274. 6281. 824. 1.57 6 280.  
2696.15 0.0 85. 579. 369. -0.49 0 2692.00  
14.15 2695.97 3.23 10.35 2.23 0.07 2697.72 2693.60  
0.006329 0.042 0.080 0.050 0.080 0.05 -0.00 485.00  
2682.00 10. 10. 10. 49. 231. 765.00 1852.

\*SECNO 8.200

RICHLAND CREEK

100 YEAR FLOODWA

08/01/81

MILE	Q	QLOB	QCH	QRO3	HV	ITHIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	BSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3470 ENCROACHMENT STATIONS= 740.0 860.0 TYPE= 1 TARGET= 120.000  
8.20 6950. 340. 6565. 45. 1.80 2 120.



K07

2704.29	0.0	134.	593.	23.	0.23	0	2700.30	
10.09	2703.53	2.54	11.07	2.01	8.26	2706.15	2699.50	
0.007993	0.042	0.120	0.045	0.120	0.12	-0.00	740.00	
	2694.20	1170.	1170.	1170.	75.	45.	860.00	1876.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	740.0	860.0	TYPE=	1	TARGET=	120.000		
8.20	6950.	373.	6530.	47.	1.53	120.		
2704.88	0.0	154.	640.	25.	-0.28	0	2700.30	
10.68	2704.60	2.42	10.21	1.83	0.28	2706.40	2699.50	
0.006143	0.042	0.120	0.045	0.120	0.03	-0.00	740.00	
	2694.20	40.	40.	40.	75.	45.	860.00	1877.

SPECIAL BRIDGE

SB	HK	XKOR	COF2	RDLEN	BMC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
	ELCHU	ELCHD						
	2694.20	2694.20						

\*SECNO 8.200

3700. BRIDGE STENCL= 740.00 STENCR= 860.00

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2707.55	2706.66	0.42	15.	6954.	670.	670.	2704.00

ELTRD  
2706.70

\*\*\* NOTE: QWEIR IS GREATER THAN 0 AND ELEV IS LESS THAN ELTRD \*\*\*

3470 ENCROACHMENT STATIONS=	740.0	860.0	TYPE=	1	TARGET=	120.000		
8.20	6950.	446.	6455.	49.	1.01	3	120.	
2706.54	0.0	212.	772.	34.	-0.51	0	2700.30	
12.34	2706.87	2.10	8.36	1.44	1.15	2707.55	2699.50	
0.003203	0.042	0.120	0.045	0.120	0.0	-0.00	740.00	
	2694.20	30.	30.	30.	75.	45.	860.00	1877.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	740.0	860.0	TYPE=	1	TARGET=	120.000	
8.20	6950.	448.	6453.	49.	1.00	0	120.
2706.59	0.0	214.	776.	34.	-0.01	0	2700.30

L07

12.39	2706.88	2.09	8.32	1.43	0.03	2707.59	2699.50	
0.003151	0.042	0.120	0.045	0.120	0.00	-0.00	740.00	
	2694.20	10.	10.	10.	75.	15.	860.00	1878.

\*SECNO 8.270

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	385.0	525.0	TYPE=	1	TARGET=	140.000		
8.27	6425.	594.	5370.	461.	1.53	2	140.	
2707.92	0.0	155.	500.	140.	0.53	0	2704.00	
8.72	2706.87	3.84	10.74	3.30	1.60	2709.45	2705.00	
0.008130	0.042	0.090	0.045	0.100	0.26	-0.00	325.00	
	2699.20	340.	340.	340.	68.	72.	525.00	1885.

\*SECNO 8.410

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPT/II ASSUMED

3470 ENCROACHMENT STATIONS=	480.0	600.0	TYPE=	1	TARGET=	120.000		
8.41	6370.	184.	6086.	101.	2.55	4	120.	
2715.11	2715.11	45.	485.	40.	1.02	5	2715.00	
8.91	2715.04	4.05	13.10	2.53	6.95	2717.66	2713.40	
0.014235	0.042	0.070	0.045	0.090	0.51	-0.00	480.00	
	2706.20	660.	660.	660.	57.	63.	600.00	1895.

\*SECNO 8.670

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	200.0	310.0	TYPE=	1	TARGET=	110.000		
8.67	6270.	184.	5744.	343.	3.31	4	110.	
2732.06	2732.06	90.	377.	85.	0.76	11	2730.00	
11.86	2732.53	2.04	15.23	4.03	17.31	2735.37	2727.00	
0.012847	0.042	0.120	0.045	0.100	0.38	-0.00	200.00	
	2720.20	1280.	1280.	1280.	71.	39.	310.00	1911.

\*SECNO 8.800

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	200.0	335.0	TYPE=	1	TARGET=	135.000	
8.80	6215.	1194.	3006.	7014.	1.25	1	135.
2739.97	0.0	239.	252.	436.	-2.06	0	2734.30
10.77	2739.12	4.99	11.93	4.62	5.65	2741.23	2731.80
0.007174	0.042	0.070	0.045	0.100	0.21	-0.00	200.00
	2729.20	600.	600.	600.	64.	71.	333.00
							1971.

\*SECNO 8.920

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	400.0	480.0	TYPE=	1	TARGET=	80.000	
8.92	3615.	183.	3426.	6.	1.87	3	80.
2743.76	0.0	65.	304.	4.	0.62	0	2741.50
6.76	2743.30	2.80	11.25	1.80	4.09	2745.63	2741.50
0.009317	0.042	0.090	0.040	0.080	0.31	-0.00	400.00
	2737.00	520.	520.	520.	52.	28.	480.00
							1929.

\*SECNO 9.060

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	400.0	510.0	TYPE=	1	TARGET=	110.000	
9.06	3515.	173.	3323.	19.	1.25	2	85.
2749.32	0.0	92.	361.	11.	-0.62	0	2746.00
7.82	2748.74	1.88	9.22	1.71	4.88	2750.57	2746.00
0.004988	0.042	0.120	0.040	0.080	0.06	-0.00	400.00
	2741.50	730.	730.	730.	52.	33.	484.79
							1936.

\*SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	YOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSPR	ENDST	VOL

3485 20 TRIALS ATTEMPTED WSEL, CWSEL  
 3493 PROBABLE MINIMUM SPECIFIC ENERGY  
 5720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	125.0	235.0	TYPE=	1	TARGET=	110.000	
9.06	3515.	735.	2715.	65.	2.14	20	110.
2753.57	2753.57	222.	205.	21.	0.89	15	2750.10

## A08

6.17	2753.08	3.31	13.23	3.07	0.16	2752.71	2751.50	
0.013727	0.042	0.120	0.040	0.080	0.44	-0.00	125.00	
	2747.40	20.	20.	20.	81.	29.	235.00	1936.

\*SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	125.0	235.0	TYPE=	1	TARGET=	110.000		
9.06	3515.	707.	2723.	84.	1.12	4	110.	
2754.84	0.0	301.	283.	35.	-1.02	0	2730.10	
9.94	2753.94	2.35	9.16	2.39	0.15	2755.96	2751.50	
0.004759	0.042	0.120	0.040	0.080	0.10	-0.00	125.00	
	2744.90	20.	20.	20.	81.	29.	235.00	1937.

\*SECNO 9.150

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	125.0	235.0	TYPE=	1	TARGET=	110.000		
9.15	3470.	765.	2653.	53.	1.29	3	110.	
2757.48	0.0	254.	257.	27.	0.18	0	2753.50	
9.18	2756.68	3.01	10.31	1.95	2.73	2758.78	2754.90	
0.008038	0.042	0.110	0.045	0.110	0.09	-0.00	125.00	
	2748.30	450.	450.	450.	81.	29.	235.00	1943.

\*SECNO 9.260

3280 CROSS SECTION 9.26 EXTENDED 0.88 FEET

3470 ENCROACHMENT STATIONS=	430.0	580.0	TYPE=	1	TARGET=	150.000		
9.26	3470.	14.	3250.	206.	1.58	4	150.	
2761.88	2761.36	16.	312.	114.	0.29	12	2761.20	
7.88	2761.86	0.87	10.42	1.80	4.54	2763.47	2760.50	
0.009534	0.042	0.110	0.045	0.110	0.14	-0.00	430.00	
	2754.00	520.	520.	520.	55.	95.	580.00	1948.

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 9.26 EXTENDED 1.73 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	430.0	580.0	TYPE=	1	TARGET=	150.000		
9.26	3470.	51.	3101.	317.	1.07	3	150.	
2762.74	0.0	42.	354.	174.	-0.51	0	2761.20	
8.74	2762.81	1.23	8.75	1.83	0.29	2763.81	2760.50	
0.005673	0.042	0.110	0.045	0.110	0.05	-0.00	430.00	
	2754.00	40.	40.	40.	53.	95.	580.00	1949.

B08

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	42.70	2.00	305.00	0.0
	ELCHU	ELCHD						
	2754.00	2754.00						

\*SECNO 9,260

3700.	BRIDGE STENCL=	430.00	STENCR=	580.00				
RICHLAND CREEK		100 YEAR FLOODWA		08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRHS	ALOB	ACh	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2765.95	2764.04	0.23	791.	2668.	305.	305.	2761.50

ELTRD  
2761.80

3470 ENCROACHMENT STATIONS=	430.0	580.0	TYPE=	1	TARGET=	150.000		
9.26	3470.	108.	2913.	449.	0.63	3	150.	
2764.00	0.0	81.	420.	265.	-0.43	0	2761.10	
10.00	2763.32	1.32	6.94	1.69	0.83	2764.64	2760.30	
0.002839	0.042	0.110	0.045	0.110	0.0	-0.00	430.00	
	2754.00	30.	30.	30.	55.	95.	580.00	1949.

\*SECNO 9,260

\*\*\* GR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	430.0	580.0	TYPE=	1	TARGET=	150.000		
9.26	3470.	86.	3022.	361.	0.71	2	150.	
2763.99	0.0	81.	419.	264.	0.07	0	2761.10	
9.99	2763.29	1.07	7.21	1.37	0.02	2764.70	2760.30	
0.001859	0.042	0.110	0.035	0.110	0.04	-0.00	430.00	
	2754.00	70.	70.	70.	55.	95.	580.00	1950.

\*SECNO 9,390

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			100 YEAR FLOODWA		08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRHS	ALOB	ACh	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

COB

3693 PROBABLE MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=	330.0	470.0	TYPE=	1	TARGET=	140.000	
9.39	3410.	147.	2852.	470.	1.87	20	140.
2768.28	2768.28	65.	238.	159.	1.17	5	2766.10
10.08	2768.49	2.28	11.96	2.57	2.68	2770.15	2766.10
0.012402	0.043	0.110	0.043	0.110	0.58	-0.00	330.00
	2758.20	700.	700.	700.	52.	88.	470.00

1959.

\*SECTO 9.500

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=	400.0	650.0	TYPE=	1	TARGET=	250.000	
9.50	3320.	1213.	1442.	665.	0.52	4	250.
2776.83	0.0	497.	172.	296.	-1.35	0	2773.30
7.43	2775.81	2.44	8.38	2.25	7.07	2777.38	2773.30
0.005912	0.043	0.110	0.043	0.110	0.14	-0.00	400.00
	2769.00	850.	850.	850.	148.	102.	650.00

1973.

\*SECTO 9.550

\*\*\* SR CARDS REPEATED

3470 ENCROACHMENT STATIONS=	400.0	650.0	TYPE=	1	TARGET=	250.000	
9.55	3320.	1260.	1350.	719.	0.37	2	250.
2778.20	0.0	573.	186.	346.	-0.15	0	2774.10
8.00	2777.32	2.20	7.75	2.05	1.20	2778.57	2774.10
0.003986	0.043	0.110	0.043	0.110	0.01	-0.00	400.00
	2770.20	250.	250.	250.	148.	102.	650.00

1979.

\*SECTO 9.820

3301 HV CHANGED MORE THAN HVINS

RICHMOND CREEK			100 YEAR FLOODWA	08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSLK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VCL

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

3470 ENCROACHMENT STATIONS=	480.0	610.0	TYPE=	1	TARGET=	130.000	
9.82	3230.	897.	2091.	242.	1.81	20	130.
2791.99	2791.99	259.	159.	72.	1.43	11	2788.50
9.99	2791.72	3.46	13.17	3.37	4.51	2793.80	2788.80
0.016381	0.043	0.110	0.043	0.110	0.72	-0.00	480.00
	2782.00	640.	640.	640.	98.	32.	610.00

1991.

\*SECTO 10.000

DOB

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		230.0	380.0	TYPE=	1	TARGET=	150.000	
10.00	3150.	42.	2057.	1051.	0.60	5	150.	
2800.31	0.0	23.	275.	463.	-1.21	0	2793.50	
7.51	2799.57	1.78	7.49	2.27	6.99	2800.91	2795.30	
0.004080	0.043	0.100	0.047	0.110	0.12	-0.00	240.00	
	2792.80	960.	960.	960.	24.	126.	380.00	2005.

\*SECNO 10.090

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA		08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIN	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	W	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	CEOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	ALOB	WSDL	WSDR	ENDST	VOL

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

3470 ENCROACHMENT STATIONS=		265.0	350.0	TYPE=	1	TARGET=	85.000	
10.09	3150.	0.	2962.	188.	2.49	20	75.	
2807.63	2807.63	0.	227.	82.	1.90	8	2808.50	
8.63	2807.94	0.0	13.0	2.30	3.01	2810.13	2805.50	
0.015675	0.043	0.070	0.045	0.120	0.95	-0.00	265.00	
	2799.00	420.	420.	420.	18.	67.	350.00	2010.

\*SECNO 10.210

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		160.0	230.0	TYPE=	1	TARGET=	70.000	
10.21	3150.	0.	3150.	0.	1.04	3	70.	
2815.98	0.0	0.	385.	0.	-1.46	0	2815.00	
7.48	2815.21	0.0	8.18	0.0	6.75	2817.02	100000.00	
0.006848	0.043	0.050	0.045	0.080	0.15	-0.00	160.00	
	2808.50	680.	680.	680.	35.	35.	230.00	2015.

\*SECNO 10.280

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=		370.0	465.0	TYPE=	1	TARGET=	95.000	
10.28	3150.	0.	3150.	0.	1.57	2	71.	
2819.05	0.0	0.	315.	0.	0.53	0	2822.50	
6.05	2819.24	0.0	10.05	0.0	3.33	2820.62	100000.00	

E08

0.013202	0.043	0.080	0.045	0.080	0.26	-0.00	378.89	
	2813.00	360.	360.	360.	39.	32.	449.58	2053.

\*SECK 10,390

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOODWA			08/01/81		TOP MID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOF	VCH	VROB	HL	LOSS	WSDR	SSTA	
SLOPE	WTH	XN	XNCH	XNR	WSDL			ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR					

3470 ENCROACHMENT STATIONS=	120.0	185.0	TYPE=	1	TARGET=	45.000		
10.39	3150.	0.	2884.	266.	2.22	3	42.	
2825.90	0.0	0.	232.	62.	0.66	0	2826.50	
9.50	2825.80	0.0	12.44	4.31	7.18	2828.12	2817.00	
0.013381	0.043	0.100	0.050	0.100	0.33	-0.00	122.70	
	2816.40	540.	540.	540.	15.	27.	165.00	2022.



F08

THIS RUN EXECUTED 08/01/81 8:19:25

\*\*\*\*\*  
 HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979  
 ERROR CORR - 01,02,03  
 MODIFICATION - 50,51,52,53,54  
 \*\*\*\*\*

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

TH0219X FLOCS - MISSING LD CARD OR DCB ERROR FOR ASCII TAPE FOR FT51F001

TRACEBACK ROUTINE CALLED FROM ISN	REG. 14	REG. 15	REG. 0	REG. 1
IBCON	000E2F88	000F9AFC	00000000	00068E1C
SUMPO	420C607C	000E2050	00000000	00000000
MAIN	0002C498	000C5B10	0087D2D0	060C4FFB

ENTRY POINT= 000C5B10

STANDARD FIXUP TAKEN, EXECUTION CONTINUING

\*\*\*\*\*  
 RICHLAND CREEK

SUMMARY PRINTOUT TABLE 110

SECNO	CWSEL	DIFKIS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	GCH	GR08
0.050	2500.30	0.0	2500.55	835.	0.	0.	0.	350.	424.	629.	4117.	4654.
0.050	2501.30	1.00	2501.61	500.	500.	250.	750.	350.	424.	615.	4735.	4051.
0.250	2502.25	0.0	2502.84	419.	0.	0.	0.	476.	527.	4432.	4800.	103.
0.230	2503.07	0.82	2503.61	312.	330.	240.	570.	476.	527.	4401.	4790.	144.
0.230	2502.45	0.0	2502.99	425.	0.	0.	0.	476.	527.	4544.	4681.	110.
0.230	2503.22	0.77	2503.72	313.	330.	240.	570.	476.	527.	4456.	4728.	150.
* 0.230	2501.85	0.0	2503.81	264.	0.	0.	0.	455.	525.	2111.	7224.	0.
0.230	2502.39	0.54	2504.56	183.	330.	240.	570.	455.	525.	1499.	7836.	0.
0.230	2503.54	0.0	2504.35	342.	0.	0.	0.	455.	525.	3452.	5883.	0.
0.230	2503.99	0.45	2505.15	221.	330.	240.	570.	455.	525.	2357.	6978.	0.
0.230	2504.20	0.0	2504.41	542.	0.	0.	0.	476.	527.	4546.	3551.	1239.
0.230	2504.96	0.76	2505.24	330.	330.	240.	570.	476.	527.	4602.	4023.	710.
0.230	2504.31	0.0	2504.42	542.	0.	0.	0.	476.	527.	4548.	3548.	1239.
0.230	2504.98	0.77	2505.25	330.	330.	240.	570.	476.	527.	4606.	4019.	710.
0.270	2504.42	0.0	2504.62	547.	0.	0.	0.	476.	527.	4604.	3449.	1261.
0.270	2505.20	0.78	2505.46	330.	330.	240.	570.	476.	527.	4637.	3959.	719.

608

0.550	2506.58	0.0	2507.51	272.	0.	0.	0.	275.	357.	1254.	7719.	278.
0.550	2507.36	0.78	2508.28	165.	165.	200.	365.	275.	357.	1126.	8050.	74.
0.840	2510.98	0.0	2512.92	136.	0.	0.	0.	88.	154.	49.	8966.	153.
0.840	2511.28	0.30	2513.18	90.	90.	75.	165.	88.	154.	56.	772.	77.
1.160	2516.56	0.0	2517.71	219.	0.	0.	0.	92.	166.	194.	7566.	1319.
1.160	2516.68	0.11	2518.10	125.	125.	80.	205.	92.	166.	62.	8205.	814.
1.450	2520.02	0.0	2520.59	280.	0.	0.	0.	215.	278.	1054.	5342.	2604.
1.450	2520.38	0.56	2521.32	175.	175.	175.	350.	215.	278.	784.	6074.	2142.
1.450	2520.14	0.0	2520.66	230.	0.	0.	0.	185.	295.	0.	6869.	2131.
1.450	2520.84	0.69	2521.40	165.	175.	175.	350.	185.	295.	0.	7479.	1521.

H09

SECNO	CWSEL	DIFKMS	EG	TOPWD	PERENC	STENCL	STENCR	STCHL	STCHR	GLCB	GCH	GR08
1.450	2519.63	0.0	2521.17	140.	0.	0.	0.	185.	300.	0.	8993.	7.
1.450	2520.79	0.86	2521.76	109.	175.	175.	350.	185.	300.	0.	9000.	0.
1.450	2519.97	0.0	2521.39	151.	0.	0.	0.	185.	300.	0.	8976.	24.
1.450	2520.71	0.74	2521.92	109.	175.	175.	350.	185.	300.	0.	9000.	0.
1.450	2521.07	0.0	2521.49	232.	0.	0.	0.	185.	295.	0.	6774.	2226.
1.450	2521.49	0.42	2521.99	165.	175.	175.	350.	185.	295.	0.	7464.	1536.
1.450	2521.11	0.0	2521.53	285.	0.	0.	0.	215.	278.	1137.	5126.	2737.
1.450	2521.48	0.37	2522.10	175.	175.	175.	350.	215.	278.	811.	3988.	2201.
1.700	2522.94	0.0	2523.74	223.	0.	0.	0.	227.	278.	3299.	5243.	388.
1.700	2523.63	0.69	2524.70	150.	150.	140.	450.	227.	278.	2586.	6081.	283.
1.780	2524.04	0.0	2524.59	480.	0.	0.	0.	227.	278.	2307.	4294.	2299.
1.780	2524.94	0.91	2525.58	310.	310.	140.	450.	227.	278.	1855.	4786.	2260.
1.780	2524.16	0.0	2524.68	481.	0.	0.	0.	227.	278.	2321.	4243.	2336.
1.780	2525.04	0.89	2525.66	310.	310.	140.	450.	227.	278.	1862.	4762.	2276.
* 1.780	2527.71	0.0	2527.85	512.	0.	0.	0.	227.	278.	2587.	3263.	3050.
1.780	2527.91	0.20	2528.19	310.	310.	140.	450.	227.	278.	2053.	4172.	2675.
1.780	2527.72	0.0	2527.88	708.	0.	0.	0.	483.	534.	3633.	3138.	2098.
1.780	2527.93	0.22	2528.22	450.	450.	200.	650.	483.	534.	3337.	3881.	1682.
1.950	2528.24	0.0	2528.38	709.	0.	0.	0.	483.	534.	3418.	2918.	2514.
1.950	2528.69	0.45	2528.92	450.	450.	200.	650.	483.	534.	3210.	3597.	2043.
2.190	2529.55	0.0	2530.28	876.	0.	0.	0.	577.	628.	1631.	3858.	3281.
2.190	2530.29	0.75	2530.83	600.	600.	300.	900.	577.	628.	1677.	3657.	3436.
2.320	2531.71	0.0	2531.93	1000.	0.	0.	0.	756.	810.	2707.	2375.	3642.
2.320	2532.13	0.42	2532.48	650.	650.	650.	1300.	756.	810.	966.	2896.	4863.
2.320	2531.80	0.0	2531.94	1067.	0.	0.	0.	756.	796.	3758.	1066.	3900.
2.320	2532.23	0.43	2532.49	650.	650.	650.	1300.	756.	796.	1356.	1434.	5935.
2.320	2531.92	0.0	2532.05	1071.	0.	0.	0.	756.	796.	3780.	1032.	3913.
2.320	2532.42	0.49	2532.65	650.	650.	650.	1300.	756.	796.	1363.	1381.	5981.
2.320	2531.91	0.0	2532.07	1071.	0.	0.	0.	756.	810.	2501.	1962.	4242.
2.320	2532.42	0.51	2532.65	650.	650.	650.	1300.	756.	810.	952.	2321.	5451.
2.400	2532.42	0.0	2532.53	1088.	0.	0.	0.	756.	810.	2639.	1807.	4254.
2.400	2532.99	0.37	2533.16	650.	650.	650.	1300.	756.	810.	986.	2179.	5535.
* 2.400	2554.80	0.0	2554.02	478.	0.	0.	0.	330.	550.	1332.	7027.	340.
2.400	2554.80	-0.00	2553.02	478.	690.	50.	740.	330.	550.	1331.	7029.	340.
* 2.400	2566.70	0.0	2567.06	530.	0.	0.	0.	330.	550.	1913.	6252.	536.
2.400	2566.70	0.0	2567.06	530.	690.	50.	740.	330.	550.	1913.	6252.	536.
2.400	2567.07	0.0	2567.10	1236.	0.	0.	0.	10.	1240.	2.	9897.	2.
2.400	2567.04	-0.04	2567.09	740.	740.	10.	750.	10.	1240.	0.	9900.	0.

SECNO	CMSL	DIFKMS	EG	TOPWID	PERENC	STERCL	STENCR	STCHL	STCHR	GLCH	GCH	GROB
3.230	2567.28	0.0	2567.36	410.	0.	0.	0.	41.	391.	3.	9762.	45.
3.230	2567.42	0.15	2567.51	390.	390.	35.	425.	41.	391.	4.	9762.	45.
3.690	2567.42	0.0	2568.18	194.	0.	0.	0.	168.	306.	0.	9084.	676.
3.690	2567.47	0.05	2568.42	110.	110.	200.	310.	188.	306.	0.	9737.	23.
3.810	2568.44	0.0	2569.83	321.	0.	0.	0.	290.	447.	224.	9375.	141.
3.810	2568.52	0.08	2570.50	125.	125.	285.	410.	290.	447.	38.	9702.	0.
3.810	2568.93	0.0	2570.07	353.	0.	0.	0.	290.	447.	301.	9225.	213.
3.810	2568.95	0.02	2570.54	125.	125.	285.	410.	290.	447.	41.	9699.	0.
3.810	2571.94	0.0	2572.32	546.	0.	0.	0.	290.	447.	893.	8174.	673.
3.810	2571.78	-0.16	2572.64	125.	125.	285.	410.	290.	447.	54.	9686.	0.
3.810	2571.46	0.0	2572.86	224.	0.	0.	0.	332.	395.	752.	8448.	541.
3.810	2571.52	0.06	2572.99	125.	125.	290.	415.	332.	395.	748.	8617.	574.
3.970	2573.86	0.0	2574.54	269.	0.	0.	0.	276.	350.	1331.	7794.	605.
3.970	2573.92	0.06	2574.86	130.	130.	235.	355.	276.	350.	958.	8707.	65.
3.970	2573.73	0.0	2574.90	269.	0.	0.	0.	276.	351.	439.	9087.	205.
3.970	2573.87	0.15	2575.18	130.	130.	225.	355.	276.	351.	257.	9472.	21.
3.970	2573.96	0.0	2575.07	272.	0.	0.	0.	276.	351.	504.	9000.	226.
3.970	2574.10	0.13	2575.35	130.	130.	225.	355.	276.	351.	262.	9445.	22.
3.970	2574.56	0.0	2575.15	277.	0.	0.	0.	276.	350.	1453.	7645.	632.
3.970	2574.57	0.01	2575.42	130.	130.	225.	355.	276.	350.	998.	8467.	65.
4.140	2576.06	0.0	2576.34	420.	0.	0.	0.	630.	686.	3704.	4434.	1570.
4.140	2576.54	0.48	2577.28	200.	200.	590.	790.	630.	686.	1051.	6345.	2304.
4.140	2576.04	0.0	2576.45	179.	0.	0.	0.	603.	782.	0.	9710.	0.
4.140	2577.04	1.00	2577.37	200.	200.	590.	790.	603.	782.	160.	9508.	44.
4.140	2576.42	0.0	2576.81	179.	0.	0.	0.	603.	782.	0.	9710.	0.
4.140	2577.49	1.07	2577.81	179.	200.	590.	790.	603.	782.	0.	9710.	0.
4.140	2576.60	0.0	2576.85	423.	0.	0.	0.	630.	686.	3764.	4352.	1594.
4.140	2577.50	0.90	2577.86	297.	300.	500.	800.	630.	686.	2577.	5151.	1982.
4.280	2577.31	0.0	2577.54	469.	0.	0.	0.	353.	400.	3330.	3333.	1997.
4.280	2578.31	1.00	2578.66	270.	270.	240.	510.	353.	400.	2533.	4123.	2004.
4.280	2577.36	0.0	2577.58	470.	0.	0.	0.	353.	400.	3333.	3325.	2002.
4.280	2578.56	1.00	2578.71	270.	270.	240.	510.	353.	400.	2533.	4117.	2008.
4.280	2577.31	0.0	2577.63	469.	0.	0.	0.	353.	400.	3318.	3341.	2000.
4.280	2578.50	0.99	2578.78	270.	270.	240.	510.	353.	400.	2571.	4117.	1972.
4.280	2577.36	0.0	2577.67	470.	0.	0.	0.	353.	400.	3321.	3330.	2009.
4.280	2578.55	0.99	2578.82	270.	270.	240.	510.	353.	400.	2574.	4110.	1976.
4.280	2577.47	0.0	2577.68	472.	0.	0.	0.	353.	400.	3332.	3304.	2017.
4.280	2578.50	1.04	2578.84	270.	270.	240.	510.	353.	400.	2542.	4091.	2019.

JOB

SECNO	CWSEL	DIFKWS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	GLCS	GCH	GRCS
4.280	2577.48	0.0	2577.69	472.	0.	0.	0.	353.	400.	3339.	3302.	2018.
4.280	2578.51	1.04	2578.83	270.	270.	240.	310.	353.	400.	2943.	4097.	2020.
4.430	2578.42	0.0	2579.13	310.	0.	0.	0.	110.	159.	518.	4452.	349.
4.430	2579.54	1.12	2580.19	175.	175.	85.	280.	110.	159.	353.	4569.	3543.
4.630	2582.23	0.0	2583.48	220.	0.	0.	0.	110.	159.	456.	4935.	3084.
4.630	2582.82	0.39	2584.07	155.	155.	85.	240.	110.	159.	342.	5353.	2780.
4.820	2588.08	0.0	2589.56	222.	0.	0.	0.	152.	208.	1236.	6443.	495.
4.820	2588.82	0.53	2590.51	120.	120.	120.	240.	152.	208.	578.	7254.	542.
4.960	2591.86	0.0	2592.60	137.	0.	0.	0.	370.	433.	2836.	3494.	0.
4.960	2592.83	0.79	2593.51	126.	140.	310.	450.	370.	433.	2795.	5904.	1.
4.960	2592.38	0.0	2592.73	231.	0.	0.	0.	312.	468.	1746.	6554.	0.
4.960	2592.83	0.44	2593.42	127.	140.	310.	450.	312.	468.	22.	8278.	0.
4.960	2592.43	0.0	2592.77	231.	0.	0.	0.	312.	468.	1754.	6546.	0.
4.960	2592.92	0.49	2593.50	127.	140.	310.	450.	312.	468.	22.	8278.	0.
* 4.960	2590.64	0.0	2594.70	72.	0.	0.	0.	382.	450.	0.	8286.	14.
4.960	2591.63	1.00	2594.89	62.	70.	380.	450.	382.	450.	0.	8300.	0.
4.960	2593.74	0.0	2593.71	95.	0.	0.	0.	382.	450.	0.	8044.	236.
4.960	2593.57	-0.17	2593.78	64.	70.	380.	450.	382.	450.	0.	8300.	0.
5.100	2597.30	0.0	2597.50	366.	0.	0.	0.	258.	394.	644.	5465.	2071.
5.100	2597.89	0.59	2598.33	170.	170.	250.	420.	258.	394.	103.	7614.	483.
5.100	2597.14	0.0	2597.76	136.	0.	0.	0.	258.	394.	0.	8180.	0.
5.100	2597.91	0.77	2598.44	136.	170.	250.	420.	258.	394.	0.	8180.	0.
5.100	2597.48	0.0	2598.06	136.	0.	0.	0.	258.	394.	0.	8180.	0.
5.100	2598.33	0.85	2598.82	136.	170.	250.	420.	258.	394.	0.	8180.	0.
5.100	2597.92	0.0	2598.11	369.	0.	0.	0.	258.	394.	775.	5422.	1783.
5.100	2598.45	0.52	2598.84	170.	170.	250.	420.	258.	394.	115.	7682.	383.
5.200	2598.27	0.0	2598.51	370.	0.	0.	0.	258.	320.	940.	3900.	3269.
5.200	2598.95	0.89	2599.55	170.	170.	250.	420.	258.	320.	743.	5566.	2402.
* 5.490	2603.48	0.0	2603.31	333.	0.	0.	0.	546.	605.	2443.	5591.	76.
5.490	2604.02	0.53	2608.20	310.	310.	300.	610.	546.	605.	1833.	6249.	32.
5.580	2606.38	0.0	2606.80	442.	0.	0.	0.	546.	605.	4043.	3888.	139.
5.580	2607.15	0.77	2607.51	390.	390.	220.	610.	546.	605.	4168.	3893.	29.
5.580	2606.48	0.0	2606.88	442.	0.	0.	0.	546.	605.	4093.	3857.	141.
5.580	2607.22	0.74	2607.57	390.	390.	220.	610.	546.	605.	4183.	3876.	29.
* 5.580	2608.00	0.0	2608.19	700.	0.	0.	0.	920.	977.	4207.	3959.	942.
5.580	2608.69	0.70	2609.07	390.	390.	630.	1020.	920.	977.	3788.	3950.	351.
5.580	2608.07	0.0	2608.23	700.	0.	0.	0.	920.	1019.	3801.	3630.	659.
5.580	2608.85	0.78	2609.14	390.	390.	630.	1020.	920.	1019.	3314.	4774.	2.

## KOB

SECNO	CWSEL	DIFKWS	EO	TOPWD	PERENC	STENCL	STENCR	STCHL	STCHR	GLCB	GCH	GRCL
5.640	2608.42	0.0	2608.97	632.	0.	0.	0.	600.	658.	3678.	3573.	612.
5.640	2609.33	0.91	2609.76	480.	480.	300.	760.	600.	658.	3514.	3517.	1035.
5.710	2609.82	0.0	2610.41	430.	0.	0.	0.	600.	658.	3632.	3634.	799.
5.710	2610.32	0.30	2611.00	400.	400.	300.	700.	600.	658.	3592.	3594.	479.
* 5.910	2616.61	0.0	2617.94	549.	0.	0.	0.	655.	718.	172.	5532.	2326.
5.910	2616.70	0.09	2618.77	247.	250.	600.	850.	655.	718.	119.	6478.	1433.
5.970	2618.77	0.0	2619.28	581.	0.	0.	0.	393.	451.	3145.	3533.	1342.
5.970	2619.64	0.87	2620.37	330.	330.	170.	500.	393.	451.	3143.	4290.	587.
6.040	2620.01	0.0	2620.39	919.	0.	0.	0.	560.	605.	4149.	2547.	1304.
6.040	2620.92	0.91	2621.74	399.	470.	405.	815.	560.	605.	2860.	3074.	1526.
* 6.120	2622.48	0.0	2623.74	614.	0.	0.	0.	850.	908.	1437.	5478.	1075.
6.120	2622.62	0.14	2624.21	395.	475.	635.	1110.	850.	908.	747.	5988.	1254.
6.160	2623.29	0.0	2624.86	231.	0.	0.	0.	940.	1020.	14.	6875.	1096.
6.160	2623.90	0.61	2625.13	272.	430.	700.	1130.	940.	1020.	93.	6848.	1265.
6.160	2624.04	0.0	2625.19	344.	0.	0.	0.	940.	1020.	96.	6588.	1301.
6.160	2624.13	0.11	2625.39	258.	400.	700.	1100.	940.	1020.	112.	6829.	1044.
6.160	2625.64	0.0	2626.16	679.	0.	0.	0.	940.	1020.	900.	5564.	1521.
6.160	2625.89	0.25	2626.31	400.	400.	700.	1100.	940.	1020.	715.	6042.	1227.
6.160	2625.57	0.0	2626.44	350.	0.	0.	0.	885.	1005.	936.	7037.	13.
6.160	2625.78	0.20	2626.87	263.	310.	710.	1020.	885.	1005.	183.	7782.	20.
6.210	2625.92	0.0	2626.94	462.	0.	0.	0.	830.	895.	2583.	5378.	14.
6.210	2626.01	0.09	2627.66	210.	210.	700.	910.	830.	895.	1581.	6374.	20.
6.310	2628.79	0.0	2629.43	817.	0.	0.	0.	500.	540.	3109.	3523.	1324.
6.310	2629.72	0.93	2630.74	300.	300.	270.	570.	500.	540.	2899.	4370.	686.
6.480	2634.01	0.0	2635.01	496.	0.	0.	0.	308.	393.	905.	5720.	1295.
6.480	2634.80	0.80	2635.37	390.	770.	270.	1040.	308.	393.	326.	5833.	1760.
* 6.610	2637.84	0.0	2640.44	307.	0.	0.	0.	340.	405.	289.	7462.	150.
6.610	2637.72	-0.11	2640.43	238.	580.	250.	830.	340.	405.	289.	7510.	121.
6.610	2639.51	0.0	2640.83	346.	0.	0.	0.	340.	405.	599.	6693.	608.
6.610	2639.32	-0.18	2640.83	231.	580.	250.	830.	340.	405.	577.	6951.	372.
* 6.610	2639.83	0.0	2640.83	461.	0.	0.	0.	340.	405.	620.	6221.	1059.
6.610	2640.19	0.36	2641.17	326.	580.	250.	830.	340.	405.	640.	6308.	902.
6.610	2639.88	0.0	2640.87	462.	0.	0.	0.	340.	405.	626.	6198.	1076.
6.610	2640.23	0.35	2641.20	326.	580.	250.	830.	340.	405.	646.	6293.	912.
* 6.740	2644.17	0.0	2644.28	304.	0.	0.	0.	368.	408.	556.	5801.	1503.
6.740	2644.36	0.20	2646.99	200.	380.	260.	640.	368.	408.	517.	6323.	1619.
6.790	2648.02	0.0	2648.37	392.	0.	0.	0.	368.	408.	1815.	3872.	2153.
6.790	2648.87	0.85	2649.35	253.	360.	260.	640.	368.	408.	1692.	4306.	1641.

LOB

SECNO	CMSL	DIFKWS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	GCH	GR08
6.790	2648.07	0.0	2648.42	322.	0.	0.	0.	338.	408.	1825.	322.	2152.
6.790	2648.95	0.86	2649.41	253.	380.	260.	640.	338.	408.	1700.	2493.	1627.
6.790	2648.26	0.0	2648.70	363.	0.	0.	0.	340.	385.	2972.	4142.	726.
6.790	2649.12	0.86	2649.48	310.	310.	140.	450.	340.	385.	3012.	4033.	792.
6.790	2648.28	0.0	2648.72	363.	0.	0.	0.	340.	385.	2975.	4139.	727.
6.790	2649.13	0.86	2649.50	310.	310.	140.	450.	340.	385.	3014.	4034.	792.
7.000	2651.04	0.0	2652.02	883.	0.	0.	0.	825.	905.	1437.	5558.	785.
7.000	2651.26	0.23	2652.89	270.	270.	750.	1020.	825.	905.	301.	6714.	786.
* 7.230	2661.44	0.0	2662.73	767.	0.	0.	0.	318.	400.	555.	5774.	1381.
7.230	2661.50	0.08	2663.18	440.	440.	210.	650.	318.	400.	410.	6347.	954.
7.230	2662.37	0.0	2663.00	813.	0.	0.	0.	318.	400.	758.	4961.	1911.
7.230	2662.59	0.22	2663.51	440.	440.	210.	650.	318.	400.	582.	5723.	1424.
7.230	2662.37	0.0	2663.00	813.	0.	0.	0.	318.	400.	759.	4954.	1906.
7.230	2663.13	0.76	2663.84	440.	440.	210.	650.	318.	400.	651.	5473.	1383.
7.230	2662.40	0.0	2663.06	814.	0.	0.	0.	318.	400.	782.	5041.	1887.
7.230	2663.13	0.76	2663.89	440.	440.	210.	650.	318.	400.	666.	5356.	1488.
* 7.460	2669.79	0.0	2671.48	378.	0.	0.	0.	295.	343.	438.	4851.	2351.
* 7.460	2669.84	0.05	2672.40	160.	160.	270.	430.	295.	343.	106.	5625.	1909.
7.540	2673.95	0.0	2674.74	396.	0.	0.	0.	250.	327.	508.	5360.	1752.
7.540	2674.88	0.92	2675.73	180.	180.	220.	400.	250.	327.	399.	5906.	1316.
* 7.780	2684.14	0.0	2685.02	1029.	0.	0.	0.	795.	858.	1570.	4284.	1642.
* 7.780	2684.68	0.55	2686.67	250.	250.	640.	890.	795.	858.	1334.	5928.	234.
7.970	2692.83	0.0	2694.62	305.	0.	0.	0.	518.	600.	300.	6653.	427.
7.970	2693.85	1.02	2695.05	272.	280.	500.	780.	518.	600.	280.	6351.	749.
7.970	2693.95	0.0	2694.99	585.	0.	0.	0.	518.	600.	402.	6109.	668.
7.970	2694.27	0.32	2695.29	280.	280.	500.	780.	518.	600.	284.	6216.	881.
* 7.970	2695.56	0.0	2696.75	632.	0.	0.	0.	508.	560.	351.	5523.	1506.
* 7.970	2695.55	-0.01	2697.60	280.	280.	485.	765.	508.	560.	241.	6432.	507.
7.970	2695.97	0.0	2696.83	635.	0.	0.	0.	508.	560.	428.	5067.	1885.
7.970	2696.15	0.17	2697.72	280.	280.	485.	765.	508.	560.	274.	6281.	824.
* 8.200	2703.53	0.0	2705.04	615.	0.	0.	0.	775.	855.	442.	5742.	566.
8.200	2704.29	0.76	2706.10	120.	120.	740.	860.	775.	855.	370.	6563.	45.
8.200	2704.60	0.0	2705.35	683.	0.	0.	0.	775.	855.	907.	5002.	1041.
8.200	2704.88	0.28	2706.40	120.	120.	740.	860.	775.	855.	375.	6530.	47.
8.200	2704.87	0.0	2707.08	973.	0.	0.	0.	775.	855.	1251.	3868.	1831.
8.200	2706.34	-0.33	2707.53	120.	120.	740.	860.	775.	855.	446.	6433.	49.
8.200	2706.88	0.0	2707.09	975.	0.	0.	0.	775.	855.	1253.	3860.	1836.
8.200	2708.59	-0.30	2707.59	120.	120.	740.	860.	775.	855.	448.	6453.	49.

MOS

SECNO	CMSL	DIFKMS	EG	YOPWID	PERENC	STENCL	STENCR	SYCHL	SYCHR	QLOB	GCH	GRDB	
8.270	2706.87	0.0	2708.72	249.	0.	0.	0.	418.	488.	928.	5145.	352.	
*	8.270	2707.92	1.05	2709.45	140.	140.	385.	525.	418.	488.	928.	5370.	481.
8.410	2715.04	0.0	2716.32	539.	0.	0.	0.	300.	574.	1177.	4764.	429.	
*	8.410	2715.11	0.07	2717.88	120.	120.	480.	600.	300.	574.	1177.	4088.	161.
8.470	2732.53	0.0	2734.99	238.	0.	0.	0.	250.	291.	387.	5369.	514.	
*	8.470	2732.63	-0.47	2735.57	110.	110.	200.	310.	250.	291.	387.	5744.	513.
8.800	2739.12	0.0	2740.07	291.	0.	0.	0.	250.	250.	1878.	2540.	1777.	
*	8.800	2739.97	0.85	2741.23	135.	135.	200.	335.	250.	250.	1194.	3008.	2014.
8.920	2743.30	0.0	2744.80	234.	0.	0.	0.	425.	478.	604.	3006.	5.	
*	8.920	2743.78	0.45	2745.83	80.	80.	400.	480.	425.	478.	604.	3426.	6.
9.060	2748.74	0.0	2749.65	281.	0.	0.	0.	425.	478.	688.	2816.	11.	
*	9.060	2749.52	0.57	2751.57	85.	110.	400.	510.	425.	478.	688.	3325.	19.
9.060	2753.08	0.0	2754.54	218.	0.	0.	0.	187.	224.	1189.	2238.	88.	
*	9.060	2753.57	0.49	2755.71	110.	110.	125.	235.	187.	224.	735.	2715.	65.
9.060	2753.94	0.0	2754.75	219.	0.	0.	0.	187.	224.	1146.	2242.	127.	
*	9.060	2754.84	0.90	2755.98	110.	110.	125.	235.	187.	224.	707.	2723.	84.
9.150	2756.68	0.0	2757.66	218.	0.	0.	0.	187.	224.	1189.	2214.	67.	
*	9.150	2757.48	0.80	2758.78	110.	110.	125.	235.	187.	224.	765.	2653.	53.
9.260	2761.86	0.0	2763.10	433.	0.	0.	0.	440.	510.	106.	2985.	379.	
*	9.260	2761.88	0.02	2763.47	150.	150.	430.	580.	440.	510.	106.	3250.	208.
9.260	2762.81	0.0	2763.37	473.	0.	0.	0.	440.	510.	339.	2920.	611.	
*	9.260	2762.74	-0.07	2763.81	150.	150.	430.	580.	440.	510.	31.	3101.	317.
9.260	2763.32	0.0	2763.66	630.	0.	0.	0.	440.	510.	437.	2227.	806.	
*	9.260	2764.00	0.68	2764.64	150.	150.	430.	580.	440.	510.	108.	2913.	449.
9.260	2763.29	0.0	2763.73	627.	0.	0.	0.	440.	510.	342.	2435.	672.	
*	9.260	2763.99	0.70	2764.70	150.	150.	430.	580.	440.	510.	88.	3022.	381.
9.390	2768.49	0.0	2769.56	548.	0.	0.	0.	343.	400.	331.	2519.	640.	
*	9.390	2768.28	-0.21	2770.13	140.	140.	330.	470.	343.	400.	147.	2852.	410.
9.500	2772.81	0.0	2774.27	614.	0.	0.	0.	533.	580.	1441.	1272.	624.	
*	9.500	2776.83	1.02	2777.56	250.	250.	400.	650.	533.	580.	1213.	1447.	885.
9.530	2777.32	0.0	2777.53	641.	0.	0.	0.	533.	580.	1382.	1917.	734.	
*	9.530	2778.20	0.87	2778.57	250.	250.	400.	650.	533.	580.	1280.	1950.	710.
9.820	2791.73	0.0	2792.81	358.	0.	0.	0.	568.	587.	1150.	1723.	356.	
*	9.820	2791.99	0.27	2793.80	130.	130.	480.	610.	568.	587.	897.	2091.	272.
10.000	2799.37	0.0	2799.87	335.	0.	0.	0.	235.	273.	72.	1749.	1345.	
*	10.000	2800.31	0.94	2800.91	130.	130.	230.	380.	235.	273.	72.	2057.	1631.
10.090	2807.94	0.0	2809.44	247.	0.	0.	0.	285.	300.	0.	2576.	574.	
*	10.090	2807.83	-0.51	2810.13	75.	65.	285.	330.	285.	300.	0.	2962.	188.



SECNO	CVSEL	DIFKWS	EG	TOPWID	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	QCH	QROB
10.210	2815.21	0.0	2816.62	82.	0.	0.	0.	180.	230.	0.	3144.	6.
10.210	2815.08	0.77	2817.02	70.	70.	180.	230.	180.	230.	0.	3151.	0.
10.280	2819.24	0.0	2820.68	72.	0.	0.	0.	371.	465.	0.	3151.	0.
10.280	2819.05	-0.19	2820.62	71.	95.	370.	465.	371.	465.	0.	3151.	0.
* 10.390	2825.80	0.0	2827.43	183.	0.	0.	0.	122.	153.	0.	2576.	574.
10.390	2825.90	0.10	2828.12	42.	45.	120.	165.	122.	153.	0.	2584.	266.

## SUMMARY OF ERRORS

CAUTION SECNO= 0.230 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1.780 PROFILE= 1 HYDRAULIC JUMP D.S.

CAUTION SECNO= 2.400 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.400 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 2.400 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2.400 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 2.400 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 2.400 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

NOTE SECNO= 2.400 PROFILE= 1 WSEL BASED ON X5 CARD

NOTE SECNO= 2.400 PROFILE= 2 WSEL BASED ON X5 CARD

CAUTION SECNO= 4.960 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 4.990 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 4.990 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 4.990 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 4.990 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 5.580 PROFILE= 2 HYDRAULIC JUMP D.S.

CAUTION SECNO= 5.910 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 5.910 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 6.120 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 6.120 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 6.120 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 6.120 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 6.610 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 6.610 PROFILE= 1 HYDRAULIC JUMP D.S.

CAUTION SECNO= 6.610 PROFILE= 2 HYDRAULIC JUMP D.S.

CAUTION SECNO= 6.740 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 6.740 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 6.740 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 6.740 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 6.740 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 6.740 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 7.230 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 7.460 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 7.460 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 7.780 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 7.780 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 7.970 PROFILE= 1

WSEL ASSUMED BASED ON MIN DIFF

CAUTION SECNO= 7.970 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 7.970 PROFILE= 1 HYDRAULIC JUMP D.S.

CAUTION SECNO= 7.970 PROFILE= 2 HYDRAULIC JUMP D.S.

CAUTION SECNO= 8.200 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 8.410 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 8.410 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 8.670 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 8.670 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 8.920 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.060 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.060 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.060 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.060 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.060 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.060 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.260 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.390 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.390 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.390 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.390 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.390 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.390 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.820 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.820 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.820 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.820 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.820 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 9.820 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 10.090 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 10.090 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 10.090 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 10.090 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 10.090 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 10.090 PROFILE= 2

20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 10.390 PROFILE= 1 CRITICAL DEPTH ASSUMED



**FLOODWAY DATA, RICHLAND CREEK  
 PROFILE NO. 2**

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
4.280	270.	2690.	3.2	2578.5	2577.5	1.0
4.280	270.	2694.	3.2	2578.5	2577.5	1.0
4.430	175.	1554.	5.4	2579.5	2578.4	1.1
4.630	155.	1089.	7.9	2582.6	2582.2	0.4
4.820	120.	734.	9.0	2588.6	2588.1	0.5
4.960	140.	1329.	6.2	2592.6	2591.9	0.7
4.960	140.	1353.	6.1	2592.8	2592.4	0.4
4.960	140.	1364.	6.1	2592.9	2592.4	0.5
4.960	70.	574.	14.5	2591.6	2590.6	1.0
4.960	70.	695.	11.9	2593.7	2593.7	0.0
5.100	170.	1661.	4.9	2597.9	2597.3	0.6
5.100	170.	1402.	5.8	2597.9	2597.1	0.8
5.100	170.	1460.	5.6	2598.3	2597.5	0.8
5.100	170.	1735.	4.7	2598.4	2597.9	0.5
5.200	170.	1826.	4.4	2599.0	2598.3	0.7
5.490	310.	941.	8.6	2604.0	2603.5	0.5
5.580	390.	2393.	3.4	2607.1	2606.4	0.7
5.580	390.	2421.	3.3	2607.2	2606.5	0.7
5.580	390.	2280.	3.5	2608.7	2608.0	0.7
5.580	390.	2454.	3.3	2608.9	2608.1	0.8
5.640	480.	2198.	3.7	2609.3	2608.4	0.9
5.710	400.	1734.	4.7	2610.3	2609.8	0.5
5.910	250.	956.	8.4	2616.7	2616.6	0.1
5.970	330.	1347.	6.0	2619.6	2618.8	0.8
6.060	410.	1435.	5.6	2620.9	2620.0	0.9
6.120	475.	1302.	6.1	2622.6	2622.5	0.1
6.160	430.	1138.	7.0	2623.9	2623.3	0.6
6.160	400.	1099.	7.3	2624.1	2624.0	0.1
6.160	400.	1652.	4.8	2625.9	2625.6	0.3
6.160	310.	1027.	7.8	2625.8	2625.6	0.2
6.200	210.	1081.	7.4	2626.0	2625.9	0.1
6.310	300.	1814.	4.9	2629.7	2628.8	0.9
6.480	770.	1636.	4.8	2634.8	2634.0	0.8
6.610	580.	738.	10.7	2637.8	2637.8	0.0
6.610	580.	1139.	6.9	2639.5	2639.5	0.0
6.610	580.	1620.	4.9	2640.2	2639.8	0.4
6.610	580.	1635.	4.8	2640.2	2639.9	0.3
6.740	380.	933.	8.4	2644.4	2644.2	0.2
6.790	380.	2241.	3.5	2648.9	2648.0	0.9
6.790	380.	2257.	3.5	2648.9	2648.1	0.8
6.790	310.	2559.	3.1	2649.1	2648.3	0.8
6.790	310.	2563.	3.1	2649.1	2648.3	0.8
7.000	270.	1088.	7.2	2651.3	2651.0	0.3
7.230	440.	1232.	6.3	2661.5	2661.4	0.1
7.230	440.	1708.	4.3	2662.6	2662.4	0.2
7.230	440.	1949.	4.0	2663.1	2662.4	0.7
7.230	440.	1963.	3.9	2663.2	2662.4	0.8
7.460	160.	815.	9.4	2669.8	2669.8	0.0
7.540	180.	1326.	5.7	2674.9	2674.0	0.9
7.780	250.	639.	8.0	2684.7	2684.1	0.6

F09

**FLOODWAY DATA, RICHLAND CREEK**  
**PROFILE NO. 2**

STATION	WIDTH (FT)	FLOODWAY SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION		
				WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
7.970	280.	1144.	6.4	2695.8	2692.8	1.0
7.970	280.	1262.	5.8	2694.3	2693.9	0.4
7.970	280.	868.	8.5	2695.6	2695.6	0.0
7.970	280.	1033.	7.1	2696.1	2696.0	0.1
8.200	120.	749.	9.3	2704.3	2703.5	0.8
8.200	120.	819.	8.5	2704.9	2704.6	0.3
8.200	120.	1018.	6.8	2706.9	2706.9	0.0
8.200	120.	1024.	6.8	2706.9	2706.9	0.0
8.270	140.	794.	8.1	2707.9	2706.9	1.0
8.410	120.	550.	11.6	2715.1	2715.0	0.1
8.670	110.	552.	11.4	2732.5	2732.5	0.0
8.800	135.	927.	6.7	2740.0	2739.1	0.9
8.920	80.	373.	9.7	2743.8	2743.3	0.5
9.060	110.	463.	7.6	2749.3	2748.7	0.6
9.060	110.	468.	7.8	2753.6	2753.1	0.5
9.060	110.	621.	5.7	2754.8	2753.9	0.9
9.150	110.	539.	6.4	2757.5	2756.7	0.8
9.260	150.	443.	7.8	2761.9	2761.9	0.0
9.260	150.	570.	6.1	2762.8	2762.8	0.0
9.260	150.	766.	4.5	2764.0	2763.3	0.7
9.260	150.	764.	4.5	2764.0	2763.3	0.7
9.390	140.	463.	7.4	2768.5	2768.5	0.0
9.500	250.	965.	3.4	2776.8	2775.8	1.0
9.550	250.	1106.	3.0	2778.2	2777.3	0.9
9.820	150.	490.	6.6	2792.0	2791.7	0.3
10.000	150.	761.	4.1	2800.3	2799.4	0.9
10.090	85.	308.	10.2	2807.9	2807.9	0.0
10.210	70.	385.	8.2	2816.0	2815.2	0.8
10.280	95.	313.	10.1	2819.2	2819.2	0.0
10.390	45.	294.	10.7	2825.9	2825.8	0.1

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THIS RUN EXECUTED 08/01/81 8:17:03

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 \*\* RELEASE DATED NOV 76 UPDATED JULY 1979  
 \*\* EXPLANATION - 01, 52, 53, 54  
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T1 WAYNESVILLE NC DSN= RICHCR 4-15-81 10  
 T2 10 YEAR FLOOD 20  
 T3 RICHLAND CREEK FLOOD PROFILES 30

J1	ICHECK	INQ	MINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO	
	0.	2.	0.	0.	0.00250	0.	0.0	0.	2565.00	0.0	40

J2	MPROF	STRT	PRFVS	XSECV	XSECH	FM	ALLDC	IBW	CHNIN	ITRACE	
	0.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	50

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	150.00	0.0	160.00	201.00	0.0	0.0	0.0	0.0	0.0	0.0	60
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NC	0.070	0.070	0.055	0.1	0.5						70
QT	5.	4800.	8100.	9400.	13100.	9400.	0.	0.	0.	0.	80
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90

X1	0.05	22.	350.	424.	0.	0.	0.	0.0	0.0	0.	100
GR	2509.3	0.	2505.5	47.	2499.5	150.	2498.2	197.	2497.8	250.	110
GR	2496.9	256.	2498.0	240.	2498.6	280.	2498.0	282.	2498.3	295.	120
GR	2498.3	350.	2486.5	376.	2486.5	397.	2491.	424.	2496.6	483.	130
GR	2496.8	675.	2496.3	848.	2497.0	948.	249.	968.	2504.7	977.	140
GR	2504.7	992.	2513.2	1000.	0.0	0.	0.	0.	0.0	0.	150
NC	0.070	0.070	0.055	0.0	0.0						160
QT	5.	4790.	8075.	9335.	13000.	9335.	0.	0.	0.	0.	170
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180

X1	0.23	15.	476.	527.	760.	760.	800.	0.0	-0.40	0.	190
GR	2515.5	0.	2504.7	83.	2498.7	217.	2498.7	359.	2497.5	433.	200
GR	2496.2	473.	2491.9	489.	2488.2	500.	2488.2	516.	2491.8	523.	210
GR	2498.2	527.	2508.3	575.	2506.4	625.	2508.3	644.	2508.1	666.	220
GR	2515.2	678.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	230

X1	0.23	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	240
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X1	0.23	26.	455.	525.	1.	1.	1.	0.0	0.0	0.	250
BT	11.0	267.0	2498.7	0.0	423.0	2505.3	0.0	455.0	2504.2	0.0	260
BT	455.0	2507.7	2504.2	525.0	2508.3	2505.0	525.0	2506.9	0.0	575.0	270
BT	2508.3	0.0	625.0	2508.4	0.0	644.0	2508.3	0.0	666.0	2508.1	280
BT	0.0	678.0	2515.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	290
GR	2515.5	0.	2504.7	83.	2498.7	217.	2498.7	267.	2505.3	423.	300
GR	2506.2	455.	2504.3	455.	2497.4	475.	2491.8	487.	2490.4	489.	310

B01

GR 2504.1	689.	2504.6	490.	2490.4	490.	2489.9	495.	2493.0	499.	320
GR 2488.5	505.	2488.0	509.	2489.0	515.	2492.2	520.	2495.1	525.	330
GR 2506.9	525.	2508.7	575.	2508.4	625.	2508.3	644.	2508.1	666.	340
GR 2515.2	678.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	350
X1 0.23	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	360
X2 0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	370
X1 0.23	16.	476.	527.	1.	1.	1.	0.0	0.0	0.	380
GR 2515.5	0.	2504.7	83.	2498.7	217.	2498.7	359.	2497.5	433.	390
GR 2496.7	476.	2491.9	489.	2488.2	500.	2488.2	516.	2491.8	523.	400
GR 2498.2	527.	2491.1	587.	2500.3	629.	2508.3	644.	2508.1	666.	410
GR 2515.2	678.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	420
X1 0.23	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	430
X1 0.27	0.	0.	0.	150.	150.	150.	0.0	0.0	0.	440
NC 0.080	0.080	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	450
QT 5.	4780.	8040.	9250.	12850.	9250.	0.	0.	0.	0.	460
ET 0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	470
X1 0.55	11.	275.	357.	1500.	1420.	1400.	0.0	0.0	0.	480
GR 2515.9	0.	2502.2	197.	2502.3	275.	2496.0	294.	2491.8	306.	490
GR 2491.8	330.	2495.8	343.	2502.3	357.	2504.4	393.	2508.2	413.	500
GR 2515.7	429.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	510
NC 0.070	0.100	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	520
QT 5.	4770.	8000.	9170.	12730.	9170.	0.	0.	0.	0.	530
ET 0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	540
X1 0.84	22.	68.	154.	1380.	1560.	1320.	0.0	0.0	0.	550
GR 2521.5	0.	2511.5	31.	2511.2	50.	2513.5	72.	2508.2	88.	560
GR 2499.9	9.	2497.4	105.	2497.4	138.	2500.0	149.	2506.9	154.	570
GR 2509.1	167.	2508.9	180.	2512.5	202.	2513.0	216.	2516.6	228.	580
GR 2517.0	233.	2517.6	285.	2517.1	307.	2517.7	325.	2518.3	331.	590
GR 2519.3	344.	2521.3	399.	0.0	0.	0.0	0.	0.0	0.	600
NC 0.080	0.090	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	610
QT 5.	4760.	7970.	9080.	12590.	9080.	0.	0.	0.	0.	620
ET 0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	630
X1 1.16	19.	92.	166.	1460.	1460.	1460.	0.0	0.0	0.	640
GR 2526.0	0.	2511.5	17.	2515.8	45.	2513.6	68.	2513.0	92.	650
GR 2505.9	107.	2503.5	118.	2503.5	148.	2505.9	157.	2509.2	166.	660
GR 2511.5	210.	2512.4	236.	2515.2	250.	2517.0	263.	2517.3	266.	670
GR 2510.7	271.	2521.5	287.	2532.5	292.	2534.6	308.	0.0	0.	680
NC 0.070	0.070	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	690
QT 5.	4730.	7940.	9000.	12460.	9000.	0.	0.	0.	0.	700
ET 0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	710
X1 1.16	24.	215.	278.	1360.	1340.	1360.	0.0	0.0	0.	720
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	730
GR 2527.1	117.	2517.0	142.	2514.4	162.	2512.2	207.	2511.5	215.	740
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	750



C01

GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	760
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	770
X1 1.45	24.	185.	295.	40.	40.	40.	0.0	0.0	0.	780
X3 10.	0.0	0.0	0.	0.0	0.	0.0	2525.0	2518.0	0.	790
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	800
GR 2527.1	117.	2517.0	142.	2513.2	185.	2512.2	207.	2511.5	215.	810
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	820
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	830
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	840
X1 1.45	31.	185.	300.	1.	1.	1.	0.0	0.0	0.	850
BT 15.0	33.0	2527.9	0.0	170.0	2527.8	0.0	185.0	2527.6	0.0	860
BT 185.0	2527.1	2524.8	220.0	2527.0	2524.3	230.0	2526.0	2523.2	300.0	870
BT 2524.0	2521.4	300.0	2524.0	0.0	321.0	2523.0	0.0	371.0	2520.0	880
BT 0.0	392.0	2519.3	0.0	413.0	2519.3	0.0	427.0	2526.0	0.0	890
BT 443.0	2530.6	0.0	439.0	2533.4	0.0	0.0	0.0	0.0	0.0	900
GR 2530.4	0.	2527.9	33.	2527.8	170.	2527.7	182.	2524.8	185.	910
GR 2523.4	185.	2517.0	189.	2513.8	199.	2512.1	215.	2511.5	215.	920
GR 2509.3	220.	2524.4	220.	2524.3	222.	2509.0	227.	2507.6	230.	930
GR 2507.0	240.	2507.0	250.	2507.8	260.	2523.3	260.	2523.2	262.	940
GR 2507.9	262.	2508.2	264.	2518.9	300.	2524.0	300.	2523.0	321.	950
GR 2520.0	371.	2519.3	392.	2519.3	413.	2526.0	427.	2530.6	443.	960
GR 2533.4	459.	0.0	0.	0.0	1.	0.0	0.	0.0	0.	970
X1 1.45	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	980
X2 0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	990
X1 1.45	24.	185.	295.	1.	1.	1.	0.0	0.0	0.	1000
X3 10.	0.0	0.0	0.	0.0	0.	0.0	2527.0	2520.0	0.	1010
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	1020
GR 2527.1	117.	2517.0	142.	2513.2	185.	2512.2	207.	2511.5	215.	1030
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	1040
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	1050
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	1060
X1 1.45	24.	215.	278.	40.	40.	40.	0.0	0.0	0.	1070
GR 2530.4	0.	2526.4	53.	2525.3	73.	2524.7	92.	2525.5	99.	1080
GR 2527.1	117.	2517.0	142.	2514.4	162.	2512.2	207.	2511.5	215.	1090
GR 2509.0	221.	2507.2	231.	2507.2	255.	2511.5	273.	2513.2	278.	1100
GR 2513.2	285.	2511.8	295.	2511.8	325.	2512.4	366.	2519.3	392.	1110
GR 2519.3	413.	2526.0	427.	2530.7	443.	2533.4	459.	0.0	0.	1120
HC 0.070	0.090	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.	1130
QT 5.	4745.	7910.	8930.	12350.	8930.	0.	0.	0.	0.	1140
ET 0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1150
X1 1.70	31.	227.	278.	1300.	1300.	1300.	0.0	-2.30	0.	1160
GR 2536.8	0.	2534.5	20.	2532.1	30.	2530.1	33.	2529.2	43.	1170
GR 2527.7	59.	2525.1	74.	2519.9	96.	2519.9	96.	2519.2	101.	1180
GR 2518.0	111.	2518.5	129.	2519.3	143.	2517.9	166.	2519.2	180.	1190
GR 2519.9	186.	2518.3	197.	2518.0	211.	2517.8	227.	2516.9	232.	1200
GR 2514.2	234.	2512.6	245.	2512.6	255.	2512.6	265.	2514.2	275.	1210
GR 2516.6	278.	2516.6	290.	2529.0	299.	2530.8	314.	2539.2	328.	1220
GR 2541.1	333.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	1230

001

VC	0.070	0.090	0.040	0.0	0.0						1240
QT	5.	4740.	7900.	8900.	12100.	8900.	0.	0.	0.	0.	1250
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1260
X1	1.78	29.	227.	278.	360.	360.	360.	0.0	0.0	0.	1270
GR 2536.8	0.	2534.5	20.	2532.1	30.	2530.1	31.	2529.2	43.	1280	
GR 2527.7	39.	2525.1	74.	2519.9	96.	2519.2	101.	2518.0	111.	1290	
GR 2518.5	129.	2519.3	143.	2517.9	166.	2519.2	180.	2519.9	187.	1300	
GR 2518.3	197.	2518.0	211.	2517.8	227.	2516.9	232.	2514.2	234.	1310	
GR 2512.6	245.	2512.6	255.	2512.6	265.	2514.2	275.	2516.6	278.	1320	
GR 2516.6	290.	2519.0	297.	2521.3	550.	2537.0	585.	0.0	0.	1330	
X1	1.78	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	1340
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2522.5	2520.0	1350	
SB	1.25	1.60	3.00	0.	52.00	2.00	473.00	0.0	2513.0	2513.0	1360
X1	1.78	0.	0.	0.	30.	70.	70.	0.0	0.0	0.	1370
X2	0.	0.0	1.	2522.5	2524.7	0.0	0.	0.0	0.0	0.	1380
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2525.4	2520.0	1390	
BT	11.0	0.0	2536.8	0.0	20.0	2534.5	0.0	29.0	2532.4	0.0	1400
BT	215.0	2525.4	0.0	225.0	2525.3	0.0	225.0	2527.0	0.0	282.0	1410
B	2526.2	0.0	282.0	2524.8	0.0	292.0	2524.3	0.0	410.0	2525.5	1420
BT	0.0	574.0	2528.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1430
X1	1.78	34.	483.	534.	40.	40.	40.	0.0	-0.53	0.	1440
GR 2537.4	0.	2532.9	18.	2528.3	38.	2525.7	61.	2523.0	87.	1450	
GR 2522.0	139.	2524.1	204.	2523.6	280.	2521.7	361.	2522.3	390.	1460	
GR 2522.3	422.	2522.4	454.	2522.4	476.	2521.9	483.	2517.0	492.	1470	
GR 2513.1	560.	2513.1	510.	2513.1	520.	2517.0	528.	2522.4	534.	1480	
GR 2521.4	545.	2520.4	567.	2520.5	610.	2520.5	650.	2520.6	673.	1490	
GR 2522.4	699.	2526.1	733.	2529.7	757.	2535.1	771.	2533.8	785.	1500	
GR 2534.4	790.	2534.1	810.	2533.2	822.	2542.1	832.	0.0	0.	1510	
NC	0.070	0.070	0.040	0.0	0.0						1520
QT	5.	4800.	7800.	8850.	12100.	8850.	0.	0.	0.	0.	1530
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1540
X1	1.25	0.	0.	0.	810.	770.	810.	0.0	0.50	0.	1550
NC	0.070	0.070	0.040	0.0	0.0						1560
QT	5.	4390.	7640.	8770.	12040.	8770.	0.	0.	0.	0.	1570
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1580
X1	2.19	42.	577.	720.	1260.	1260.	1260.	0.0	0.0	0.	1590
GR 2550.5	0.	2546.0	15.	2538.8	34.	2534.5	58.	2531.4	71.	1600	
GR 2529.5	16.	2528.8	110.	2528.5	119.	2528.0	191.	2527.8	232.	1610	
GR 2527.8	245.	2529.1	264.	2528.8	288.	2528.3	329.	2528.1	384.	1620	
GR 2527.7	425.	2527.1	442.	2528.7	451.	2528.7	455.	2528.7	476.	1630	
GR 2528.9	491.	2526.6	515.	2526.6	539.	2527.6	546.	2527.6	558.	1640	
GR 2525.9	577.	2524.4	583.	2519.3	590.	2519.3	600.	2519.3	610.	1650	
GR 2524.4	619.	2525.9	628.	2525.4	667.	2526.3	718.	2526.4	821.	1660	
GR 2526.7	918.	2529.5	971.	2533.1	1035.	2536.9	1071.	2544.1	1110.	1670	
GR 2547.1	1151.	2549.4	1157.	0.0	0.	0.0	0.	0.0	0.	1680	
QT	5.	4270.	7550.	8725.	11950.	8725.	0.	0.	0.	0.	1690
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1700
Nh	5.	0.070	756.	0.040	810.	0.060	1180.	0.070	1270.	0.080	1710

E01

NH	1550.	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	1720
X1	2.32	28.	756.	810.	200.	640.	640.	0.0	0.0	0.	1730	
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	1740	
GR	2528.5	656.	2528.9	743.	2525.0	756.	2523.4	764.	2523.4	788.	1750	
GR	2528.5	810.	2528.3	847.	2528.3	885.	2528.7	953.	2530.1	1071.	1760	
GR	2530.8	1180.	2525.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	1770	
GR	2524.0	1233.	2524.8	1250.	2531.7	1270.	2531.8	1286.	2531.8	1336.	1780	
GR	2533.8	1396.	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	1790	
NH	5.	0.070	756.	0.040	796.	0.060	1200.	0.040	1250.	0.080	1800	
NH	1550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	1810	
X1	2.32	32.	756.	796.	1.	1.	1.	0.0	0.0	0.	1820	
BT	16.0	444.0	2529.0	0.0	547.0	2528.8	0.0	656.0	1528.5	0.0	1830	
BT	756.0	2529.0	0.0	756.0	2529.0	2528.0	796.0	2528.7	2527.6	796.0	1840	
BT	2528.7	0.0	847.0	2528.3	0.0	885.0	2523.3	0.0	953.0	2528.7	1850	
BT	0.0	1071.0	2530.1	0.0	1200.0	2531.0	0.0	200.0	2531.0	2529.9	1860	
BT	1250.0	2531.7	2529.7	1250.0	2531.7	0.0	1286.0	2531.8	0.0	0.0	1870	
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	1880	
GR	2528.5	656.	2529.0	756.	2525.0	756.	2523.4	764.	2523.4	788.	1890	
GR	2524.8	796.	2528.7	796.	2528.3	847.	2528.3	885.	2528.7	953.	1900	
GR	2530.1	1071.	2531.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	1910	
GR	2523.5	1224.	2529.8	1224.	2529.8	1226.	2523.6	1226.	2524.0	1233.	1920	
GR	2524.8	1250.	2531.7	1250.	2531.8	1286.	2531.8	1336.	2533.8	1396.	1930	
GR	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	0.0	0.	1940	
X1	2.32	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	1950	
X2	0.	0.0	0.	0.0	0.0	0.0	1.	0.0	0.0	0.	1960	
NH	5.	0.070	743.	0.040	810.	0.060	1180.	0.040	1270.	0.080	1970	
NH	1550.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	1980	
X1	2.32	28.	756.	810.	1.	1.	1.	0.0	0.0	0.	1990	
GR	2540.0	38.	2536.0	250.	2529.1	282.	2529.0	444.	2528.8	547.	2000	
GR	2528.5	656.	2528.9	743.	2525.0	756.	2523.4	764.	2523.4	788.	2010	
GR	2528.5	810.	2528.3	847.	2528.3	885.	2528.7	953.	2530.1	1071.	2020	
GR	2530.8	1180.	2525.0	1200.	2524.5	1200.	2523.4	1208.	2523.4	1222.	2030	
GR	2524.0	1233.	2524.8	1250.	2531.7	1270.	2531.8	1286.	2531.8	1336.	2040	
GR	2533.8	1396.	2536.6	1458.	2541.6	1550.	0.0	0.	0.0	0.	2050	
QT	5.	4200.	7500.	8700.	11900.	8700.	0.	0.	0.	0.	2060	
X1	2.40	0.	0.	0.	500.	400.	500.	0.0	0.0	0.	2070	
NC	0.050	0.050	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2080	
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2090	
X1	2.40	13.	330.	550.	40.	40.	40.	0.0	-10.00	0.	2100	
GR	2572.6	24.	2567.4	106.	2564.6	130.	2561.5	330.	2561.5	550.	2110	
GR	2565.3	615.	2567.1	650.	2569.7	750.	2571.0	850.	2571.0	950.	2120	
GR	2569.8	1050.	2569.4	1150.	2570.0	1218.	0.0	0.	0.0	0.	2130	
SB	1.25	1.60	3.00	0.	1.00	0.01	0.10	0.0	2551.5	2551.5	2140	
X1	2.40	0.	0.	0.	30.	30.	30.	0.0	10.00	0.	2150	
X2	0.	0.0	1.	2551.6	2561.5	0.0	0.	0.0	0.0	0.	2160	
X5	5.	2565.00	2566.50	2566.70	2567.60	2566.70	0.0	0.0	0.0	0.0	2170	

F01

BT	37.0	27.0	2572.6	0.0	106.0	2567.4	0.0	330.0	2567.4	0.0	2180
BT	330.0	2567.4	2565.6	359.0	2567.4	2565.6	359.0	2567.4	0.0	361.0	2190
BT	2567.4	0.0	361.0	2567.4	2565.6	391.0	2567.4	2565.6	391.0	2567.4	2200
BT	0.0	393.0	2567.4	0.0	393.0	2567.4	2565.6	421.0	2567.4	2565.6	2210
BT	421.0	2567.4	0.0	423.0	2567.4	0.0	423.0	2567.4	2565.6	456.0	2220
BT	2567.4	2565.6	456.0	2567.4	0.0	458.0	2567.4	0.0	458.0	2567.4	2230
BT	2565.6	486.0	2567.4	2565.6	486.0	2567.4	0.0	488.0	2567.4	0.0	2240
BT	488.0	2567.4	2565.6	520.0	2567.4	2565.6	520.0	2567.4	0.0	522.0	2250
BT	2567.4	0.0	522.0	2567.4	2565.6	550.0	2567.4	2565.6	550.0	2567.4	2260
BT	0.0	650.0	2567.4	0.0	750.0	2569.7	0.0	850.0	2571.0	0.0	2270
BT	950.0	2571.0	0.0	1050.0	2569.8	0.0	1150.0	2569.4	0.0	1218.0	2280
BT	2570.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2290
QT	5.	5150.	8300.	9900.	13350.	9900.	0.	0.	0.	0.	2300

X1	2.40	6.	10.	1240.	10.	10.	10.	0.0	0.0	0.	2310
GR	2580.0	0.	2562.0	10.	2560.0	10.	2560.0	1240.	2562.0	1240.	2320
GR	2580.0	1250.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2330
NC	0.050	0.050	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2340
QT	5.	5080.	8160.	9810.	13190.	9810.	0.	0.	0.	0.	2350
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2360

X1	3.23	16.	41.	391.	4180.	4180.	4180.	0.0	0.0	0.	2370
GR	2579.9	0.	2577.4	11.	2574.5	23.	2570.4	31.	2566.3	36.	2380
GR	2565.0	41.	2560.2	50.	2555.0	55.	2555.0	375.	2560.2	380.	2390
GR	2563.8	391.	2566.6	439.	2570.9	474.	2576.1	502.	2580.4	524.	2400
GR	2581.9	532.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2410
NC	0.080	0.080	0.035	0.1	0.5	0.0	0.0	0.0	0.0	0.0	2420
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2430
QT	5.	5040.	8090.	9760.	13100.	9760.	0.	0.	0.	0.	2440

X1	3.69	29.	188.	306.	2200.	2200.	2200.	0.0	0.0	0.	2450
GR	2579.8	41.	2572.6	83.	2574.2	118.	2573.5	121.	2570.9	181.	2460
GR	2571.4	188.	2566.3	195.	2561.8	200.	2560.8	200.	2559.0	204.	2470
GR	2577.6	209.	2553.3	218.	2553.0	230.	2552.8	240.	2553.0	250.	2480
GR	2570.0	270.	2557.8	280.	2558.3	290.	2559.8	295.	2561.0	302.	2490
GR	2561.5	305.	2561.8	305.	2562.6	306.	2562.5	376.	2569.9	393.	2500
GR	2570.4	400.	2570.4	448.	2577.8	500.	2579.8	500.	0.0	0.	2510
NC	0.080	0.080	0.040	0.1	0.5	0.0	0.0	0.0	0.0	0.0	2520
QT	5.	5030.	8070.	9740.	13080.	9740.	0.	0.	0.	0.	2530
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2540

X1	3.81	24.	290.	447.	600.	570.	560.	0.0	0.0	0.	2550
GR	2573.2	1.	2572.0	50.	2566.9	265.	2565.1	290.	2564.2	301.	2560
GR	2562.0	302.	2559.1	307.	2559.1	313.	2557.4	320.	2557.5	322.	2570
GR	2558.0	328.	2558.4	343.	2556.8	351.	2556.9	353.	2560.5	358.	2580
GR	2559.8	368.	2562.0	383.	2564.9	384.	2565.2	396.	2565.8	407.	2590
GR	2566.7	447.	2567.4	498.	2572.0	600.	2575.0	650.	0.0	0.	2600

X1	3.81	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	2610
SB	1.25	1.60	3.00	0.	85.00	10.00	800.00	0.42	2556.9	2556.9	2620

X1	3.81	0.	0.	0.	60.	60.	60.	0.0	0.0	0.	2630
X2	0.	0.0	1.	2567.0	2571.8	0.0	0.0	0.0	0.0	0.	2640
BT	9.0	1.0	2573.2	0.0	50.0	2572.0	0.0	200.0	2571.8	0.0	2650

G01

BT	290.0	2571.8	0.0	290.0	2573.2	0.0	446.0	2573.2	0.0	446.0	2660
BT	2571.8	0.0	600.0	2572.0	0.0	650.0	2575.0	0.0	0.0	0.0	2670
X1	3.81	13.	332.	395.	20.	20.	20.	0.0	0.0	0.	2680
GR	2585.0	30.	2580.0	90.	2570.0	290.	2565.0	310.	2563.5	332.	2690
GR	2556.2	350.	2556.2	379.	2564.0	395.	2565.0	495.	2570.0	435.	2700
GR	2571.9	500.	2571.7	560.	2579.0	600.	0.0	0.	0.0	0.	2710
NC	0.120	0.120	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	2720
QT	5.	5020.	8050.	9730.	13050.	9730.	0.	0.	0.	0.	2730
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2740
X1	3.97	26.	276.	350.	780.	760.	740.	0.0	0.0	0.	2750
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2570.0	185.	2760
GR	2565.0	260.	2564.0	276.	2559.2	276.	2558.8	278.	2558.8	293.	2770
GR	2559.2	294.	2558.8	296.	2558.8	299.	2562.2	302.	2561.8	306.	2780
GR	2560.8	310.	2560.3	320.	2560.4	321.	2558.8	324.	2558.8	325.	2790
GR	2361.9	327.	2558.8	328.	2558.8	350.	2564.0	350.	2565.0	370.	2800
GR	2581.9	420.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2810
X1	3.97	33.	276.	351.	40.	40.	40.	0.0	0.0	0.	2820
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2571.0	250.	2830
GR	2571.5	276.	2559.2	277.	2558.8	278.	2558.8	293.	2559.2	294.	2840
GR	2558.8	296.	2558.8	299.	2562.2	300.	2571.2	300.	2571.2	302.	2850
GR	2562.2	302.	2561.8	306.	2560.8	310.	2560.3	320.	2560.4	321.	2860
GR	2558.8	324.	2558.8	325.	2571.2	325.	2571.2	327.	2561.9	327.	2870
GR	2558.8	328.	2558.8	350.	2570.2	351.	2570.1	370.	2571.8	375.	2880
GR	2572.2	385.	2572.9	395.	2581.9	420.	0.0	0.	0.0	0.	2890
X1	3.97	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	2900
X1	3.97	26.	276.	350.	10.	10.	10.	0.0	0.0	0.	2910
GR	2582.4	38.	2577.8	94.	2572.7	137.	2572.2	156.	2570.0	185.	2920
GR	2565.0	260.	2564.0	276.	2559.2	276.	2558.8	278.	2558.8	293.	2930
GR	2559.2	294.	2558.8	296.	2558.8	299.	2562.2	302.	2561.8	306.	2940
GR	2560.8	310.	2560.3	320.	2560.4	321.	2558.8	324.	2558.8	325.	2950
GR	2561.9	327.	2558.8	328.	2558.8	350.	2564.0	350.	2565.0	370.	2960
GR	2581.9	420.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	2970
NC	0.120	0.120	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	2980
QT	5.	5010.	8010.	9710.	13010.	9710.	0.	0.	0.	0.	2990
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3000
X1	4.14	22.	630.	686.	760.	940.	940.	0.0	0.0	0.	3010
GR	2590.0	330.	2580.0	362.	2571.0	390.	2567.6	400.	2567.7	450.	3020
GR	2568.0	550.	2565.4	618.	2564.3	630.	2562.8	634.	2562.7	681.	3030
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3040
GR	2500.3	900.	2582.3	000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3050
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3060
X1	4.14	22.	603.	782.	40.	40.	40.	0.0	0.0	0.	3070
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2577.0	2577.0	450.	3080
GR	2590.0	330.	2580.0	362.	2571.0	390.	2567.6	400.	2567.7	450.	3090
GR	2568.0	550.	2565.9	603.	2564.3	630.	2562.8	634.	2562.7	681.	3100
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3110

H01

GR	2580.3	900.	2582.3	1000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3120
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3130
SB	1.25	1.60	3.00	0.	131.00	6.00	1740.00	1.24	2562.8	2562.8	3140

X1	4.14	0.	0.	0.	115.	115.	115.	0.0	0.0	0.	3150
X2	0.	0.0	1.	2575.2	2577.2	0.0	0.	0.0	0.0	0.	3160
X3	10.	0.0	0.0	0.	0.0	0.	0.0	2578.9	2578.9	0.	3170
BT	16.0	330.0	2590.0	0.0	356.0	2581.8	0.0	450.0	2580.0	0.0	3180
BT	542.0	2578.8	0.0	585.0	2578.8	0.0	602.0	2578.9	0.0	602.0	3190
BT	2582.2	0.0	800.0	2581.1	0.0	800.0	2579.7	0.0	900.0	2580.3	3200
BT	0.0	1000.0	2582.3	0.0	1100.0	2583.4	0.0	1200.0	2583.8	0.0	3210
BT	1300.0	2584.1	0.0	1400.0	2586.3	0.0	1500.0	2589.0	0.0	0.0	3220

X1	4.14	22.	630.	686.	30.	30.	30.	0.0	0.0	0.	3230
GR	2590.0	330.	2580.0	362.	2571.0	390.	2537.6	400.	2567.7	450.	3240
GR	2568.0	550.	2565.4	618.	2564.3	630.	2562.8	634.	2562.7	681.	3250
GR	2566.7	686.	2567.0	705.	2566.8	718.	2567.9	782.	2579.7	800.	3260
GR	2580.3	900.	2582.3	1000.	2583.4	1100.	2583.8	1200.	2584.1	1300.	3270
GR	2586.3	1400.	2590.0	1500.	0.0	0.	0.0	0.	0.0	0.	3280
HC	0.100	0.100	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3290
QT	5.	4295.	6990.	8660.	11925.	8660.	0.	0.	0.	0.	3300
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3310

X1	4.28	28.	353.	400.	600.	710.	710.	0.0	0.0	0.	3320
GR	2585.5	8.	2580.6	90.	2574.4	160.	2572.1	163.	2569.2	173.	3330
GR	2569.2	192.	2568.9	210.	2568.2	228.	2567.9	246.	2567.7	264.	3340
GR	2568.2	281.	2570.3	350.	2570.0	353.	2564.6	360.	2562.4	369.	3350
GR	2563.6	375.	2563.6	383.	2564.6	391.	2569.2	400.	2570.0	421.	3360
GR	2569.4	456.	2569.8	475.	2570.4	493.	2571.3	511.	2571.1	528.	3370
GR	2572.2	546.	2573.8	560.	2585.5	680.	0.0	0.	0.0	0.	3380

X1	4.28	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	3390
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X1	4.28	58.	353.	400.	1.	1.	1.	0.0	0.0	0.	3400
BT	43.0	8.0	2585.5	0.0	90.0	2580.6	0.0	160.0	2574.4	0.0	3410
BT	163.0	2572.1	0.0	173.0	2572.4	0.0	173.0	2572.4	2570.9	192.0	3420
BT	2572.4	2570.9	210.0	2572.4	2571.1	229.0	2572.4	2571.1	245.0	2572.5	3430
BT	2571.2	246.0	2572.5	2571.2	264.0	2572.6	2571.4	280.0	2572.8	2571.6	3440
BT	281.0	2572.8	2571.6	300.0	2572.9	2571.8	314.0	2572.9	2571.8	315.0	3450
BT	2572.9	2571.9	349.0	2573.1	2571.9	350.0	2573.1	2571.9	353.0	2573.1	3460
BT	2572.0	353.0	2574.0	2572.0	360.0	2574.0	2572.0	369.0	2574.0	2572.0	3470
BT	375.0	2574.0	2572.1	383.0	2574.0	2572.1	391.0	2574.0	2572.1	400.0	3480
BT	2574.0	2572.2	400.0	2573.1	2572.2	421.0	2573.2	2572.2	422.0	2573.2	3490
BT	2572.2	439.0	2573.1	2572.1	456.0	2573.4	2572.1	457.0	2573.4	2572.1	3500
BT	475.0	2573.4	2572.2	492.0	2573.7	2572.4	493.0	2573.7	2572.4	511.0	3510
BT	2573.8	2572.5	528.0	2573.7	2572.5	529.0	2573.7	2572.6	546.0	2573.7	3520
BT	2572.6	546.0	2573.7	0.0	560.0	2573.8	0.0	680.0	2585.5	0.0	3530
GR	2585.5	8.	2580.6	90.	2574.4	160.	2572.1	163.	2569.2	173.	3540
GR	2569.2	192.	2568.9	209.	2571.0	209.	2571.0	210.	2568.9	210.	3550
GR	2568.2	228.	2567.9	245.	2571.2	245.	2571.2	246.	2567.9	246.	3560
GR	2567.8	264.	2568.1	280.	2571.6	280.	2571.6	281.	2568.2	281.	3570
GR	2568.8	300.	2569.3	314.	2571.8	314.	2571.8	315.	2569.3	315.	3580
GR	2570.3	349.	2571.9	349.	2571.9	350.	2570.3	350.	2570.0	353.	3590
GR	2564.6	360.	2562.4	369.	2563.6	375.	2563.6	383.	2564.6	391.	3600
GR	2569.2	400.	2570.0	421.	2572.2	421.	2572.2	422.	2570.0	422.	3610

GR 2564.6 360. 2562.4 369. 2563.0 377. 2563.0 421. 2572.2 421. 2572.2 422. 2570.0 422. 3610

101

GR 2569.6 439. 2569.4 456. 2572.1 456. 2572.1 457. 2569.4 457. 3620  
 GR 2569.8 475. 2570.4 492. 2572.4 492. 2572.4 493. 2570.4 493. 3630  
 GR 2571.3 511. 2571.1 528. 2572.5 528. 2572.5 529. 2571.2 529. 3640  
 GR 2572.2 546. 2573.8 560. 2585.5 680. 0.0 0. 0.0 0. 3650

X1 4.28 0. 0. 0. 5. 5. 5. 0.0 0.0 0. 3660  
 X2 0. 0.0 0. 0.0 0.0 0.0 1. 0.0 0.0 0. 3670

X1 4.28 28. 353. 490. 1. 1. 1. 0.0 0.0 0. 3680  
 GR 2585.5 8. 2580.6 90. 2574.4 160. 2572.1 163. 2569.2 173. 3690  
 GR 2569.2 192. 2568.9 210. 2568.2 228. 2567.9 246. 2567.7 264. 3700  
 GR 2568.2 281. 2570.3 350. 2570.0 353. 2564.6 360. 2562.4 369. 3710  
 GR 2563.6 375. 2563.6 383. 2564.6 391. 2569.2 400. 2570.0 421. 3720  
 GR 2569.4 456. 2569.8 475. 2570.4 493. 2571.3 511. 2571.1 528. 3730  
 GR 2572.2 546. 2573.8 560. 2585.5 680. 0.0 0. 0.0 0. 3740

X1 4.28 0. 0. 0. 10. 10. 10. 0.0 0.0 0. 3750  
 NC 0.120 0.040 0.045 0.0 0.0 0.0 0.0 0.0 0. 3760  
 QT 5. 4395. 7115. 8465. 11540. 8465. 0. 0. 0. 0. 3770  
 ET 0. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3780

X1 4.43 17. 110. 159. 715. 735. 735. 0.0 -5.30 0. 3790  
 GR 2593.8 35. 2577.4 80. 2577.3 110. 2572.7 118. 2571.8 125. 3800  
 GR 2571.7 130. 2571.5 135. 2572.6 150. 2577.0 159. 2576.6 200. 3810  
 GR 2577.5 250. 2582.1 284. 2582.4 291. 2574.4 414. 2587.5 446. 3820  
 GR 2587.5 477. 2588.2 487. 0.0 0. 0.0 0. 0.0 0. 3830  
 QT 5. 4275. 6950. 8475. 11600. 8475. 0. 0. 0. 0. 3840  
 ET 0. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3850

X1 4.63 0. 0. 0. 1000. 1000. 1000. 0.0 5.30 0. 3860  
 NC 0.120 0.070 0.050 0.0 0.0 0.0 0.0 0.0 0. 3870  
 QT 5. 4260. 6920. 8375. 11420. 8375. 0. 0. 0. 0. 3880  
 ET 0. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3890

X1 4.82 14. 132. 208. 1100. 940. 940. 0.0 0.0 0. 3900  
 GR 2597.4 35. 2583.9 68. 2582.4 152. 2577.2 163. 2576.0 175. 3910  
 GR 2575.7 185. 2576.0 190. 2577.2 200. 2584.2 208. 2584.7 214. 3920  
 GR 2584.4 224. 2585.8 265. 2590.8 297. 2592.2 312. 0.0 0. 3930  
 NC 0.070 0.080 0.055 0.0 0.0 0.0 0.0 0.0 0. 3940  
 QT 5. 4250. 6900. 8300. 11290. 8300. 0. 0. 0. 0. 3950  
 ET 0. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3960

X1 4.96 18. 370. 433. 660. 610. 610. 0.0 0.0 0. 3970  
 GR 2610.0 30. 2596.0 150. 2595.0 178. 2595.0 290. 2585.2 312. 3980  
 GR 2581.3 370. 2581.1 380. 2579.4 392. 2579.3 409. 2579.2 415. 3990  
 GR 2582.0 430. 2591.5 433. 2597.5 450. 2599.5 468. 2600.1 485. 4000  
 GR 2604.1 500. 2608.1 630. 2610.0 675. 0.0 0. 0.0 0. 4010

X1 4.96 18. 312. 468. 40. 40. 40. 0.0 0.0 0. 4020  
 GR 2610.0 30. 2596.0 150. 2594.0 200. 2587.2 220. 2587.2 312. 4030  
 GR 2581.3 370. 2581.1 380. 2579.4 392. 2579.3 409. 2579.2 415. 4040  
 GR 2582.0 430. 2591.5 433. 2597.5 450. 2599.5 468. 2600.1 485. 4050





K01

X1	5.49	21.	546.	605.	1530.	1530.	1530.	0.0	0.0	0.	4500
GR 2612.5	173.	2607.5	185.	2602.2	197.	2599.0	309.	2600.0	368.	4510	
GR 2601.2	385.	2603.3	400.	2603.9	485.	2603.9	508.	2602.8	546.	4520	
GR 2595.9	553.	2594.8	563.	2595.2	573.	2595.8	600.	2600.9	605.	4530	
GR 2601.9	620.	2607.8	632.	2610.2	642.	2609.8	646.	2608.6	651.	4540	
GR 2615.2	660.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	4550	
QT	5.	4175.	6790.	8090.	11085.	8090.	0.	0.	0.	4560	
ET	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4570	
NC	0.080	0.120	0.040	0.0	0.0	0.0	0.0	0.0	0.0	4580	
X1	5.58	21.	546.	605.	360.	360.	360.	0.0	0.0	0.	4590
GR 2612.5	173.	2607.5	185.	2602.2	197.	2599.0	309.	2600.0	368.	4600	
GR 2601.2	335.	2603.3	400.	2603.9	485.	2603.9	508.	2602.8	546.	4610	
GR 2596.5	553.	2596.5	563.	2596.5	573.	2596.5	600.	2600.9	605.	4620	
GR 2601.9	620.	2607.8	632.	2610.2	642.	2609.8	646.	2608.6	651.	4630	
GR 2615.2	660.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	4640	
X1	5.58	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	4650
NC	0.070	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	4660	
SB	1.25	1.60	3.00	0.	41.20	0.01	408.00	0.0	2596.5	2596.5	4670
X1	5.58	15.	920.	977.	35.	35.	35.	0.0	0.0	0.	4680
X2	0.	0.0	1.	2606.4	2604.9	0.0	0.	0.0	0.0	0.	4690
UT	12.0	500.0	2605.4	0.0	600.0	2605.3	0.0	700.0	2604.9	0.0	4700
BT	786.0	2605.7	0.0	800.0	2605.9	0.0	900.0	2608.3	0.0	952.0	4710
BT	2609.7	0.0	952.0	2611.1	0.0	993.0	2611.3	0.0	993.0	2607.7	4720
BT	0.0	1050.0	2609.0	0.0	1082.0	2614.0	0.0	0.0	0.0	0.0	4730
GR 2603.2	450.	2603.4	850.	2604.7	920.	2598.9	927.	2596.5	930.	4740	
GR 2596.5	942.	2596.5	944.	2596.5	947.	2596.6	966.	2599.9	967.	4750	
GR 2604.4	977.	2604.5	1019.	2603.3	1118.	2606.5	1134.	2606.8	1150.	4760	
X1	5.58	18.	920.	1019.	40.	40.	40.	0.0	0.0	0.	4770
GR 2603.2	450.	2603.4	850.	2604.7	920.	2598.9	927.	2597.4	935.	4780	
GR 2598.4	938.	2598.5	944.	2598.5	947.	2600.1	956.	2599.9	967.	4790	
GR 2599.4	973.	2599.2	993.	2599.4	1000.	2599.9	1008.	2604.5	1019.	4800	
GR 2603.3	1118.	2606.5	1134.	2606.8	1150.	0.0	0.	0.0	0.	4810	
NC	0.070	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	4820	
QT	5.	4160.	6765.	8065.	11050.	8065.	0.	0.	0.	0.	4830
X1	5.64	32.	600.	658.	340.	340.	340.	0.0	-1.50	0.	4840
GR 2631.5	12.	2619.5	81.	2616.0	100.	2613.8	124.	2611.2	150.	4850	
GR 2609.5	160.	2608.0	200.	2606.5	300.	2606.5	400.	2606.8	490.	4860	
GR 2604.5	495.	2606.9	498.	2606.5	550.	2606.9	595.	2607.5	600.	4870	
GR 2600.5	622.	2602.0	630.	2601.0	650.	2601.1	653.	2606.5	658.	4880	
GR 2606.0	705.	2609.5	785.	2611.5	805.	2612.3	864.	2612.4	922.	4890	
GR 2614.4	935.	2614.5	940.	2613.0	947.	2617.3	952.	2617.3	963.	4900	
GR 2624.0	977.	2632.8	1045.	0.0	0.	0.0	0.	0.0	0.	4910	
X1	5.71	0.	0.	0.	350.	350.	350.	0.0	1.50	0.	4920
NC	0.040	0.080	0.040	0.0	0.0	0.0	0.0	0.0	0.0	4930	
QT	5.	4135.	6730.	8030.	10995.	8030.	0.	0.	0.	0.	4940

L01

X1	5.91	24.	655.	718.	900.	900.	900.	0.0	0.0	0.	4950
GR 2623.5		235.	2615.2	250.	2618.0	352.	2630.0	352.	2630.0	603.	4960
GR 2616.5		603.	2615.3	655.	2605.8	666.	2606.0	684.	2607.2	692.	4970
GR 2607.7		701.	2616.0	718.	2613.3	733.	2613.5	800.	2613.7	850.	4980
GR 2614.0		900.	2614.4	979.	2616.0	992.	2616.2	997.	2615.8	1024.	4990
GR 2613.8		1028.	2614.8	1030.	2615.8	1092.	2617.0	1131.	0.0	0.	5000
NC	0.035	0.080	0.045	0.0	0.0						5010
QT	5.	4130.	6720.	8020.	10975.	8020.	0.	0.	0.	0.	5020

X1	5.97	24.	393.	451.	280.	280.	280.	0.0	0.0	0.	5030
GR 2624.5		45.	2619.0	65.	2616.0	75.	2615.5	100.	2616.6	200.	5040
GR 2616.3		300.	2618.2	364.	2617.7	393.	2610.3	400.	2609.3	407.	5050
GR 2609.3		417.	2609.3	428.	2610.3	440.	2614.8	451.	2615.7	477.	5060
GR 2615.3		500.	2625.0	500.	2625.0	670.	2616.0	650.	2615.3	700.	5070
GR 2615.4		719.	2616.8	796.	2618.8	797.	2630.0	817.	0.0	0.	5080
NC	0.035	0.070	0.040	0.0	0.0						5090
QT	5.	4115.	6700.	8000.	10950.	8000.	0.	0.	0.	0.	5100

X1	6.06	19.	560.	605.	340.	340.	340.	0.0	0.0	0.	5110
GR 2618.8		12.	2618.5	21.	2618.4	100.	2618.1	200.	2617.9	300.	5120
GR 2618.0		317.	2617.2	491.	2617.1	522.	2622.3	555.	2619.5	560.	5130
GR 2610.6		577.	2609.2	580.	2609.2	597.	2610.5	600.	2619.6	605.	5140
GR 2617.9		650.	2618.2	795.	2617.7	836.	2617.6	950.	0.0	0.	5150
NC	0.080	0.080	0.040	0.0	0.0						5160
QT	5.	4110.	6690.	7990.	10935.	7990.	0.	0.	0.	0.	5170

X1	6.12	27.	850.	908.	280.	280.	280.	0.0	0.0	0.	5180
X5	1.	2621.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5190
GR 2625.0		215.	2625.0	235.	2621.5	250.	2621.0	300.	2620.8	400.	5200
GR 2620.0		415.	2630.0	415.	2630.0	585.	2620.3	585.	2620.1	603.	5210
GR 2619.3		617.	2619.3	657.	2621.2	687.	2631.5	687.	2631.5	757.	5220
GR 2621.0		757.	2620.7	811.	2620.7	850.	2612.9	861.	2612.3	872.	5230
GR 2612.2		882.	2611.8	892.	2613.0	900.	2619.8	908.	2621.6	954.	5240
GR 2621.3		978.	2618.1	1100.	0.0	0.	0.0	0.	0.0	0.	5250
NC	0.050	0.080	0.045	0.0	0.0						5260
QT	5.	4105.	6685.	7985.	10925.	7985.	0.	0.	0.	0.	5270

X1	6.16	22.	940.	1020.	160.	160.	160.	0.0	0.0	0.	5280
GR 2635.7		380.	2634.0	390.	2631.8	400.	2630.0	410.	2625.8	435.	5290
GR 2623.0		551.	2623.8	586.	2625.8	680.	2625.2	805.	2624.4	820.	5300
GR 2622.8		902.	2624.5	935.	2621.5	940.	2614.5	930.	2613.4	965.	5310
GR 2613.7		975.	2614.2	986.	2614.7	1000.	2619.7	1020.	2620.7	1126.	5320
GR 2625.2		1140.	2625.4	1160.	0.0	0.	0.0	0.	0.0	0.	5330

X1	6.16	0.	0.	0.	50.	50.	50.	0.0	0.0	0.	5340
SB	1.25	1.60	3.00	0.	51.00	6.00	632.00	5.94	2615.0	2615.0	5350
NC	0.080	0.080	0.045	0.0	0.0						5360

X1	6.16	0.	0.	0.	50.	50.	50.	0.0	0.0	0.	5370
X2	0.	0.0	1.	2622.2	2624.5	0.0	0.	0.0	0.0	0.	5380
BT	13.0	660.0	2625.3	0.0	800.0	2625.0	0.0	900.0	2624.8	0.0	5390
BT	950.0	2624.6	0.0	970.0	2624.8	0.0	1050.0	2624.2	0.0	1100.0	5400
BT	2624.1	0.0	1100.0	2626.0	0.0	1262.0	2628.1	0.0	1262.0	2626.5	5410

M01

BT	0.0	1275.0	2626.6	0.0	1460.0	2634.0	0.0	1490.0	2639.5	0.0	5420
X1	6.16	29.	885.	1005.	40.	40.	40.	0.0	0.0	0.	5430
GR	2635.0	350.	2632.0	370.	2630.0	379.	2628.1	383.	2628.1	385.	5440
GR	2627.4	386.	2627.3	405.	2627.5	496.	2625.8	600.	2623.8	645.	5450
GR	2621.5	710.	2625.4	722.	2625.3	760.	2635.0	760.	2635.0	805.	5460
GR	2625.5	805.	2625.8	822.	2624.4	875.	2624.3	885.	2616.8	900.	5470
GR	2615.8	910.	2615.2	920.	2616.2	936.	2616.8	950.	2617.8	955.	5480
GR	2617.7	975.	2624.0	1005.	2628.8	1054.	2632.8	1150.	0.0	0.	5490
NC	0.100	0.100	0.045	0.0	0.0						5500
QT	5.	4100.	6675.	7975.	10915.	7975.	0.	0.	0.	0.	5510
X1	6.20	25.	830.	895.	90.	90.	90.	0.0	0.0	0.	5520
GR	2624.8	400.	2624.8	413.	2623.8	443.	2623.3	470.	2623.0	568.	5530
GR	2632.0	528.	2632.0	595.	2623.1	595.	2623.1	622.	2623.2	640.	5540
GR	2623.0	650.	2622.7	674.	2630.0	674.	2630.0	700.	2622.4	700.	5550
GR	2621.7	810.	2623.2	830.	2616.8	850.	2614.9	861.	2614.7	876.	5560
GR	2615.7	880.	2616.9	888.	2624.4	895.	2628.6	950.	2635.6	995.	5570
QT	5.	4085.	6655.	7955.	10880.	7955.	0.	0.	0.	0.	5580
X1	6.31	31.	500.	540.	480.	480.	480.	0.0	0.0	0.	5590
GR	2626.4	31.	2626.9	62.	2626.4	90.	2626.3	119.	2626.0	186.	5600
GR	2625.6	244.	2625.6	285.	2625.4	312.	2624.6	363.	2625.3	392.	5610
GR	2625.3	412.	2625.3	437.	2626.2	497.	2626.6	497.	2626.6	500.	5620
GR	2620.0	500.	2620.0	505.	2617.5	513.	2617.0	517.	2618.2	523.	5630
GR	2626.9	530.	2622.0	540.	2626.6	604.	2630.0	651.	2629.5	682.	5640
GR	2626.9	741.	2626.9	841.	2627.4	888.	2627.2	898.	2629.6	918.	5650
GR	2629.6	922.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	5660
NC	0.100	0.100	0.045	0.0	0.0						5670
QT	3.	4065.	6625.	7920.	10835.	7920.	0.	0.	0.	0.	5680
X1	6.48	31.	308.	393.	1000.	1000.	1000.	0.0	0.0	0.	5690
GR	2658.0	30.	2642.5	70.	2638.2	102.	2638.2	133.	2638.0	150.	5700
GR	2637.3	174.	2631.2	174.	2631.2	200.	2631.0	300.	2631.0	308.	5710
GR	2626.0	312.	2626.2	326.	2626.7	340.	2626.2	360.	2626.2	370.	5720
GR	2626.7	381.	2627.1	381.	2631.0	393.	2630.0	400.	2631.5	440.	5730
GR	2631.0	500.	2632.2	568.	2632.0	600.	2660.0	600.	2660.0	980.	5740
GR	2632.8	980.	2632.9	990.	2632.8	1000.	2633.0	1008.	2633.4	1035.	5750
GR	2633.1	1050.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	5760
NC	0.100	0.120	0.045	0.0	0.0						5770
QT	3.	4045.	6595.	7900.	10795.	7900.	0.	0.	0.	0.	5780
X1	6.61	33.	340.	405.	500.	580.	580.	0.0	0.0	0.	5790
GR	2658.3	0.	2650.3	150.	2645.4	228.	2638.0	250.	2637.5	255.	5800
GR	2637.0	310.	2633.0	340.	2631.3	340.	2629.2	345.	2627.5	349.	5810
GR	2627.5	353.	2629.3	365.	2629.3	374.	2629.0	387.	2628.5	395.	5820
GR	2630.5	395.	2630.5	400.	2633.0	405.	2636.0	412.	2637.0	430.	5830
GR	2638.0	466.	2680.0	466.	2680.0	795.	2636.8	795.	2637.5	845.	5840
GR	2637.4	876.	2638.0	900.	2638.2	920.	2660.0	920.	2660.0	1086.	5850
GR	2646.5	1086.	2647.2	1100.	2654.0	1200.	0.0	0.	0.0	0.	5860
X1	6.61	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	5870
Sa	1.25	1.60	3.00	0.	45.00	2.00	402.00	0.0	2628.5	2628.5	5880

A02

X1	6.61	33.	340.	405.	30.	30.	30.	0.0	0.0	0.	5890
X2	0.	0.0	1.	2637.9	2636.3	0.0	0.	0.0	0.0	0.	5900
BT	26.0	0.0	2658.3	0.0	150.0	2650.3	0.0	228.0	2645.4	0.0	5910
BT	250.0	2638.0	0.0	255.0	2637.5	0.0	300.0	2638.6	0.0	335.0	5920
BT	2640.4	0.0	335.0	2641.0	0.0	366.0	2641.4	0.0	400.0	2641.0	5930
BT	0.0	400.0	2640.4	0.0	466.0	2638.0	0.0	466.0	2680.0	0.0	5940
BT	720.0	2680.0	0.0	720.0	2636.3	0.0	750.0	2636.8	0.0	795.0	5950
BT	2636.8	0.0	800.0	2637.0	0.0	845.0	2637.5	0.0	876.0	2637.5	5960
QT	0.0	900.0	2638.0	0.0	920.0	2638.3	0.0	1000.0	2641.5	0.0	5970
BT	1086.0	2646.4	0.0	1100.0	2647.2	0.0	1200.0	2654.0	0.0	0.0	5980
GR	2658.3	0.	2650.3	150.	2645.4	228.	2638.0	250.	2637.3	255.	5990
GR	2637.0	310.	2633.0	340.	2631.3	340.	2629.2	345.	2627.5	349.	6000
GR	2627.5	353.	2629.3	365.	2629.3	374.	2629.0	387.	2628.5	395.	6010
GR	2630.5	395.	2630.5	400.	2633.0	405.	2636.0	412.	2637.0	430.	6020
GR	2638.0	466.	2680.0	466.	2680.0	720.	2636.2	720.	2636.8	750.	6030
GR	2636.8	800.	2637.5	845.	2637.4	876.	2638.0	900.	2638.2	920.	6040
GR	2641.5	1000.	2647.4	1100.	2654.0	1200.	0.0	0.	0.0	0.	6050

X1	6.61	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	6060
NC	0.100	0.100	0.045	0.0	0.0						6070
QT	5.	4030.	6565.	7860.	10730.	7860.	0.	0.	0.	0.	6080

X1	6.74	26.	368.	408.	220.	220.	220.	0.0	0.0	0.	6090
GR	2653.7	170.	2646.0	185.	2641.8	255.	2641.3	305.	2655.0	305.	6100
GR	2655.0	355.	2641.7	355.	2639.7	368.	2632.8	376.	2631.4	388.	6110
GR	2631.7	395.	2632.8	402.	2635.5	405.	2639.1	408.	2655.0	409.	6120
GR	2655.0	538.	2641.8	538.	2641.3	559.	2641.4	591.	2640.8	627.	6130
GR	2640.7	645.	2640.6	658.	2641.4	668.	2641.4	678.	2639.9	694.	6140
GR	2643.0	700.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6150
NC	0.100	0.100	0.045	0.0	0.0						6160
QT	5.	4020.	6550.	7840.	10705.	7840.	0.	0.	0.	0.	6170

X1	6.79	25.	368.	408.	680.	680.	680.	0.0	0.0	0.	6180
GR	2653.7	170.	2646.0	185.	2641.8	255.	2641.3	305.	2641.7	355.	6190
GR	2639.7	368.	2632.8	376.	2631.4	388.	2631.7	395.	2632.8	402.	6200
GR	2637.5	408.	2639.1	408.	2639.2	410.	2655.0	410.	2655.0	537.	6210
GR	2641.7	537.	2641.3	558.	2641.4	591.	2640.8	627.	2640.7	645.	6220
GR	2640.6	658.	2641.4	668.	2641.4	678.	2639.9	694.	2643.0	700.	6230

X1	6.79	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	6240
SB	1.25	1.60	3.00	0.	28.00	3.00	365.00	1.80	2634.0	2634.0	6250

X1	6.79	31.	340.	385.	50.	50.	50.	0.0	0.0	0.	6260
X2	0.	0.0	1.	2642.8	2641.7	0.0	0.	0.0	0.0	0.	6270
BT	18.0	60.0	2660.0	0.0	98.0	2644.8	0.0	115.0	2648.0	0.0	6280
BT	145.0	2647.5	0.0	220.0	2643.0	0.0	250.0	2644.0	0.0	300.0	6290
BT	2645.5	0.0	310.0	2646.0	0.0	330.0	2648.0	0.0	400.0	2648.1	6300
BT	0.0	400.0	2646.0	0.0	449.0	2644.0	0.0	455.0	2650.0	0.0	6310
BT	460.0	2648.5	0.0	495.0	2652.4	0.0	511.0	2652.2	0.0	530.0	6320
BT	2659.0	0.0	545.0	2662.0	0.0	0.0	0.0	0.0	0.0	0.0	6330
GR	2660.0	60.	2644.8	98.	2648.0	115.	2640.0	150.	2641.0	160.	6340
GR	2642.5	225.	2642.5	230.	2643.0	255.	2642.0	265.	2640.3	340.	6350
GR	2636.5	345.	2634.8	355.	2634.8	365.	2634.0	365.	2634.0	379.	6360
GR	2636.0	380.	2635.0	382.	2636.0	385.	2641.1	387.	2642.5	403.	6370

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GR 2641.5	408.	2642.0	425.	2644.6	435.	2644.6	438.	2642.3	445.	6380
GR 2650.0	455.	2643.5	460.	2652.4	495.	2652.2	511.	2659.0	530.	6390
GR 2662.0	545.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6400

X1	6.79	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	6410
NC	0.120	0.110	0.045	0.0	0.0						6420
QT	5.	3990.	6500.	7780.	10300.	7780.	0.	0.	0.	0.	6430

X1	7.00	30.	825.	905.	1080.	1080.	1090.	0.0	0.0	0.	6440
GR 2670.0	10.	2653.9	60.	2652.5	132.	2649.3	200.	2649.0	300.	6450	
GR 2649.5	400.	2648.8	480.	2651.7	515.	2651.9	541.	2650.0	555.	6460	
GR 2649.0	630.	2649.2	850.	2649.0	825.	2644.0	837.	2642.0	853.	6470	
GR 2649.1	875.	2643.1	890.	2644.0	900.	2646.5	905.	2645.5	920.	4480	
GR 2649.5	935.	2649.5	950.	2649.0	990.	2649.0	1075.	2651.0	1086.	6490	
GR 2631.5	1098.	2651.5	1125.	2651.5	1145.	2655.0	1400.	2663.0	1600.	6500	
NC	0.120	0.110	0.045	0.0	0.0						6510
QT	5.	3955.	6440.	7710.	10485.	7710.	0.	0.	0.	0.	6520

X1	7.23	24.	318.	400.	1220.	1220.	1220.	0.0	0.0	0.	6530
GR 2690.0	70.	2669.0	100.	2659.0	140.	2659.5	153.	2660.0	170.	6540	
GR 2460.0	250.	2659.4	300.	2657.0	318.	2653.5	355.	2654.0	360.	6550	
GR 2653.5	370.	2655.0	395.	2657.0	400.	2660.7	450.	2659.4	600.	6560	
GR 2659.5	645.	2659.0	700.	2651.7	918.	2663.8	936.	2664.0	1000.	6570	
GR 2645.2	1055.	2665.0	1072.	2665.2	1080.	2680.0	1092.	0.0	0.	6580	

X1	7.23	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	6590
SB	1.25	1.60	3.00	0.	53.00	3.00	402.00	2.60	2653.5	2653.5	6600

X1	7.23	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	6610
XZ	0.	0.0	1.	2659.3	2658.9	0.0	0.	0.0	0.0	0.	6620
BT	21.0	70.0	2680.0	0.0	100.0	2669.0	0.0	140.0	2659.0	0.0	6630
BT	153.0	2659.5	0.0	170.0	2660.0	0.0	170.0	2662.0	0.0	318.0	6640
BT	2663.5	0.0	318.0	2664.9	0.0	400.0	2664.9	0.0	400.0	2663.5	6650
BT	0.0	460.0	2660.7	0.0	600.0	2659.4	0.0	635.0	2659.5	0.0	6660
BT	700.0	2659.0	0.0	918.0	2661.7	0.0	986.0	2663.8	0.0	1000.0	6670
BT	2664.0	0.0	1055.0	2665.2	0.0	1072.0	2665.0	0.0	1080.0	2665.2	6680
BT	0.0	1092.0	2680.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6690
NC	0.120	0.120	0.045	0.0	0.0						6700

X1	7.23	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	6710
NC	0.080	0.110	0.050	0.0	0.0						6720
QT	5.	3920.	6385.	7640.	10370.	7640.	0.	0.	0.	0.	6730

X1	7.46	21.	295.	313.	1120.	1120.	1120.	0.0	0.0	0.	6740
GR 2672.7	0.	2669.4	137.	2669.4	182.	2668.0	190.	2668.3	216.	6750	
GR 2668.6	242.	2668.5	261.	2668.3	295.	2661.5	300.	2665.4	304.	6760	
GR 2660.6	310.	2660.6	314.	2661.5	327.	2663.5	342.	2666.3	343.	6770	
GR 2664.5	433.	2667.0	476.	2670.7	500.	2670.7	613.	2671.4	650.	6780	
GR 2673.4	695.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6790	
NC	0.090	0.110	0.050	0.0	0.0						6800
QT	5.	3910.	6365.	7620.	10330.	7620.	0.	0.	0.	0.	6810

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X1	7.54	31.	250.	327.	420.	511.	420.	0.0	0.0	0.	6820
GR	2677.6	0.	2676.6	41.	2675.6	91.	2675.3	115.	2675.8	154.	6830
GR	2672.5	170.	2685.0	170.	2685.0	207.	2671.0	290.	2669.6	245.	6840
GR	2671.0	250.	2665.5	260.	2664.3	272.	2665.3	288.	2664.3	307.	6850
GR	2665.5	315.	2666.5	320.	2668.5	327.	2668.5	329.	2668.5	337.	6860
GR	2668.3	347.	2666.5	400.	2671.0	450.	2674.6	503.	2690.0	505.	6870
GR	2660.0	693.	2674.3	693.	2672.8	708.	2676.4	727.	2676.0	742.	6880
GR	2685.5	800.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	6890
NC	0.090	0.110	0.050	0.0	0.0						6900
QT	5.	3830.	6260.	7495.	10195.	7495.	0.	0.	0.	0.	6910

X1	7.76	27.	795.	858.	1240.	1240.	1240.	0.0	0.0	0.	6920
GR	2689.0	0.	2687.0	40.	2685.0	100.	2685.0	200.	2684.0	300.	6930
GR	2683.3	400.	2682.8	430.	2682.6	500.	2682.3	600.	2682.5	700.	6940
GR	2681.6	795.	2678.5	805.	2675.7	825.	2676.0	845.	2677.3	855.	6950
GR	2682.0	858.	2682.2	900.	2683.0	930.	2682.5	1012.	2682.0	1020.	6960
GR	2681.3	1100.	2682.0	1200.	2683.8	1300.	2686.0	1400.	2687.0	1500.	6970
GR	2687.5	1575.	2692.0	1590.	0.0	0.	0.0	0.	0.0	0.	6980
NC	0.100	0.110	0.050	0.0	0.0						6990
QT	5.	3750.	6165.	7380.	10080.	7380.	0.	0.	0.	0.	7000

X1	7.97	34.	518.	600.	940.	940.	940.	0.0	0.0	0.	7010
GR	2713.0	47.	2700.5	70.	2700.5	100.	2696.0	300.	2693.0	450.	7020
GR	2693.5	475.	2687.5	518.	2685.5	525.	2686.0	532.	2682.0	548.	7030
GR	2682.0	535.	2684.0	560.	2685.0	570.	2684.0	573.	2690.5	600.	7040
GR	2691.5	700.	2692.5	740.	2695.0	800.	2694.3	900.	2692.6	980.	7050
GR	2693.7	1100.	2694.5	1200.	2696.0	1230.	2695.0	1300.	2698.0	1400.	7060
GR	2698.2	1500.	2698.8	1509.	2699.9	1510.	2700.0	1545.	2701.8	1600.	7070
GR	2703.0	1700.	2702.0	1800.	2702.4	1845.	2704.5	1855.	0.0	0.	7080

X1	7.97	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	7090
NC	0.080	0.080	0.050	0.0	0.0						7100
SB	1.25	1.60	3.00	0.	29.00	4.00	506.00	1.90	2682.0	2682.0	7110

X1	7.97	19.	508.	560.	30.	30.	30.	0.0	0.0	0.	7120
X2	0.	0.0	1.	2693.1	2692.6	0.0	0.	0.0	0.0	0.	7130
BT	28.0	47.0	2713.0	0.0	70.0	2700.5	0.0	100.0	2700.5	0.0	7140
BT	300.0	2696.0	0.0	400.0	2696.5	0.0	450.0	2696.5	0.0	475.0	7150
BT	2696.0	0.0	500.0	2696.7	0.0	500.0	2698.5	0.0	595.0	2698.0	7160
BT	0.0	595.0	2696.0	0.0	300.0	2695.0	0.0	900.0	2694.3	0.0	7170
BT	980.0	2692.6	0.0	1100.0	2693.7	0.0	1200.0	2694.5	0.0	1230.0	7180
BT	2695.0	0.0	1300.0	2695.0	0.0	1400.0	2698.0	0.0	1500.0	2698.2	7190
BT	0.0	1509.0	2698.8	0.0	1510.0	2699.9	0.0	1545.0	2700.0	0.0	7200
BT	1600.0	2701.8	0.0	1700.0	2703.0	0.0	1800.0	2702.0	0.0	1845.0	7210
BT	2702.4	0.0	1855.0	2704.5	0.0	0.0	0.0	0.0	0.0	0.0	7220
GR	2697.0	400.	2695.5	410.	2695.3	424.	2692.0	508.	2683.7	520.	7230
GR	2683.0	525.	2682.2	534.	2682.0	542.	2683.7	550.	2693.6	560.	7240
GR	2693.6	580.	2693.8	590.	2694.1	614.	2694.8	718.	2694.6	843.	7250
GR	2692.6	850.	2692.8	873.	2693.6	950.	2694.1	1042.	0.0	0.	7260

X1	7.97	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	7270
NC	0.120	0.120	0.045	0.0	0.0						7280
QT	5.	3520.	5800.	6950.	9520.	6950.	0.	0.	0.	0.	7290

D02

X1	8.20	28.	775.	855.	1170.	1170.	1170.	0.0	0.0	0.	7300
GR	2720.5	0.	2721.0	10.	2717.0	15.	2716.5	75.	2718.0	155.	7310
GR	2717.5	175.	2711.0	320.	2711.0	350.	2710.2	375.	2709.5	425.	7320
GR	2708.5	475.	2703.5	575.	2702.0	675.	2700.8	725.	2700.3	775.	7330
GR	2697.5	105.	2694.2	834.	2694.2	845.	2699.5	855.	2701.8	875.	7340
GR	2702.5	948.	2701.4	975.	2703.0	1075.	2703.2	1175.	2705.5	1275.	7350
GR	2706.0	1375.	2706.8	1475.	2708.0	1575.	0.0	0.	0.0	0.	7360

X1	8.20	0.	0.	0.	40.	40.	40.	0.0	0.0	0.	7370
SB	1.25	1.60	3.00	0.	34.00	4.00	670.00	3.92	2694.2	2694.2	7380

X1	8.20	0.	0.	0.	30.	30.	30.	0.0	0.0	0.	7390
X2	0.	0.0	0.	0.	2704.0	2706.7	0.0	0.0	0.0	0.	7400
BT	11.0	250.0	2707.2	0.0	400.0	2709.4	0.0	500.0	2708.0	0.0	7410
BT	750.0	2706.9	0.0	750.0	2708.0	0.0	878.0	2708.0	0.0	878.0	7420
BT	2706.9	0.0	1050.0	2706.8	0.0	1150.0	2706.7	0.0	1250.0	2706.7	7430
BT	0.0	1400.0	2707.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7440

X1	8.20	0.	0.	0.	10.	10.	10.	0.0	0.0	0.	7450
NC	0.090	0.100	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	7460
QT	5.	3215.	5340.	6425.	8810.	6425.	0.	0.	0.	0.	7470

X1	8.27	30.	418.	488.	340.	340.	340.	0.0	0.0	0.	7480
GR	2714.5	27.	2711.2	82.	2711.0	100.	2709.7	136.	2720.0	136.	7490
GR	2720.0	165.	2709.5	165.	2708.2	231.	2705.0	350.	2705.5	365.	7500
GR	2703.8	372.	2702.8	403.	2704.0	418.	2700.4	420.	2699.3	428.	7510
GR	2699.2	436.	2700.5	450.	2701.8	481.	2705.0	488.	2703.4	491.	7520
GR	2703.7	515.	2708.2	527.	2708.5	675.	2706.0	682.	2708.0	690.	7530
GR	2708.0	703.	2710.7	800.	2709.5	850.	2711.8	900.	2711.3	950.	7540
NC	0.070	0.090	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	7550
QT	5.	3185.	5295.	6370.	8735.	6370.	0.	0.	0.	0.	7560

X1	8.41	24.	500.	574.	660.	660.	660.	0.0	0.0	0.	7570
GR	2724.2	15.	2719.8	62.	2717.8	133.	2716.8	170.	2715.9	220.	7580
GR	2715.9	270.	2714.9	275.	2716.2	278.	2716.2	296.	2714.6	313.	7590
GR	2713.4	400.	2711.8	425.	2713.0	500.	2706.2	510.	2706.4	522.	7600
GR	2707.5	532.	2708.0	540.	2708.8	550.	2713.4	574.	2713.8	603.	7610
GR	2713.9	700.	2714.4	800.	2716.1	850.	2717.4	950.	0.0	0.	7620
NC	0.120	0.100	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	7630
QT	5.	3135.	5205.	6270.	8590.	6270.	0.	0.	0.	0.	7640

X1	8.67	19.	250.	291.	1280.	1280.	1280.	0.0	0.0	0.	7650
GR	2752.2	20.	2739.4	35.	2737.2	57.	2730.3	68.	2731.8	74.	7660
GR	2731.8	90.	2732.0	145.	2742.5	145.	2742.5	172.	2730.8	172.	7670
GR	2730.0	250.	2721.3	260.	2720.2	266.	2721.3	281.	2723.7	284.	7680
GR	2727.0	291.	2728.3	312.	2737.4	350.	2737.8	362.	0.0	0.	7690
NC	0.070	0.100	0.045	0.0	0.0	0.0	0.0	0.	0.	0.	7700
QT	5.	3110.	5165.	6215.	8520.	6215.	0.	0.	0.	0.	7710

X1	8.80	17.	250.	277.	600.	600.	600.	0.0	0.0	0.	7720
GR	2755.0	35.	2740.0	57.	2737.7	71.	2736.5	150.	2735.8	228.	7730
GR	2733.6	237.	2734.3	250.	2729.2	263.	2729.2	268.	2729.3	272.	7740
GR	2730.3	275.	2731.8	277.	2732.7	322.	2733.7	335.	2737.9	341.	7750

E02

GR 2739.0 351. 2740.0 374. 0.0 0. 0.0 0. 0.0 0. 7760  
 NC 0.090 0.080 0.040 0.0 0.0 3615. 0. 0. 0. 0. 7770  
 QT 5. 1780. 2975. 3615. 5150. 3615. 0. 0. 0. 0. 7780

X1 8.92 16. 425. 478. 520. 520. 520. 0.0 0.0 0. 7790  
 GR 2770.0 50. 2748.0 90. 2744.3 200. 2742.2 300. 2740.8 400. 7800  
 GR 2741.5 425. 2738.3 435. 2737.2 440. 2737.0 447. 2737.0 455. 7810  
 GR 2757.1 460. 2737.3 465. 2738.0 473. 2741.5 478. 2762.0 520. 7820  
 GR 2762.0 550. 0.0 0. 0.0 0. 0.0 0. 0.0 0. 7830  
 NC 0.120 0.080 0.040 0.0 0.0 3515. 0. 0. 0. 0. 7840  
 QT 5. 1720. 2895. 3515. 5015. 3515. 0. 0. 0. 0. 7850

X1 9.06 0. 0. 0. 730. 730. 730. 0.0 4.50 0. 7860

X1 9.06 14. 187. 224. 20. 20. 20. 0.0 -3.40 0. 7870  
 GR 2784.3 8. 2754.3 37. 2754.0 50. 2753.7 100. 2753.7 157. 7880  
 GR 2751.8 166. 2754.0 180. 2753.5 187. 2750.8 195. 2750.8 204. 7890  
 GR 2750.8 218. 2754.9 224. 2755.0 227. 2755.5 253. 0.0 0. 7900

X1 9.06 14. 187. 224. 20. 20. 20. 0.0 -3.40 0. 7910  
 GR 2784.3 8. 2754.3 37. 2754.0 50. 2753.7 100. 2753.7 157. 7920  
 GR 2751.8 166. 2754.0 180. 2753.5 187. 2748.8 203. 2748.3 204. 7930  
 GR 2748.7 214. 2754.9 224. 2755.0 227. 2755.5 253. 0.0 0. 7940  
 NC 0.110 0.110 0.045 0.0 0.0 3470. 0. 0. 0. 0. 7950  
 QT 5. 1890. 2855. 3470. 4945. 3470. 0. 0. 0. 0. 7960

X1 9.15 0. 0. 0. 450. 450. 450. 0.0 3.40 0. 7970

X1 9.26 22. 460. 510. 520. 520. 520. 0.0 0.0 0. 7980  
 GR 2783.3 55. 2771.5 100. 2764.0 140. 2768.0 155. 2766.8 200. 7990  
 GR 2767.2 200. 2767.0 210. 2762.0 230. 2761.3 255. 2760.7 340. 8000  
 GR 2762.3 345. 2761.5 400. 2761.5 429. 2761.2 480. 2755.5 470. 8010  
 GR 2754.2 472. 2754.2 480. 2754.0 485. 2754.2 500. 2760.5 510. 8020  
 GR 2760.1 535. 2761.0 700. 0.0 0. 0.0 0. 0.0 0. 8030

X1 9.26 0. 0. 0. 40. 40. 40. 0.0 0.0 0. 8040  
 SB 1.25 1.60 3.00 0. 42.70 2.00 305.00 0.0 2754.0 2754.0 8050

X1 9.26 31. 460. 510. 30. 30. 30. 0.0 0.0 0. 8060  
 X2 0. 0.0 1. 2761.5 2761.8 0.0 0. 0.0 0.0 0. 8070  
 BT 17.0 112.0 2768.8 0.0 300.0 2765.0 0.0 400.0 2764.5 0.0 8080  
 BT 480.0 2763.5 0.0 500.0 2763.5 0.0 600.0 2761.9 0.0 700.0 8090  
 BT 2761.8 0.0 815.0 2762.5 0.0 925.0 2765.0 0.0 955.0 2764.5 8100  
 BT 0.0 1000.0 2766.8 0.0 1100.0 2769.3 0.0 1125.0 2769.5 0.0 8110  
 BT 1128.0 2768.2 0.0 1132.0 2771.2 0.0 1160.0 2771.0 0.0 1195.0 8120  
 BT 2782.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 8130  
 GR 2783.5 55. 2774.0 90. 2767.1 120. 2764.0 140. 2768.0 155. 8140  
 GR 2766.7 200. 2757.2 200. 2766.8 210. 2762.0 231. 2761.5 250. 8150  
 GR 2760.6 340. 2762.3 345. 2761.5 400. 2761.5 430. 2761.1 440. 8160  
 GR 2754.2 472. 2754.2 480. 2754.0 485. 2754.2 500. 2760.3 510. 8170  
 GR 2760.1 535. 2761.0 700. 2764.0 900. 2766.2 953. 2766.8 1000. 8180  
 GR 2769.3 1100. 2769.5 1125. 2768.2 1128. 2771.2 112. 2771.0 1160. 8190





602

GR 2804.9	267.	2800.0	272.	2799.4	277.	2799.0	282.	2799.0	286.	8660
GR 2800.0	290.	2803.5	296.	2804.9	300.	2805.5	300.	2805.6	330.	8670
GR 2814.0	330.	2814.0	340.	2805.7	340.	2805.8	365.	2814.0	365.	8680
GR 2814.0	375.	2807.8	375.	2805.9	390.	2806.0	405.	2814.0	405.	8690
GR 2814.0	415.	2806.1	415.	2806.4	440.	2814.0	440.	2814.0	450.	8700
GR 2806.0	450.	2807.0	500.	2807.8	550.	2811.0	600.	2813.9	630.	8710
GR 2813.7	653.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	8720
NC 0.080	0.080	0.045	0.0	0.0						8730

X1 10.21	13.	140.	230.	680.	680.	680.	0.0	0.0	0.	8740
GR 2828.3	23.	2818.0	53.	2818.0	137.	2817.5	150.	2815.0	160.	8750
GR 2809.4	175.	2809.0	180.	2808.5	190.	2809.5	210.	2814.3	230.	8760
GR 2816.0	250.	2820.3	350.	2821.3	418.	0.0	0.	0.0	0.	8770
NC 0.080	0.080	0.045	0.0	0.0						8780

X1 10.28	16.	371.	465.	360.	360.	360.	0.0	0.0	0.	8790
GR 2837.4	0.	2834.3	100.	2831.5	200.	2831.0	250.	2823.5	283.	8800
GR 2823.5	303.	2822.5	371.	2813.3	392.	2813.0	400.	2813.0	412.	8810
GR 2813.5	425.	2814.5	430.	2815.0	437.	2824.0	465.	2826.5	500.	8820
GR 2828.9	600.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	8830
NC 0.100	0.100	0.050	0.0	0.0						8840

X1 10.39	13.	122.	153.	540.	540.	540.	0.0	0.0	0.	8850
GR 2833.7	19.	2831.5	90.	2830.5	100.	2826.5	122.	2817.0	133.	8860
GR 2816.5	139.	2816.4	148.	2817.0	153.	2824.5	165.	2823.9	213.	8870
GR 2825.5	300.	2831.0	405.	2836.2	534.	0.0	0.	0.0	0.	8880
EJ										8890

H02

\*PROF 1

CCHV= 0.100 CEHV= 0.500

\*SECNO .050

3040 SECTION NOT HIGH ENOUGH 2565.00 2559.30 2486.50 2559.30 0.0 0

3265 DIVIDED FLOW

RIGHLAND CREEK

10 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	YTRIAL	TOP/ID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	IC	EG	LEFT/RIGHT	
SLOPE	WTH	XNE	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.05	4800.	29.	3201.	1570.	0.30	0	773.	
2498.42	2494.88	47.	606.	989.	0.50	18	2498.30	
11.92	2565.00	0.62	5.28	1.59	0.0	2498.72	2495.30	
0.002488	0.0	0.070	0.055	0.070	0.0	-0.00	189.09	
	2486.50	0.	0.	0.	198.	582.	969.04	0.

\*SECNO .230

0.23	4790.	1588.	3179.	23.	0.43	2	371.	
2500.45	0.0	734.	509.	17.	0.12	0	2495.80	
12.65	0.0	2.17	6.24	1.35	2.10	2500.88	2497.80	
0.002862	0.056	0.070	0.055	0.070	0.06	-0.00	168.92	
	2487.80	760.	800.	760.	333.	38.	539.61	26.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23	4790.	1661.	3104.	25.	0.39	2	375.	
2500.60	0.0	780.	517.	19.	-0.04	0	2495.80	
12.80	0.0	2.13	6.01	1.34	0.11	2500.99	2497.80	
0.002596	0.056	0.070	0.055	0.070	0.00	-0.00	185.54	
	2487.80	40.	40.	40.	336.	39.	540.33	27.

\*SECNO .230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

0.23	4790.	356.	4434.	0.	1.32	3	184.	
2500.14	0.0	120.	464.	0.	0.93	0	2506.20	
12.14	0.0	2.96	9.55	0.0	0.01	2501.46	2506.90	
0.016434	0.056	0.070	0.055	0.070	0.17	-0.00	184.78	
	2488.00	1.	1.	1.	305.	35.	525.00	27.

\*SECNO .230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD				08/01/81		TOP MID	
MILE	Q	QLOB	QCH	QROB	HV	ITIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDL		LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	CG		SSTA	
SLOPE	WTM	XNL	XNCH	XNR	OLOSS	CORIR		ENDST	VOL
	ELMIN	XLOB	XLCH	XLOBR	WSDL	WSDI			

3370 NORMAL BRIDGE, NRD= 11 MIN ELTR= 2498.70 MAX ELLC= 2505.00

0.23	4790.	754.	4036.	0.	0.78	3	229.		
2501.11	0.0	252.	530.	0.	-0.54	0	2506.20		
13.11	0.0	2.99	7.61	0.0	0.37	2501.89	2506.90		
0.009505	0.056	0.070	0.055	0.070	0.05	-0.03	163.43		
	2488.00	30.	30.	30.	327.	35.	525.00		27.

\*SECNO .230

3301 HV CHANGED MORE THAN HVINS

0.23	4790.	1814.	2552.	425.	0.20	3	483.		
2501.75	0.0	1018.	555.	274.	-0.58	0	2496.20		
13.55	0.0	1.78	4.60	1.54	0.00	2501.95	2498.20		
0.001385	0.056	0.070	0.055	0.070	0.06	-0.00	148.90		
	2488.20	1.	1.	1.	353.	130.	631.72		28.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23	4790.	1819.	2546.	425.	0.20	2	483.		
2501.77	0.0	1023.	556.	276.	-0.00	0	2496.20		
13.57	0.0	1.78	4.58	1.54	0.01	2501.96	2498.20		
0.001371	0.055	0.070	0.055	0.070	0.00	-0.00	148.55		
	2488.20	10.	10.	10.	353.	130.	631.75		28.

\*SECNO .270

\*\*\* GR CARDS REPEATED

0.27	4790.	1881.	2459.	451.	0.17	1	488.		
2501.98	0.0	1093.	566.	298.	-0.02	0	2496.20		
13.78	0.0	1.72	4.34	1.51	0.19	2502.15	2498.20		
0.001200	0.055	0.070	0.055	0.070	0.00	-0.00	143.81		
	2488.20	150.	150.	150.	358.	131.	632.74		35.

\*SECNO .550

0.55	4780.	228.	4530.	22.	0.45	2	219.		
2504.04	0.0	14.	711.	28.	-0.43	0	2502.30		
12.24	0.0	1.19	6.37	0.80	2.27	2504.65	2502.30		
0.002217	0.049	0.070	0.049	0.080	0.21	-0.00	170.60		

12.24 0.002217 0.049 0.070 0.047 0.080 0.21 -0.00 170.60

J02

2491.80 1500. 1400. 1420. 145. 73. 389.24 82.

\*SECTO .840

RICHLAND CREEK	10 YEAR FLOOD	08/01/81						
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRIMS	ALOB	ACH	AROB	PHV	IDC	BANK ELEV	
DEPTH	MSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	8STA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.84	4770.	0.	4768.	2.	1.05	2	74.	
2507.76	0.0	0.	580.	3.	0.45	0	2508.20	
10.36	0.0	0.0	8.22	0.47	3.95	2508.81	2508.90	
0.003108	0.046	0.070	0.040	0.100	0.22	-0.00	88.37	
	2497.40	1380.	1520.	1560.	33.	41.	161.97	108.

\*SECTO 1.160

1.16	4770.	0.	4460.	300.	1.05	1	143.	
2512.73	0.0	0.	527.	159.	-0.00	0	2513.90	
9.23	0.0	0.0	8.46	1.83	4.96	2513.77	2509.20	
0.003833	0.044	0.080	0.040	0.090	0.00	-0.00	94.22	
	2503.50	1460.	1440.	1460.	35.	109.	237.58	129.

\*SECTO 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	4750.	361.	3273.	1115.	0.46	2	239.	
2516.84	0.0	222.	516.	452.	-0.59	0	2511.50	
9.64	0.0	1.63	6.35	2.47	3.47	2517.30	2513.20	
0.001825	0.043	0.090	0.040	0.070	0.06	-0.00	143.23	
	2507.20	1360.	1360.	1340.	103.	136.	382.73	158.

\*SECTO 1.450

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2525.00 ELREA= 2518.00

1.45	4750.	0.	4750.	0.	0.69	2	110.	
2516.82	0.0	0.	713.	0.	0.23	0	2513.20	
9.62	0.0	0.0	6.66	0.0	0.09	2517.50	2511.80	
0.002714	0.043	0.090	0.040	0.070	0.12	-0.00	185.00	
	2507.20	40.	40.	40.	55.	55.	295.00	159.

\*SECTO 1.450

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	4750.	0.	4750.	0.	1.00	2	98.	
2516.66	0.0	0.	591.	0.	0.31	0	2524.80	
9.66	0.0	0.0	8.04	0.0	0.00	2517.67	2524.00	
0.006671	0.043	0.090	0.040	0.070	0.16	-0.00	190.05	
	2507.00	1.	1.	1.	52.	50.	292.47	159.

K02

\*SECNO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOB	CCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IG	CORAR	LEFT/RIGHT	
DEPTH	MSELK	VLOB	VCH	VR	HL	WSDR	MSDR	SSTA	
SLOPE	WTN	XL	XNCH	YR	OLOSS	WSDL	MSDR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR					

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2517.30 MAX ELLC= 2524.80

1.45	4750.	0.	4750.	0.	0.91	2	100.		
2516.94	0.0	0.	619.	0.	-0.09	0	2524.80		
9.94	0.0	0.0	7.67	0.0	0.18	2517.86	2524.00		
0.005720	0.043	0.090	0.040	0.070	0.01	-0.00	189.18		
	2507.00	30.	30.	30.	53.	51.	293.42		159.

\*SECNO 1.450

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2527.00 ELREA= 2520.00

1.45	4750.	0.	4750.	0.	0.60	2	110.		
2517.29	0.0	0.	766.	0.	-0.32	0	2513.20		
10.09	0.0	0.0	6.20	0.0	0.00	2517.89	2511.80		
0.002138	0.043	0.090	0.040	0.070	0.03	-0.00	185.00		
	2507.20	1.	1.	1.	55.	55.	295.00		159.

\*SECNO 1.450

1.45	4750.	421.	3131.	1198.	0.34	2	245.		
2517.64	0.0	281.	566.	537.	-0.26	0	2511.50		
10.44	0.0	1.50	5.53	2.23	0.06	2517.98	2513.20		
0.001221	0.043	0.090	0.040	0.070	0.03	-0.00	140.40		
	2507.20	40.	40.	40.	106.	139.	385.77		180.

\*SECNO 1.700

1.70	4745.	1202.	3353.	190.	0.70	2	207.		
2519.76	0.0	467.	428.	76.	0.37	0	2515.50		
9.46	0.0	2.57	7.84	2.49	2.30	2520.46	2514.30		
0.002790	0.043	0.070	0.040	0.090	0.18	-0.00	86.87		
	2510.30	1300.	1300.	1300.	166.	41.	293.96		195.

\*SECNO 1.780

1.78	4740.	821.	3486.	433.	1.04	3	414.		
2520.90	0.0	308.	368.	272.	0.34	0	2517.80		
8.30	0.0	2.67	9.46	1.59	1.31	2521.94	2516.60		
0.004952	0.043	0.070	0.040	0.090	0.17	-0.00	91.77		
	2512.60	360.	360.	360.	161.	253.	505.91		203.

\*SECNO 1.780

L02

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOP MID	
MILE	Q	QLOB	QCH	QROB	HV	I TRIAL	BANK ELEV	
ELEV	CRHS	ALOB	ACH	AROB	PHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2522.50 ELREA= 2520.00

1.78	4740.	0.	4269.	471.	1.97	2	260.	
2520.73	2520.73	0.	360.	235.	0.93	6	2517.80	
8.13	0.0	0.0	11.86	2.00	0.25	2522.71	2516.30	
0.008033	0.043	0.070	0.040	0.090	0.46	-0.00	227.00	
	2512.60	40.	40.	40.	26.	235.	487.45	204.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	DAREA	SS
	1.25	1.60	3.00	0.0	52.00	2.00	475.00	0.0
	ELCHU	ELCHD						
	2513.00	2513.00						

\*SECNO 1.780

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	DAREA	TAREA	ELLC
2523.21	2522.78	0.61	0.	4740.	475.	475.	2522.50
	ELTRD						
	2524.70						

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2525.40 ELREA= 2520.00

1.78	4740.	0.	3503.	1147.	0.77	3	327.	
2522.43	0.0	0.	447.	684.	-1.20	0	2517.80	
9.83	0.0	0.0	8.04	1.68	0.50	2523.21	2516.60	
0.002765	0.042	0.070	0.040	0.090	0.0	-0.00	227.00	
	2512.60	30.	30.	30.	26.	301.	553.72	205.

\*SECNO 1.780

3265 DIVIDED FLOW

M02

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWTD		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

1.78	4740.	142.	3884.	714.	1.40	3	398.		
2522.41	2522.41	111.	372.	333.	0.63	5	2521.40		
9.81	0.0	1.28	10.44	2.14	0.16	2523.80	2521.90		
0.006331	0.042	0.070	0.040	0.090	0.31	-0.00	135.83		
	2512.60	40.	40.	40.	373.	195.	703.65		205.

\*SECNO 1.950

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

1.95	4600.	1064.	2297.	1239.	0.18	4	660.		
2525.25	0.0	941.	492.	756.	-1.21	0	2521.90		
12.15	0.0	1.13	4.67	1.64	1.51	2525.44	2522.40		
0.000875	0.042	0.070	0.040	0.070	0.12	-0.00	65.33		
	2513.10	810.	810.	770.	443.	217.	725.19		233.

\*SECNO 2.190

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWTD		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				

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

2.19	4390.	180.	3032.	1178.	1.06	20	518.		
2527.87	2527.87	104.	309.	476.	0.88	13	2525.90		
8.57	0.0	1.73	9.83	2.47	2.35	2528.93	2525.90		
0.006904	0.042	0.070	0.040	0.070	0.44	-0.00	217.83		
	2519.30	1260.	1260.	1260.	385.	332.	934.31		277.

1490 NH CARD USED

\*SECNO 2.320



3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			VOL
2.32	4270.	995.	1526.	1749.	0.15	3	947.		
2530.52	0.0	821.	322.	879.	-0.91	0	2525.00		
7.12	0.0	1.21	4.74	1.99	1.66	2530.68	2528.50		
0.001529	0.042	0.070	0.040	0.066	0.09	-0.00	275.40		
	2523.40	200.	640.	640.	508.	484.	1256.59		294.

1490 NH CARD USED  
\*SECNO 2.320

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	4270.	1442.	725.	2102.	0.10	2	916.		
2530.59	0.0	825.	234.	778.	-0.06	0	2529.00		
7.19	0.0	1.75	3.11	2.70	0.00	2530.69	2528.70		
0.003260	0.042	0.070	0.040	0.050	0.01	-80.00	275.09		
	2523.40	1.	1.	1.	501.	474.	1250.00		294.

\*SECNO 2.320

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	4270.	1493.	702.	2075.	0.09	2	931.		
2530.69	0.0	874.	238.	814.	-0.01	0	2529.00		
7.29	0.0	1.71	2.95	2.55	0.09	2530.78	2528.70		
0.002884	0.042	0.070	0.040	0.050	0.00	-84.91	274.62		
	2523.40	30.	30.	30.	501.	474.	1250.00		293.

1490 NH CARD USED  
\*SECNO 2.320

3265 DIVIDED FLOW

2.32	4270.	934.	1213.	2123.	0.10	0	976.		
2530.69	0.0	903.	331.	952.	0.01	0	2525.00		
7.29	0.0	1.03	3.66	2.23	0.00	2530.79	2528.50		
0.000878	0.042	0.066	0.040	0.045	0.01	-0.00	274.60		
	2523.40	1.	1.	1.	508.	484.	1267.09		295.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

2.40	4200.	1022.	1108.	2070.	0.07	2	995.	
2531.05	0.0	1072.	350.	1112.	-0.03	0	2525.00	
7.65	0.0	0.95	3.16	1.86	0.33	2531.12	2528.50	
0.000610	0.042	0.045	0.040	0.046	0.00	-0.00	272.98	
	2523.40	50.	500.	400.	510.	485.	1268.10	320.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			10 YEAR FLOOD		08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPHD	
ELEV	CRW3	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSYA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	Y/L

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

2.40	4200.	421.	3667.	112.	0.90	20	389.	
2553.57	2553.57	138.	455.	37.	0.83	14	2551.50	
2.07	0.0	3.05	8.68	3.04	0.06	2551.57	2551.50	
0.010036	0.042	0.050	0.030	0.050	0.41	-0.00	196.53	
	2551.50	40.	40.	40.	243.	145.	585.39	322.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	1.00	0.01	0.10	0.0
ELCHU	ELCHD							
2551.50	2551.50							

\*SECNO 2.400  
 WATER EL=X5 CARD= 2565.000

\*\*\* GR CARDS REPEATED

2.40	4200.	688.	3340.	172.	0.24	0	483.	
2565.00	0.0	391.	770.	105.	0.10	0	2561.50	
3.50	0.0	1.76	4.34	1.64	0.09	2565.24	2561.50	
0.001443	0.042	0.050	0.030	0.050	0.07	0.0	126.57	
	2561.50	30.	30.	30.	313.	170.	609.87	322.

\*SECNO 2.400

2.40	5150.	0.	5149.	0.	0.01	2	1234.	
2565.26	0.0	3.	6465.	3.	-0.23	0	2562.00	
3.26	0.0	0.14	0.80	0.14	0.00	2565.26	2562.00	
0.000028	0.042	0.050	0.030	0.050	0.02	0.00	8.12	
	2560.00	10.	10.	10.	617.	617.	1241.57	101.

\*SECNO 3.230

CC3

3.23	5080.	0.	5076.	4.	0.03	2	379.	
2565.39	0.0	0.	5463.	22.	0.02	0	2565.00	
10.39	0.0	0.06	1.47	0.17	0.14	2565.42	2563.80	
0.000042	0.039	0.050	0.030	0.050	0.01	-0.00	39.53	
	2555.00	4180.	4180.	4180.	176.	202.	418.13	801.

CCHV= 0.100 CEHV= 0.500  
\*SECNO 3.690

3.69	5040.	0.	4837.	203.	0.32	1	187.	
2565.48	0.0	0.	1039.	215.	0.29	0	2571.40	
12.68	0.0	0.0	4.65	0.95	0.23	2565.80	2562.60	
0.00046	0.038	0.080	0.035	0.080	0.15	-0.00	195.92	
	2552.80	2200.	2200.	2200.	51.	136.	332.82	920.

CCHV= 0.100 CEHV= 0.500  
\*SECNO 3.810

330: HV CHANGED MORE THAN 4VINS

RICHLAND CREEK			10 YEAR FLOOD		08/01/81			
MILE	Q	QLOB	GCN	QROB	HV	ITRVAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
3.81	5030.	4.	5026.	0.	1.12	2	134.	
2565.92	0.0	5.	592.	0.	0.86	0	2565.10	
9.12	0.0	0.85	8.50	0.0	0.85	2567.04	2566.70	
0.003816	0.039	0.080	0.040	0.080	0.40	-3.00	78.53	
	2556.80	600.	560.	570.	90.	44.	412.28	932.

\*SECNO 3.810

\*\*\* GR CARDS REPEATED

3.81	5030.	13.	5017.	0.	0.89	2	164.	
2566.42	0.0	12.	660.	0.	-0.23	0	2565.10	
9.62	0.0	1.08	7.60	0.0	0.25	2567.32	2566.70	
0.005860	0.039	0.080	0.040	0.080	0.02	-0.00	271.51	
	2556.80	40.	40.	40.	97.	67.	435.07	933.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	85.00	10.00	800.00	0.42
	ELCHRJ	ELCHD						
	2556.90	2556.90						

\*SECNO 3.810

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S.= 2566.23 BRIDGE VELOCITY=, 6.83  
CALCULATED CHANNEL AREA=, 737.

D03

EGPRS	EGLNY	H3	QHEIR	QPR	BAREA	TAREA	ELLC	
2567.41	2567.58	0.41	0.	5030.	800.	800.	2567.00	
ELTRD								
2571.80								
3.81	5030.	24.	5005.	0.	0.74	0	191.	
2566.83	0.0	21.	721.	1.	-0.15	0	2565.10	
10.03	0.0	1.17	6.94	0.21	0.26	2567.58	2566.70	
0.004804	0.039	0.080	0.040	0.080	0.0	-0.00	285.95	
	2556.80	60.	60.	60.	103.	88.	456.59	934.

\*SENO 3.810

3301 HV CHANGED MORE THAN HVINS

3.81	5030.	114.	4866.	49.	1.26	2	112.	
2566.68	0.0	58.	531.	30.	0.52	0	2563.50	
10.46	0.0	1.95	9.17	1.65	0.09	2567.92	2564.00	
0.003797	0.039	0.080	0.040	0.080	0.26	-0.00	303.37	
	2556.20	20.	20.	20.	60.	51.	414.95	934.

\*SENO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	5020.	283.	4542.	195.	0.54	2	191.	
2569.51	0.0	233.	738.	130.	-0.73	0	2564.00	
10.71	0.0	1.21	6.16	1.30	2.06	2570.05	2564.00	
0.002108	0.039	0.120	0.045	0.120	0.07	-0.00	192.31	
	2558.80	780.	740.	760.	121.	70.	383.35	949.

\*SENO 3.970

3265 DIVIDED FLOW

RICHLAND CREEK		10 YEAR FLOOD				08/01/81			
MILE	Q	QLOB	QCH	GROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDS	VOL	
3.97	5020.	0.	5020.	0.	0.80	2	71.		
2569.51	0.0	0.	700.	0.	0.26	0	2571.50		
10.71	0.0	0.0	7.17	0.0	0.12	2570.30	2570.20		
0.004928	0.039	0.120	0.045	0.120	0.13	-0.00	276.16		
	2558.80	40.	40.	40.	37.	37.	350.94	950.	

\*SENO 3.970

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

E03

3.97	5020.	0.	5020.	0.	0.77	2	71.	
2569.68	0.0	0.0	712.	0.0	-0.03	0	2571.50	
10.88	0.0	0.0	7.05	0.1	0.14	2570.45	2570.20	
0.004699	0.039	0.120	0.045	0.121	0.00	-0.00	276.15	
	2558.80	30.	30.	30.	37.	37.	350.95	950.

\*SECNO 3.970

3.97	5020.	326.	4481.	213.	0.46	2	201.	
2570.05	0.0	280.	777.	149.	-0.31	0	2564.00	
11.25	0.0	1.16	5.76	1.43	0.03	2570.51	2564.00	
0.001724	0.039	0.120	0.045	0.120	0.03	-0.00	184.38	
	2558.80	10.	10.	10.	129.	72.	384.93	951.

\*SECNO 4.140

4.14	5010.	1502.	2863.	645.	0.31	2	400.	
2571.80	0.0	1056.	493.	453.	-0.15	0	2564.30	
9.10	0.0	1.42	5.81	1.42	1.58	2572.11	2566.70	
0.001769	0.039	0.120	0.045	0.120	0.02	-0.00	387.55	
	2562.70	760.	940.	940.	270.	130.	787.93	982.

\*SECNO 4.140

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2577.00 ELREA= 2577.00

4.14	5010.	0.	5010.	0.	0.31	0	179.	
2571.87	0.0	0.	1129.	0.	-0.01	0	2565.90	
9.17	0.0	0.0	4.44	0.0	0.07	2572.18	2567.90	
0.001570	0.039	0.120	0.045	0.120	0.00	-0.00	603.00	
	2562.70	40.	40.	40.	90.	90.	782.00	984.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	131.00	6.00	1740.00	1.24
	ELCHJ	ELCHD						
	2562.80	2562.80						

\*ECHO 4.140

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

		10 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XML	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOSR	WSDL	WSDR	ENDST	VOL

CLASS A LOW FLOW

3420 BRIDGE H.S.= 2571.85 BRIDGE VELOCITY= 4.07

		CALCULATED CHANNEL AREA=		1232.			
EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2572.20	0.03	0.	5010.	1740.	1741.	2575.20

ELTRD

2577.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2578.90 ELREA= 2578.90

4.14	5010.	0.	5010.	0.	0.30	0	179.
2571.90	0.0	0.	1135.	0.	-0.00	0	2583.90
9.20	0.0	0.0	4.41	0.0	0.03	2572.20	2567.90
0.001540	0.039	0.120	0.045	0.120	0.0	-0.00	603.00
	2562.70	115.	115.	115.	90.	90.	782.00
							987.

\*SECNO 4.140

4.14	5010.	1528.	2827.	655.	0.29	1	401.
2571.96	0.0	1096.	502.	470.	-0.01	0	2564.30
9.26	0.0	1.39	5.63	1.39	0.05	2572.25	2566.70
0.001619	0.039	0.120	0.045	0.120	0.00	-0.00	387.03
	2562.70	30.	30.	30.	271.	130.	788.18
							988.

\*SECNO 4.280

4.28	4295.	1434.	2277.	584.	0.30	2	393.
2573.15	0.0	813.	394.	424.	0.00	0	2570.00
10.75	0.0	1.76	5.78	1.38	1.19	2573.45	2569.20
0.001975	0.039	0.100	0.045	0.100	0.00	-0.00	161.63
	2562.40	600.	710.	710.	215.	178.	554.34
							1016.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

4.28	4295.	1443.	2254.	598.	0.28	2	394.
2573.25	0.0	830.	398.	438.	-0.01	0	2570.00
10.85	0.0	1.74	5.66	1.36	0.08	2573.53	2569.20
0.001866	0.039	0.100	0.045	0.100	0.00	-0.00	161.51
	2562.40	40.	40.	40.	215.	179.	555.15
							1017.

\*SECNO 4.280

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	4295.	872.	2934.	489.	0.79	2	391.
2572.94	0.0	527.	343.	288.	0.51	0	2570.00
10.60	0.0	1.65	8.55	1.70	0.00	2573.73	2569.20
0.012226	0.039	0.100	0.045	0.100	0.25	-385.25	161.84
	2562.40	1.	1.	1.	215.	176.	552.94
							1017.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT

G03

SLOPE	WTN ELMIN	XNL XLOBL	XNGH XLCH	XNR XLOBR	OLOSS WSDL	CORAR MSDR	SSTA ENDST	VOL
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3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	4295.	894.	2915.	486.	0.78	2	392.	
2573.07	0.0	541.	343.	288.	-0.01	0	2570.00	
10.67	0.0	1.65	8.50	1.69	0.06	2573.85	2569.20	
0.012365	0.039	0.100	0.045	0.100	0.00	-402.69	161.73	
	2562.40	5.	5.	5.	215.	177.	553.64	1017.

\*SECHO 4.280

3301 HV CHANGED MORE THAN HVINS

4.28	4295.	1483.	2155.	657.	0.22	3	398.	
2573.68	0.0	914.	419.	507.	-0.55	0	2570.00	
11.28	0.0	1.62	5.15	1.30	0.00	2573.91	2569.20	
0.001442	0.039	0.100	0.045	0.100	0.06	-0.00	160.94	
	2562.40	1.	1.	1.	216.	182.	558.97	1017.

\*SECHO 4.280

\*\*\* GR CARDS REPEATED

4.28	4295.	1483.	2151.	659.	0.22	2	398.	
2573.70	0.0	917.	420.	509.	-0.00	0	2570.00	
11.30	0.0	1.62	5.13	1.29	0.01	2573.92	2569.20	
0.001428	0.039	0.100	0.045	0.100	0.00	-0.00	160.91	
	2562.40	10.	10.	10.	216.	183.	559.11	1018.

\*SECHO 4.430

3301 HV CHANGED MORE THAN HVINS

4.43	4395.	174.	2948.	1273.	0.74	2	200.	
2575.14	0.0	106.	365.	351.	0.52	0	2572.00	
8.94	0.0	1.65	8.07	3.63	1.70	2575.88	2571.70	
0.004363	0.040	0.120	0.045	0.060	0.26	-0.00	71.65	
	2566.20	715.	735.	735.	63.	137.	271.76	1040.

\*SECHO 4.630

\*\*\* GR CARDS REPEATED

4.63	4275.	149.	3000.	1126.	0.90	3	195.	
2579.98	0.0	88.	543.	299.	0.16	0	2577.30	
3.48	0.0	1.69	8.76	3.76	4.92	2580.87	2577.00	
0.005802	0.040	0.120	0.045	0.060	0.08	-0.00	72.93	
	2571.50	1000.	1000.	1000.	62.	134.	268.51	1058.

\*SECHO 4.820

RICHLAND CREEK MILE	OLOB	10 YEAR FLOOD QCH	08/01/81 HV	TOPWID
ELEV	CRWS	AROB	IDC	BANK ELEV
DEPTH	WSELK	VCH	HL	LEFT/RIGHT

H03

SLOPE	MTN ELMIN	XNL XLOBL	XNCH XLCH	XNR XLOBR	OLOSS WSDL	CORAR WSDR	SSTA ENDST	VOL
4.82	4260.	334.	3883.	43.	1.11	2	191.	
2585.46	0.0	197.	440.	32.	0.21	0	2582.40	
9.76	0.0	1.69	8.83	1.35	5.59	2586.57	2584.20	
0.00199	0.040	0.120	0.050	0.070	0.11	-0.00	64.18	
	2575.70	1100.	940.	940.	116.	75.	255.13	1074.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96	4250.	1190.	3060.	0.	0.43	2	128.	
2588.79	0.0	335.	526.	0.	-0.67	0	2581.30	
9.59	0.0	3.55	5.82	0.0	2.58	2589.22	2591.50	
0.003001	0.041	0.070	0.055	0.080	0.07	-0.00	303.95	
	2579.20	660.	610.	610.	98.	31.	432.14	1085.

\*SECNO 4.960

4.96	4250.	494.	3756.	0.	0.25	2	218.	
2589.08	0.0	270.	882.	0.	-0.18	0	2585.20	
9.88	0.0	1.83	4.26	0.0	0.09	2589.33	2599.50	
0.001853	0.041	0.070	0.055	0.080	0.02	-0.00	214.48	
	2579.20	40.	40.	40.	176.	42.	432.23	1085.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	54.00	4.00	1310.00	1.18
ELCHU	ELCHD							
2579.20	2579.20							

\*SECNO 4.960

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S. = 2588.96 BRIDGE VELOCITY = 7.08

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2589.36	0.04	0.	4250.	1310.	1310.	2597.50

ELTRD  
2598.00

4.96	4250.	499.	3751.	0.	0.25	0	218.	
2589.11	0.0	273.	886.	0.	-0.00	0	2585.20	
9.91	0.0	1.83	4.23	0.0	0.03	2589.36	2599.50	
0.001820	0.041	0.070	0.055	0.080	0.0	-0.00	214.38	
	2579.20	15.	15.	15.	176.	42.	432.25	1086.

\*SECNO 4.960



3301 HV CHANGED MORE THAN HVINS

4.96	4250.	0.	4250.	0.	2.04	3	56.	
2588.26	0.0	0.	371.	0.	1.78	0	2596.20	
8.66	0.0	0.0	11.45	0.0	0.04	2590.30	2589.40	
0.016333	0.041	0.070	0.055	0.080	0.89	-0.00	391.60	
	2579.60	10.	10.	10.	24.	32.	448.04	1086.

\*SECHO 4.960

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

HIGHLAND CREEK			10 YEAR FLOOD			08/01/81		
MILE	Q	QLOD	QCH	QROB	HV	ITRYAL	TCFWD	
ELEV	CRIMS	ALOB	ACH	ARCB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
4.96	4250.	0.	4250.	0.	1.34	3	63.	
2589.73	0.0	0.	457.	0.	-0.69	0	2596.90	
10.13	0.0	0.0	9.30	0.47	0.71	2591.07	2589.40	
0.008964	0.041	0.080	0.055	0.090	0.07	-0.00	389.97	
	2579.60	60.	60.	60.	26.	37.	452.98	1087.

\*SECHO 5.100

3301 HV CHANGED MORE THAN HVINS

5.10	4240.	220.	3300.	720.	0.21	5	349.	
2593.54	0.0	165.	807.	447.	-1.13	0	2589.10	
7.94	0.0	1.33	4.09	1.61	2.56	2593.75	2589.70	
0.001768	0.041	0.100	0.050	0.080	0.11	-0.00	197.32	
	2585.60	900.	750.	750.	129.	221.	546.63	1103.

\*SECHO 5.100

\*\*\* GR CARDS REPEATED

3495 OVRBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2600.00 ELREA= 2598.00

5.10	4240.	0.	4240.	0.	0.43	2	136.	
2593.52	0.0	0.	195.	0.	0.22	0	2589.10	
7.92	0.0	0.0	2.27	0.0	0.09	2593.95	2589.70	
0.002948	0.041	0.100	0.050	0.080	0.11	-0.00	258.00	
	2585.60	40.	40.	40.	68.	68.	394.00	1104.

SPECIAL BRIDGE

SB	HK	JR	COFO	RDLEN	BMC	BMP	BAREA	SS
	1.25	1.60	3.00	0.0	95.00	18.00	1350.00	1.63
	ELCHU	ELCHD						
	2584.20	2584.20						

J03

\*SECNO 5.100

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S. = 2593.38 BRIDGE VELOCITY = 5.02

CALCULATED CHANNEL AREA = 844.  
EGPRS EGLWC H3 QWEIR QPR BAREA TAREA ELLC  
0.0 2594.13 0.21 0. 4240. 1350. 1349. 2597.80

ELTRD  
2599.10

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA = 2601.00 ELREA = 2599.50

5.10	4240.	0.	4240.	0.	0.40	0	136.	
2593.72	0.0	0.	833.	0.	-0.03	0	2589.10	
8.12	0.0	0.0	5.09	0.0	0.18	2594.13	2589.70	
0.002627	0.041	0.090	0.050	0.100	0.0	0.0	258.00	
	2585.60	30.	30.	30.	88.	88.	394.00	1105.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

5.10	4240.	274.	3318.	648.	0.18	2	351.	
2593.90	0.0	193.	868.	516.	-0.22	0	2589.10	
8.30	0.0	1.42	3.82	1.26	0.02	2594.17	2589.70	
0.001400	0.041	0.090	0.050	0.100	0.02	-0.00	196.16	
	2585.60	10.	10.	10.	130.	221.	547.47	1105.

\*SECNO 5.200

RICHLAND CREEK

10 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
5.20	4190.	351.	2405.	1434.	0.23	2	354.	
2594.53	0.0	227.	492.	1036.	0.04	0	2589.10	
8.93	0.0	1.54	4.89	1.38	0.57	2594.76	2587.00	
0.001105	0.041	0.080	0.040	0.100	0.02	-0.00	194.74	
	2585.60	460.	460.	460.	94.	259.	548.50	1123.

\*SECNO 5.490

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK

10 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DKV	IDC	BANK ELEV	

K03

DEPTH SLOPE	WSELK WTN ELMIN	VLOB XNL XLOBL	VCH XNCH XLCH	VROB XNR XLOBR	HL LOSS WSDL	EG CORAR WSDR	LEFT/RIGHT SSTA ENDST	VOL
3685 20 TRIALS ATTEMPTED WSEL, CWSEL								
3693 PROBABLE MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
5.49	4175.	659.	3549.	2.	1.59	20	236.	
2601.57	2601.57	254.	324.	3.	1.37	15	2602.80	
6.77	0.0	2.51	10.95	0.70	3.77	2603.16	2600.90	
0.009647	0.041	0.080	0.040	0.100	0.68	-0.00	219.19	
	2594.80	1530.	1530.	1530.	356.	39.	614.99	1164.

\*SECHO 5.580

3301 HV CHANGED MORE THAN HVINS

5.58	4175.	1666.	2459.	50.	0.33	3	433.	
2604.27	0.0	891.	425.	49.	-1.27	0	2602.80	
7.77	0.0	1.87	5.78	1.03	1.31	2604.60	2600.90	
0.001898	0.041	0.080	0.040	0.120	0.13	-0.00	192.31	
	2596.50	360.	360.	360.	383.	49.	624.82	1172.

\*SECHO 5.580

\*\*\* GR CARDS REPEATED

5.58	4175.	1690.	2433.	51.	0.31	2	433.	
2604.36	0.0	924.	431.	51.	-0.02	0	2602.80	
7.86	0.0	1.83	5.65	1.01	0.07	2604.67	2600.90	
0.001782	0.041	0.080	0.040	0.120	0.00	-0.00	192.10	
	2596.50	40.	40.	40.	383.	50.	625.01	1173.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.67	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHJ	ELCHD						
	2596.50	2596.50						

\*SECHO 5.580

6840 FLOW IS BY WEIR AND LOW FLOW  
3280 CROSS SECTION 5.58 EXTENDED 2.71 FEET

3420 BRIDGE W.S. = 2604.36 BRIDGE VELOCITY = 10.65

EGPR3	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2606.40	2606.13	0.00	721.	3450.	408.	408.	2606.40
CALCULATED CHANNEL AREA = 324.							
ELTRD							
2604.90							

5.58	4175.	1710.	2178.	287.	0.22	2	681.	
2605.91	0.0	1176.	437.	278.	-0.09	0	2604.70	
9.41	0.0	1.45	4.99	1.03	1.45	2606.13	2604.40	

L03

0.001374 0.041 0.070 0.040 0.080 0.0 -0.00 450.00  
2596.50 35. 35. 35. 499. 183. 1131.06 1174.

\*SECNO 5.580  
3280 CROSS SECTION 5.58 EXTENDED 2.84 FEET

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
5.58	4175.	1555.	2404.	210.	0.14	2	682.		
2606.04	0.0	1234.	624.	230.	-0.07	0	2604.70		
8.64	0.0	1.26	3.85	0.94	0.05	2606.18	2604.50		
0.000969	0.041	0.070	0.040	0.080	0.01	-0.00	450.00		
	2597.40	40.	40.	40.	520.	162.	1131.68		1176.

\*SECNO 5.640  
3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
5.64	4160.	1023.	2885.	252.	0.94	2	548.		
2606.47	2606.47	485.	312.	126.	0.80	12	2606.00		
7.47	0.0	2.11	9.24	2.00	0.70	2607.41	2605.00		
0.007095	0.041	0.070	0.040	0.080	0.40	-0.00	201.69		
	2599.00	340.	340.	340.	427.	121.	750.13		1188.

\*SECNO 5.710  
\*\*\* GR CARDS REPEATED

5.71	4160.	1438.	2401.	321.	0.44	2	583.		
2606.66	0.0	764.	352.	194.	-0.50	0	2607.50		
8.15	0.0	1.88	6.82	1.66	1.63	2609.10	2606.50		
0.001302	0.041	0.070	0.040	0.080	0.05	-0.00	182.43		
	2600.50	350.	350.	350.	447.	137.	765.73		1197.

\*SECNO 5.910  
3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	10 YEAR FLOOD	08/01/81
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M03

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
5.91	4135.	0.	3850.	285.	1.51	2	317.	
2614.57	2614.57	0.	377.	197.	1.07	8	2615.30	
8.77	0.0	0.0	10.23	1.45	4.21	2616.08	2616.00	
0.007156	0.041	0.040	0.040	0.080	0.54	-0.00	655.85	
	2605.80	900.	900.	900.	31.	343.	1029.53	1216.

\*SECNO 5.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

5.97	4130.	644.	3025.	461.	0.77	4	508.	
2617.11	0.0	218.	375.	268.	-0.75	0	2617.70	
7.81	0.0	2.96	8.07	1.72	1.72	2617.88	2614.80	
0.005356	0.041	0.035	0.045	0.080	0.07	-0.00	71.32	
	2609.30	280.	280.	280.	351.	374.	796.15	1221.

\*SECNO 6.060

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 1.29 FEET

RICHLAND CREEK		10 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSYA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.06	4115.	1383.	2311.	421.	0.55	3	891.	
2618.89	0.0	497.	304.	316.	-0.22	0	2619.50	
9.69	0.0	2.78	7.60	1.33	1.54	2619.44	2619.60	
0.003878	0.041	0.035	0.040	0.070	0.02	-0.00	12.00	
	2609.20	340.	340.	340.	571.	368.	950.00	1229.

\*SECNO 6.120

WATER EL=X5 CARD= 2621.500

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 3.40 FEET

6.12	4110.	370.	3384.	35.	0.72	0	549.	
2621.50	0.0	324.	451.	258.	0.50	0	2620.70	

A04

9.70	0.0	1.14	7.51	1.38	0.95	2622.72	2619.80	
0.002967	0.041	0.080	0.040	0.080	0.09	-0.00	250.00	
	2611.80	280.	280.	280.	629.	221.	1100.00	1235.

\*SECNO 6.160

6.16	4105.	0.	3770.	335.	0.70	0	191.	
2622.05	0.0	0.	539.	199.	-0.02	0	2621.50	
8.65	0.0	0.69	6.99	1.69	0.53	2622.75	2619.70	
0.003687	0.041	0.050	0.045	0.080	0.00	-0.00	939.09	
	2613.40	160.	160.	160.	41.	150.	1130.19	1239.

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

6.16	4105.	0.	3717.	388.	0.62	2	192.	
2622.31	0.0	1.	560.	228.	-0.08	0	2621.50	
8.91	0.0	0.83	6.63	1.70	0.17	2622.93	2619.70	
0.003156	0.041	0.050	0.045	0.050	0.01	-0.00	938.65	
	2613.40	50.	50.	50.	41.	151.	1131.01	1240.

SPECIAL BRIDGE

SB	HK	XKOR	COFa	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	21.00	6.00	632.00	5.94
ELCHU	ELCHD							
2615.00	2615.00							

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	GPR	BAREA	TAREA	ELLC
2623.36	2623.04	0.15	0.	4105.	632.	632.	2622.20
ULTRD							
2624.50							

6.16	4105.	1.	3611.	493.	0.49	2	200.	
2622.87	0.0	2.	605.	291.	-0.13	0	2621.50	
9.47	0.0	0.57	5.97	1.70	0.43	2323.36	2619.70	
0.002303	0.041	0.080	0.045	0.080	0.0	-0.00	898.32	
	2613.40	50.	50.	50.	82.	153.	1132.76	1241.

\*SECNO 6.160

3265 DIVIDED FLOW

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV

804

DEPTH SLOPE	MSELK MTN ELMIN	VLOB XNL XL0BL	VCH XNCH XLCH	VRCB XNR XL0BR	HL OLUSE WSDL	EG CORAR WSDR	LEFT/RIGHT SSTA ENDST	VOL
6.16	4105.	30.	4075.	0.	0.78	2	154.	
2622.86	0.0	29.	573.	0.	0.29	0	2624.30	
7.66	0.0	1.05	7.13	0.0	0.13	2623.64	2624.00	
0.005389	0.041	0.080	0.045	0.080	0.14	-0.00	671.66	
	2615.20	40.	40.	40.	273.	55.	999.55	1241.

\*SECNO 6.200

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

6.20	4100.	196.	3904.	0.	1.66	4	246.	
2623.08	2622.79	133.	569.	0.	0.88	8	2623.20	
8.38	0.0	1.47	10.58	0.0	0.66	2624.74	2624.40	
0.010645	0.041	0.100	0.045	0.100	0.44	-0.00	541.71	
	2614.70	90.	90.	90.	321.	31.	893.77	1242.

\*SECNO 6.310

3265 DIVIDED FLOW

3280 CROSS SECTION 6.31 EXTENDED 0.95 FEET

3301 HV CHANGED MORE THAN HVINS

6.31	4085.	1065.	2578.	441.	0.66	2	745.	
2627.35	0.0	742.	318.	257.	-1.00	0	2626.60	
10.35	0.0	1.44	8.10	1.72	3.17	2628.01	2622.00	
0.004487	0.041	0.100	0.045	0.100	0.10	-0.00	31.00	
	2617.00	480.	480.	480.	489.	379.	899.25	1252.

\*SECNO 6.480

6.48	4065.	216.	3596.	253.	0.81	3	426.	
2632.35	0.0	66.	470.	203.	0.15	0	2631.00	
6.35	0.0	1.30	7.65	1.25	5.08	2633.16	2631.00	
0.005797	0.041	0.100	0.045	0.100	0.08	-0.00	174.00	
	2626.00	1000.	1000.	1000.	177.	250.	600.00	1277.

\*SECNO 6.610

3301 HV CHANGED MORE THAN HVINS

6.61	4045.	46.	3987.	11.	1.33	2	93.	
2635.81	0.0	30.	428.	9.	0.52	0	2633.00	
8.31	0.0	1.56	9.31	1.24	3.72	2637.14	2633.00	
0.007131	0.041	0.100	0.045	0.120	0.26	-0.00	318.93	
	2611.50	580.	580.	580.	54.	39.	411.55	1286.

04

\*SECHO 6.610

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		10 YEAR FLOOD				08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	ITM	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
6.61	4045.	62.	3967.	16.	1.14	2	101.		
2636.27	0.0	40.	458.	13.	-0.18	0	2633.00		
8.77	0.0	1.54	8.66	1.23	0.25	2637.41	2633.00		
0.005639	0.041	0.100	0.045	0.120	0.02	-0.00	315.49		
	2627.50	40.	40.	40.	57.	44.	416.83	1286.	

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAKEA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHU	ELCHD						
	2628.50	2628.50						

\*SECHO 6.610

326% DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC		
2638.09	2638.08	0.18	567.	3446.	402.	404.	2637.90		
	ELTRD								
	2636.30								
6.61	4045.	103.	3880.	62.	0.82	3	270.		
2637.27	0.0	72.	523.	89.	-0.32	0	2633.00		
9.77	0.0	1.43	7.41	0.69	0.68	2638.09	2633.00		
0.003460	0.041	0.100	0.045	0.120	0.0	-0.00	280.01		
	2627.50	30.	30.	30.	92.	458.	830.38	1287.	

\*SECHO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC		
2637.32	0.0	75.	526.	95.	-0.01	0	2633.00		
9.82	0.0	1.41	7.36	0.69	0.03	2638.13	2633.00		
0.003383	0.041	0.100	0.045	0.120	0.00	-0.00	275.03		
	2627.50	10.	10.	10.	97.	461.	833.29	1287.	

\*SECHO 6.740



004

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK	ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL
3685 20 TRIALS ATTEMPTED WSEL, CWSEL									
3693 PROBABLE MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
6.74	4030.	0.	4029.	0.	3.47	20	46.		
2640.14	2640.14	1.	269.	0.	2.67	13	2639.70		
8.74	0.0	0.76	14.95	0.43	1.49	2643.61	2655.00		
0.019693	0.041	0.100	0.045	0.100	1.33	0.0	365.14		
	2631.40	220.	220.	220.	23.	306.	694.47		1289.

\*SECNO 6.790

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 2.51 FEET

3301 HV CHANGED MORE THAN HVINS

6.79	4020.	637.	2484.	900.	0.25	5	380.		
2645.51	0.0	575.	494.	730.	-3.22	0	2639.70		
14.11	0.0	1.11	5.03	1.23	1.82	2645.76	2639.10		
0.001007	0.041	0.100	0.045	0.100	0.32	-0.00	193.23		
	2631.40	680.	680.	680.	195.	312.	700.00		1305.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 2.55 FEET

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK	ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL
6.79	4020.	643.	2472.	906.	0.25	2	381.		
2645.55	0.0	584.	498.	738.	-0.01	0	2639.70		
14.15	0.0	1.10	4.99	1.23	0.04	2645.80	2639.10		
0.000984	0.041	0.100	0.045	0.100	0.00	-0.00	192.42		

0.000984 0.041 0.100 0.045 0.100 0.00 -0.00 192.96

E04

2631.40 40. 40. 40. 196. 312. 700.00 1307.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2646.13	2645.90	0.05	2256.	1765.	365.	359.	2642.80

ELTRD  
2647.70

6.79	4020.	1187.	2565.	268.	0.30	2	333.	
2645.84	0.0	874.	477.	222.	0.05	0	2640.50	
11.84	0.0	1.36	5.38	1.21	0.34	2646.13	2636.00	
0.001273	0.041	0.100	0.045	0.100	0.0	-0.00	95.40	
	2634.00	50.	50.	50.	267.	87.	449.60	1309.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.79	4020.	1188.	2565.	268.	0.30	0	333.	
2645.85	0.0	877.	478.	223.	-0.00	0	2640.50	
11.85	0.0	1.36	5.37	1.21	0.01	2646.15	2636.00	
0.001267	0.041	0.100	0.045	0.100	0.00	-0.00	95.38	
	2634.00	10.	10.	10.	267.	87.	449.61	1309.

\*SECNO 7.000

3301 HV CHANGED MORE THAN HVINS

7.00	3990.	0.	3271.	119.	1.60	3	104.	
2648.33	0.0	0.	576.	50.	1.31	0	2649.00	
6.33	0.0	0.0	10.30	2.39	3.13	2649.93	2646.50	
0.012370	0.041	0.120	0.045	0.110	0.65	-0.00	826.63	
	2642.00	1080.	1080.	1080.	38.	66.	930.57	1334.

\*SECNO 7.230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.23	3955.	75.	3661.	219.	1.01	9	570.	
2660.06	2658.95	74.	438.	212.	-0.60	8	2657.00	
6.56	0.0	1.02	8.56	1.03	1.07	2661.06	2657.00	
0.006928	0.041	0.120	0.045	0.110	0.06	-0.00	135.77	
	2653.50	1220.	1220.	1220.	2.3.	426.	785.48	1350.

\*SECHO 7.230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK

10 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWD	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	H.	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	ORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7.23	3955.	175.	3358.	425.	0.62	2	703.	
2660.69	0.0	191.	490.	449.	-0.39	0	2657.00	
7.19	0.0	0.90	6.85	0.95	0.21	2661.31	2657.00	
0.004002	0.041	0.120	0.045	0.110	0.04	-0.00	133.22	
	2653.50	40.	40.	40.	226.	470.	836.93	1351.

SPECIAL BRIDGE

SB	HK	W:OR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
ELCHU	ELCHD							
2653.50	2653.50							

\*SECHO 7.230

\*\*\* GR CARDS REPEATED

6870 D.S. ENERGY OF 2661.31 HIGHER THAN COMPUTED ENERGY OF 2661.24

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2661.24	2661.06	0.04	2084.	1902.	402.	402.	2659.60
ELTRD							
2658.90							

7.23	3955.	171.	3363.	421.	0.63	3	701.	
2660.68	0.0	189.	489.	444.	0.01	0	2657.00	
7.18	0.0	0.90	6.87	0.95	0.0	2661.31	2657.00	
0.004041	0.041	0.120	0.045	0.110	0.0	-0.00	133.26	
	2653.50	30.	30.	30.	226.	477.	836.03	1352.

\*SECH0 7.230

\*\*\* GR CARDS REPEATED

7.23	3955.	178.	3374.	402.	0.62	0	706.	
2660.72	0.0	196.	492.	480.	-0.00	0	2657.00	
7.22	0.0	0.91	6.85	0.87	0.04	2661.35	2657.00	
0.003987	0.041	0.120	0.045	0.120	0.00	-0.00	133.12	
	2653.50	10.	10.	10.	226.	480.	838.95	1352.

\*SECH0 7.460

3301 HV CHANGED MORE THAN HVINS

7.46	3920.	0.	3087.	833.	1.44	3	186.	
2667.85	0.0	0.	287.	304.	0.81	0	2668.30	
7.45	0.0	0.0	10.75	2.74	7.54	2669.29	2668.30	
0.013806	0.042	0.080	0.050	0.110	0.41	-0.00	295.33	
	2660.40	1120.	1120.	1120.	24.	163.	481.51	1375.

\*SECH0 7.540

3301 HV CHANGED MORE THAN HVINS

7.54	3910.	112.	3153.	645.	0.55	2	262.	
2671.85	0.0	77.	481.	354.	-0.89	0	2671.00	
7.55	0.0	1.44	6.56	1.82	3.02	2672.40	2668.50	
0.004386	0.042	0.090	0.050	0.110	0.09	-0.00	200.00	
	2664.30	420.	420.	420.	89.	174.	462.47	1382.

\*SECH0 7.780

RICHLAND CREEK

10 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.78	3830.	362.	2963.	504.	0.75	4	853.	
2683.18	2683.18	295.	375.	403.	0.21	6	2681.60	
7.48	0.0	1.23	7.90	1.24	6.76	2683.93	2682.00	
0.007008	0.042	0.090	0.050	0.110	0.10	-0.00	407.46	
	2675.70	1240.	1240.	1240.	419.	439.	1265.32	1410.

\*SECH0 7.970

7.97	3750.	79.	3570.	1.	1.16	3	133.	
2690.78	0.0	38.	421.	4.	0.40	0	2687.50	
8.78	0.0	2.05	8.73	0.36	7.80	2691.93	2690.50	
0.010027	0.042	0.100	0.050	0.110	0.20	-0.00	494.53	
	2682.00	940.	940.	940.	64.	68.	627.48	1427.

\*SECH0 7.970

\*\*\* GR CARDS REPEATED

H04

7.97	3750.	103.	3621.	27.	0.88	2	200	
2691.40	0.0	55.	472.	41.	-0.28	0	2687.50	
9.40	0.0	1.88	7.67	0.65	0.32	2692.28	2690.50	
0.004634	0.042	0.100	0.050	0.110	0.03	-0.00	490.82	
	2682.00	40.	40.	40.	69.	131.	690.47	1427.

SPECIAL BRIDGE

SB	HK	XKOR	COFq	R/LEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	29.00	4.00	506.00	1.90
ELCH		ELCHD						
2682.00		2682.00						

\*SECNO 7.970

3840, FLOW IS BY WEIR AND LOW FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81			
MILE	Q	GLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOC	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTM	XW	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3420 BRIDGE W.S. = 2691.75 BRIDGE VELOCITY = 8.78

CALCULATED CHANNEL AREA =		424.					
EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2692.77	2692.95	0.35	12.	3728.	506.	512.	2693.10

ELTRD  
2692.60

\*\*\* NOTE: QWEIR IS GREATER THAN Q AND ELEV IS LESS THAN ELTRD \*\*\*

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3710 WSEL ASSUMED BASED ON MIN DIFF

3693 PROBABLE MINIMUM SPECIFIC ENERGY

7.97	3750.	0.	3750.	0.	2.96	20	46.	
2690.05	2690.01	0.	271.	0.	2.08	15	2692.00	
8.05	0.0	0.0	13.82	0.0	0.34	2693.02	2693.60	
0.022936	0.042	0.080	0.050	0.080	-0.34	-0.00	510.82	
	2682.00	30.	30.	30.	23.	22.	556.42	1428.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

7.97	3750.	0.	3750.	0.	2.02	5	49.	
2691.26	0.0	0.	329.	0.	-0.94	0	2692.00	
9.26	0.0	0.0	11.41	0.0	0.17	2693.28	2693.60	
0.013362	0.042	0.080	0.050	0.080	0.09	-0.00	509.06	
	2682.00	10.	10.	10.	25.	24.	557.65	1428.

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\*SECHO 8.200

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		
8.20	3520.	165.	3283.	72.	0.82	5	361.	
2702.34	0.0	140.	436.	88.	-1.20	0	2700.30	
8.14	0.0	1.17	7.53	0.82	9.76	2703.17	2699.50	
0.00576	0.042	0.120	0.045	0.120	0.12	-0.00	652.37	
	2694.20	1170.	1170.	1170.	163.	219.	1033.72	1441.

\*SECHO 8.200

\*\*\* GR CARDS REPEATED

8.20	3520.	217.	3179.	124.	0.65	0	431.	
2702.72	0.0	192.	406.	159.	-0.17	0	2700.30	
8.52	0.0	1.13	6.82	0.78	0.19	2703.38	2699.50	
0.004169	0.042	0.120	0.045	0.120	0.02	-0.00	626.86	
	2694.20	40.	40.	40.	188.	243.	1057.64	1442.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
ELCHU	ELCHD							
2694.20	2694.20							

\*SECHO 8.200

\*\*\* GR CARDS REPEATED

CLASS A LOW FLOW

3420 BRIDGE W.S. = 2702.62 BRIDGE VELOCITY = 6.63

CALCULATED CHANNEL AREA = 531.									
EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC		
0.0	2703.46	0.14	0.	3520.	670.	670.	2704.00		

ELTRD  
2706.70

8.20	3520.	235.	3138.	147.	0.60	0	449.	
2702.86	0.0	213.	478.	187.	-0.05	0	2700.30	
8.66	0.0	1.10	6.57	0.78	0.08	2703.46	2699.50	
0.003757	0.042	0.120	0.045	0.120	0.0	-0.00	617.68	
	2694.20	30.	30.	30.	197.	251.	1066.24	1442.

J04

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

8.20	3520.	242.	3124.	155.	0.58	1	455.		
2702.92	0.0	221.	481.	197.	-0.02	0	2700.30		
8.72	0.0	1.10	6.49	0.78	0.04	2703.50	2699.50		
0.003629	0.042	0.120	0.045	0.120	0.00	-0.00	614.59		
	2694.20	10.	10.	10.	200.	254.	1069.13		1442.

\*SECNO 8.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL
7105 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
8.27	3215.	195.	2945.	75.	1.53	3	150.		
2704.85	2704.85	72.	285.	35.	0.94	14	2704.00		
5.65	0.0	2.70	10.33	2.13	2.18	2706.38	2705.00		
0.015783	0.042	0.090	0.045	0.100	0.47	-0.00	367.67		
	2699.20	340.	340.	340.	85.	65.	518.07		1447.

\*SECNO 8.410

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL
8.41	3185.	197.	2988.	0.	1.14	4	175.		
2713.41	0.0	96.	339.	0.	-0.39	0	2713.00		
7.21	0.0	2.06	8.83	0.02	8.13	2714.55	2713.40		
0.009859	0.042	0.070	0.045	0.090	0.04	-0.00	399.62		
	2706.20	660.	660.	660.	137.	37.	574.38		1454.

\*SECNO 8.670

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL

K04

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

8.67	3135.	0.	3096.	39.	2.59	4	62.	
2728.64	2728.64	0.	238.	21.	1.45	8	2730.00	
8.44	0.0	0.0	13.01	1.87	15.93	2731.23	2727.00	
0.016282	0.042	0.120	0.045	0.100	0.73	-0.00	251.57	
	2720.20	1280.	1280.	1280.	19.	43.	313.41	1464.

\*SECNO 8.800

3301 HV CHANGED MORE THAN HVINS

8.80	3110.	387.	1714.	1009.	0.90	4	230.	
2737.11	0.0	150.	175.	278.	-1.69	0	2734.30	
7.91	0.0	2.58	9.82	3.64	6.51	2738.01	2731.80	
0.007927	0.042	0.070	0.045	0.100	0.17	-0.00	110.07	
	2729.20	600.	600.	600.	153.	76.	339.87	1470.

\*SECNO 8.920

8.92	1780.	35.	1745.	0.	1.28	6	136.	
2747.61	2741.48	35.	191.	0.	0.37	11	2741.50	
4.61	0.0	1.00	9.16	0.02	4.69	2742.88	2741.50	
0.011534	0.042	0.090	0.040	0.080	0.19	-0.00	342.40	
	2737.00	520.	520.	520.	109.	27.	478.22	1475.

\*SECNO 9.060

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

9.06	1720.	136.	1583.	1.	0.60	4	200.	
2747.12	0.0	153.	244.	1.	-0.68	0	2746.00	
5.62	0.0	0.89	6.48	0.76	4.77	2747.72	2746.00	
0.004143	0.042	0.120	0.040	0.080	0.07	-0.00	279.94	
	2741.50	730.	730.	730.	172.	29.	480.30	1480.

\*SECNO 9.060

RICHLAND CREEK

10 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	H.	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

9.06	1720.	413.	1307.	1.	1.06	20	200.	
2751.77	2751.77	227.	139.	1.	0.46	15	2750.10	
4.37	0.0	1.82	9.42	0.55	0.13	2752.83	2751.50	
0.011740	0.042	0.120	0.040	0.080	0.03	-0.00	36.16	
	2747.40	20.	20.	20.	169.	30.	235.86	1480.

\*SECNO 9.060





M04

SLOPE	WTN ELMIN	XN XLOBL	XNCH XLCH	XNR XLOBR	OLOSS WSDL	CORAR WSDR	SSTA ENDST	VOL
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CLASS A LOW FLOW

3420 BRIDGE W.S. = 2760.29 BRIDGE VELOCITY = 6.60

CALCULATED CHANNEL AREA = 256

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2761.26	0.17	0.	1690.	305.	305.	2761.50

ELTRD  
2761.80

9.26	1690.	0.	1679.	11.	0.71	0	156.	
2760.55	0.0	0.	247.	27.	-0.07	0	2761.10	
6.55	0.0	0.0	6.80	0.40	0.10	2761.26	2760.30	
0.005369	0.042	0.110	0.045	0.110	0.0	-0.00	460.96	
	2754.00	30.	30.	30.	24.	132.	616.60	1489.

\*SECNO 9.26U

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

9.26	1690.	0.	1679.	11.	0.70	0	167.	
2760.40	0.0	0.	250.	37.	-0.02	0	2761.10	
6.60	0.0	0.0	6.72	0.34	0.04	2761.30	2760.30	
0.003135	0.042	0.110	0.035	0.110	0.00	-0.00	339.76	
	2754.00	10.	10.	10.	145.	142.	627.12	1489.

\*SECNO 9.39D

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	TRIAL	IDC	BANK ELEV
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDSY	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL			

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

9.39	1660.	0.	1660.	0.	2.09	5	35.	
2765.69	2765.69	0.	143.	0.	1.39	8	2766.10	
7.49	0.0	0.0	11.60	0.0	4.56	2767.78	2766.10	
0.021541	0.043	0.110	0.045	0.110	0.70	-0.00	363.69	
	2758.20	700.	700.	700.	18.	17.	398.92	1492.

\*SECNO 9.500

3301 HV CHANGED MORE THAN HVINS

9.50	1605.	587.	792.	226.	0.30	6	576.
2775.11	0.0	483.	129.	209.	-1.79	0	2773.30

A05

5.71	0.0	1.22	6.13	1.08	7.45	2775.41	2773.30	
0.004643	0.043	0.110	0.045	0.110	0.18	-0.00	178.81	
	2769.40	850.	850.	850.	369.	207.	754.63	1502.

\*SECNO 9.550

\*\*\* GR CARDS REPEATED

9.55	1605.	637.	710.	258.	0.20	3	590.	
2776.17	0.0	578.	136.	261.	-0.10	0	2774.10	
5.97	0.0	1.10	5.23	0.99	0.95	2776.37	2774.10	
0.003155	0.043	0.110	0.045	0.110	0.01	-0.00	172.41	
	2770.20	250.	250.	250.	375.	215.	762.78	1507.

\*SECNO 9.820

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

9.82	1545.	308.	1115.	122.	0.79	20	298.	
2790.68	2790.68	220.	134.	75.	0.59	12	2788.50	
8.68	0.0	1.40	8.33	1.63	3.03	2791.46	2788.80	
0.008091	0.043	0.110	0.047	0.110	0.29	-0.00	341.87	
	2782.00	640.	640.	640.	236.	62.	639.56	1517.

\*SECNO 10.000

10.00	1500.	16.	1147.	338.	0.53	4	284.	
2797.62	0.0	10.	172.	262.	-0.26	0	2793.50	
4.82	0.0	1.55	6.65	1.29	6.66	2798.15	2795.30	
0.005992	0.043	0.100	0.047	0.110	0.03	-0.00	250.15	
	2792.80	960.	960.	960.	24.	260.	514.30	1527.

\*SECNO 10.090

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		10 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

10.09	1500.	0.	1500.	0.	2.03	20	33.	
2804.82	2804.82	0.	131.	0.	1.50	11	2803.50	

B05

5.82	0.0	0.0	11.44	0.0	4.51	2806.85	2805.50	
0.021445	0.043	0.070	0.045	0.120	0.75	-0.00	287.08	
	2799.00	420.	420.	420.	15.	17.	299.78	1529.

\*SECNO 10.210

3301 HV CHANGED MORE THAN HVINS

10.21	1500.	0.	1500.	0.	0.62	3	65.	
2813.85	0.0	0.	238.	0.	-1.42	0	2815.00	
5.35	0.0	0.0	6.31	0.0	7.47	2814.47	2814.30	
0.006667	0.043	0.080	0.045	0.080	0.14	-0.00	163.05	
	2808.50	680.	680.	680.	52.	55.	228.16	1532.

\*SECNO 10.280

10.28	1500.	0.	1500.	0.	1.05	3	60.	
2817.04	0.0	0.	183.	0.	0.43	0	2822.50	
4.04	0.0	0.0	8.22	0.0	3.40	2818.09	2824.00	
0.014400	0.043	0.080	0.045	0.080	0.22	-0.00	383.46	
	2813.00	360.	360.	360.	35.	25.	443.34	1534.

\*SECNO 10.390

RICHLAND CREEK		10 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSPD	WSDR	ENDST	VOL
10.39	1500.	0.	1409.	91.	1.17	3	37.	
2823.33	0.0	0.	158.	32.	0.12	0	2826.50	
6.93	0.0	0.0	8.94	2.84	6.35	2824.50	2817.00	
0.009786	0.043	0.100	0.050	0.100	0.06	-0.00	125.68	
	2816.40	540.	540.	540.	12.	26.	163.12	1536.

C05

THIS RUN EXECUTED 08/01/81 8:17:13

\*\*\*\*\*  
HEC2 RELEASE DATED NOV 76 UPDATED JULY1979  
ERROR CORR - 01,02,03  
MODIFICATION - 50,51,52,53,54  
\*\*\*\*\*

T1	WAYNESVILLE NC										8900
T2	50 YEAR FLOOD										8910
T3	RICHLAND CREEK										8920
J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	3.	0.	0.	0.00250	0.	0.0	0.	2565.00	0.0	8930
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FH	ALLDC	IBW	CHNIM	ITRAC	
	2.	0.	1.	0.	0.	0.0	0.0	0.	0.	0.	8940

\*PROF 2

CCHV= 0.100 CEHV= 0.500

\*SECHO .050

3840 SECTION NOT HIGH ENOUGH 2565.00 2559.30 2486.50 2559.30 0.0 0  
 RICHLAND CREEK 50 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
0.05	8100.	367.	4033.	3700.	0.30	0	823.		
2499.65	2498.21	272.	697.	1663.	0.50	22	2498.30		
13.15	2565.00	1.35	5.78	2.23	0.0	2499.95	2495.60		
0.002472	0.0	0.070	0.055	0.070	0.0	0.0	147.35		
	2486.50	0.	0.	0.	240.	584.	970.60	0.	

\*SECHO .230

0.23	8075.	3610.	4389.	76.	0.55	2	408.		
2501.82	0.0	1175.	579.	38.	0.26	0	2495.80		
14.02	0.0	3.07	7.58	1.99	2.30	2502.37	2497.80		
0.003555	0.056	0.070	0.055	0.070	0.13	-0.00	138.36		
	2487.80	760.	800.	760.	363.	45.	546.11	39.	

\*SECHO .230

\*\*\* GR CARDS REPEATED

0.23	8075.	3714.	4279.	82.	0.50	2	413.		
2502.01	0.0	1240.	589.	42.	-0.05	0	2495.80		
14.21	0.0	3.00	7.27	1.94	0.13	2502.51	2497.80		
0.003196	0.055	0.070	0.055	0.070	0.01	-0.00	134.07		
	2487.80	40.	40.	40.	367.	46.	547.02	41.	

\*SECHO .230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

7105 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.23	8075.	1462.	6613.	0.	1.92	3	241.		
2501.36	2501.36	295.	548.	0.	1.42	13	2506.20		
13.36	0.0	4.95	12.07	9.0	0.01	2503.28	2506.90		

13.36 0.0 4.95 12.07 0.0 0.01 2503.28 2500.90

E05

0.023307 0.056 0.070 0.055 0.070 0.71 -0.00 157.67  
 2488.00 1. 1. 1. 332. 35. 525.00 41.

\*SECNO .230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3307 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPMID		
PILE	Q	QLOB	GCH	QROB	HV	ITRIAL	IDC	BANK FLEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	ENDST		VOL
SLOPE	WTN	XNL	XNCH	XNR	OLOSS				
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

0.23 8075. 2654. 5421. 0. 0.78 4 318.  
 2503.03 0.0 647. 663. 0. -1.14 0 2506.20  
 15.03 0.0 4.10 8.17 0.0 0.42 2503.81 2506.90  
 0.009311 0.056 0.070 0.055 0.070 0.11 -0.00 120.33  
 2488.00 30. 30. 30. 370. 35. 525.00 42.

\*SECNO .230

3301 HV CHANGED MORE THAN HVINS

0.23 8075. 3793. 3266. 1016. 0.20 2 530.  
 2503.67 0.0 1690. 653. 480. -0.58 0 2496.20  
 15.47 0.0 2.24 5.00 2.12 0.00 2503.87 2498.20  
 0.001316 0.056 0.070 0.055 0.070 0.06 -0.00 105.83  
 2488.20 1. 1. 1. 396. 134. 635.33 42.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23 8075. 3794. 3264. 1017. 0.20 2 530.  
 2503.68 0.0 1692. 653. 480. -0.00 0 2496.20  
 15.48 0.0 2.24 4.99 2.12 0.01 2503.88 2498.20  
 0.001313 0.056 0.070 0.055 0.070 0.00 -0.00 105.72  
 2488.20 10. 10. 10. 396. 134. 635.34 42.

\*SECNO .270

\*\*\* GR CARDS REPEATED

0.27 8075. 3849. 3188. 1038. 0.19 0 534.  
 2503.89 0.0 1765. 664. 501. -0.02 0 2496.20  
 15.69 0.0 2.18 4.80 2.07 0.19 2504.07 2498.20  
 0.001191 0.056 0.070 0.055 0.070 0.00 -0.00 101.32  
 2488.20 150. 150. 150. 400. 134. 635.71 52.

F05

\*SECNO .550

3301 HV CHANGED MORE THAN HVINS

0.55	8040.	935.	6913.	191.	0.85	2	261.	
2505.99	0.0	395.	871.	108.	0.67	0	2502.30	
14.19	0.0	2.37	7.94	1.76	2.43	2506.84	2502.33	
0.002626	0.049	0.070	0.045	0.080	0.33	-0.00	142.54	
	2491.80	1500.	1400.	1420.	173.	87.	403.10	124.

\*SECNO .840

3301 HV CHANGED MORE THAN HVINS

NICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID		
0.84	8000.	19.	7890.	91.	1.72	2	114.		
2510.26	0.0	15.	745.	61.	0.87	0	2508.20		
12.86	0.0	1.31	10.60	1.48	4.70	2511.98	2508.90		
0.003746	0.046	0.070	0.040	0.100	0.43	-0.00	73.75		
	2497.40	1380.	1520.	1560.	47.	67.	188.24	162.	

\*SECNO 1.160

3301 HV CHANGED MORE THAN HVINS

1.16	7970.	96.	6832.	1042.	1.13	2	207.	
2515.69	0.0	69.	745.	394.	-0.59	0	2513.90	
12.19	0.0	1.39	9.17	2.64	4.78	2516.82	2509.20	
0.002960	0.044	0.080	0.040	0.090	0.06	-0.00	46.21	
	2503.50	1460.	1440.	1460.	83.	124.	253.50	195.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	7940.	872.	4856.	2211.	0.55	3	256.	
2519.29	0.0	408.	670.	720.	-0.59	0	2511.50	
12.09	0.0	2.14	7.25	3.07	2.96	2519.84	2513.20	
0.001676	0.043	0.090	0.040	0.070	0.06	-0.00	136.32	
	2507.20	1360.	1360.	1340.	110.	145.	391.97	242.

\*SECNO 1.450

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2525.00 ELREA= 2518.00

1.45	7940.	0.	6127.	1813.	0.48	2	228.	
2519.43	0.0	0.	1000.	625.	-0.07	0	2513.20	
12.23	0.0	0.0	6.12	2.90	0.06	2519.91	2511.80	
0.001459	0.043	0.090	0.040	0.070	0.01	-0.00	185.00	



605

2507.20 40. 40. 40. 55. 173. 413.27 244.

\*SECNO 1.450

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.60

1.45	7940.	0.	7940.	0.	1.42	2	108.
2518.96	0.0	0.	830.	0.	0.94	0	2524.80
11.56	0.0	0.0	9.54	0.0	0.00	2520.38	2524.00
0.007054	0.043	0.090	0.040	0.070	0.47	-0.00	187.77
	2507.00	1.	1.	1.	55.	58.	300.00
							244.

\*SECNO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CRLEK	50 YEAR FLOOD	08/01/81						
MILE	Q	SLOB	QCH	QROB	HV	ITR1AL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.60

1.45	7940.	0.	7940.	0.	1.31	2	108.
2519.28	0.0	0.	865.	0.	-0.11	0	2524.80
12.28	0.0	0.0	9.18	0.0	0.20	2520.59	2524.00
0.006277	0.043	0.090	0.040	0.070	0.01	-0.00	187.57
	2507.00	30.	30.	30.	55.	58.	300.00
							244.

\*SECNO 1.450

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2527.00 ELREA= 2520.00

1.45	7940.	0.	7940.	0.	0.92	2	110.
2519.72	0.0	0.	1032.	0.	-0.39	0	2513.20
12.52	0.0	0.0	7.69	0.0	0.00	2520.64	2511.80
0.002206	0.043	0.090	0.040	0.070	0.04	-0.00	185.00
	2507.20	1.	1.	1.	55.	55.	295.00
							244.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	7940.	954.	4652.	2334.	0.40	2	281.
2520.34	0.0	492.	737.	863.	-0.51	0	2511.50

H05

13.15	0.0	1.94	6.32	2.70	0.06	2520.75	2513.20	
0.001123	0.043	0.090	0.040	0.070	0.05	-0.00	133.71	
	2507.20	40.	40.	40.	113.	169.	415.19	246.

\*SECNO 1.700

1.70	7910.	2766.	4804.	340.	0.78	2	219.	
2522.22	0.0	826.	553.	118.	0.37	0	2515.50	
11.92	0.0	3.35	8.88	2.88	2.07	2523.00	2514.30	
0.002425	0.043	0.070	0.040	0.090	0.19	-0.00	76.44	
	2510.30	1300.	1300.	1300.	176.	43.	295.75	299.

\*SECNO 1.780

1.78	7900.	1963.	4124.	1814.	0.62	2	475.	
2523.31	0.0	646.	491.	926.	-0.16	0	2517.80	
10.71	0.0	3.04	8.39	1.96	0.91	2523.95	2516.60	
0.002653	0.043	0.070	0.040	0.090	0.02	-0.00	81.57	
	2512.60	360.	360.	360.	171.	304.	556.58	314.

\*SECNO 1.780

\*\*\* GK CARDS REPEATED  
RICHMOND CREEK

50 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XFL	XNCH	YNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
1.78	7900.	1983.	4052.	1865.	0.57	2	476.	
2523.46	0.0	668.	499.	968.	-0.05	0	2517.80	
10.86	0.0	2.97	8.12	1.93	0.10	2524.04	2516.60	
0.002431	0.043	0.070	0.040	0.090	0.00	-0.00	80.93	
	2512.60	40.	40.	40.	172.	305.	557.07	316.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2520.67 NOT 2523.46  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	52.00	2.00	475.00	0.0
	ELCHU	ELCHD						
	2513.00	2513.00						

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
PRESSURE AND WEIR FLOW

EGPRS	EGLMC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2530.33	2525.11	0.0	2019.	5895.	475.	475.	2522.50
ELTRD							
2524.70							

1.78	7900.	2270.	2950.	2640.	0.13	2	507.	
2527.15	0.0	1240.	687.	2021.	-0.44	0	2517.80	
14.55	0.0	1.83	4.35	1.31	3.25	2527.29	2516.40	
0.000456	0.043	0.070	0.040	0.090	0.0	-0.00	62.15	
	2512.60	30.	30.	30.	190.	317.	569.15	318.

\*SECNO 1.780

1.78	7900.	3086.	2960.	1854.	0.16	2	700.	
2527.16	0.0	1976.	615.	1241.	0.02	0	2521.40	
14.56	0.0	1.56	4.81	1.49	0.02	2527.32	2521.90	
0.000690	0.042	0.070	0.040	0.090	0.01	-0.00	43.62	
	2512.60	40.	40.	40.	465.	235.	743.43	322.

\*SECNO 1.950

\*\*\* GR CARDS REPEATED

1.95	7800.	2865.	2729.	2206.	0.13	2	700.	
2527.70	0.0	1991.	617.	1248.	-0.03	0	2521.90	
14.60	0.0	1.44	4.43	1.77	0.51	2527.83	2522.40	
0.000581	0.042	0.070	0.040	0.070	0.00	-0.00	43.32	
	2513.10	810.	810.	770.	465.	235.	743.66	392.

\*SECNO 2.190

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

2.19	7640.	1014.	3887.	2739.	0.96	6	844.	
2529.00	2528.92	484.	366.	836.	0.83	17	2525.90	
9.70	0.0	2.10	10.62	3.28	1.71	2529.96	2525.90	
0.006420	0.042	0.070	0.040	0.070	0.41	-0.00	106.07	
	2519.30	1260.	1260.	1260.	496.	357.	959.67	472.

1490 NH CARD USED

\*SECNO 2.320

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK

50 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VRQB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
2.32	7550.	2278.	2133.	3139.	0.19	2	999.	
2531.51	0.0	1301.	376.	1329.	-0.77	0	2525.00	
8.11	0.0	1.75	5.67	2.36	1.67	2531.71	2528.50	
0.001787	0.042	0.070	0.040	0.065	0.08	-0.00	270.79	
	2523.40	200.	640.	640.	512.	486.	1269.47	498.

1490 NH CARD USED

J05

\*SECNO 2.320

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	7550.	3198.	976.	3376.	0.12	2	980.	
2531.59	0.0	1310.	274.	1186.	-0.07	0	2529.00	
8.19	0.0	2.44	3.57	2.85	0.00	2531.72	2528.70	
0.003478	0.042	0.070	0.040	0.054	0.01	-116.05	270.43	
	2523.40	1.	1.	1.	506.	474.	1250.00	498.

\*SECNO 2.320

\*\*\* GR CARDS REPEATED

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	7550.	3233.	949.	3367.	0.11	2	981.	
2531.70	0.0	1363.	278.	1235.	-0.01	0	2529.00	
8.30	0.0	2.37	3.41	2.73	0.10	2531.81	2528.70	
0.003120	0.042	0.070	0.040	0.034	0.00	-116.44	269.93	
	2523.40	30.	30.	30.	506.	475.	1251.19	500.

1490 NH CARD USED

\*SECNO 2.320

2.32	7550.	2097.	1762.	3691.	0.14	1	1000.	
2531.69	0.0	1389.	386.	1412.	0.03	0	2525.00	
8.29	0.0	1.51	4.57	2.61	0.00	2531.83	2528.50	
0.001119	0.042	0.067	0.040	0.047	0.01	-0.00	269.95	
	2523.40	1.	1.	1.	513.	487.	1270.00	500.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

2.40	7500.	2212.	1624.	3664.	0.10	2	1079.	
2532.15	0.0	1608.	410.	1645.	-0.04	0	2525.00	
8.75	0.0	1.38	3.96	2.23	0.42	2532.25	2528.50	
0.000775	0.042	0.067	0.040	0.048	0.00	-0.00	267.86	
	2523.40	500.	500.	400.	515.	563.	1346.49	535.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XL	XLCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CHSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

2.40	7500.	1005.	6228.	266.	1.26	20	458.	
2554.41	2554.41	273.	640.	73.	1.16	17	2551.50	
2.91	0.0	3.68	9.73	3.67	0.07	2555.67	2551.50	

K05

0.009273 0.042 0.050 0.030 0.050 0.58 -0.00 142.19  
 2551.50 40. 40. 40. 298. 160. 599.79 538.

SPECIAL BRIDGE

SB HK XKOR COFB RDLEN BWC BWP BAREA SS  
 1.25 1.60 3.07 0.0 1.00 0.01 0.10 0.0  
 ELCHU ELCHD  
 2551.50 2551.50

\*SECNO 2.400  
 WATER EL=X5 CAPD= 2566.500

\*\*\* GR CARDS REPEATED

2.40 7500. 1615. 5440. 445. 0.30 0 525.  
 2566.50 0.0 706. 1100. 216. 0.10 0 2561.50  
 5.00 0.0 2.29 4.95 2.06 0.08 2566.80 2561.50  
 0.001166 0.042 0.050 0.030 0.050 0.10 -0.00 113.71  
 2561.50 30. 30. 30. 326. 198. 638.33 539.

\*SECNO 2.400

2.40 8300. 1. 8298. 1. 0.02 2 1235.  
 2566.81 0.0 6. 8377. 6. -0.28 0 2562.00  
 6.81 0.0 0.18 0.99 0.18 0.00 2566.83 2562.00  
 0.000031 0.042 0.050 0.030 0.050 0.03 -0.00 7.33  
 2560.00 10. 10. 10. 618. 618. 1242.67 540.

\*SECNO 3.230

3.23 8160. 2. 8128. 30. 0.06 2 407.  
 2566.97 0.0 7. 4017. 37. 0.05 0 2565.00  
 11.97 0.0 0.28 2.02 0.35 0.18 2567.03 2563.80  
 0.000066 0.039 0.050 0.030 0.050 0.02 -0.00 35.19  
 2555.00 4180. 4180. 4180. 181. 226. 441.99 1139.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.690

3301 HV CHANGED MORE THAN HVINS

3.69 8090. 0. 7568. 522. 0.56 0 193.  
 2567.08 0.0 0. 1217. 341. 2.50 0 2571.40  
 14.28 0.0 0.0 6.22 1.53 0.36 2567.64 2562.60  
 0.000961 0.039 0.080 0.035 0.080 0.25 -0.00 193.94  
 2552.80 2200. 2200. 2200. 53. 140. 386.51 1283.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.810

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK 50 YEAR FLOOD 08/01/81  
 MILE R QLOB QCH QROB HV ITRIAL TOPHID  
 ELEV CRINS ALOB ACH AROB DHV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB HL EG LEFT/RIGHT

L05

SLOPE	MTN ELMIN	XNL XLOBL	XNCH XLCH	XNR XLOBR	OLSS WSDL	CORAR WSDR	SSA ENDST	VOL
3.81	8070.	120.	7896.	54.	1.21	2	284.	
2567.86	0.0	66.	884.	44.	0.65	0	2565.10	
11.06	0.0	1.81	8.93	1.23	1.10	2569.07	2566.70	
0.006075	0.039	0.080	0.040	0.080	0.32	-0.00	224.26	
	2556.80	800.	560.	570.	144.	140.	508.34	1299.

\*SECNO 3.810

\*\*\* GR CARDS REPEATED

3.81	8070.	168.	7802.	100.	1.01	2	312.	
2568.29	0.0	99.	952.	73.	-0.20	0	2565.10	
11.49	0.0	1.70	8.20	1.38	0.21	2569.30	2566.70	
0.004830	0.039	0.080	0.040	0.080	0.02	-0.00	205.98	
	2556.80	40.	40.	40.	163.	149.	517.97	1300.

SPECIAL BRIDGE

GB	HK	XKDR	COFQ	RDLEN	ΔWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	85.00	10.00	800.00	0.42
ELCHU		ELCHD						
2556.90		2556.90						

\*SECNO 3.810

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2570.82	2569.58	0.44	0.	8070.	800.	800.	2567.00
ELTRD							
2571.80							

3.81	8070.	474.	7233.	363.	0.45	2	444.	
2570.37	0.0	364.	1278.	268.	-0.56	0	2565.10	
13.57	0.0	1.30	5.66	1.36	1.52	2570.82	2566.70	
0.001491	0.039	0.080	0.040	0.080	0.0	-0.00	118.47	
	2556.80	60.	60.	60.	250.	195.	563.99	1302.

\*SECNO 3.810

3301 HV CHANGED MORE THAN HVINS

3.81	8070.	482.	7289.	298.	1.38	2	144.	
2569.95	0.0	174.	738.	128.	0.93	0	2563.50	
13.75	0.0	2.77	9.88	2.33	0.04	2571.33	2564.00	
0.002837	0.039	0.080	0.040	0.080	0.46	-0.00	290.20	
	2556.20	20.	20.	20.	73.	71.	434.70	1303.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	8050.	896.	6703.	451.	0.64	2	247.	
2572.48	0.0	543.	958.	243.	-0.74	0	2564.00	
13.68	0.0	1.65	7.00	1.86	1.72	2573.12	2564.00	
0.001926	0.039	0.120	0.045	0.120	0.07	-0.00	145.25	
	2558.80	780.	740.	760.	168.	79.	392.14	1327.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID		
Q	CR743	QLOB	ACH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CR743	ALOB	ACH	AROB	DMV	IDC	LEFT/RIGHT		
DEPTH	SELK	VLOB	VCH	VROB	HL	EG			
SLOPE	WTH	XNL	XNCH	XNR	GLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	%DI	WSDR	ENDST		VOL
3.97	8050.	84.	7889.	77.	1.15	2	237.		
2572.35	0.0	100.	906.	53.	0.51	0	2571.50		
13.55	0.0	0.85	8.71	1.48	0.12	2573.50	2570.20		
0.005872	0.039	0.120	0.045	0.120	0.26	-0.00	150.28		
	2558.80	40.	40.	40.	163.	74.	387.15		1328.

\*SECNO 3.970

\*\*\* GR CARDS REPEATED

3.97	8050.	125.	7834.	91.	1.09	2	250.	
2572.59	0.0	131.	924.	62.	-0.07	0	2571.50	
13.79	0.0	0.95	8.47	1.48	0.17	2573.68	2570.20	
0.005418	0.039	0.120	0.045	0.120	0.01	-0.00	141.01	
	2558.80	30.	30.	30.	172.	77.	390.63	1329.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	8050.	1007.	6564.	478.	0.54	2	262.	
2573.72	0.0	646.	1012.	275.	-0.55	0	2564.00	
14.43	0.0	1.58	6.48	1.74	0.03	2573.76	2564.00	
0.001533	0.039	0.120	0.045	0.120	0.05	-0.00	132.53	
	2558.80	10.	10.	10.	180.	81.	394.33	1329.

\*SECNO 4.140

4.14	8010.	2915.	3856.	1239.	0.28	3	414.	
2574.73	0.0	1783.	658.	760.	-0.26	0	2564.30	
12.03	0.0	1.63	5.86	1.63	1.22	2575.01	2566.70	
0.001223	0.039	0.120	0.045	0.120	0.03	-0.00	378.39	
	2562.70	760.	940.	940.	280.	134.	792.42	1380.

\*SECNO 4.140

K06

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2577.00 ELREA= 2577.00

4.14	8010.	0.	8010.	0.	0.37	2	179.	
2574.73	0.0	0.	1643.	0.	0.09	0	2565.90	
12.03	0.0	0.0	4.88	0.0	0.05	2575.10	2567.90	
0.001149	0.039	0.120	0.045	0.120	0.05	-0.00	603.00	
	2562.70	40.	40.	40.	90.	90.	782.00	1382.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWS	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	131.00	6.00	1740.00	1.24
	ELCHU	ELCHD						
	2562.80	2562.80						

\*SECNO 4.140

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

			50 YEAR FLOOD		08/01/81			
FILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XAL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

CLASS A LOW FLOW

3420 BRIDGE W.S.= 2574.70 BRIDGE VELOCITY= 4.81

CALCULATED CHANNEL AREA= 1663.

EGRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
0.0	2575.14	0.04	0.	8010.	1740.	1741.	2575.20

ELTRD  
2577.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2578.90 ELREA= 2578.90

4.14	8010.	0.	8010.	0.	0.37	0	179.	
2574.77	0.0	0.	1649.	0.	-0.00	0	2565.90	
12.07	0.0	0.0	4.86	0.0	0.03	2575.14	2567.90	
0.001134	0.039	0.120	0.045	0.120	0.0	-0.00	603.00	
	2562.70	115.	115.	115.	90.	90.	782.00	1386.

\*SECNO 4.140

4.14	8010.	2937.	3825.	1248.	0.26	2	415.	
2574.92	0.0	1830.	668.	779.	-0.10	0	2564.30	
12.22	0.0	1.61	5.72	1.60	0.03	2575.18	2564.70	
0.001144	0.039	0.120	0.045	0.120	0.01	-0.00	377.81	
	2562.70	30.	30.	30.	280.	135.	792.71	1388.

\*SECNO 4.280

4.28	6990.	2607.	2957.	1426.	0.25	2	436.
2575.76	0.0	1326.	517.	859.	-0.02	0	2570.00



806

13.36	0.0	1.97	5.72	1.66	0.83	2576.01	2569.20	
0.001349	0.040	0.100	0.045	0.100	0.00	-0.00	144.61	
	2562.40	690.	710.	710.	232.	204.	580.13	1433.

\*SECHO 4.280

\*\*\* GR CARDS REPEATED

4.28	6990.	2610.	2947.	1433.	0.24	0	437.	
2575.82	0.0	1336.	519.	868.	-0.00	0	2570.00	
13.42	0.0	1.95	5.68	1.65	0.05	2576.06	2569.20	
0.001320	0.040	0.100	0.045	0.100	0.00	-0.00	144.05	
	2562.40	40.	40.	40.	232.	204.	580.64	1435.

\*SECHO 4.280

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	6990.	2567.	3085.	1337.	0.41	2	435.	
2575.74	0.0	1065.	425.	664.	0.16	0	2570.00	
13.34	0.0	2.41	7.26	2.01	0.00	2576.15	2569.20	
0.011472	0.040	0.100	0.045	0.100	0.08	-514.52	144.85	
	2562.40	1.	1.	1.	232.	203.	579.91	1435.

\*SECHO 4.280

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELFV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	MSFLK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XML	XNCH	XROB	CLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	6990.	2574.	3065.	1352.	0.39	2	437.	
2575.81	0.0	1080.	428.	677.	-0.01	0	2570.00	
13.41	0.0	2.38	7.16	2.00	0.06	2576.21	2569.20	
0.011030	0.040	0.100	0.045	0.100	0.00	-514.52	144.06	
	2562.40	5.	5.	5.	232.	204.	580.64	1435.

\*SECHO 4.280

4.28	6990.	2622.	2911.	1458.	0.23	2	441.	
2576.00	0.0	1375.	528.	902.	-0.17	0	2570.00	
13.60	0.0	1.91	5.52	1.62	0.00	2576.22	2569.20	
0.001218	0.040	0.100	0.045	0.100	0.02	-0.00	141.95	
	2562.40	1.	1.	1.	232.	206.	582.55	1435.

\*SECHO 4.280

\*\*\* GR CARDS REPEATED

4.28	6990.	2622.	2908.	1459.	0.23	2	441.	
2576.01	0.0	1378.	528.	904.	-0.00	0	2570.00	
13.61	0.0	1.90	5.51	1.61	0.01	2576.24	2569.20	

C06

0.001211 0.040 0.100 0.045 0.100 0.00 -0.00 141.31  
 2562.40 10. 10. 10. 235. 206. 582.68 1436.

\*SECNO 4.430

3301 HV CHANGED MORE THAN HVINS

4.43 7115. 393. 4073. 2649. 0.80 2 229.  
 2577.17 0.0 189. 465. 596. 0.58 0 2572.00  
 10.97 0.0 2.38 8.77 4.45 1.44 2577.97 2571.70  
 0.003739 0.040 0.120 0.045 0.060 0.29 -0.00 66.09  
 2566.20 715. 735. 735. 68. 161. 295.26 1470.

\*SECNO 4.630

\*\*\* GA CARDS REPEATED

4.63 6950. 342. 4244. 2363. 1.10 2 211.  
 2581.56 0.0 150. 420. 482. 0.30 0 2577.30  
 10.06 0.0 2.28 10.10 4.90 4.54 2582.66 2577.00  
 0.005672 0.040 0.120 0.045 0.060 0.15 -0.00 68.57  
 2571.50 1000. 1000. 1000. 66. 146. 280.04 1496.

\*SECNO 4.820

RICHLAND CREEK

50 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	TRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	MSDL	MSDR	ENDST	VOL	
4.82	6900.	900.	5615.	406.	1.39	2	214.		
2587.24	0.0	357.	539.	138.	0.29	0	2582.40		
11.54	0.0	2.52	10.42	2.94	5.82	2588.62	2584.20		
0.006569	0.040	0.120	0.050	0.070	0.14	-0.00	59.84		
	2575.70	1100.	940.	940.	120.	94.	274.20	1520.	

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96 6900. 2236. 4664. 0. 0.63 2 134.  
 2590.93 0.0 483. 660. 0. -0.76 0 2581.30  
 11.73 0.0 4.63 7.06 0.0 2.87 2591.57 2591.50  
 0.003414 0.041 0.070 0.055 0.080 0.08 -0.00 299.13  
 2579.20 660. 610. 610. 102. 31. 432.82 1536.

\*SECNO 4.960

4.96 6900. 1286. 5614. 0. 0.32 2 225.  
 2591.38 0.0 502. 1159. 0. -0.32 0 2585.20  
 12.18 0.0 2.56 4.84 0.0 0.09 2591.69 2599.50  
 0.001708 0.041 0.070 0.055 0.080 0.03 -0.00 207.72  
 2579.20 40. 40. 40. 182. 43. 432.96 1537.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	IWC	BWP	BAREA	SS
	1.25	1.80	3.00	0.0	54.00	4.00	1310.00	1.18
ELCHU		ELCHD						
2579.20		2579.20						

\*SECNO 4.960

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S. = 2591.19 BRIDGE VELOCITY = 8.97

CALCULATED CHANNEL AREA = 769.								
EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC	
0.0	2591.73	0.04	0.	6900.	1310.	1310.	2597.50	
ELTRD								
2598.00								

4.96	6900.	1293.	5607.	0.	0.31	0	225.	
2591.42	0.0	506.	1164.	0.	-0.00	0	2585.20	
12.22	0.0	2.55	4.82	0.0	0.04	2591.73	2599.50	
0.001680	0.041	0.070	0.055	0.080	0.0	-0.00	207.60	
	2579.20	15.	15.	15.	182.	43.	432.97	1537.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96	6900.	0.	6898.	2.	3.34	3	65.	
2589.94	0.0	0.	470.	1.	3.03	0	2596.90	
10.34	0.0	0.0	14.67	1.15	0.04	2593.28	2589.40	
0.021622	0.041	0.070	0.055	0.080	1.51	-0.00	389.72	
	2579.60	10.	10.	10.	26.	39.	454.98	1538.

\*SECNO 4.960

\*\*\* GR CARDS REPEATED

3302 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRHS	ALOB	ACH	AROB	DIIV	IDC	BANK ELEV	
DEPTH	MSELK	VLOB	VCH	YROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
4.96	6900.	0.	6818.	12.	1.86	4	90.	
2592.37	0.0	0.	620.	40.	-1.48	0	2596.90	
12.77	0.0	0.0	11.00	2.04	0.80	2594.23	2589.40	
0.009036	0.041	0.080	0.055	0.090	0.15	-0.00	387.03	
	2579.60	60.	60.	60.	29.	61.	476.95	1538.

\*SECNO 5.100

E06

3301 HV CHANGED MORE THAN HVINS

5.10	6880.	496.	4771.	1613.	0.20	5	361.	
2596.06	0.0	327.	1151.	840.	-1.66	0	2589.10	
10.46	0.0	1.52	4.14	1.92	1.87	2596.27	2589.70	
0.001131	0.041	0.100	0.050	0.080	0.17	-0.00	190.77	
	2585.60	900.	750.	750.	135.	225.	551.37	1565.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2600.00 ELREA= 2598.00

5.10	6880.	0.	6880.	0.	0.57	2	136.	
2595.94	0.0	0.	1135.	0.	0.37	0	2589.10	
10.34	0.0	0.0	6.06	0.0	0.06	2596.51	2589.70	
0.002466	0.041	0.100	0.050	0.080	0.18	-0.00	258.00	
	2585.60	40.	40.	40.	68.	68.	394.00	1566.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	95.00	18.00	1350.00	1.63
ELCHU	ELCHD							
2584.20	2584.20							

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

CLASS A LOW FLOW

3420 BRIDGE W.S.= 2595.74 BRIDGE VELOCITY= 6.22

EGPRS	EGLKC	H3	QWEIR	GPR	BAREA	TAREA	ELLC
0.0	2596.75	0.27	0.	6880.	1350.	1349.	2597.80

ELTRD  
2599.10

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2801.00 ELREA= 2599.50

5.10	6880.	0.	6880.	0.	0.54	0	136.	
2596.21	0.0	0.	1172.	0.	-0.04	0	2589.10	
10.61	0.0	0.0	5.07	0.0	0.23	2596.75	2589.70	
0.002218	0.041	0.090	0.050	0.100	0.0	0.0	258.00	
	2585.60	30.	30.	30.	68.	68.	394.00	1567.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

5.10	6880.	599.	4885.	1396.	0.19	2	363.	
2596.61	0.0	365.	1226.	926.	-0.35	0	2589.10	

F06

11.01	0.0	1.64	3.98	1.51	0.01	2596.80	2589.70	
0.000961	0.041	0.090	0.050	0.100	0.03	-0.00	189.35	
	2585.60	10.	10.	10.	137.	226.	552.40	1568.

\*SECNO 5.200

RICHLAND CREEK

50 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	CLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDRT	VOL
5.20	6310.	732.	3430.	2648.	0.24	2	365.	
2597.01	0.0	392.	645.	1609.	0.06	0	2589.10	
11.41	0.0	1.87	5.31	1.65	0.43	2597.26	2587.00	
0.000907	0.041	0.080	0.040	0.100	0.03	-0.00	188.32	
	2585.60	460.	460.	460.	101.	264.	553.15	1595.

\*SECNO 5.490

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK

50 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	CLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
5.49	6810.	1864.	4897.	49.	1.63	20	289.	
2603.06	2603.06	543.	412.	26.	1.39	18	2602.80	
8.26	0.0	3.43	11.90	1.88	3.16	2604.69	2600.90	
0.008584	0.041	0.080	0.040	0.100	0.69	-0.00	195.04	
	2594.80	1530.	1530.	1530.	380.	47.	622.37	1658.

\*SECNO 5.580

3301 HV CHANGED MORE THAN HVINS

5.58	6790.	3236.	3446.	108.	0.40	2	439.	
2605.74	0.0	1412.	512.	80.	-1.23	0	2602.80	
9.24	0.0	2.29	6.73	1.35	1.32	2606.14	2600.90	
0.002013	0.041	0.080	0.040	0.120	0.12	-0.00	188.99	
	2596.50	360.	360.	360.	387.	52.	627.80	1671.

\*SECNO 5.580

\*\*\* GR CARDS REPEATED

5.58	6790.	3266.	3414.	109.	0.38	2	439.	
2605.84	0.0	1448.	518.	82.	-0.02	0	2602.80	

G06

9.34	0.0	2.26	6.59	1.33	0.08	2606.22	2600.90	
0.001901	0.041	0.080	0.040	0.120	0.00	-0.00	188.78	
	2596.50	40.	40.	40.	387.	53.	628.01	1673.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2605.64 NOT 2605.84  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFR	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHU	ELCHD						
	2596.50	2596.50						

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.22 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2607.60	2607.41	0.00	3354.	3440.	408.	408.	2606.40
ELTRD							
2604.90							

5.58	6790.	3393.	2677.	719.	0.19	2	700.	
2607.41	0.0	1882.	522.	525.	-0.19	0	2604.70	
10.91	0.0	1.80	5.13	1.37	1.39	2607.60	2604.40	
0.001143	0.041	0.070	0.040	0.080	0.0	-0.00	450.00	
	2596.50	35.	35.	35.	499.	202.	1150.00	1675.

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.30 FEET

RICHLAND CREEK		50 YEAR FLOOD				08/01		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

5.58	6790.	3061.	3222.	507.	0.15	2	700.	
2607.50	0.0	1921.	768.	412.	-0.04	0	2604.70	
10.10	0.0	1.59	4.19	1.23	0.04	2607.65	2604.50	
0.000869	0.041	0.070	0.040	0.080	0.00	-0.00	450.00	
	2597.40	40.	40.	40.	520.	181.	1150.00	1677.

\*SECNO 5.640

5.64	6765.	2805.	3351.	608.	0.62	0	617.	
2607.83	0.0	1055.	392.	273.	0.47	0	2606.00	
8.83	0.0	2.66	8.56	2.23	0.57	2608.45	2605.00	
0.004509	0.041	0.070	0.040	0.080	0.25	-0.00	164.28	
	2599.00	340.	340.	340.	465.	152.	781.33	1696.

\*SECNO 5.710

\*\*\* GR CARDS REPEATED

5.71	6765.	2840.	3310.	615.	0.58	3	620.	
2609.40	0.0	1082.	395.	280.	-0.03	0	2607.50	
8.90	0.0	2.62	8.38	2.19	1.53	2609.99	2606.50	
0.004267	0.041	0.070	0.040	0.080	0.00	-0.00	162.63	
	2600.50	350.	350.	350.	466.	154.	782.74	1710.

\*SECNO 5.910

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

5.91	6730.	52.	5037.	1641.	1.35	4	510.	
2616.12	2616.12	31.	472.	671.	0.76	8	2615.30	
10.32	0.0	1.69	10.68	2.44	4.62	2617.46	2616.00	
0.006307	0.041	0.040	0.040	0.080	0.38	-0.00	248.34	
	2605.80	900.	900.	900.	438.	416.	1102.28	1740.

\*SECNO 5.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

5.97	6720.	2319.	3322.	1079.	0.52	3	580.	
2618.34	0.0	574.	446.	511.	-0.82	0	2617.70	
9.04	0.0	4.04	7.44	2.11	1.32	2618.87	2614.80	
0.003667	0.041	0.035	0.045	0.080	0.08	-0.00	67.19	
	2609.30	280.	280.	280.	355.	375.	796.77	1749.

\*SECNO 6.060

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 2.06 FEET

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	

DEPTH WSELK VLOB VLN XNCH XNR OLOSS CORAR SSTA

106

	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.06	6700.	3216.	2482.	1002.	0.41	3	917.	
2619.65	0.0	897.	338.	573.	-0.11	0	2619.50	
10.45	0.0	3.59	7.35	1.75	1.19	2620.08	2619.60	
0.003320	0.041	0.035	0.040	0.070	0.01	-0.00	12.00	
	2609.20	340.	340.	340.	571.	368.	950.00	1762.

\*SECNO 6.120

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 4.00 FEET

330: HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOP MID	
ELEV	CRHS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

6.12	6690.	985.	4915.	789.	1.18	20	613.	
2622.10	2622.10	542.	486.	374.	0.77	6	2620.70	
10.30	0.0	1.82	10.12	2.11	1.12	2623.29	2619.80	
0.004878	0.041	0.080	0.040	0.080	0.38	-0.00	247.41	
	2611.80	280.	280.	280.	632.	221.	1100.00	1773.

\*SECNO 6.160

3265 DIVIDED FLOW

6.16	6685.	3.	5866.	816.	1.28	2	204.	
2622.92	0.0	2.	609.	296.	0.10	0	2621.50	
9.52	0.0	1.35	9.63	2.76	0.86	2624.20	2619.70	
0.003959	0.041	0.050	0.045	0.080	0.05	-0.00	896.01	
	2613.40	160.	160.	160.	84.	153.	1132.90	1777.

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.16	6685.	20.	5705.	960.	1.03	2	244.	
2623.45	0.0	18.	652.	356.	-0.25	0	2621.50	
10.05	0.0	1.00	8.76	2.69	0.26	2624.48	2619.70	
0.004496	0.041	0.050	0.045	0.080	0.02	-0.00	868.64	
	2613.40	50.	50.	50.	111.	155.	1134.56	1778.



SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	51.00	6.00	632.00	5.94
	ELCHU	ELCHD						
	2615.00	2615.00						

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2626.23	2624.66	0.29	872.	5762.	632.	632.	2622.20

ELTRD  
2624.50

6.16	6685.	254.	5176.	1255.	0.56	2	487.
2624.95	0.0	279.	772.	533.	-0.48	0	2621.50
11.55	0.0	0.91	6.70	2.35	1.03	2625.51	2619.70
0.002099	0.041	0.080	0.045	0.080	0.0	-0.00	483.62
	2613.40	50.	50.	50.	496.	159.	1139.26
							1779.

\*SECNO 6.160

3265 DIVIDED FLOW

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOOR	WSDL	WSDR	ENDST
							VOL

6.16	6685.	362.	6320.	3.	0.89	2	259.
2624.91	0.0	189.	813.	4.	0.33	0	2624.30
9.71	0.0	1.92	7.77	0.73	0.12	2625.80	2624.00
0.004443	0.041	0.080	0.045	0.080	0.17	-0.00	620.11
	2615.20	40.	40.	40.	325.	69.	1014.25
							1781.

\*SECNO 6.200

3265 DIVIDED FLOW

3280 CROSS SECTION 6.20 EXTENDED 0.49 FEET

6.20	6675.	1826.	4845.	3.	1.03	2	454.
2625.29	0.0	884.	512.	5.	0.14	0	2623.20
10.59	0.0	2.07	9.47	0.66	0.45	2626.32	2624.40
0.005752	0.041	0.100	0.045	0.100	0.07	-0.00	400.00
	2614.70	90.	90.	90.	463.	44.	906.65
							1783.

2614.70

90.

90.

90.

90.

K06

\*SECMO 6.310

3265 DIVIDED FLOW

3280 CROSS SECTION 6.31 EXTENDED 1.86 FEET

6.31	6655.	2360.	3327.	968.	0.71	3	793.	
2628.26	0.0	1170.	355.	496.	-0.31	0	2626.60	
11.26	0.0	2.02	9.38	1.95	2.63	2628.97	2622.00	
0.005207	0.041	0.100	0.045	0.100	0.03	-0.00	31.00	
	2617.00	480.	480.	480.	489.	387.	906.84	1802.

\*SECMO 6.480

3265 DIVIDED FLOW

3280 CROSS SECTION 6.48 EXTENDED 0.51 FEET

6.48	6625.	882.	5011.	932.	0.90	2	496.	
2633.61	0.0	334.	576.	300.	0.19	0	2631.00	
7.61	0.0	2.04	8.69	1.86	5.44	2634.51	2631.00	
0.005691	0.041	0.100	0.045	0.100	0.09	-0.00	174.00	
	2626.00	1000.	1000.	1000.	177.	700.	1050.00	1841.

\*SECMO 6.610

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

6.61	6595.	159.	6382.	54.	2.30	4	169.	
2637.16	2636.19	86.	516.	36.	1.40	8	2633.00	
9.66	0.0	2.40	12.37	1.53	4.25	2639.46	2633.00	
0.009812	0.041	0.100	0.045	0.120	0.70	-0.00	292.45	
	2627.30	580.	580.	580.	80.	448.	820.68	1855.

\*SECMO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	50 YEAR FLOOD	08/01/81						
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.61	6595.	316.	6058.	220.	1.50	6	342.	

L06

2638.33	2636.18	162.	592.	194.	-0.80	9	2633.00
10.83	0.0	1.98	10.24	1.13	0.29	2639.83	2633.00
0.005608	0.041	0.100	0.045	0.120	0.08	-0.00	249.04
	2627.50	40.	40.	40.	123.	548.	920.00

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2635.90 NOT 2638.33  
 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHU	ELCHD						
	2628.50	2628.50						

\*SECNO 6.610

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2639.94	2639.67	0.11	3365.	3237.	402.	404.	2637.90
ELTRD							
2636.30							

6.61	6595.	389.	5644.	558.	1.08	3	435.
2638.86	0.0	212.	627.	487.	-0.42	0	2633.00
11.36	0.0	1.84	9.01	1.20	0.11	2639.94	2633.00
0.004016	0.041	0.100	0.045	0.120	0.0	-0.00	247.43
	2627.50	30.	30.	30.	125.	564.	936.14

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.61	6595.	399.	5614.	382.	1.05	2	437.
2638.93	0.0	218.	631.	485.	-0.03	0	2633.00
11.43	0.0	1.83	8.89	1.20	0.04	2639.98	2633.00
0.003877	0.041	0.100	0.045	0.120	0.00	-0.00	247.22
	2627.50	10.	10.	10.	125.	565.	937.79

\*SECNO 6.740

3265 DIVIDED FLOW

3280 CROSS SECTION 6.74 EXTENDED 0.60 FEET

3301 HV CHANGED MORE THAN HVINS

M06

RICHLAND CREEK		50 YEAR FLOOD			08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
3685 2D TRIALS ATTEMPTED WSEL, CWSEL									
3693 PROBABLE MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
6.74	6565.	359.	5167.	1039.	1.98	20	295.		
2643.60	2643.60	167.	408.	403.	0.93	8	2639.70		
12.20	0.0	2.15	12.67	2.58	1.24	2645.58	2655.00		
0.008954	0.041	0.100	0.045	0.100	0.47	-0.00	225.02		
	2631.40	220.	220.	220.	163.	312.	700.00	1862.	

\*SECNO 6.790

3273 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 4.23 FEET

3301 HV CHANGED MORE THAN HVINS

6.79	6550.	1396.	3443.	1720.	0.33	3	390.		
2647.23	0.0	900.	563.	1014.	-1.42	0	2639.70		
15.83	0.0	1.56	6.12	1.70	1.81	2647.55	2639.10		
0.001252	0.041	0.100	0.045	0.100	0.17	-0.00	182.60		
	2631.40	680.	680.	680.	205.	312.	700.00	1889.	

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 4.28 FEET

RICHLAND CREEK		50 YEAR FLOOD			08/01/81				
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
6.79	6550.	1396.	3428.	1726.	0.32	2	391.		
2647.28	0.0	900.	565.	1023.	-0.01	0	2639.70		
15.88	0.0	1.55	6.07	1.69	0.05	2647.30	2639.10		
0.001225	0.041	0.100	0.045	0.100	0.00	-0.00	182.50		
	2631.40	40.	40.	40.	206.	312.	700.00	1892.	

SPECIAL BRIDGE

A07

SE	HK	XKOR	COFO	ROLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790  
PRESS FLOW BECAUSE EGLWC OF 2647.64 EXCEEDS 1.5 DEPTH

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2655.28	2647.64	0.04	4742.	1828.	365.	359.	2642.80
ELTRD							
2641.70							

6.79	6550.	2339.	3647.	563.	0.40	2	356.
2647.51	0.0	1265.	552.	332.	0.08	0	2640.50
13.51	0.0	1.85	6.60	1.70	0.30	2647.91	2636.00
0.001580	0.041	0.100	0.045	0.100	0.0	-0.00	91.25
	2634.00	50.	50.	50.	271.	89.	451.77
							1894.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.79	6550.	2341.	3644.	564.	0.40	0	356.
2647.52	0.0	1268.	553.	332.	-0.00	0	2640.50
13.52	0.0	1.85	6.59	1.70	0.02	2647.92	2636.00
0.001573	0.041	0.100	0.045	0.100	0.00	-0.00	91.20
	2634.00	10.	10.	10.	271.	89.	451.78
							1895.

\*SECNO 7.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	50 YEAR FLOOD				08/01/81			
MILE	Q	QLOB	QCH	QROB	KV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IPC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSPR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

7.00	6500.	694.	5291.	516.	1.24	4	849.
2650.31	2650.31	612.	535.	278.	0.85	15	2649.00
8.31	0.0	1.13	9.89	1.86	3.17	2651.56	2646.50
0.007343	0.041	0.120	0.045	0.110	0.42	-0.00	178.49
	2642.00	1080.	1080.	1080.	687.	217.	1082.22
							1939.

\*SECNO 7.230

RICHLAND CREEK

FILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DIV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.23	6440.	404.	5036.	1000.	1.10	4	745.		
2661.18	2661.18	281.	530.	670.	-0.14	10	2657.00		
7.68	0.0	1.44	9.50	1.49	8.71	2662.28	2657.00		
0.006943	0.041	0.120	0.045	0.110	0.01	-0.00	131.28		
	2653.50	1220.	1220.	1220.	228.	517.	876.07	1980.	

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

RICHLAND CREEK

FILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DIV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	

7.23	6440.	556.	4468.	1416.	0.63	3	796.		
2661.90	0.0	416.	589.	1030.	-0.47	0	2657.00		
8.40	0.0	1.34	7.59	1.37	0.20	2662.53	2657.00		
0.003853	0.042	0.120	0.045	0.110	0.05	-0.00	128.42		
	2653.50	40.	40.	40.	231.	565.	924.33	1981.	

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BHP	BAREA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
ELCHU	ELCHD							
2653.50	2653.50							

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

6870 D.S. ENERGY OF 2662.53 HIGHER THAN COMPUTED ENERGY OF 2662.38  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	OWEIR	QPR	BAREA	TAREA	ELLC
2662.38	2662.25	0.03	4685.	1767.	402.	402.	2659.60
ELTRD							
2658.90							

7.23	6440.	560.	4452.	1428.	0.62	3	797.		
2661.91	0.0	420.	590.	1042.	-0.01	0	2657.00		
8.41	0.0	1.33	7.54	1.37	0.0	2662.53	2657.00		
0.003789	0.042	0.120	0.045	0.110	0.0	-0.00	128.33		

C07

2653.50 30. 30. 30. 231. 566. 925.01 1983.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

7.23	6440.	577.	4510.	1353.	0.64	0	798.	
2661.94	0.0	426.	593.	1060.	0.02	0	2657.00	
8.44	0.0	1.35	7.60	1.28	0.04	2662.58	2657.00	
0.003825	0.042	0.120	0.045	0.120	0.01	-0.00	128.19	
	2653.50	10.	10.	10.	231.	567.	926.17	1983.

\*SECNO 7.460

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	CLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED								
7.46	6385.	169.	4356.	1859.	1.68	5	307.	
2669.21	2669.21	88.	352.	499.	1.05	8	2668.30	
8.81	0.0	1.92	12.36	3.73	7.39	2670.89	2666.30	
0.014100	0.042	0.080	0.050	0.110	0.52	-0.00	183.09	
	2660.40	1120.	1120.	1120.	136.	171.	490.33	2022.

\*SECNO 7.540

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.54	6365.	357.	4635.	1373.	0.70	3	321.	
2673.39	0.0	161.	600.	585.	-0.99	0	2671.00	
9.09	0.0	2.22	7.73	2.35	3.10	2674.09	2668.50	
0.004526	0.042	0.090	0.050	0.110	0.10	-0.00	107.30	
	2664.30	420.	420.	420.	181.	423.	711.15	2033.

\*SECNO 7.780

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	CLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED								
7.78	6260.	1134.	3881.	1245.	0.85	6	985.	
2683.87	2683.87	594.	419.	704.	0.15	9	2681.60	
8.17	0.0	1.91	9.26	1.77	7.41	2684.72	2682.00	

D07

0.008306	0.042	0.090	0.050	0.110	0.07	-0.00	318.07	
	2675.70	1240.	1240.	1240.	508.	477.	1303.34	2077.

\*SECNO 7.970

3301 HV CHANGED MORE THAN HVINS

7.97	6165.	218.	5730.	209.	1.63	6	246.	
2692.25	2691.58	81.	541.	136.	0.78	11	2687.50	
10.25	0.0	2.70	10.60	1.54	8.77	2693.88	2690.50	
0.010568	0.042	0.100	0.050	0.110	0.39	-0.00	483.98	
	2682.00	940.	940.	940.	75.	171.	729.89	2103.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97	6165.	268.	5440.	457.	1.07	3	387.	
2693.18	0.0	117.	618.	296.	-0.56	0	2687.50	
11.18	0.0	2.27	8.81	1.54	0.32	2694.25	2690.50	
0.006122	0.042	0.100	0.050	0.110	0.06	-0.00	441.14	
	2682.00	40.	40.	40.	118.	484.	1042.98	2104.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2689.65 NOT 2693.18  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	29.00	4.00	506.00	1.90
	ELCHU	ELCHD						
	2682.00	2682.00						

\*SECNO 7.970

3280 CROSS SECTION 7.97 EXTENDED 0.76 FEET

RICHARD CREEK	50 YEAR FLOOD				08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XN	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSPR	ENOST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2695.04	2694.79	0.37	1773.	4381.	506.	512.	2693.10
ELTRD							
2692.60							



E07

3685 20 TRIALS ATTEMPTED WSEL, CWSEL  
3720 CRITICAL DEPTH ASSUMED

7.97	6165.	201.	5271.	694.	1.41	20	607.	
2694.86	2694.86	104.	512.	399.	0.34	9	2692.00	
12.86	0.0	1.93	10.29	1.74	0.19	2696.27	2693.60	
0.006710	0.042	0.080	0.050	0.080	-0.19	-0.00	435.28	
	2682.00	30.	30.	30.	99.	508.	1042.00	2105.

\*SECNO 7.970

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION

7.97 EXTENDED 1.41 FEET

3301 HV CHANGED MORE THAN HVINS

7.97	6165.	286.	4659.	1220.	0.87	7	632.	
2695.51	0.0	158.	546.	714.	-0.55	0	2692.00	
15.51	0.0	1.81	8.53	1.71	0.05	2696.38	2693.60	
0.004234	0.042	0.080	0.050	0.080	0.05	-0.00	409.94	
	2682.00	10.	10.	10.	124.	508.	1042.00	2105.

\*SECNO 8.200

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
0	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

8.20	5800.	393.	5160.	248.	1.61	3	451.	
2702.88	2702.88	217.	479.	192.	0.74	14	2700.30	
8.68	0.0	1.81	10.77	1.29	7.19	2704.49	2699.50	
0.010037	0.042	0.120	0.045	0.120	0.37	-0.00	616.24	
	2694.20	1170.	1170.	1170.	199.	253.	1067.58	2136.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

8.20	5800.	660.	4452.	688.	0.72	4	651.	
2704.10	0.0	450.	576.	575.	-0.89	0	2700.30	
9.90	0.0	1.47	7.73	1.20	0.24	2704.82	2699.50	
0.004043	0.042	0.120	0.045	0.120	0.09	-0.00	563.12	
	2694.20	40.	40.	40.	252.	399.	1213.86	2137.

F07

SPECIAL BRIDGE

SB	HK	XKOR	CDFA	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
	ELCHU	ELCHD						
	2694.20	2694.20						

\*SECO 8.200

\*\*\* GR CARDS REPEATED  
PRESSURE FLOW

EGPRS	EGLWC	H3	GWEIR	QPR	BAREA	TAREA	ELLT
2705.96	2704.69	0.14	0.	5800.	670.	670.	2704.00
ELTRD							
2706.70							

8.20	5800.	924.	3670.	1206.	0.27	2	782.
2705.69	0.0	814.	704.	1206.	-0.44	0	2700.30
11.49	0.0	1.14	5.21	1.00	1.14	2705.96	2699.50
0.001410	0.042	0.120	0.045	0.120	0.0	-0.00	531.20
	2694.20	30.	30.	30.	284.	498.	1312.95
							2139.

\*SECO 8.200

\*\*\* GR CARDS REPEATED

8.20	5800.	927.	3650.	1213.	0.27	0	787.
2705.71	0.0	820.	708.	1218.	-0.00	0	2700.30
11.51	0.0	1.13	5.18	1.00	0.01	2705.98	2699.50
0.001389	0.042	0.120	0.045	0.120	0.00	-0.00	530.70
	2694.20	10.	10.	10.	284.	503.	1317.97
							2139.

\*SECO 8.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WCELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

8.27	5340.	620.	4471.	249.	1.82	3	219.
2706.22	2706.22	186.	381.	79.	1.55	14	2704.00
7.02	0.0	3.33	11.74	3.16	1.05	2708.04	2705.00
0.013953	0.042	0.090	0.045	0.100	0.77	-0.00	304.64
	2699.20	340.	340.	340.	148.	230.	682.88
							2153.

\*SECTO 8.410

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOP MID BANK ELEV	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOP MID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
8.41	5295.	845.	4237.	213.	1.22	4	496.	
2714.68	2714.68	282.	433.	165.	-0.60	11	2713.00	
8.48	0.0	3.00	9.80	1.29	7.20	2715.89	2713.40	
0.008755	0.042	0.070	0.045	0.090	0.08	-0.00	317.10	
	2706.20	660.	660.	660.	225.	271.	80.11	2164.

\*SECTO 8.670

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOP MID BANK ELEV	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOP MID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
8.67	5205.	116.	4742.	348.	2.56	4	160.	
2731.47	2731.47	87.	353.	101.	1.35	12	2730.00	
11.27	0.0	1.33	15.43	3.43	12.46	2734.03	2727.00	
0.010914	0.043	0.120	0.045	0.100	0.67	-0.00	66.14	
	2720.20	1280.	1280.	1280.	204.	55.	325.24	2185.

\*SECTO 8.800

3301 HV CHANGED MORE THAN HVINS

8.80	5165.	1335.	2297.	1533.	0.92	2	281.	
2738.56	0.0	401.	214.	372.	-1.65	0	2734.30	
9.36	0.0	3.33	10.74	4.12	5.28	2739.48	2731.80	
0.007231	0.043	0.070	0.045	0.100	0.16	-0.00	65.74	
	2729.20	600.	600.	600.	198.	84.	347.03	2196.

\*SECTO 8.920

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOP MID BANK ELEV	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOP MID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	

H07

ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY							
3720 CRITICAL DEPTH ASSUMED							
8.92	2975.	374.	2599.	2.	1.39	2	212.
2742.86	2742.86	189.	257.	2.	0.48	14	2741.50
5.86	0.0	1.98	10.11	1.30	4.13	2744.25	2741.50
0.009426	0.043	0.090	0.040	0.080	0.24	-0.00	288.54
	2737.00	520.	520.	520.	183.	29.	480.79
							2204.

\*SECNO 9.060

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

9.06	2895.	467.	2422.	7.	0.83	3	255.
2748.23	0.0	343.	303.	5.	-0.56	0	2746.00
6.73	0.0	1.36	7.99	1.28	4.75	2749.06	2746.00
0.004726	0.042	0.120	0.040	0.080	0.06	-0.00	227.17
	2741.50	730.	730.	730.	224.	31.	482.57
							2213.

\*SECNO 9.060

3280 CROSS SECTION 9.06 EXTENDED 0.60 FEET

RICHLAND CREEK		50 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QRO3	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VR0B	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CWSL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED							
9.06	2895.	479.	1928.	48.	1.31	20	218.
2752.70	2752.70	368.	173.	26.	0.48	15	2750.10
5.30	0.0	2.50	11.14	1.87	0.14	2754.02	2751.50
0.012194	0.042	0.120	0.040	0.080	0.24	-0.00	35.26
	2747.40	20.	20.	20.	170.	48.	253.00
							2214.

\*SECNO 9.060

3280 CROSS SECTION 9.06 EXTENDED 1.42 FEET

3301 HV CHANGED MORE THAN HVINS

9.06	2895.	892.	1919.	84.	0.70	4	219.
2753.52	0.0	492.	236.	49.	-0.62	0	2750.10
8.62	0.0	1.81	8.13	1.71	0.14	2754.21	2751.50
0.004429	0.042	0.120	0.040	0.080	0.06	-0.00	34.47
	2744.90	20.	20.	20.	171.	48.	253.00
							2214.

\*SECNO 9.150

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION

9.15 EXTENDED 0.63 FEET

9.15	2855.	875.	1949.	31.	0.97	3	218.	
2756.13	0.0	372.	207.	26.	0.27	0	2753.50	
7.83	0.0	2.35	9.42	1.19	2.74	2757.09	2754.90	
0.008980	0.042	0.110	0.045	0.110	0.14	-0.00	35.23	
	2748.30	450.	450.	450.	170.	48.	253.00	2221.

\*SECHO 9.260

3265 DIVIDED FLCH

3280 CROSS SECTION 9.26 EXTENDED 0.21 FEET

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

9.26	2855.	10.	2705.	139.	1.39	3	316.	
2761.21	2761.21	19.	278.	133.	0.42	8	2761.20	
7.21	0.0	0.54	9.72	1.05	4.84	2762.60	2760.50	
0.009854	0.043	0.110	0.045	0.110	0.21	-0.00	267.24	
	2754.00	520.	520.	520.	218.	215.	700.00	2227.

\*SECHO 9.260

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION

9.26 EXTENDED 1.34 FEET

3301 HV CHANGED MORE THAN HVINS

9.26	2855.	182.	2253.	421.	0.56	4	471.	
2762.35	0.0	216.	335.	347.	-0.83	3	2761.20	
8.35	0.0	0.84	6.73	1.21	0.22	2762.91	2760.50	
0.003615	0.043	0.110	0.045	0.110	0.08	-0.00	228.62	
	2754.00	40.	40.	40.	256.	215.	700.00	2228.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAR/A	SS
	1.25	1.60	3.00	0.0	42.70	2.00	305.00	0.0
	ELCHU	ELCHD						
	2754.00	2754.00						

\*SECHO 9.260

J07

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	LOSS	WSDR	SSTA	
SLOPE	WTH	XML	XNCH	XNR	GLOSS	WSDL	WSDR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR					
PRESSURE AND WEIR FLOW									
EGRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC		
2764.33	2763.00	0.09	1041.	1828.	305.	305.	2761.50		
ELTRD									
9.26	2855.	291.	1977.	587.	0.32	2	602.		
2762.93	0.0	350.	366.	586.	-0.24	0	2761.10		
8.93	0.0	0.83	5.40	1.00	0.33	2763.24	2760.30		
0.00202	0.043	0.110	0.045	0.110	0.0	-0.00	228.92		
	2754.00	30.	30.	30.	258.	344.	828.79		2229.

\*SECNO 9.260

*** GR CARDS REPEATED									
9.26	2855.	238.	2133.	484.	0.40	2	600.		
2762.90	0.0	343.	365.	576.	0.08	0	2761.10		
8.90	0.0	0.69	5.85	0.84	0.02	2763.30	2760.30		
0.001472	0.043	0.110	0.035	0.110	0.04	-0.00	227.06		
	2754.00	10.	10.	10.	258.	342.	826.76		2229.

\*SECNO 9.390

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/11/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	LOSS	WSDR	SSTA	
SLOPE	WTH	XML	XNCH	XNR	GLOSS	WSDL	WSDR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR					
3685 20 TRIALS ATTEMPTED WSEL, CWSEL									
3693 PROBABLE MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
9.39	2810.	220.	2104.	486.	0.91	20	546.		
2768.28	2768.28	195.	238.	330.	0.51	13	2766.10		
10.08	0.0	1.12	8.83	1.47	1.90	2769.19	2766.10		
0.006753	0.043	0.110	0.045	0.110	0.26	-0.00	45.85		
	2758.20	700.	700.	700.	336.	373.	754.76		2245.

\*SECNO 9.500

9.50	2740.	1081.	1221.	438.	0.59	4	589.		
2775.36	0.0	571.	135.	257.	-0.32	0	2773.30		

K07

5.96	0.0	1.89	9.02	1.70	6.73	2775.95	2773.30	
0.009454	0.043	0.110	0.045	0.110	0.03	-0.00	172.86	
	2769.40	850.	850.	850.	375.	215.	762.18	2262.

\*SECNO 9.550

\*\*\* GR CARDS REPEATED

9.55	2740.	1262.	902.	575.	0.19	2	634.	
2777.06	0.0	905.	158.	451.	-0.41	0	2774.10	
6.86	0.0	1.39	5.72	1.28	1.25	2777.24	2774.10	
0.003098	0.043	0.110	0.045	0.110	0.04	-0.00	151.87	
	2770.20	250.	250.	250.	396.	238.	785.73	2269.

\*SECNO 9.820

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL  
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED								
9.82	2665.	866.	1520.	279.	0.95	20	344.	
2791.48	2791.48	416.	149.	121.	0.77	13	2788.50	
9.48	0.0	2.08	10.20	2.30	3.30	2792.43	2788.80	
0.010506	0.043	0.110	0.047	0.110	0.38	-0.00	305.02	
	2782.00	640.	640.	640.	272.	71.	648.91	2286.

\*SECNO 10.000

10.00	2600.	29.	1583.	988.	0.51	5	319.	
2798.84	0.0	17.	219.	577.	-0.44	0	2793.50	
6.04	0.0	1.71	7.23	1.71	6.88	2799.35	2795.30	
0.005159	0.043	0.100	0.047	0.110	0.04	-0.00	228.72	
	2792.80	960.	960.	960.	25.	294.	547.99	2302.

\*SECNO 10.090

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		50 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WCDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL  
3693 PROBABLE MINIMUM SPECIFIC ENERGY

L07

3720 CRITICAL DEPTH ASSUMPT

10.09	2600.	0.	2993.	307.	1.55	20	215.	
2807.32	2807.32	0.	276.	206.	1.04	11	2808.50	
3.32	0.0	0.0	10.62	1.49	3.05	2808.87	2805.50	
0.01063	0.043	0.070	0.045	0.120	0.52	-0.00	265.00	
	2799.00	420.	420.	420.	18.	237.	519.87	2308.

\*SECNO 10.210

10.21	2600.	0.	2599.	1.	1.15	2	76.	
2814.81	0.0	0.	302.	2.	-0.40	0	2815.00	
6.31	0.0	0.0	8.59	0.74	7.05	2815.96	2814.30	
0.009823	0.043	0.080	0.045	0.080	0.04	-0.00	160.50	
	2808.50	880.	880.	880.	34.	41.	236.02	2314.

\*SECNO 10.280

10.28	2600.	0.	2600.	0.	1.30	1	68.	
2818.62	0.0	0.	284.	0.	0.16	0	2822.50	
5.62	0.0	0.0	9.16	0.0	3.89	2819.92	2824.00	
0.011928	0.043	0.080	0.045	0.080	0.08	-0.00	379.85	
	2813.00	360.	360.	360.	38.	30.	448.26	2316.

\*SECNO 10.390

RICHLAND CREEK			50 YEAR FLOOD		09/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WFELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	MTH	XNL	XNCH	XNR	GLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
10.39	2600.	0.	2319.	281.	1.80	4	147.		
2824.97	2823.80	0.	204.	118.	0.50	14	2826.50		
8.57	0.0	0.0	11.37	2.30	6.59	2826.77	2817.00		
0.012501	0.043	0.100	0.050	0.100	0.25	-0.00	123.78		
	2816.40	540.	540.	540.	14.	133.	270.88		2320.



M07

THIS RUN EXECUTED 08/01/81 8:17:35

\*\*\*\*\*  
HEC2 RELEASE DATED NOV 76 UPDATED JULY1979  
ERROR CORR - 01,02,03  
MODIFICATION - 50,51,52,53,54  
\*\*\*\*\*

T1 WAYNESVILLE NC 8950  
T2 100 YEAR FLOOD 8960  
T3 RICHLAND CREEK FLOOD PROFILES 8970

J1 ICHECK INQ MINV IDIR STRT METRIC HVINS Q WSEL FQ  
0. 4. 0. 0. 0.00250 0. 0.0 0. 2565.00 0.0 8980

J2 NPROF IPLOT PRFVS XEECV XSECH FN ALLDC ISW CHNIM ITRACE  
3. 0. -1. 0. 0. 0.0 0.0 0. 0. 0. 8990

\*PKOF 3

CCHV= 0.100 CEHV= 0.500

\*SECNO .050

3840 SECTION NOT HIGH ENOUGH 2565.00 2559.30 2486.50 2559.30 0.0 0  
 RICHLAND CREEK 100 YEAR FLOOD 09/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	MSDL	WSDR	ENDST	VOL
0.05	9400.	551.	4324.	4526.	0.30		830.	
2500.04	2498.49	352.	726.	1875.	0.50		2498.30	
13.54	2565.00	1.56	5.96	2.41	0.0	2500.34	2495.60	
0.002484	0.0	0.070	0.053	0.070	0.0	-0.00	140.70	
	2486.50	0.	0.	0.	246.	584.	971.10	0.

\*SECNO .230

0.23	9335.	4432.	4800.	103.	0.59	2	419.	
2502.25	0.0	1321.	601.	47.	0.29	0	2495.80	
14.45	0.0	3.35	7.99	2.19	2.35	2502.84	2497.80	
0.003758	0.056	0.070	0.055	0.070	0.15	-0.00	128.79	
	2487.80	760.	800.	760.	373.	47.	548.15	44.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23	9335.	4545.	4680.	110.	0.54	2	425.	
2502.45	0.0	1393.	611.	51.	-0.06	0	2495.80	
14.65	0.0	3.26	7.66	2.14	0.14	2502.99	2497.80	
0.003375	0.056	0.070	0.055	0.070	0.01	-0.00	124.24	
	2487.80	40.	40.	40.	377.	48.	549.11	45.

\*SECNO .230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	MSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

0.23	9335.	2111.	7224.	0.	1.96	3	264.	
2501.85	2501.85	386.	582.	0.	1.42	13	2506.20	
13.85	0.0	5.47	12.41	0.0	0.01	2503.81	2503.50	

808

0.023557 0.056 0.070 0.055 0.070 0.71 -0.00 146.61  
2488.00 1. 1. 1. 343. 35. 525.00 45.

\*SECNO .230

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWD	
MILE	Q	QLOB	QCK	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSYA	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	ENDST	VOL
	ELMTH	XLOBL	XLCH	XLOBR	WSDL	WSDR		

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

0.23 9335. 3452. 5883. 0. 0.81 4 342.  
2503.94 0.0 781. 699. 0. -1.15 0 2506.20  
15.54 0.0 4.42 8.42 0.0 0.43 2504.35 2505.90  
0.009533 0.056 0.070 0.055 0.070 0.12 -0.00 108.83  
2488.00 30. 30. 30. 381. 35. 525.00 46.

\*SECNO .230

3301 HV CHANGED MORE THAN HVINS

0.23 9335. 4546. 3551. 1239. 0.22 2 542.  
2504.20 0.0 1888. 680. 537. -0.59 0 2496.20  
16.00 0.0 2.41 5.22 2.31 0.00 2504.41 2498.20  
0.001361 0.056 0.070 0.055 0.070 0.06 -0.00 94.08  
2488.20 1. 1. 1. 407. 135. 636.32 46.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23 9335. 4548. 3548. 1239. 0.22 2 542.  
2504.21 0.0 1890. 680. 537. -0.00 0 2496.20  
16.01 0.0 2.41 5.22 2.31 0.01 2504.42 2498.20  
0.001357 0.056 0.070 0.055 0.070 0.00 -0.00 93.95  
2488.20 10. 10. 10. 408. 135. 636.33 47.

\*SECNO .270

\*\*\* GR CARDS REPEATED

0.27 9335. 4604. 3469. 1261. 0.20 0 547.  
2504.42 0.0 1948. 691. 560. -0.02 0 2496.20  
16.22 0.0 2.34 5.02 2.25 0.19 2504.62 2498.20  
0.001233 0.056 0.070 0.055 0.070 0.00 -0.00 82.41  
2488.20 150. 150. 150. 412. 135. 636.71 58.

C08

\*SECH0 .550

3301 HV CHANGED MORE THAN HVINS

0.55	9250.	1254.	7719.	278.	0.93	2	272.	
2506.58	0.0	476.	920.	137.	0.73	0	2502.30	
14.78	0.0	2.65	8.39	2.03	2.52	2507.51	2502.30	
0.002730	0.049	0.070	0.045	0.080	0.37	-0.00	134.01	
	2491.80	1500.	1400.	1420.	182.	90.	405.76	137.

\*SECH0 .840

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			100 YEAR FLOOD		08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XPR.	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XL0BL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.84	9170.	49.	8966.	155.	1.95	2	136.	
2510.98	0.0	29.	792.	88.	1.02	0	2508.20	
13.56	0.0	1.67	11.32	1.77	4.91	2512.92	2506.90	
0.003931	0.046	0.070	0.040	0.100	0.51	-0.00	57.14	
	2497.40	1380.	1520.	1560.	64.	72.	192.67	179.

\*SECH0 1.160

3301 HV CHANGED MORE THAN HVINS

1.16	9080.	194.	7566.	1319.	1.15	2	219.	
2516.56	0.0	112.	810.	473.	-0.80	0	2513.90	
13.06	0.0	1.74	9.34	2.79	4.71	2517.71	2509.20	
0.002750	0.044	0.080	0.040	0.090	0.08	-0.00	41.00	
	2503.50	1460.	1440.	1460.	88.	131.	259.82	217.

\*SECH0 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	9000.	1054.	5342.	2604.	0.57	3	280.	
2520.02	0.0	466.	716.	819.	-0.38	0	2511.50	
12.82	0.0	2.26	7.46	3.18	2.82	2520.59	2513.20	
0.001626	0.043	0.090	0.040	0.070	0.06	-0.00	134.52	
	2507.20	1360.	1360.	1340.	112.	168.	414.51	270.

\*SECH0 1.450

3495 OVRBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2525.00 ELREA= 2518.00

1.45	9000.	0.	6869.	2131.	0.51	2	230.	
2520.14	0.0	0.	1079.	710.	-0.05	0	2513.20	
12.94	0.0	0.0	6.37	3.00	0.06	2520.66	2511.80	
0.001427	0.043	0.090	0.040	0.070	0.01	-0.00	185.00	

D08

2507.20 40. 40. 40. 55. 175. 414.76 272.

\*SECHO 1.450

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	9000.	0.	8993.	7.	1.54	2	140.
2519.63	0.0	0.	903.	9.	1.03	0	2524.80
12.63	0.0	0.0	9.96	0.80	0.00	2521.17	2524.00
0.007133	0.043	0.090	0.040	0.070	0.51	-0.00	187.35
	2507.00	1.	1.	1.	55.	171.	413.70
							272.

\*SECHO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DIV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XML	XNCH	XNR	OLOSS	CORAR	ENDST	VOL	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	9000.	0.	8976.	24.	1.41	2	151.
2519.97	0.0	0.	939.	21.	-0.13	0	2524.80
12.97	0.0	0.0	9.55	1.14	0.20	2521.39	2524.00
0.006344	0.043	0.090	0.040	0.070	0.01	-0.00	187.14
	2507.00	30.	30.	30.	55.	172.	413.41
							273.

\*SECHO 1.450

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2527.00 FLREA= 2520.00

1.45	9000.	0.	6774.	2226.	0.41	7	232.
2521.07	0.0	0.	1181.	822.	-1.00	0	2513.20
13.87	0.0	0.0	5.74	2.71	0.00	2521.49	2511.80
0.001026	0.043	0.090	0.040	0.070	0.10	-0.00	185.00
	2507.20	1.	1.	1.	55.	177.	416.70
							273.

\*SECHO 1.450

1.45	9000.	1137.	5126.	2737.	0.42	2	285.
2521.11	0.0	555.	785.	949.	0.01	0	2511.50

2521.11 0.0 555. 785. 969. 0.01 0 2517.50

E08

13.91	0.0	2.05	6.53	2.83	0.04	2521.53	2513.20	
0.001104	0.043	0.090	0.040	0.070	0.01	-0.00	131.85	
	2507.20	40.	40.	40.	115.	170.	416.78	275.

\*SECNO 1.700

1.70	8930.	3299.	5243.	388.	0.80	2	223.	
2522.94	0.0	934.	590.	131.	0.37	0	2515.50	
12.64	0.0	3.53	8.89	2.97	2.01	2523.74	2514.30	
0.002336	0.043	0.070	0.040	0.090	0.19	-0.00	73.21	
	2510.30	1300.	1300.	1300.	179.	44.	296.27	334.

\*SECNO 1.780

1.78	8900.	2307.	4294.	2299.	0.55	3	480.	
2524.04	0.0	753.	529.	1129.	-0.25	0	2517.80	
11.44	0.0	3.06	8.12	2.04	0.83	2524.59	2516.60	
0.002257	0.043	0.070	0.040	0.090	0.02	-0.00	78.50	
	2512.60	360.	360.	360.	174.	306.	558.95	350.

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPHD	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	HSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	LOSS	COSAR	SSA	
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR	ENDST	VOL
1.78	8900.	2321.	4243.	2336.	0.52	2	481.	
2524.16	0.0	771.	535.	1163.	-0.03	0	2517.80	
11.56	0.0	3.01	7.94	2.01	0.09	2524.68	2516.60	
0.002121	0.043	0.070	0.040	0.090	0.00	-0.00	77.99	
	2512.60	40.	40.	40.	175.	307.	559.35	353.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2521.30 NOT 2524.16  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	52.00	2.00	475.00	0.0
ELCHJ	ELCHD							
2513.00	2513.00							

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2532.83	2525.61	0.0	3110.	5792.	475.	475.	2522.50
ELTRD							
2524.70							

\*\*\*  
20  
0.0  
\*SEI  
326  
330  
718  
372  
2  
0.  
\*SE  
324  
334  
0.  
\*SI  
32  
32

F08

1.78	8900.	2587.	3263.	3050.	0.13	2	51.	
2527.71	0.0	1332.	716.	2182.	-0.37	0	2517.80	
15.11	0.0	1.94	4.58	1.40	3.18		2516.40	
0.000475	0.042	0.070	0.040	0.090	0.0	-0.00	58.93	
	2512.60	30.	30.	30.	194.	318.	570.95	355.

\*SECNO 1.780

1.78	8900.	3443.	3138.	2098.	0.16	2	708.	
2527.72	0.0	2223.	643.	1359.	0.01	0	2521.40	
15.12	0.0	1.65	4.88	1.54	0.02		2521.90	
0.000667	0.042	0.070	0.040	0.090	0.01	-0.00	38.68	
	2512.60	40.	40.	40.	470.	239.	747.15	359.

\*SECNO 1.950

\*\*\* GR CARDS REPEATED

1.95	8850.	3418.	2918.	2514.	0.13	2	709.	
2528.24	0.0	2231.	644.	1363.	-0.02	0	2521.90	
15.14	0.0	1.53	4.53	1.84	0.49		2522.40	
0.000574	0.042	0.070	0.040	0.070	0.00	-0.00	38.52	
	2513.10	810.	810.	770.	470.	239.	747.28	436.

\*SECNO 2.190

3301 HV CHANGED MORE THAN HVINS

2.19	8770.	1631.	3858.	3281.	0.73	3	876.	
2529.55	0.0	743.	394.	1020.	0.00	0	2525.90	
10.25	0.0	2.19	9.80	3.22	1.60		2525.90	
0.004953	0.042	0.070	0.040	0.070	0.30	-0.00	95.44	
	2519.30	1260.	1260.	1260.	507.	369.	971.75	529.

1490 NH CARD USED

\*SECNO 2.320

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	1TRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	FT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	MSDL	MSDR	ENDST	VOL
2.32	8725.	2707.	2375.	3642.	0.22	2	1000.	
2531.71	0.0	1390.	386.	1413.	-0.51	0	2525.00	
8.31	0.0	1.95	0.16	2.58	1.61		2528.50	
0.002032	0.042	0.070	0.040	0.065	0.05	-0.00	269.94	
	2523.40	200.	640.	640.	513.	487.	1270.17	557.

1490 NH CARD USED

\*SECNO 2.320

370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

21  
0.0  
\*8E1  
326  
326  
330  
368  
369  
372  
2  
0.  
\*S1  
321  
0  
\*S1  
32  
0  
SF

608

2.32	872.	3758.	1066.	3900.	0.14	2	1087.
2531.80	0.0	1412.	282.	1283.	-0.08	0	2529.00
8.40	0.0	2.66	3.78	3.04	0.00	2531.94	2528.70
0.003752	0.042	0.070	0.040	0.055	0.01	-116.44	269.46
	2523.40	1.	1.	1.	507.	560.	1336.12
							557.

\*SECNO 2.320

\*\*\* GR CARDS REPEATED

3370 NORMAL BRIDGE, NRD= 16 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	8725.	3780.	1032.	3913.	0.13	2	1071.
2531.92	0.0	1469.	287.	1347.	-0.01	0	2529.00
8.52	0.0	2.57	3.80	2.90	0.11	2532.05	2528.70
0.003328	0.042	0.070	0.040	0.055	0.00	-116.41	268.91
	2523.40	30.	30.	30.	507.	564.	1339.67
							559.

1490 NH CARD USED

\*SECNO 2.320

2.32	8725.	2501.	1962.	4262.	0.16	1	1071.
2531.91	0.0	1495.	398.	1521.	0.03	0	2525.00
8.51	0.0	1.67	4.94	2.80	0.00	2532.07	2528.50
0.001255	0.042	0.067	0.040	0.048	0.02	-0.00	268.93
	2523.40	1.	1.	1.	514.	557.	1339.52
							560.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

2.40	8700.	2639.	1807.	4254.	0.11	2	1088.
2532.42	0.0	1740.	425.	1791.	-0.04	0	2525.00
9.02	0.0	1.52	4.26	2.38	0.46	2532.53	2528.50
0.000855	0.042	0.067	0.040	0.049	0.00	-0.00	266.60
	2523.40	500.	500.	400.	518.	572.	1354.60
							598.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	G	QLOB	QCH	QRCB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XN	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

2.40	8700.	1332.	7027.	340.	1.22	20	478.
2554.80	2554.80	350.	726.	93.	1.11	21	2551.50
3.30	0.0	3.81	9.68	3.66	0.08	2556.02	2551.50
0.007783	0.042	0.050	0.030	0.050	0.55	-0.00	120.30
	2551.50	40.	40.	40.	312.	166.	606.42
							600.



H08

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	H/SEA	SS
	1.25	1.60	3.00	0.0	1.00	0.01	0.10	0.0
	ELCHU	ELCHD						
	2551.50	2551.50						

\*SECO 2.400  
WATER EL=X5 CARD= 2566.700

\*\*\* GR CARDS REPEATED

2.40	8700.	1913.	6252.	536.	0.36	0	530.
2566.70	0.0	749.	1144.	234.	0.10	0	2561.50
5.20	0.0	2.55	5.46	2.29	0.08	2567.06	2561.50
0.001351	0.042	0.050	0.030	0.050	0.09	-0.00	112.00
	2561.50	30.	30.	30.	328.	202.	642.22
							602.

\*SECO 2.400

2.40	9000.	2.	9897.	2.	0.02	2	1236.
2567.08	0.0	7.	8703.	7.	-0.34	0	2562.00
7.08	0.0	0.21	1.14	0.21	0.00	2567.10	2562.00
0.000039	0.042	0.050	0.030	0.050	0.03	-0.00	7.18
	2560.00	10.	10.	10.	618.	618.	1242.82
							603.

\*SECO 3.230

3.23	9810.	3.	9762.	45.	0.09	2	410.
2567.28	0.0	9.	4124.	101.	0.07	0	2565.00
12.28	0.0	0.36	2.37	0.44	0.23	2567.36	2563.80
0.000087	0.039	0.050	0.030	0.050	0.03	-0.00	34.81
	2555.00	4180.	4180.	4180.	181.	228.	444.48
							1224.

CCHV= 0.100 CEHV= 0.500

\*SECO 3.690

3/01 HV CHANGED MORE THAN HVINS

3.69	9760.	0.	9084.	676.	0.76	0	194.
2567.42	0.0	0.	1255.	368.	0.67	0	2571.40
14.62	0.0	0.0	7.24	1.83	0.48	2568.18	2562.60
0.001257	0.039	0.080	0.035	0.080	0.34	-0.00	193.47
	2552.80	2200.	2200.	2200.	54.	140.	387.29
							1372.

CCHV= 0.100 CEHV= 0.500

\*SECO 3.810

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK			100 YEAR FLOOD		04/27/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPHD
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTH	XN	XNCH	XNR	LOSS	CORAR	SSTA
	ELMIN	XLDBL	XLCH	XLOBR	WSDL	WSDR	ENDST
							VOL



J08

3301 HV CHANGED MORE THAN HVINS

3.97	9730.	1331.	7794.	605.	0.68	2	269.
2573.86	0.0	739.	1059.	303.	-0.72	0	2564.00
15.06	0.0	1.80	7.36	1.96	1.61	2576.34	2564.00
0.001859	0.039	0.120	0.045	0.120	0.07	-0.00	127.23
	2558.80	780.	740.	760.	186.	83.	396.21
							1425.

\*SECNO 3.970

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	GLOB	GCH	GROB	HV	ITRIAL	TOPMID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLCB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL
3.97	9730.	439.	9087.	205.	1.18	2	269.	
2573.73	0.0	293.	1009.	112.	0.49	0	2571.50	
14.93	0.0	1.50	9.00	1.83	0.12	2574.90	2570.20	
0.005437	0.039	0.120	0.045	0.120	0.25	-0.00	128.34	
	2558.80	40.	40.	40.	185.	84.	397.30	1426.

\*SECNO 3.970

\*\*\* GR CARDS REPEATED

3.97	9730.	504.	9000.	226.	1.11	2	272.
2573.96	0.0	328.	1027.	123.	-0.07	0	2571.50
15.16	0.0	1.54	8.76	1.84	0.16	2575.07	2570.20
0.005035	0.039	0.120	0.045	0.120	0.01	-0.00	126.35
	2558.80	30.	30.	30.	187.	84.	397.95
							1427.

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	9730.	1453.	7645.	632.	0.59	2	277.
2574.56	0.0	846.	1111.	337.	-0.52	0	2564.00
15.76	0.0	1.72	6.88	1.88	0.03	2575.15	2564.00
0.001524	0.039	0.120	0.045	0.120	0.05	-0.00	121.30
	2558.80	10.	10.	10.	192.	85.	398.29
							1428.

\*SECNO 4.140

4.14	9710.	3704.	4436.	1570.	0.29	2	420.
2576.06	0.0	2118.	732.	901.	-0.30	0	2564.30
13.36	0.0	1.75	6.06	1.74	1.17	2576.34	2566.70
0.001137	0.039	0.120	0.045	0.120	0.03	-0.00	374.28
	2562.70	760.	940.	940.	284.	136.	794.44
							1487.

\*SECNO 4.140

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2577.00 ELREA= 2577.00

4.14	9710.	0.	9710.	0.	0.42	2	179.
2576.04	0.0	0.	1876.	0.	0.13	0	2565.90
13.34	0.0	0.0	5.18	0.0	0.04	2576.45	2567.90

KOB

0.001085 0.039 0.120 0.045 0.120 0.06 -0.00 603.00  
 2562.70 40. 40. 40. 90. 90. 782.00 1489.

SPECIAL BRIDGE

SB HK XKOR COFO RDLEN BWC BWP BAREA SS  
 1.25 1.60 3.00 0.0 131.00 4.00 1740.00 1.24  
 ELCHU ELCHP  
 2562.60 2562.80

\*SECNO 4.140

\*\*\* GR CARDS REPEATED  
 RICHLAND CREEK

100 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	YTRIAL	TOPWID	
PLSV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	ML	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE FLOW

EGPRS EGLWC H3 QWEIR QPR BAREA TAREA ELLC  
 2576.81 2576.49 0.04 0. 9710. 1740. 1741. 2575.20  
 ELTRD  
 2577.20

3425 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2578.90 ELREA= 2578.90

4.14 9710. 0. 9710. 0. 0.39 2 179.  
 2576.42 0.0 0. 1945. 0. -0.03 0 2565.90  
 13.72 0.0 0.0 4.99 0.0 0.36 2576.81 2567.90  
 0.000961 0.039 0.120 0.045 0.120 0.0 -0.00 603.00  
 2562.70 115. 115. 115. 90. 90. 782.00 1494.

\*SECNO 4.140

4.14 9710. 3764. 4352. 1594. 0.25 2 423.  
 2576.60 0.0 2260. 763. 962. -0.14 0 2564.30  
 13.90 0.0 1.67 5.71 1.66 0.03 2576.85 2566.70  
 0.000954 0.039 0.120 0.045 0.120 0.01 -0.00 372.57  
 2562.70 30. 30. 30. 285. 137. 795.28 1496.

\*SECNO 4.280

4.28 8660. 3330. 3333. 1997. 0.23 2 469.  
 2577.31 0.0 1662. 589. 1150. -0.02 0 2570.00  
 14.91 0.0 2.00 5.63 1.74 0.68 2577.54 2566.20  
 0.001104 0.040 0.100 0.045 0.100 0.00 -0.00 127.13  
 2562.40 600. 710. 710. 249. 220. 596.01 1552.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

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LOB

4.28	8660.	3333.	3325.	2002.	0.22	0	470.	
2577.36	0.0	1671.	591.	1158.	-0.00	0	2570.00	
14.96	0.0	1.99	5.62	1.73	0.04	2577.58	2569.20	
0.001088	0.040	0.100	0.045	0.100	0.00	-0.00	126.67	
	2562.40	40.	40.	40.	250.	220.	596.43	1555.

\*SECNO 4.280

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	8660.	3318.	3341.	2000.	0.32	2	469.	
2577.31	0.0	1406.	499.	960.	0.09	0	2570.00	
14.91	0.0	2.36	6.70	2.08	0.00	2577.63	2569.20	
0.007887	0.040	0.100	0.045	0.100	0.05	-514.52	127.11	
	2562.40	1.	1.	1.	249.	220.	596.03	1555.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	G	GLOB	GCH	GROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	8660.	3321.	3330.	2009.	0.31	2	470.	
2577.36	0.0	1416.	501.	968.	-0.01	0	2570.00	
14.96	0.0	2.35	6.65	2.07	0.04	2577.67	2569.20	
0.007725	0.040	0.100	0.045	0.100	0.00	-514.52	126.61	
	2562.40	5.	5.	5.	250.	220.	596.49	1555.

\*SECNO 4.280

4.28	8660.	3339.	3304.	2017.	0.22	2	472.	
2577.47	0.0	1697.	597.	1181.	-0.10	0	2570.00	
15.07	0.0	1.97	5.54	1.71	0.00	2577.68	2569.20	
0.001042	0.040	0.100	0.045	0.100	0.01	-0.00	125.38	
	2562.40	1.	1.	1.	251.	221.	597.61	1555.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

4.28	8660.	3339.	3302.	2018.	0.21	2	472.	
2577.48	0.0	1700.	597.	1183.	-0.00	0	2570.00	
15.08	0.0	1.96	5.53	1.71	0.01	2577.69	2569.20	
0.001038	0.040	0.100	0.045	0.100	0.00	-0.00	125.25	
	2562.40	10.	10.	10.	251.	221.	597.72	1556.

\*SECNO 4.430

4.43	8465.	518.	4452.	3494.	0.71	2	310.	
2578.42	0.0	246.	526.	814.	0.49	0	2572.00	
12.22	0.0	2.11	8.47	4.29	1.19	2579.13	2571.70	

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M08

0.002956 0.040 0.120 0.045 0.060 0.25 -0.00 62.66  
 2566.20 715. 735. 735. 72. 238. 372.16 1598.

\*SECNO 4.630

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

4.63 8475. 456. 4935. 3084. 1.25 3 222.  
 2582.23 0.0 178. 453. 564. 0.54 0 2577.50  
 10.73 0.0 2.56 10.90 5.47 4.08 2583.48 2577.00  
 0.005981 0.040 0.120 0.045 0.080 0.27 -0.00 66.78  
 2571.50 1000. 1000. 1000. 68. 152. 286.96 1630.

\*SECNO 4.820

RICHLAND CREEK

100 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	ARIB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VRCB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	VOI.
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	
4.82	8375.	1236.	6443.	695.	1.48	2	222.	
2588.08	0.0	436.	586.	196.	0.23	0	2582.40	
12.38	0.0	2.83	10.99	3.54	5.97	2589.56	2584.20	
0.008525	0.040	0.120	0.050	0.070	0.11	-0.00	57.77	
	2575.70	1100.	940.	940.	122.	100.	279.63	1657.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96 8300. 2806. 5494. 0. 0.74 2 137.  
 2591.86 0.0 549. 718. 0. -0.74 0 2581.30  
 12.66 0.0 5.11 7.65 0.34 2.96 2592.60 2591.50  
 0.003617 0.041 0.070 0.055 0.080 0.07 -0.00 297.06  
 2579.20 660. 610. 610. 104. 33. 434.01 1675.

\*SECNO 4.960

4.96 8300. 1746. 6554. 0. 0.33 2 231.  
 2592.38 0.0 609. 1282. 0. -0.39 0 2585.20  
 13.18 0.0 2.87 5.11 0.0 0.10 2592.73 2599.50  
 0.001710 0.041 0.070 0.055 0.080 0.04 -0.00 204.75  
 2579.20 40. 40. 40. 185. 46. 435.51 1677.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BMC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	54.00	4.00	1310.00	1.18
	ELCHU	ELCHD						
	2579.20	2579.20						

\*SECNO 4.960

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S. = 2592.16 BRIDGE VELOCITY = 9.81

CALCULATED CHANNEL AREA = 846.  
 EGPRS EGLWC H3 QWEIR QPR BAREA TAREA ELLC  
 0.0 2592.77 0.05 0. 8300. 1310. 1310. 2592.50

2598.00

4.96	8300.	1754.	6546.	0.	0.34	0	231.
2592.43	0.0	613.	1288.	0.	-0.00	0	2585.20
13.23	0.0	2.86	5.08	0.0	0.04	2592.77	2592.50
0.001684	0.041	0.070	0.055	0.080	0.0	-0.00	204.62
	2579.20	15.	15.	15.	185.	46.	435.63

\*SECHO 4.960

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK

100 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTR	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

4.96	8300.	0.	8286.	14.	4.06	4	72.
2590.64	2590.64	0.	512.	7.	3.72	11	2596.90
11.04	0.0	0.0	16.18	2.08	0.04	2594.70	2589.40
0.023980	0.041	0.070	0.055	0.080	1.86	-0.00	373.96
	2579.60	10.	10.	10.	27.	45.	461.21

\*SECHO 4.960

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK

100 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTR	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

4.96	8300.	0.	8064.	236.	1.97	4	95.
2593.74	0.0	0.	707.	80.	-2.09	0	2596.90
14.14	0.0	0.0	11.41	2.94	0.80	2595.71	2589.40
0.008481	0.041	0.080	0.055	0.090	0.21	-0.00	385.51
	2579.60	60.	60.	60.	30.	64.	480.26

\*SECNO 5.100

3301 HV CHANGED MORE THAN HVINS

5.10	8180.	644.	5465.	2071.	0.20	4	366.	
2597.30	0.0	413.	1320.	1036.	-1.77	0	2589.10	
11.70	0.0	1.56	4.14	2.00	1.61	2597.50	2589.70	
0.000940	0.041	0.100	0.050	0.080	0.18	-0.00	187.56	
	2585.60	900.	750.	750.	138.	228.	553.70	1710.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2600.00 ELREA= 2598.00

5.10	8180.	0.	8180.	0.	0.62	2	136.	
2597.14	0.0	0.	1298.	0.	0.42	0	2589.10	
11.54	0.0	0.0	6.30	0.0	0.06	2597.76	2589.70	
0.002227	0.041	0.100	0.050	0.080	0.21	-0.00	258.00	
	2585.60	40.	40.	40.	68.	68.	394.00	1712.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	95.00	18.00	1350.00	1.63
	ELCHU	ELCHD						
	2584.20	2584.20						

\*SECNO 5.100

\*\*\* GR CARDS REPEATED  
PRESSURE FLOW

EGPSS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2598.06	2598.01	0.28	0.	8180.	1350.	1349.	2597.80
ELTRD							
2599.10							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2601.00 ELREA= 2599.50

5.10	8180.	0.	8180.	0.	0.57	2	136.	
2597.48	0.0	0.	1345.	0.	-0.04	0	2589.10	
11.88	0.0	0.0	6.08	0.0	0.30	2598.06	2589.70	
0.001982	0.041	0.090	0.050	0.100	0.0	-0.00	258.00	
	2585.60	30.	30.	30.	68.	68.	394.00	1713.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

5.10	8180.	775.	5622.	1783.	0.18	2	369.	
2597.92	0.0	457.	1404.	1136.	-0.39	0	2589.10	
12.32	0.0	1.70	4.00	1.57	0.01	2598.11	2589.70	



C09

0.000810 0.041 0.090 0.050 0.100 0.04 -0.00 185.96  
 2585.60 10. 10. 10. 140. 229. 554.86 1713.

\*SECNO 5.200

RICHLAND CREEK 100 YEAR FLOOD 08/01/81  
 MILE Q QLOB QCH QROB HV ITRIAL TOPMID  
 ELEV CRIWS ALOB ACH AROB DHV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB HL EG LEFT/RIGHT  
 SLOPE WTN XNL XNCH XNR OLOSS CORAR SSTA  
 ELMIN XLOBL XLCH XLOBR WSDL WSDR ENDST VOL  
 5.20 8110. 947. 3900. 3269. 0.24 2 370.  
 2598.27 0.0 482. 723. 1903. 0.06 0 2589.10  
 12.67 0.0 1.95 5.39 1.72 0.37 2598.51 2587.00  
 0.000803 0.041 0.080 0.040 0.100 0.03 -0.00 185.08  
 2585.60 480. 480. 480. 104. 266. 555.50 1746.

\*SECNO 5.490

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK 100 YEAR FLOOD 08/01/81  
 MILE Q QLOB QCH QROB HV ITRIAL TOPMID  
 ELEV CRIWS ALOB ACH AROB DHV IDC BANK ELEV  
 DEPTH WSELK VLOB VCH VROB HL EG LEFT/RIGHT  
 SLOPE WTN XNL XNCH XNR OLOSS CORAR SSTA  
 ELMIN XLOBL XLCH XLOBR WSDL WSDR ENDST VOL

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

5.49 8110. 2443. 5591. 76. 1.83 20 333.  
 2603.48 2603.48 638. 436. 34. 1.59 16 2602.80  
 8.68 0.0 3.83 12.82 2.23 2.93 2605.31 2600.90  
 0.009216 0.041 0.080 0.040 0.100 0.79 -0.00 194.10  
 2594.80 1530. 1530. 1530. 381. 48. 623.22 1820.

\*SECNO 5.580

3301 HV CHANGED MORE THAN HVINS

5.58 8090. 4063. 3885. 139. 0.42 2 442.  
 2606.38 0.0 1641. 550. 95. -1.41 0 2602.80  
 9.88 0.0 2.48 7.07 1.46 1.35 2606.80 2600.90  
 0.002020 0.041 0.080 0.040 0.120 0.14 -0.00 187.54  
 2596.50 360. 360. 360. 388. 54. 629.11 1834.

\*SECNO 5.580

GR CARDS REPEATED

5.58 8090. 4093. 3857. 141. 0.40 2 442.  
 2606.48 0.0 1677. 556. 98. -0.02 0 2602.80  
 9.98 0.0 2.44 6.94 1.44 0.08 2606.88 2600.90

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D09

0.001918	0.041	0.080	0.040	0.120	0.00	-0.00	187.31	
	2596.50	40.	40.	40.	388.	54.	629.31	1836.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHU	ELCHD						
	2596.50	2596.50						

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.80 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2608.19	2607.95	0.00	4740.	3385.	408.	408.	2806.40
ELTRD							
2604.90							

5.58	8090.	4209.	2939.	942.	0.19	2	700.	
2608.00	0.0	2155.	555.	626.	-0.21	0	2604.70	
11.50	0.0	1.95	5.29	1.51	1.31	2608.19	2604.40	
0.001122	0.041	0.070	0.040	0.080	0.0	-0.00	450.00	
	2596.50	35.	35.	35.	499.	202.	1150.00	1838.

\*SECNO 5.580  
3280 CROSS SECTION      5.58 EXTENDED      4.86 FEET

RICHLAND CREEK

100 YEAR FLOOD      08/01/81

MILE	Q	QLOS	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
5.58	8090.	3801.	3630.	659.	0.16	1	700.	
2608.07	0.0	2187.	824.	486.	-0.03	0	2604.70	
10.67	0.0	1.74	4.40	1.36	0.04	2608.23	2604.50	
0.000872	0.041	0.070	0.040	0.080	0.00	-0.00	450.00	
	2597.40	40.	40.	40.	520.	181.	1150.00	1841.

\*SECNO 5.640

5.64	8065.	3678.	3575.	812.	0.55	1	432.	
2608.42	0.0	1309.	425.	346.	0.39	0	2606.00	
9.42	0.0	2.81	8.41	2.34	0.55	2608.97	2605.00	
0.003904	0.041	0.070	0.040	0.080	0.20	-0.00	157.56	
	2596.00	340.	340.	340.	471.	160.	789.15	1863.

\*SECNO 5.710

E09

\*\*\* GR CARDS REPEATED

5.71	8065.	3632.	3634.	799.	0.59	2	630.	
2609.82	0.0	1269.	420.	335.	0.04	0	2607.50	
9.32	0.0	2.86	8.66	2.39	1.42	2610.41	2606.50	
0.004207	0.041	0.070	0.040	0.080	0.02	-0.00	155.09	
	2600.50	350.	350.	350.	471.	159.	788.25	1879.

\*SECNO 5.910

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	LOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	MSDL				
7185	MINIMUM	SPECIFIC	ENERGY						
3720	CRITICAL	DEPTH	ASSUMED						
5.91	8030.	172.	5532.	2326.	1.33	7	569.		
2616.61	2616.61	75.	503.	864.	0.74	8	2615.30		
10.81	0.0	2.31	11.00	2.69	4.54	2617.94	2616.00		
0.006156	0.041	0.040	0.040	0.080	0.37	-0.00	247.46		
	2605.80	900.	900.	900.	439.	432.	1118.23	1915.	

\*SECNO 5.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

5.97	8020.	3145.	3533.	1342.	0.52	3	581.	
2618.77	0.0	713.	471.	594.	-0.81	0	2617.70	
9.47	0.0	4.41	7.50	2.26	1.27	2619.28	2614.80	
0.003467	0.041	0.035	0.045	0.080	0.08	-0.00	65.77	
	2609.30	280.	280.	280.	356.	375.	796.98	1926.

\*SECNO 6.060

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 2.41 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	LOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	MSDL				
6.06	8000.	4149.	2547.	1304.	0.38	2	919.		

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F09

2620.01	0.0	1085.	354.	696.	-0.13	0	2619.50	
10.81	0.0	3.82	7.20	1.87	1.09	2620.39	2619.60	
0.002996	0.041	0.035	0.040	0.070	0.01	-0.00	12.00	
	2609.20	340.	340.	340.	571.	368.	950.00	1941.

\*SECHO 6.120

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 4.38 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPMID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XL	XMCH	XNR	LOSS	CORAR	ENDST		VOL
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR			

3685 20 TRIALS ATTEMPTED USEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.12	7990.	1437.	5478.	1075.	1.27	20	614.	
2622.48	2622.48	678.	507.	445.	0.88	6	2620.70	
10.88	0.0	2.12	10.80	2.41	1.09	2623.74	2619.80	
0.005240	0.041	0.080	0.040	0.080	0.44	-0.00	245.81	
	2611.80	280.	280.	280.	633.	221.	1100.00	1953.

\*SECHO 6.160

3265 DIVIDED FLOW

6.16	7985.	14.	6875.	1096.	1.57	2	231.	
2623.29	0.0	11.	639.	338.	0.31	0	2621.50	
9.89	0.0	1.24	10.77	3.25	0.96	2624.86	2619.70	
0.006986	0.041	0.050	0.045	0.080	0.15	-0.00	677.03	
	2613.40	160.	160.	160.	103.	154.	1134.05	1958.

\*SECHO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.16	7985.	96.	6588.	1301.	1.17	3	344.	
2624.02	0.0	68.	697.	422.	-0.40	0	2621.50	
10.6.	0.0	1.41	9.45	3.08	0.29	2625.19	2611.70	
0.004794	0.041	0.050	0.045	0.080	0.04	-0.00	538.46	
	2613.40	50.	50.	50.	442.	156.	1136.32	1959.

SPECIAL BRIDGE

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SPE

609

SB	HK	XXOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	51.00	6.00	632.00	5.94
	ELCHU	ELCHD						
	2613.00	2613.00						

\*SECNO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.16 EXTENDED 0.16 FEET

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	YAREA	ELLC
2627.98	2625.38	0.33	2156.	5865.	632.	632.	2622.20

ELTRD
2624.50

6.16	7985.	545.	5862.	1578.	0.60	2	650.
2625.55	0.0	487.	821.	610.	-0.57	0	2621.30
12.15	0.0	1.12	7.14	2.59	0.97	2626.16	2619.70
0.002201	0.041	0.080	0.045	0.080	0.0	-0.00	448.80
	2613.40	50.	50.	50.	531.	180.	1160.00
							1961.

\*SECNO 6.160

3265 DIVIDED FLOW

RICHLAND CREEK			100 YEAR FLOOD			08/01/81		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XRL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.16	7985.	581.	7393.	11.	1.02	2	327.	
2625.47	0.0	273.	881.	11.	0.41	0	2624.30	
10.27	0.0	2.13	8.39	1.03	0.12	2626.49	2624.00	
0.004658	0.041	0.080	0.045	0.080	0.21	-0.00	607.42	
	2615.20	40.	40.	40.	338.	75.	1020.01	1962.

\*SECNO 6.200

3265 DIVIDED FLOW

3280 CROSS SECTION 6.20 EXTENDED 1.12 FEET

6.20	7975.	2586.	5375.	14.	1.02	2	462.
2625.92	0.0	1124.	553.	15.	-0.00	0	2623.20

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H09

11.22	0.0	2.30	9.72	0.92	0.43	2626.24	2624.40	
0.005465	0.041	0.100	0.045	0.100	0.00	-0.00	400.00	1965.
	2614.70	90.	90.	90.	463.	52.	914.97	

\*SECNO 6.310

3265 DIVIDED FLOW

3280 CROSS SECTION 6.31 EXTENDED 2.39 FEET

6.31	7955.	3106.	3527.	1322.	0.65	3	816.	
2628.79	0.0	1419.	376.	653.	-0.37	0	2626.60	
11.79	0.0	2.19	9.38	2.02	2.46	2629.44	2622.00	
0.004819	0.041	0.100	0.045	0.100	0.04	-0.00	31.00	
	2617.00	480.	480.	480.	489.	391.	911.26	1988.

\*SECNO 6.480

3265 DIVIDED FLOW

3280 CROSS SECTION 6.48 EXTENDED 0.91 FEET

6.48	7920.	906.	5715.	1299.	1.00	2	496.	
2634.01	0.0	389.	611.	612.	0.36	0	2631.00	
8.01	0.0	2.33	9.35	2.12	5.40	2635.02	2631.00	
0.006096	0.041	0.100	0.045	0.100	0.18	-0.00	174.00	
	2626.00	1000.	1000.	1000.	177.	700.	1050.00	2035.

\*SECNO 6.610

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOJ	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

6.61	7900.	288.	7463.	149.	2.61	2	307.	
2637.83	2637.83	118.	560.	110.	1.61	11	2633.00	
10.33	0.0	2.45	13.33	1.36	4.50	2640.44	2633.00	
0.010225	0.041	0.100	0.045	0.120	0.80	-0.00	251.67	
	2627.50	580.	580.	580.	121.	521.	893.34	2050.

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	BANK ELEV	
DEPTH	MSELK	VLOB	VCH	VROB	HL	EG	BETA	BANK ELEV	
SLOPE	HTM	XH	XCH	XROB	QLOSS	CORAR	BETA	BANK ELEV	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDBY		VOL
6.61	7900.	599.	6693.	608.	1.32	5	346.		
2639.51	0.0	272.	669.	416.	-1.29	0	2633.00		
12.01	0.0	2.20	10.00	1.44	0.26	2640.83	2633.00		
0.004538	0.041	0.100	0.045	0.120	0.13	-0.00	245.49		
	2627.50	40.	40.	40.	127.	548.	920.00		2051.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2636.85 NOT 2639.51  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHU	ELCHD						
	2628.50	2628.50						

\*SECH0 6.610  
6870 D.S. ENERGY OF 2640.83 HIGHER THAN COMPUTED ENERGY OF 2640.71

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H5	QWEIR	QPR	BAREA	TAREA	ELLC	
2640.71	2640.44	0.06	5719.	2800.	402.	404.	2637.90	
	ELTRD							
	2636.30							
6.61	7900.	620.	6220.	1060.	1.00	3	461.	
2639.83	0.0	302.	690.	746.	-0.32	0	2633.00	
12.33	0.0	2.05	9.02	1.42	0.0	2640.83	2633.00	
0.003542	0.041	0.100	0.045	0.120	0.0	-0.00	244.55	
	2627.50	30.	30.	30.	128.	587.	959.60	
								2053.

\*SECH0 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.61	7900.	626.	6198.	1076.	0.98	1	462.	
2639.89	0.0	307.	693.	759.	-0.02	0	2633.00	
12.39	0.0	2.04	8.95	1.42	0.04	2640.87	2633.00	

J09

0.003470 0.041 0.100 0.045 0.120 0.00 -0.00 244.42  
 2627.50 10. 10. 10. 128. 588. 960.65 2053.

\*SECNO 6.740

3265 DIVIDED FLOW

3280 CROSS SECTION 6.74 EXTENDED 1.17 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	STA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENSSY	VOL

3685 20 TRIALS ATTEMPTED WSEL, CHSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.74 7840. 557. 5800. 1503. 2.11 20 304.  
 2644.17 2644.17 223. 431. 495. 1.13 8 2639.70  
 12.77 0.0 2.50 13.47 3.04 1.19 2646.28 2655.00  
 0.009560 0.041 0.100 0.045 0.100 0.56 -0.00 215.55  
 2631.40 220. 220. 220. 172. 312. 700.00 2060.

\*SECNO 6.790

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.02 FEET

3301 HV CHANGED MORE THAN HVINS

6.79 7840. 1815. 3872. 2153. 0.35 3 392.  
 2648.02 0.0 1037. 594. 1164. -1.76 0 2639.70  
 16.62 0.0 1.75 6.32 1.88 1.91 2648.37 2639.10  
 0.071320 0.041 0.100 0.045 0.100 0.18 -0.00 181.07  
 2631.40 680. 680. 680. 207. 312. 700.00 2091.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 5.08 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC		



K09

DEPTH SLOPE	WSELK WTN ELMIN	VLOB XNL XLOBL	VCH XNCH XLCH	VROB XNR XLOBR	HL LOSS MSDL	EG CORAR MSDS	L3FT/RIGHT SSTA ENDST	VOL
6.79	7840.	1827.	3856.	2159.	0.35	2	392.	
2648.07	0.0	1048.	596.	1153.	-0.01	0	2639.70	
16.67	0.0	1.74	6.47	1.87	0.05	2648.42	2639.10	
0.001293	0.041	0.100	0.045	0.100	0.00	-0.00	180.96	2093.
	2631.40	40.	40.	40.	207.	312.	700.00	

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790  
PRESS FLOW BECAUSE EGLWC OF 2648.46 EXCEEDS 1.5 DEPTH  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	WEIR	QPR	BAREA	TAREA	ELLC
2639.34	2648.46	0.04	6015.	1929.	365.	359.	2642.80
ELTRD							
2641.70							

6.79	7840.	2972.	4142.	726.	0.44	2	363.	
2648.26	0.0	1452.	586.	382.	0.09	0	2640.50	
14.26	0.0	2.05	7.06	1.90	0.28	2648.70	2636.00	
0.001671	0.041	0.100	0.045	0.100	0.0	-0.00	89.34	
	2634.00	50.	50.	50.	273.	90.	452.74	2096.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

6.79	7840.	2975.	4139.	727.	0.44	0	363.	
2648.28	0.0	1455.	587.	383.	-0.00	0	2640.50	
14.28	0.0	2.04	7.05	1.90	0.02	2648.71	2636.00	
0.001663	0.041	0.100	0.045	0.100	0.00	-0.00	89.32	
	2634.00	10.	10.	10.	273.	90.	452.76	2097.

\*SECNO 7.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.00	7780.	1437.	5558.	785.	0.99	3	883.	
2651.67	0.0	1049.	592.	407.	0.55	0	2649.00	
9.14	0.0	1.37	9.38	1.93	3.03	2652.02	2646.50	
0.005733	0.041	0.120	0.045	0.110	0.28	-0.00	163.19	
	2642.00	1080.	1080.	1080.	702.	221.	1086.48	2152.

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\*SECNO 7.230

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOP MID BANK ELEV		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	LEFT/RIGHT		VOL
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	SSTA		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	ENDST		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR			
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
7.23	7710.	555.	5774.	1381.	1.29	11	767.		
2661.44	2661.44	329.	551.	796.	0.30	12	2657.00		
7.94	0.0	1.69	10.48	1.74	8.23	2662.73	2657.00		
0.008017	0.042	0.120	0.045	0.110	0.15	-0.00	130.25		
	2653.50	1220.	1220.	1220.	229.	538.	896.79		2205.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOP MID BANK ELEV		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	LEFT/RIGHT		VOL
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	SSTA		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	ENDST		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR			
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
7.23	7710.	758.	4961.	1991.	0.64	4	813.		
2662.37	0.0	505.	627.	1279.	-0.65	0	2657.00		
8.87	0.0	1.50	7.91	1.56	0.21	2663.00	2657.00		
0.003848	0.042	0.120	0.045	0.110	0.06	-0.00	126.55		
	2653.50	40.	40.	40.	232.	580.	939.49		2206.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAEA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
ELCHU	ELCHD							
2653.50	2653.50							

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

PRESS FLOW BECAUSE EGLWC OF 2663.09 EXCEEDS 1.5 DEPTH  
 6870 D.S. ENERGY OF 2663.00 HIGHER THAN COMPUTED ENERGY OF 2662.86  
 PRESSURE AND WEIR FLOW

EGPRB	EGLWC	H3	QWEIR	QPR	BAEA	TAREA	ELLC
2671.50	2663.09	0.09	5933.	1800.	402.	402.	2659.60
ELTND							
2658.90							

M09

7.23	7710.	759.	4954.	1996.	0.63	3	813.
2662.37	0.0	506.	628.	1284.	-0.00	0	2657.00
8.87	0.0	1.50	7.89	1.55	0.0	2663.00	2657.00
0.003824	0.042	0.120	0.045	0.110	0.0	-0.00	126.51
	2653.50	30.	30.	30.	232.	581.	939.77
							2208.

\*SECHO 7.250

\*\*\* GR CARDS REPEATED

7.23	7710.	782.	5041.	1887.	0.66	1	814.
2662.40	0.0	512.	630.	1301.	0.03	0	2657.00
8.90	0.0	1.53	8.00	1.45	0.04	2663.06	2657.00
0.003907	0.042	0.120	0.045	0.120	0.01	-0.00	126.39
	2653.50	10.	10.	10.	233.	581.	940.75
							2209.

\*SECHO 7.460

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XML	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

7.46	7640.	438.	4851.	2351.	1.69	5	378.
2669.79	2669.79	177.	380.	586.	1.03	8	2668.30
9.39	0.0	2.48	12.75	4.01	7.39	2671.48	2668.30
0.013549	0.042	0.080	0.050	0.110	0.51	-0.00	116.27
	2660.40	1120.	1120.	1120.	203.	175.	494.12
							2255.

\*SECHO 7.540

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.54	7620.	508.	5360.	1752.	0.79	3	396.
2673.95	0.0	225.	643.	683.	-0.90	0	2671.00
9.65	0.0	2.26	8.34	2.57	3.17	2674.74	2668.50
0.004604	0.042	0.090	0.050	0.110	0.09	-0.00	93.09
	2664.30	420.	420.	420.	203.	426.	714.09
							2268.

\*SECHO 7.780

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XML	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.78	7495.	1570.	4284.	1642.	0.89	5	1029.	
2684.14	2684.14	724.	436.	823.	0.10	13	2681.60	
8.44	0.0	2.17	9.83	2.00	7.90	2685.02	2142.00	
0.008892	0.042	0.090	0.050	0.110	0.05	-0.00	285.28	2318.
	2675.70	1240.	1240.	1240.	540.	489.	1315.33	

\*SECTO 7.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97	7380.	300.	6653.	427.	1.79	4	305.	
2692.83	2692.27	102.	589.	222.	0.91	11	2687.50	
10.83	0.0	2.94	11.29	1.92	9.14	2694.62	2690.50	
0.010697	0.042	0.100	0.050	0.110	0.43	-0.00	479.77	
	2682.00	940.	940.	940.	79.	447.	1005.53	2349.

\*SECTO 7.970

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97	7380.	402.	6109.	868.	1.05	3	585.	
2693.95	0.0	187.	680.	538.	-0.75	0	2687.50	
11.95	0.0	2.15	8.98	1.61	0.30	2694.99	2690.50	
0.005395	0.042	0.100	0.050	0.110	0.07	-0.00	402.94	
	2682.00	40.	40.	40.	156.	571.	1130.15	2350.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2690.51 NOT 2693.95  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BARIA	S3
	1.25	1.60	3.00	0.0	29.00	4.00	506.00	.90
	ELCHU	ELCHD						
	2682.00	2682.00						

\*SECTO 7.970

3280 CROSS SECTION 7.97 EXTENDED 1.46 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITR1A	TOPWID	
ELEV	CR1WS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WLN	XN	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

CGPRS	EGLWC	H3	QWEIR	QPR	BARE/I	TAREA	ELLC
2695.65	2695.35	0.28	3209.	4188.	50%	512.	2693.10

ELTRD  
2692.60

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3710 WSEL ASSUMED BASED ON MIN DIFF

7.97	7380.	351.	5523.	15%	1.19	20	632.	
2695.56	2695.49	163.	549.	737.	0.15	13	2692.00	
13.56	0.0	2.16	10.07	2.04	0.17	2696.75	2693.60	
0.005860	0.042	0.080	0.050	0.080	-0.17	0.0	409.62	
	2682.00	30.	30.	30.	124.	508.	1042.00	2351.

\*SECTO 7.970

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 7.97 EXTENDED 1.68 FEET

7.97	7380.	428.	5067.	1885.	0.86	3	635.	
2695.97	0.0	205.	571.	941.	-0.33	0	2692.00	
13.97	0.0	2.09	8.88	2.00	0.05	2696.83	2693.60	
0.004324	0.042	0.080	0.050	0.080	0.03	-0.00	406.79	
	2682.00	10.	10.	10.	127.	508.	1042.00	2352.

\*SECTO 8.200

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/91			
MILE	Q	QLOB	OCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIVS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLCSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSEL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

8.20	6950.	642.	5742.	566.	1.51	3	615.	
2703.53	2703.53	334.	531.	380.	0.65	14	2700.30	
9.33	0.0	1.92	10.81	1.49	6.93	2705.04	2699.50	
0.008817	0.042	0.120	0.045	0.120	0.32	-0.00	574.37	
	2692.20	1170.	1170.	1170.	241.	374.	1189.43	2392.

\*SECTO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

8.20	6950.	907.	5002.	1041.	0.75	4	683.
2704.60	0.0	559.	616.	761.	-0.76	0	2700.30
10.40	0.0	1.62	8.12	1.37	0.23	2705.35	2699.50

C10

0.004076	0.042	0.120	0.045	0.120	0.08	-0.00	553.07	
	2694.20	40.	40.	40.	282.	421.	1235.71	2393.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
	ELCHU	ELCHD						
	2694.20	2694.20						

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2707.27	2705.42	0.14	237.	6594.	670.	670.	2704.00

ELTRD  
2706.70

8.20	6950.	1251.	3868.	1831.	0.21	2	973.	
2706.87	0.0	1115.	798.	1858.	-0.54	0	2700.30	
12.67	0.0	1.12	4.84	0.99	1.73	2707.08	2699.50	
0.001029	0.042	0.120	0.045	0.120	0.0	-0.00	507.59	
	2694.20	30.	30.	30.	307.	668.	1480.86	2395.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

8.20	6950.	1253.	3860.	1836.	0.21	1	975.	
2706.88	0.0	1120.	800.	1869.	-0.00	0	2700.30	
12.68	0.0	1.12	4.83	0.98	0.01	2707.09	2699.50	
0.001019	0.042	0.120	0.045	0.120	0.00	-0.00	507.23	
	2694.20	10.	10.	10.	308.	667.	1482.38	2396.

\*SECNO 8.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

8.27	6425.	928.	5145.	352.	1.85	6	249.	
2706.87	2706.78	267.	426.	104.	1.64	14	2704.00	
7.67	0.0	3.47	12.07	3.40	0.81	2708.72	2705.00	
0.012698	0.042	0.090	0.045	0.100	0.82	-0.00	280.53	
	2699.20	340.	340.	340.	172.	232.	685.47	2414.

\*SECNO 8.410

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3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			VOL
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
8.41	6370.	1165.	4796.	409.	1.32	4	510.		
2715.01	2715.01	345.	457.	245.	-0.53	8	2713.00		
8.81	0.0	3.38	10.49	1.67	7.14	2716.33	2713.40		
0.009320	0.042	0.070	0.045	0.090	0.05	0.0	274.45		
	2706.20	660.	660.	660.	263.	281.	817.95		2428.

\*SECNO 8.670

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			VOL
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
8.67	6270.	388.	5368.	514.	2.46	3	238.		
2732.53	2732.53	225.	396.	140.	1.14	11	2730.00		
12.33	0.0	1.72	13.54	3.68	12.05	2734.99	2727.00		
0.009504	0.043	0.120	0.045	0.100	0.57	-0.00	64.45		
	2720.20	1280.	1280.	1280.	206.	59.	329.66		2454.

\*SECNO 8.800

3301 HV CHANGED MORE THAN HVINS

8.80	6215.	1878.	2561.	1777.	0.95	2	291.		
2739.12	0.0	504.	229.	413.	-1.51	0	2734.30		
9.92	0.0	3.72	11.18	4.30	4.93	2740.07	2731.80		
0.007167	0.043	0.070	0.045	0.100	0.15	-0.00	62.36		
	2729.20	800.	800.	800.	201.	90.	353.75		2467.

\*SECNO 8.920

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	100 YEAR FLOOD			08/01/81					
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E10

MILE	Q	GLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
8.92	3515.	606.	3003.	5.	1.49	2	235.	
2743.31	2743.31	265.	281.	3.	0.54	11	2741.50	
6.31	0.0	2.29	10.69	1.57	4.09	274.80	2741.50	
0.009361	0.043	0.090	0.040	0.080	0.27	-0.00	247.07	
	2737.00	520.	520.	520.	204.	30.	481.71	2478.

\*SECNO 9.060

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

9.06	3515.	687.	2817.	11.	0.91	3	281.	
2748.74	0.0	449.	330.	8.	-0.57	0	2746.00	
7.24	0.0	1.53	8.34	1.48	4.79	2749.65	2746.00	
0.004820	0.042	0.120	0.040	0.080	0.06	-0.00	203.07	
	2741.50	730.	730.	730.	248.	32.	483.70	2489.

\*SECNO 9.060

3280 CROSS SECTION

9.06 EXTENDED

0.98 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK								
MILE	Q	GLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
3685 20 TRIALS ATTEMPTED WSEL, CWSEL								
3693 PROBABLE MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
9.06	3515.	1190.	2237.	88.	1.46	20	218.	
2753.08	2753.08	426.	187.	37.	0.54	15	2730.10	
5.68	0.0	2.79	11.95	2.40	0.15	2754.54	2751.50	
0.012654	0.042	0.120	0.040	0.080	0.27	-0.00	34.89	
	2747.40	20.	20.	20.	171.	48.	253.00	2489.

\*SECNO 9.060

3280 CROSS SECTION

9.06 EXTENDED

1.84 FEET

3301 HV CHANGED MORE THAN HVINS

9.06	3515.	1146.	2242.	127.	0.81	4	219.	
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WATER  
 \*\*\* GR  
 2567  
 0.007  
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 256  
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 25



F10

2753.94	0.0	557.	252.	62.	-0.65	0	2750.10
9.04	0.0	2.06	8.91	2.06	0.15	2754.75	2751.50
0.004879	0.042	0.120	0.040	0.080	0.06	-0.00	34.06
	2744.90	20.	20.	20.	171.	48.	253.00
							2489.

\*SECNO 9.150

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 9.15 EXTENDED 1.19 FEET

9.15	3470.	1189.	2214.	67.	0.97	3	218.
2756.89	0.0	457.	228.	43.	0.17	0	2753.50
8.39	0.0	2.60	9.73	1.57	2.83	2757.66	2754.90
0.008426	0.042	0.110	0.045	0.110	0.08	-0.00	34.69
	2748.30	450.	450.	450.	171.	48.	253.00
							2498.

\*SECNO 9.260

3265 DIVIDED FLOW

3280 CROSS SECTION 9.26 EXTENDED 0.86 FEET

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLORR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
9.26	3470.	106.	2986.	379.	1.24	2	433.	
2761.86	2761.86	111.	311.	255.	0.26	11	2761.20	
7.86	0.0	0.95	9.61	1.48	4.31	2763.10	2760.50	
0.008157	0.043	0.110	0.045	0.110	0.13	-0.00	235.03	
	2754.00	520.	520.	520.	250.	215.	700.00	
							2506.	

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

3280 CROSS SECTION 9.26 EXTENDED 1.80 FEET

3301 HV CHANGED MORE THAN HVINS

9.26	3470.	339.	2520.	611.	0.57	4	473.
2762.81	0.0	323.	358.	435.	-0.67	0	2761.20
8.81	0.0	1.05	7.04	1.40	0.21	2763.37	2760.50
0.003627	0.043	0.110	0.045	0.110	0.07	-0.00	226.79
	2754.00	40.	40.	40.	258.	215.	700.00
							2507.

SPECIAL BRIDGE

0.004  
SPECI  
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610

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	42.70	2.00	305.00	0.0
	ELCHU	ELCHD						
	2754.00	2754.00						

\*SECNO 9.260

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	HS	QWEIR	QPR	BAREA	TAREA	ELLC
2766.02	2763.46	0.09	1686.	1785.	305.	305.	2761.50

ELTRD
2761.80

9.26	3470.	437.	2227.	806.	0.34	2	630.	
2763.32	0.0	442.	386.	717.	-0.23	0	2761.10	
9.32	0.0	0.99	5.77	1.12	0.28	2763.66	2760.30	
0.002196	0.043	0.110	0.045	0.110	0.0	-0.00	225.20	
	2754.00	30.	30.	30.	260.	370.	855.11	2508.

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

9.26	3470.	362.	2435.	672.	0.44	2	627.	
2763.29	0.0	433.	386.	703.	0.10	0	2761.10	
9.29	0.0	0.81	6.35	0.96	0.02	2763.73	2760.30	
0.001618	0.043	0.110	0.035	0.110	0.05	-0.00	225.38	
	2754.00	10.	10.	10.	260.	367.	852.36	2508.

\*SECNO 9.390

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

9.39	3410.	331.	2419.	660.	1.07	20	568.
2768.49	2768.49	250.	246.	385.	0.63	8	2766.10
10.29	0.0	1.32	9.83	1.71	2.14	2769.56	2766.10

H10

0.008014	0.043	0.110	0.045	0.110	0.32	-0.00	45.45	
	2758.20	700.	700.	700.	336.	381.	782.37	2527.

\*SECNO 9.500

3301 HV CHANGED MORE THAN HVINS

9.50	3320.	1441.	1255.	624.	0.46	4	614.	
2775.81	0.0	737.	147.	352.	-0.61	0	2773.30	
6.41	0.0	1.95	8.56	7.77	6.65	2776.27	2773.30	
0.007638	0.043	0.110	0.045	0.110	0.06	-0.00	162.27	
	2769.40	850.	850.	850.	385.	229.	176.09	2548.

\*SECNO 9.550

\*\*\* GR CARDS REPEATED

9.55	3320.	1569.	1017.	734.	0.21	2	641.	
2777.32	0.0	1007.	164.	510.	-0.26	0	2774.10	
7.12	0.0	1.56	6.19	1.44	1.23	2777.53	2774.10	
0.003434	0.043	0.110	0.045	0.110	0.03	-0.00	145.69	
	2770.20	250.	250.	250.	402.	239.	786.99	2556.

\*SECNO 9.820

3245 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDL	WSBR	SSTA
SLOPE	WTN	XNL	XNCH	XNROB				ENDST
	ELMIN	XLOBL	XCCH	XLOBR				VOL

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

9.82	3230.	1150.	1723.	356.	1.09	20	358.	
2791.72	2791.72	481.	154.	136.	0.88	12	2788.50	
9.72	0.0	2.39	11.22	2.61	3.72	2792.80	2788.80	
0.012212	0.043	0.110	0.047	0.110	0.44	-0.00	66.95	
	2782.00	640.	640.	640.	511.	74.	651.71	2574.

\*SECNO 10.000

3301 HV CHANGED MORE THAN HVINS

10.00	3150.	36.	1769.	1345.	0.50	5	335.	
2799.37	0.0	20.	239.	727.	-0.59	0	2793.50	
6.57	0.0	1.76	7.40	1.85	7.01	2799.87	2795.30	
0.004805	0.043	0.100	0.047	0.110	0.06	-0.00	228.09	
	2792.80	960.	960.	960.	26.	309.	562.60	2594.

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\*SECH0 10.090

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				
3685 20 TRIALS ATTEMPTED WSEL, CWSEL									
3693 PROBABLE MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
10.09	3150.	0.	2576.	574.	1.50	20	247.		
2807.94	2807.94	0.	238.	329.	1.00	15	2808.50		
8.94	0.0	0.0	10.84	1.74	2.84	2809.44	2803.50		
0.010247	0.043	0.070	0.045	0.120	0.50	0.0	265.00		
	2799.00	420.	420.	420.	18.	270.	552.19		2601.

\*SECH0 10.210

10.21	3150.	0.	3144.	6.	1.41	3	82.		
2815.21	0.0	0.	330.	5.	-0.09	0	2815.00		
6.71	0.0	0.02	9.52	1.14	7.17	2816.62	2814.30		
0.010842	0.043	0.080	0.045	0.080	0.01	-0.00	159.16		
	2808.50	680.	680.	680.	36.	46.	240.69		2608.

\*SECH0 10.280

10.28	3150.	0.	3150.	0.	1.44	2	72.		
2819.24	0.0	0.	327.	0.	0.03	0	2822.50		
6.24	0.0	0.0	9.63	0.0	4.05	2820.68	2824.00		
0.011657	0.043	0.080	0.045	0.080	0.02	-0.00	378.44		
	2813.00	360.	360.	360.	40.	32.	450.19		2611.

\*SECH0 10.390

RICHLAND CREEK		100 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRIS	ALOB	ACH	AROB	DHV	EG	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	CORAR	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL				
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
10.39	3150.	0.	2576.	574.	1.63	2	183.		
2825.80	2825.80	0.	229.	234.	0.19	15	2826.50		
9.40	0.0	0.0	11.26	2.45	6.14	2827.43	2817.00		
0.011095	0.043	0.100	0.050	0.100	0.09	-0.00	122.81		
	2816.40	540.	540.	540.	15.	168.	305.68		2616.

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THIS RUN EXECUTED 08/01/81 8:17:54

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 HEC2 RELEASE DATED NOV 76 UPDATED JULY1979  
 ERROR CORR - 01,02,03  
 MODIFICATION - 30,41,52,53,54  
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T1	WAYNESVILLE NC	9000
T2	500 YEAR FLOOD	9010
T3	RICHLAND CREEK	9020

FLOOD PROFILES

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	0.	5.	0.	0.	0.00250	0.	0.0	0.	2565.00	0.0	9030
J2	NPROF	IPLOY	PRFVS	XSECV	XSECH	FN	ALLDC	ISW	CHN1	ITRACE	
	15.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.	9040

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CCHV= 0.100 CEHV= 0.500

\*SECNO .050

3840 SECTION NOT HIGH ENOUGH 2565.00 2559.30 2486.50 2559.30 0.0 0

RICHLAND CREEK 500 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WYN	XNL	XNCH	XNR	OLOSS	CORAR	BETA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
0.05	13100.	1153.	5075.	6872.	0.32	0	848.	
2501.02	2499.11	564.	798.	2408.	0.50	27	2498.30	
14.52	2565.00	2.04	6.36	2.85	0.0	2501.33	2495.60	
0.002496	0.0	0.070	0.055	0.070	0.0	-0.00	123.97	
	2486.50	0.	0.	0.	263.	585.	972.33	0.

\*SECNO .230

0.23	13000.	6900.	5907.	194.	0.71	2	448.	
2503.31	0.0	1701.	655.	72.	0.40	0	2495.80	
15.51	0.0	4.06	9.02	2.69	2.49	2504.02	2497.80	
0.004273	0.057	0.070	0.055	0.070	0.20	-0.00	105.17	
	2487.80	760.	800.	760.	396.	52.	553.17	55.

\*SECNO .250

\*\*\* GR CARDS REPEATED

0.23	13000.	7035.	5760.	205.	0.65	2	454.	
2503.54	0.0	1789.	667.	78.	-0.07	0	2495.80	
15.74	0.0	3.93	8.64	2.61	0.16	2504.19	2497.80	
0.003825	0.056	0.070	0.055	0.070	0.01	-0.00	99.93	
	2487.80	40.	40.	40.	402.	53.	554.29	57.

\*SECNO .230

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK 500 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WYN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2503.00

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

0.23	13000.	4423.	8577.	0.	1.88	4	325.	
2503.17	2503.17	683.	673.	0.	1.24	8	2506.20	
15.17	0.0	6.47	12.74	0.0	0.01	2505.06	2506.90	

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0.022397 0.056 0.070 0.055 0.070 0.62 -0.00 117.14  
 2488.00 1. 1. 1. 373. 35. 525.00 57.

\*SECNO .230  
 \*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DKV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAK	ENDST		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			VOL

3370 NORMAL BRIDGE, NRD= 11 MIN ELTRD= 2498.70 MAX ELLC= 2505.00

0.23 13000. 7161. 5839. 0. 0.70 4 404.  
 2504.97 0.0 1214. 772. 0. -1.19 0 2506.20  
 16.97 0.0 5.90 7.57 0.0 0.49 2505.67 2506.90  
 0.012497 0.056 0.070 0.055 0.070 0.12 -25.51 80.98  
 2488.00 30. 30. 30. 409. 35. 525.00 58.

\*SECNO .230

0.23 13000. 6791. 4329. 1880. 0.26 2 561.  
 2504.97 0.0 2380. 744. 675. -0.44 0 2496.20  
 17.25 0.0 2.85 5.82 2.78 0.00 2505.71 2498.20  
 0.001499 0.056 0.070 0.055 0.070 0.04 -0.00 77.18  
 2488.20 1. 1. 1. 424. 137. 638.67 58.

\*SECNO .230

\*\*\* GR CARDS REPEATED

0.23 13000. 6795. 4323. 1881. 0.26 2 562.  
 2505.47 0.0 2385. 745. 677. -0.00 0 2496.20  
 17.27 0.0 2.85 5.81 2.78 0.01 2505.73 2498.20  
 0.001491 0.056 0.070 0.055 0.070 0.00 -0.00 77.08  
 2488.20 10. 10. 10. 424. 137. 638.70 59.

\*SECNO .270

\*\*\* GR CARDS REPEATED

0.27 13000. 6868. 4229. 1803. 0.24 1 564.  
 2505.70 0.0 2477. 756. 702. -0.02 0 2496.20  
 17.51 0.0 2.77 5.59 2.71 0.21 2505.94 2498.20  
 0.001354 0.056 0.070 0.055 0.070 0.00 -0.00 75.32  
 2488.20 150. 150. 150. 426. 138. 639.12 72.

\*SECNO .550

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M10

3301 HV CHANGED MORE THAN HVINS

0.55	12850.	2292.	9989.	570.	1.15	2	299.	
2508.04	0.0	697.	1040.	213.	0.91	0	2502.30	
16.24	0.0	3.29	9.61	2.68	2.79	2509.19	2502.30	
0.003039	0.049	0.070	0.045	0.080	0.46	-0.00	112.98	
	2491.80	1500.	1400.	1420.	203.	96.	412.30	171.

\*SECNO .840

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOP MID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIM2	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSYA		
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL	
	ELMIN	XL0BL	XLCH	XL0BR	WSDL	WSDR			
0.84	12730.	323.	11993.	413.	2.53	2	176.		
2512.80	0.0	129.	913.	169.	1.38	0	2508.20		
15.40	0.0	2.52	13.13	2.43	5.43	2515.33	2503.90		
0.004380	0.046	0.070	0.040	0.100	0.69	-0.00	26.95		
	2497.40	1380.	1520.	1560.	94.	82.	203.22	225.	

\*SECNO 1.160

3301 HV CHANGED MORE THAN HVINS

1.16	12590.	587.	9780.	2223.	1.23	2	239.	
2518.85	0.0	242.	979.	702.	-1.29	0	2513.90	
15.35	0.0	2.42	9.99	3.17	4.63	2520.08	2509.20	
0.002460	0.044	0.080	0.040	0.090	0.13	-0.00	28.96	
	2503.50	1460.	1440.	1460.	100.	139.	268.28	377.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

1.45	12460.	1661.	6865.	3933.	0.64	3	289.	
2522.10	0.0	338.	847.	1107.	-0.60	0	2511.50	
14.90	0.0	2.60	8.11	3.55	2.59	2522.74	2513.20	
0.001536	0.043	0.090	0.040	0.070	0.06	-0.00	129.38	
	2507.20	1360.	1360.	1340.	117.	172.	418.85	347.

\*SECNO 1.450

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELREA= 2525.00 ELREA= 2518.00

1.45	12460.	0.	9238.	3222.	0.62	0	234.	
2522.17	0.0	0.	1303.	958.	-0.01	0	2513.20	
14.97	0.0	0.0	7.09	3.36	0.06	2522.80	2511.80	
0.001376	0.043	0.090	0.040	0.070	0.00	-0.00	185.00	
	2507.20	40.	40.	40.	55.	179.	419.01	349.

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\*SECNO 1.450

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	12460.	0.	12147.	313.	1.79	2	183.	
2521.59	0.0	0.	1117.	116.	1.17	0	2524.80	
14.59	0.0	0.0	10.88	2.70	0.00	2523.38	2524.00	
0.007388	0.043	0.090	0.040	0.070	0.59	-0.43	186.13	
	2507.00	1.	1.	1.	56.	175.	417.80	349.

\*SECNO 1.450

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	RLOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

3370 NORMAL BRIDGE, NRD= 15 MIN ELTRD= 2519.30 MAX ELLC= 2524.80

1.45	12460.	0.	12039.	421.	1.63	2	191.	
2521.98	0.0	0.	1156.	146.	-0.16	0	2524.80	
14.98	0.0	0.0	10.41	2.88	0.22	2523.61	2524.00	
0.006986	0.043	0.090	0.040	0.070	0.02	-3.84	185.88	
	2507.00	30.	30.	30.	57.	176.	418.62	350.

\*SECNO 1.450

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NOT-EFFECTIVE, ELLEA= 2527.00 ELREA= 2520.00

1.45	12460.	0.	9119.	3341.	0.51	3	236.	
2523.22	0.0	0.	1417.	1088.	-1.12	0	2513.20	
16.02	0.0	0.0	6.43	3.07	0.00	2523.73	2511.80	
0.001013	0.043	0.090	0.040	0.070	0.11	-0.00	185.00	
	2507.20	1.	1.	1.	55.	181.	421.19	350.

\*SECNO 1.450

1.45	12460.	1750.	6627.	4083.	0.49	2	295.	
2523.28	0.0	741.	921.	1275.	-0.02	0	2511.30	
16.08	0.0	2.36	7.19	3.20	0.04	2523.77	2513.20	
0.001080	0.043	0.090	0.040	0.070	0.00	-0.00	126.45	
	2507.20	40.	40.	40.	120.	175.	421.32	353.

\*SECNO 1.700

1.70	12350.	5136.	6669.	551.	0.88	2	237.	
2525.02	0.0	1266.	696.	170.	0.39	0	2515.50	
14.72	0.0	4.05	9.59	5.23	1.93	2525.90	2514.30	
0.002179	0.043	0.070	0.040	0.090	0.20	-0.00	61.22	
	2510.30	1300.	1300.	1300.	191.	45.	297.78	428.

\*SECNO 1.780

1.78	12300.	3450.	4981.	3890.	0.45	2	498.	
2526.17	0.0	1080.	637.	1736.	-0.44	0	2517.80	
13.57	0.0	3.19	7.78	2.24	0.67	2526.61	2516.60	
0.001674	0.043	0.070	0.040	0.090	0.04	-0.00	67.82	
	2512.60	360.	360.	360.	185.	313.	565.93	451.

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

MILE	Q	QLOB	500 YEAR FLOOD	QCH	QROB	08/01/31	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	EG	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	CORAR	LEFT/RIGHT	
SLOPE	WTN	XML	XNCH	XNR	OLOSS	CORAR	WSDR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
1.78	12300.	3450.	4937.	3907.	0.44	0	499.		
2526.24	0.0	1092.	641.	1756.	-0.01	0	2517.80		
13.64	0.0	3.17	7.70	2.22	0.06	2526.68	2516.60		
0.001569	0.043	0.070	0.040	0.090	0.00	-0.00	67.42		
	2512.60	40.	40.	40.	185.	314.	566.76	455.	

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2523.30 NOT 2526.24  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	FK	XKOR	COFO	RDLEN	BWC	BWP	DAREA	SS
1.25	1.60	3.00	0.0	52.00	2.00	475.00	0.0	
ELCHU	ELCHD							
2513.00	2513.00							

\*SECNO 1.780

\*\*\* GR CARDS REPEATED  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2542.90	2528.44	0.0	7135.	5266.	475.	475.	2522.50

ELTRD  
2524.70

1.78	12300.	3669.	4202.	4429.	0.19	2	531.
2529.10	0.0	1577.	787.	2594.	-0.25	0	2517.80
16.50	0.0	2.33	5.34	1.71	2.62	2529.29	2516.60

C11

0.002574 0.043 0.070 0.040 0.090 0.0 -0.00 44.04  
 2512.60 30. 30. 30. 208. 323. 575.52 458.

\*SECHO 1.780

1.78 12300. 5576. 3602. 2922. 0.17 0 724.  
 2529.15 0.0 2859. 716. 1669. -0.02 0 2521.40  
 16.55 0.0 1.95 5.31 1.75 0.03 2529.32 2531.90  
 0.000686 0.043 0.070 0.040 0.090 0.00 -0.00 32.15  
 2512.60 40. 40. 40. 476. 248. 756.63 462.

\*SECHO 1.950

\*\*\* GR CARDS REPEATED

1.95 12100. 3146. 3493. 3461. 0.15 2 725.  
 2529.68 0.0 2875. 718. 1677. -0.03 0 2521.90  
 16.58 0.0 1.79 4.87 2.06 0.50 2529.83 2522.40  
 0.000574 0.042 0.070 0.040 0.070 0.00 -0.00 32.00  
 2513.10 810. 810. 770. 476. 248. 756.85 558.

\*SECHO 2.190

2.19 12040. 3425. 3916. 4698. 0.44 2 919.  
 2530.92 0.0 1422. 464. 1513. 0.30 0 2525.90  
 11.62 0.0 2.41 8.43 3.70 1.39 2531.36 2525.90  
 0.002946 0.042 0.070 0.040 0.070 0.15 -0.00 77.23  
 2519.30 1260. 1260. 1260. 525. 394. 996.35 684.

1490 NH CARD USED

\*SECHO 2.320

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	C	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	CLOSS	CORAR	ENDST	VOL
	ELMIN	YLOBL	XLCH	XLORR	WSDL	USDR		
2.32	11950.	4000.	2866.	5084.	0.25	2	1087.	
2532.40	0.0	1728.	423.	1778.	-0.19	0	2525.00	
9.00	0.0	2.31	6.77	2.86	1.27	2532.65	2528.50	
0.002171	0.042	0.070	0.040	0.066	0.02	-0.00	266.72	
	2523.40	200.	640.	640.	516.	571.	1353.85	722.

1490 NH CARD USED

\*SECHO 2.320

3370 NORMAL BRIDGE, NRD= 16 MIN ELYRD= 2528.30 MAX ELLC= 2529.90

2.32 11950. 5271. 1227. 5451. 0.16 2 1091.  
 2532.50 0.0 1751. 310. 1665. -0.09 0 2529.00  
 9.10 0.0 3.01 3.96 3.27 0.00 2532.66 2528.70  
 0.003635 0.042 0.070 0.040 0.056 0.01 -116.44 266.24  
 2523.40 1. 1. 1. 510. 581. 1356.94 722.

\*SECHO 2.320

\*\*\* GP. CARDS REPEATED

3370 NORMAL BRIDGE, NRD= 13 MIN ELTRD= 2528.30 MAX ELLC= 2529.90

2.32	11950.	5283.	1196.	5470.	0.15	2	1095.	
2532.61	0.0	1807.	315.	1730.	-0.01	0	2529.00	
9.21	0.0	2.92	3.80	3.16	0.10	2532.77	2528.70	
0.003288	0.042	0.070	0.040	0.056	0.00	-116.44	265.71	
	2523.40	30.	30.	30.	510.	584.	1360.40	724.

1490 NH CARD USED

\*SECNO 2.320

2.32	11950.	3682.	2420.	5848.	0.19	2	1094.	
2532.60	0.0	1827.	434.	1887.	0.04	0	2525.00	
9.20	0.0	2.02	5.57	3.10	0.00	2532.79	2528.50	
0.001425	0.042	0.067	0.040	0.049	0.02	-0.00	265.79	
	2523.40	1.	1.	1.	517.	577.	1359.88	725.

\*SECNO 2.400

\*\*\* GR CARDS REPEATED

2.40	11900.	3824.	2231.	5845.	0.14	2	1114.	
2533.18	0.0	2111.	465.	2211.	-0.05	0	2525.00	
9.78	0.0	1.81	4.79	2.64	0.52	2533.31	2528.50	
0.000959	0.042	0.068	0.040	0.050	0.01	-0.00	263.10	
	2523.40	500.	500.	400.	520.	594.	1377.27	771.

\*SECNO 2.400

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

2.40	11900.	2160.	9205.	535.	1.46	20	494.	
2555.39	2555.39	472.	857.	130.	1.32	18	2551.50	
3.89	0.0	4.58	10.74	4.12	0.08	2556.85	2551.50	
0.007676	0.042	0.050	0.030	0.050	0.66	-0.00	123.19	
	2551.50	40.	40.	40.	317.	177.	616.84	774.

SPECIAL BRIDGE

SB	HK	XKOR	COFG	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	1.00	0.01	0.10	0.0
	ELCHU	ELCHD						
	2551.50	2551.50						

\*SECNO 2.400

E11

WATER EL=X5 CARD= 2567.600

\*\*\* GR CARDS REPEATED

2.60	11900.	2814.	8233.	853.	0.44	0	566.
2567.60	0.0	949.	1342.	327.	0.10	0	2561.50
6.10	0.0	2.97	6.14	2.61	0.08	2568.04	2561.50
0.001376	0.042	0.050	0.030	0.050	0.10	-0.00	102.84
	2561.50	30.	30.	30.	337.	229.	689.23
							775.

\*SECNO 2.400

2.40	13350.	3.	13345.	3.	0.03	2	1237.
2568.06	0.0	10.	9913.	10.	-0.42	0	2562.00
8.06	0.0	0.26	1.35	0.26	0.00	2568.09	2562.00
0.000046	0.042	0.050	0.030	0.050	0.04	-0.00	6.63
	2560.00	10.	10.	10.	618.	618.	1243.37
							777.

\*SECNO 3.230

3.23	13190.	9.	13076.	105.	0.15	2	419.
2568.30	0.0	16.	4482.	160.	0.10	0	2565.00
13.30	0.0	0.55	2.92	0.66	0.29	2568.43	2563.80
0.000118	0.039	0.050	0.030	0.050	0.05	-0.00	33.57
	2555.00	4180.	4180.	4180.	182.	237.	452.81
							1477.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.690

3301 HV CHANGED MORE THAN HVINS

3.69	13100.	0.	12014.	1086.	1.09	1	198.
2568.46	0.0	0.	1375.	456.	0.96	0	2571.40
15.66	0.0	0.0	8.74	2.38	0.65	2569.56	2562.60
0.001656	0.039	0.080	0.035	0.080	0.48	-0.00	192.02
	2552.80	2200.	2200.	2200.	55.	143.	389.72
							1641.

CCHV= 0.100 CEHV= 0.500

\*SECNO 3.810

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		
3.81	13080.	617.	11995.	468.	1.46	3	409.	
2569.80	0.0	273.	1188.	205.	0.36	0	2565.10	
13.30	0.0	2.26	10.10	2.29	1.52	2571.26	2566.70	
0.005232	0.039	0.080	0.040	0.080	0.18	-0.00	142.63	
	2556.80	600.	560.	570.	226.	183.	551.28	1663.

\*SECNO 3.810

\*\*\* GR CARDS REPEATED

3.81	13080.	732.	11788.	560.	1.24	2	437.
2570.23	0.0	341.	1256.	252.	-0.22	0	2565.10
13.43	0.0	2.14	9.38	2.22	0.19	2571.47	2566.70

F11

F11

0.004191	0.039	0.080	0.040	0.080	0.02	-0.00	124.21	
	2556.80	40.	40.	40.	244.	162.	560.97	1665.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	85.00	10.00	800.00	0.42
	ELCHU	ELCHD						
	2556.90	2556.90						

\*SECHO 3.810

\*\*\* GR CARDS REPEATED  
 3280 CROSS SECTION      3.81 EXTENDED      0.16 FEET

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2576.87	2571.80	0.55	3569.	9558.	800.	800.	2567.00

ELTRD  
 2571.80

3.81	13080.	1689.	10192.	1199.	0.42	2	622.	
2573.36	0.0	1062.	1746.	710.	-0.82	0	2565.10	
16.56	0.0	1.59	5.84	1.69	2.31	2573.78	2566.70	
0.007046	0.039	0.080	0.040	0.080	0.0	-0.00	1.00	
	2556.80	60.	60.	60.	368.	254.	622.64	1669.

\*SECHO 3.810

3301 HV CHANGED MORE THAN HVINS

3.81	13080.	1203.	10833.	1044.	1.84	2	329.	
2572.68	0.0	362.	911.	406.	1.42	0	2563.50	
16.48	0.0	3.33	11.90	2.57	0.03	2574.52	2564.00	
0.003113	0.039	0.080	0.040	0.080	0.71	-0.00	236.27	
	2556.20	20.	20.	20.	127.	202.	565.41	1670.

\*SECHO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	13050.	2185.	9962.	900.	0.85	2	289.	
2575.64	0.0	1019.	1192.	391.	-1.00	0	2564.00	
16.84	0.0	2.15	8.36	2.30	1.87	2576.49	2564.00	
0.002050	0.039	0.120	0.045	0.120	0.10	-0.00	112.12	
	2556.80	780.	740.	760.	201.	89.	401.51	1707.

\*SECHO 3.970

RICHLAND CREEK

500 YEAR FLOOD

08/01/81

MILE	Q	ALOB	ACH	AROB	KY	ITRIAL	TOPWID		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XML	XICH	XNR	OLSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL	
3.97	13050.	1271.	11291.	488.	1.32	2	289.		
2575.53	0.0	574.	1145.	200.	0.47	0	2371.50		
16.73	0.0	2.22	9.16	2.44	0.13	2576.85	2570.20		
0.005517	0.039	0.120	0.045	0.120	0.24	-0.00	113.11		
	2558.80	40.	40.	40.	200.	89.	402.32	1709.	

\*SECNO 3.970

\*\*\* GR CARDS REPEATED

3.97	13050.	1362.	11172.	516.	1.24	2	292.		
2575.78	0.0	614.	1164.	213.	-0.08	0	2571.50		
16.98	0.0	2.22	9.60	2.42	0.16	2577.02	2570.20		
0.005120	0.039	0.120	0.045	0.120	0.01	-0.00	111.02		
	2558.80	30.	30.	30.	202.	90.	403.00	1711.	

\*SECNO 3.970

3301 HV CHANGED MORE THAN HVINS

3.97	13050.	2335.	9783.	932.	0.74	2	297.		
2576.36	0.0	1138.	1245.	428.	-0.50	0	2564.00		
17.56	0.0	2.05	7.86	2.18	0.03	2577.09	2564.00		
0.001711	0.039	0.120	0.045	0.120	0.05	-0.00	106.12		
	2558.80	10.	10.	10.	207.	91.	403.62	1711.	

\*SECNO 4.140

4.14	13010.	5217.	5587.	2205.	0.33	2	429.		
2578.03	0.0	2629.	842.	1118.	-0.41	0	2564.30		
15.33	0.0	1.98	6.63	1.97	1.22	2578.36	2566.70		
0.001130	0.039	0.120	0.045	0.120	0.04	-0.00	368.15		
	2562.70	760.	940.	940.	270.	139.	797.44	1783.	

\*SECNO 4.140

4.14	13010.	3269.	9677.	64.	0.22	2	430.		
2578.18	0.0	2324.	2259.	81.	-0.11	0	2565.90		
15.48	0.0	1.41	4.28	0.79	0.03	2578.40	2567.90		
0.000580	0.039	0.120	0.045	0.120	0.01	-0.00	367.66		
	2562.70	40.	40.	40.	325.	105.	797.68	1787.	

SPECIAL BRIDGE

SB	IK	XKOR	COFQ	RDLEN	BMC	DMP	BAREA	SS
	1.25	1.60	3.00	0.0	131.00	6.00	1740.00	1.24
	ELCHU	ELCHD						
	2562.80	2562.80						

\*SECNO 4.140

H11

\*\*\* GR CARDS REPEATED  
RICHLAND CREEK

500 YEAR FLOOD

08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCK	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC	
2577.57	2578.42	0.02	148.	12855.	1740.	1741.	2575.20	

ELTRD  
2577.20

4.14	13010.	3345.	9592.	73.	0.18	2	635.	
2579.36	0.0	2603.	2470.	100.	-0.04	0	2565.90	
16.66	0.0	1.29	3.88	0.72	1.14	2579.54	2567.90	
0.000423	0.039	0.120	0.045	0.120	0.0	-0.00	364.00	
	2562.70	115.	115.	115.	328.	107.	799.48	1800.

\*SECTO 4.140

4.14	13010.	5348.	5405.	2258.	0.25	2	435.	
2579.34	0.0	2975.	916.	1266.	0.07	0	2564.30	
16.64	0.0	1.80	5.90	1.78	0.02	2579.59	2566.70	
0.000800	0.039	0.120	0.045	0.120	0.04	-0.00	364.07	
	2562.70	30.	30.	30.	294.	141.	799.44	1804.

\*SECTO 4.280

4.28	11925.	4739.	4050.	3136.	0.21	2	525.	
2579.94	0.0	2254.	713.	1700.	-0.04	0	2570.00	
17.54	0.0	2.07	5.68	1.84	0.55	2580.15	2569.20	
0.000866	0.040	0.100	0.045	0.100	0.00	-0.00	97.49	
	2562.40	600.	710.	710.	279.	246.	622.94	1878.

\*SECTO 4.280

\*\*\* GR CARDS REPEATED

4.28	11925.	4740.	4044.	3140.	0.21	0	526.	
2579.97	0.0	2302.	714.	1708.	-0.00	0	2570.00	
17.57	0.0	2.06	5.66	1.84	0.03	2580.18	2569.20	
0.000857	0.040	0.100	0.045	0.100	0.00	-0.00	97.12	
	2562.40	40.	40.	40.	279.	247.	623.27	1882.

\*SECTO 4.280

3370 NORMAL BRIDGE, NRD= 43 MIN ELTRD= 2572.10 MAX ELLC= 2572.60

4.28	11925.	4769.	3853.	3303.	0.25	1	526.	
2579.96	0.0	2045.	623.	1515.	0.04	0	2570.00	
17.56	0.0	2.33	6.18	2.18	0.00	2580.20	2569.20	
0.004986	0.040	0.100	0.045	0.100	0.02	-514.52	97.18	
	2562.40	1.	1.	1.	279.	247.	623.22	1882.



\*SECNO 4.280

\*\*\* GR CARDS REPEATED

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XBL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3370 NORMAL BRIDGE, NRD= 43 MIN ELTD= 2572.10 MAX ELLC= 2572.60

4.28	11925.	4770.	3850.	3304.	0.25	1	526.	
2579.98	0.0	2048.	624.	1518.	-0.00	0	2570.00	
17.58	0.0	2.33	6.17	2.18	0.02	2580.23	2569.20	
0.004966	0.040	0.100	0.045	0.100	0.00	-514.52	97.06	
	2562.40	5.	5.	5.	279.	247.	623.33	1883.

\*SECNO 4.280

4.28	11925.	4743.	4035.	3147.	0.21	2	527.	
2580.03	0.0	2317.	717.	1720.	-0.04	0	2570.00	
17.63	0.0	2.05	5.63	1.83	0.00	2580.23	2569.20	
0.000843	0.040	0.100	0.045	0.100	0.00	-0.30	96.79	
	2562.40	1.	1.	1.	280.	247.	623.85	1883.

\*SECNO 4.280

\*\*\* GR CARDS REPEATED

4.28	11925.	4743.	4034.	3148.	0.21	2	528.	
2580.03	0.0	2319.	717.	1722.	-0.00	0	2570.00	
17.63	0.0	2.05	5.62	1.83	0.01	2580.24	2569.20	
0.000840	0.040	0.100	0.045	0.100	0.00	-0.00	96.39	
	2562.40	10.	10.	10.	280.	247.	623.94	1884.

\*SECNO 4.430

4.43	11540.	765.	5135.	5641.	0.57	2	375.	
2580.76	0.0	364.	640.	1410.	0.36	0	2572.00	
14.56	0.0	2.10	8.02	4.00	0.90	2581.33	2571.70	
0.002039	0.040	0.120	0.045	0.060	0.18	-0.00	56.25	
	2566.20	715.	735.	735.	78.	297.	431.09	1944.

\*SECNO 4.630

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

4.65	11600.	704.	6158.	4738.	1.40	3	301.	
2583.98	0.0	239.	519.	786.	0.83	0	2577.30	
12.08	0.0	2.94	11.86	6.03	3.24	2584.98	2577.00	
0.005905	0.040	0.120	0.045	0.060	0.41	-0.00	63.04	
	2571.50	1000.	1000.	1000.	71.	229.	363.63	1989.

\*SECNO 4.820

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK	ELEV	
ELVY	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	ENDST		VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR			
4.82	11420.	1938.	8116.	1365.	1.71	2	234.		
2589.49	0.0	571.	665.	303.	0.31	0	2582.40		
13.79	0.0	3.40	12.20	4.50	6.07	2591.20	2584.20		
0.006813	0.040	0.120	0.050	0.070	0.16	-0.00	54.34		
	2575.70	1100.	940.	940.	126.	109.	288.61		2024.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96	11290.	4029.	7255.	7.	0.98	2	145.		
2593.51	0.0	673.	822.	6.	-0.74	0	2581.30		
14.31	0.0	5.99	8.82	1.14	3.21	2594.49	2591.50		
0.004016	0.041	0.070	0.055	0.080	0.07	-0.00	293.34		
	2579.20	660.	610.	610.	108.	37.	438.70		2046.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

4.96	11290.	2777.	8513.	0.	0.41	2	247.		
2594.23	0.0	812.	1515.	0.	-0.56	0	2585.20		
15.03	0.0	3.42	5.62	0.0	0.10	2594.64	2599.50		
0.001749	0.041	0.070	0.055	0.080	0.06	-0.00	194.23		
	2579.20	40.	40.	40.	196.	51.	440.74		2048.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	ROLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	54.00	4.00	1310.00	1.18
	ELCHU	ELCHD						
	2579.20	2579.20						

\*SECNO 4.960

\*\*\* GR CARDS REPEATED  
CLASS A LOW FLOW

3420 BRIDGE W.S.= 2593.90 BRIDGE VELOCITY=, 11.40

CALCULATED CHANNEL AREA= 990.

EGPRS	EGLWC	H3	QWEIR	QPP	BAREA	TAREA	ELLC
0.0	2594.69	0.05	0.	11290.	1310.	1310.	2597.50

ELTRD  
2598.00

4.96	11290.	2787.	8503.	0.	0.41	0	248.		
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K11

2594.28	0.0	818.	1522.	0.	-0.00	0	2585.20	
15.08	0.0	3.41	5.59	0.0	0.05	2594.69	2599.50	
0.001722	0.041	0.070	0.055	0.080	0.0	0.0	192.94	
	2579.20	15.	15.	15.	197.	51.	443.88	2048.

\*SECNO 4.960

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC			
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

4.96	11290.	0.	11056.	234.	4.31	4	93.	
2592.97	2592.97	0.	657.	57.	3.90	11	2596.90	
13.37	0.0	0.0	16.82	4.09	0.04	2597.28	2589.40	
0.019847	0.041	0.070	0.055	0.080	1.95	-0.00	386.37	
	2579.60	10.	10.	10.	30.	63.	479.41	2049.

\*SECNO 4.960

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC			
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL

4.96	11290.	0.	10659.	631.	2.33	4	100.	
2595.89	0.0	0.	848.	148.	-1.97	11	2596.90	
13.29	0.0	0.0	12.57	4.27	0.75	2598.22	2589.40	
0.001552	0.041	0.080	0.055	0.090	0.20	-0.00	383.12	
	2579.60	60.	60.	60.	33.	67.	482.6	2050.

\*SECNO 5.100

3301 HV CHANGED MORE THAN HVINS

5.10	11220.	990.	7119.	3111.	0.21	4	376.	
2599.62	0.0	583.	1635.	1411.	-2.12	0	2589.10	
14.02	0.0	1.70	4.35	2.20	1.40	2599.83	2589.70	
0.000782	0.041	0.100	0.050	0.080	0.21	-0.00	181.57	
	2585.60	900.	750.	750.	144.	232.	558.04	2091.

\*SECNO 5.100

\*\*\* GR CARDS REPEATED

L11

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2600.00 ELREA= 2598.00

5.10	11220.	0.	7807.	3413.	0.27	2	300.
2599.62	0.0	0.	1636.	1412.	0.06	0	2589.10
14.02	0.0	0.0	4.77	2.42	0.03	2599.90	2589.70
0.000940	0.041	0.100	0.050	0.080	0.03	-0.00	258.00
	2585.60	40.	40.	40.	68.	232.	558.05
							2094.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	95.00	18.00	1350.00	1.63
	ELCHU	ELCHD						
	2584.20	2584.20						

\*SECTO 5.100

\*\*\* GR CARDS REPEATED  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2601.34	2599.99	0.09	1586.	9689.	1350.	1349.	2597.80
ELTRD							
2599.10							

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 2601.00 ELREA= 2599.50

5.10	11220.	0.	8214.	3006.	0.26	2	302.
2600.65	0.0	0.	1774.	1580.	-0.02	0	2589.10
15.05	0.0	0.0	4.63	1.90	1.01	2600.90	2589.70
0.000793	0.041	0.090	0.050	0.100	0.0	-0.00	258.00
	2585.60	30.	30.	30.	68.	234.	559.96
							2096.

\*SECTO 5.100

\*\*\* GR CARDS REPEATED

5.10	11220.	1202.	7327.	2691.	0.19	2	381.
2600.73	0.0	669.	1786.	1594.	-0.07	0	2589.10
15.13	0.0	1.80	4.10	1.69	0.01	2600.92	2589.70
0.000617	0.041	0.090	0.050	0.100	0.01	-0.00	178.69
	2585.60	10.	10.	10.	147.	234.	560.12
							2097.

\*SECTO 5.200

RICHLAND CREEK

500 YEAR FLOOD 08/01/81

MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT
SLOPE	WTN	KNL	XMCH	XNR	QLOSS	CORAR	SSTA
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST
							VOL
5.20	11115.	1446.	4960.	4709.	0.25	2	383.
2600.99	0.0	690.	892.	2552.	0.06	0	2589.10

M11

15.39	0.0	2.10	5.56	1.85	0.29	2601.24	2587.00	
0.003644	0.041	0.080	0.040	0.100	0.03	-0.00	178.02	
	2585.60	460.	460.	460.	111.	272.	540.61	2140.

\*SECHO 5.490

3301 HV CHANGED MORE THAN HVINS

RICKLAND CREEK		500 YEAR FLOOD			08/01/81		TOPHID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	LOC	BANK ELEV
ELEV	CRIMS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	SSYA	ENDST
SLOPE	WTN	XNL	XNCH	XNR	OLSS	WSDL	WSDR	
	ELMIN	XLGBL	XLCH	XLGBR				VOL

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

5.49	11115.	4101.	6861.	152.	1.92	20	434.	
2604.53	2604.53	984.	498.	54.	1.67	14	2602.80	
9.73	0.0	4.17	13.77	2.81	2.45	2606.45	2600.90	
0.008908	0.041	0.080	0.040	0.100	0.84	-0.00	191.71	
	2594.80	1530.	1530.	1530.	384.	50.	625.36	2240.

\*SECHO 5.580

3301 HV CHANGED MORE THAN HVINS

5.58	11085.	5961.	4912.	212.	0.51	2	446.	
2607.50	0.0	2045.	616.	123.	-1.41	0	2602.80	
11.00	0.0	2.91	7.97	1.72	1.42	2608.01	2600.90	
0.002206	0.041	0.080	0.040	0.120	0.14	-0.00	185.00	
	2596.50	360.	360.	360.	391.	56.	631.39	2258.

\*SECHO 5.580

\*\*\* GR CARDS REPEATED

5.58	11085.	5994.	4877.	214.	0.69	2	447.	
2607.61	0.0	2084.	622.	126.	-0.02	0	2602.80	
11.11	0.0	2.88	7.84	1.69	0.79	2608.10	2600.90	
0.002102	0.041	0.080	0.040	0.120	0.00	-0.00	184.74	
	2596.50	40.	40.	40.	391.	56.	631.61	2260.

SPECIAL BRIDGE

SB	HK	XKOR	COFQ	RDLEN	BWC	BWP	AREA	SS
	1.25	1.60	3.00	0.0	41.20	0.01	408.00	0.0
	ELCHU	ELCHD						
	2596.50	2596.50						

\*SECHO 5.580

3280 CROSS SECTION      5.58 EXTENDED      5.83 FEET

PRESSURE AND WEIR FLOW

EGPRS 2609.25	EGLWC 2608.97	R3 0.00	QWEIR 7782.	QPR 3313.	BAREA 408.	TAREA 408.	ELLC 2606.40
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ELTRD  
2604.90

5.58	11085.	6057.	3575.	1453.	0.22	2	700.	
2609.03	0.0	2640.	614.	804.	-0.27	0	2604.70	
12.53	0.0	2.20	5.82	1.81	1.15	2609.25	2604.40	
0.001187	0.041	0.070	0.040	0.080	0.0	-0.00	450.00	
	2596.50	35.	35.	35.	499.	202.	1150.00	2263.

\*SECNO 5.580

3260 CROSS SECTION 5.58 EXTENDED 5.89 FEET

RICKLAND CREEK	Q	QLOB	500 YEAR FLOOD	QCH	QROB	0.001781	IYRIAL	TOPMID
MILE	CRIMS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
ELEV	SELK	VLOB	VCH	VROB	RL	EG	LEFT/RIGHT	
DEPTH	WTN	XL	XNCH	XNR	OLOSS	COPAR	SSTA	
SLOPE	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

5.58	11085.	5494.	4577.	1013.	0.19	0	700.	
2609.10	0.0	2670.	926.	620.	-0.03	0	2604.70	
11.70	0.0	2.06	4.94	1.63	0.04	2609.29	2604.50	
0.000941	0.041	0.070	0.040	0.080	0.00	0.0	450.00	
	2597.40	40.	40.	40.	520.	181.	1150.00	2267.

\*SECNO 5.640

5.64	11050.	5611.	4149.	1290.	0.51	2	649.	
2609.48	0.0	1785.	487.	492.	0.32	0	2606.00	
10.48	0.0	3.14	8.52	2.62	0.55	2610.00	2605.00	
0.003341	0.041	0.070	0.040	0.080	0.16	-0.00	151.27	
	2599.00	340.	340.	340.	478.	171.	799.84	2294.

\*SECNO 5.710

\*\*\* GR CARDS REPEATED

5.71	11050.	5494.	4304.	1252.	0.60	2	644.	
2610.72	0.0	1646.	472.	455.	0.09	0	2607.50	
10.22	0.0	3.30	9.13	2.75	1.28	2611.32	2606.50	
0.004001	0.041	0.070	0.040	0.080	0.04	-0.00	152.83	
	2600.50	350.	350.	350.	476.	168.	797.19	2315.

\*SECNO 5.910

3265 DIVIDED FLOW

3280 CROSS SECTION 5.91 EXTENDED 0.34 FEET

3301 HV CHANGED MORE THAN IVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC			
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

5.91	10995.	566.	6657.	3772.	1.45	4	610.		
2617.34	2617.34	163.	549.	1166.	0.85	8	2615.30		
11.54	0.0	3.47	12.12	3.24	4.56	2618.79	2616.00		
0.006638	0.041	0.040	0.040	0.080	0.42	-0.00	246.12		
	2605.80	900.	900.	900.	440.	445.	1131.00		2362.

\*SECNO 5.970

3265 DIVIDED FLOW

3201 HV CHANGED MORE THAN HVINS

5.97	10975.	5059.	4000.	1917.	0.54	2	586.		
2619.59	0.0	985.	519.	757.	-0.90	0	2617.70		
10.29	0.0	5.14	7.71	2.53	1.25	2620.13	2614.80		
0.003216	0.041	0.035	0.045	0.080	0.09	-0.00	62.84		
	2609.30	280.	280.	280.	359.	376.	798.42		2375.

\*SECNO 6.080

3265 DIVIDED FLOW

3280 CROSS SECTION 6.06 EXTENDED 3.15 FEET

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV		
ELEV	CRIMS	ALOB	ACH	AROB	DHV	IDC			
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT		
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA		
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST		VOL

6.06	10950.	6260.	2701.	1988.	0.36	2	925.		
2620.75	0.0	1479.	387.	952.	-0.18	0	2619.50		
11.55	0.0	4.23	6.98	2.09	0.96	2621.11	2619.60		
0.002496	0.041	0.035	0.040	0.070	0.02	-0.00	12.00		
	2609.20	340.	340.	340.	571.	368.	950.00		2395.

\*SECNO 6.120

3265 DIVIDED FLOW

3280 CROSS SECTION 6.12 EXTENDED 5.09 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOP	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALUB	ACH	AROB	DMV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL CNSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.13	10935.	2549.	6633.	1753.	1.42	20	617.	
2623.20	2623.20	940.	549.	583.	1.07	6	2620.70	
11.40	0.0	2.71	12.08	3.01	1.03	2624.62	2619.80	
0.005908	0.041	0.080	0.040	0.080	0.53	-0.00	242.74	
	2611.80	280.	280.	280.	636.	221.	1100.00	2411.

\*SECHO 6.160

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

6.16	10925.	113.	9054.	1758.	2.25	4	333.	
2623.95	2623.63	59.	692.	414.	0.83	8	2621.50	
10.55	0.0	1.93	13.09	4.24	1.17	2626.20	2619.70	
0.009281	0.041	0.050	0.045	0.080	0.41	-0.00	542.20	
	2613.40	160.	160.	160.	438.	156.	1136.12	2416.

\*SECHO 6.160

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.16 EXTENDED 0.25 FEET

3301 HV CHANGED MORE THAN HVINS

6.16	10925.	1223.	7621.	2081.	0.96	5	677.	
2625.64	0.0	524.	827.	622.	-1.29	0	2621.50	
12.24	0.0	2.33	9.21	3.35	0.27	2626.60	2619.70	
0.003621	0.041	0.050	0.045	0.080	0.13	-0.00	443.92	
	2613.40	50.	50.	50.	536.	180.	1160.00	2418.

SPECIAL BRIDGE

SB	HK	XXOR	COFQ	RDLEN	BWC	BWP	BARE	SS
	1.25	1.60	3.00	0.0	51.00	6.00	632.00	5.94
	ELCHU	ELCHD						
	2615.00	2615.00						



D12

\*SECTO 6.160

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION 6.16 EXTENDED 1.35 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGMC	H3	WEIR	OPR	BAREA	TAREA	ELLC
2633.07	2624.80	0.20	5059.	5273.	632.	632.	2622.20

ELTRD  
2624.50

6.16	10925.	1651.	7019.	2255.	0.62	3	731.	
2626.75	0.0	1083.	916.	777.	-0.34	0	2621.50	
13.35	0.0	1.52	7.66	2.90	0.77	2627.37	2619.70	
0.002187	0.041	0.080	0.045	0.080	0.0	-0.00	429.32	
	2613.40	50.	50.	50.	551.	180.	1160.00	2421.

\*SECTO 6.160

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
MILE	CRHS	ALOB	ACH	AROB	OHV	IDC	BANK ELEV	
ELEV	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
DEPTH	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
SLOPE	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.16	10925.	1352.	9521.	52.	1.20	2	435.	
2626.59	0.0	554.	1015.	34.	0.58	0	2624.30	
11.39	0.0	2.44	9.38	1.53	0.12	2627.79	2624.00	
0.004813	0.041	0.080	0.045	0.080	0.29	-0.00	551.69	
	2615.20	40.	40.	40.	393.	86.	1031.44	2423.

\*SECTO 6.200

3265 DIVIDED FLOW

3280 CROSS SECTION 6.20 EXTENDED 2.47 FEET

6.20	10915.	4394.	6450.	71.	0.98	3	480.	
2627.27	0.0	1630.	640.	54.	-0.22	0	2623.20	
12.57	0.0	2.70	10.07	1.31	0.43	2628.24	2624.40	
0.004831	0.041	0.100	0.045	0.100	0.07	-0.00	400.00	
	2614.70	90.	90.	90.	463.	70.	932.54	2427.

\*SECTO 6.310

3265 DIVIDED FLOW

3280 CROSS SECTION 6.31 EXTENDED 3.48 FEET

6.31	10880.	4751.	3912.	2217.	0.54	2	882.	
2629.88	0.0	1931.	420.	1020.	-0.44	0	2626.60	
12.88	0.0	2.46	9.32	2.17	2.14	2630.42	2622.00	
0.004108	0.041	0.100	0.045	0.100	0.04	-0.00	31.00	
	2617.00	480.	480.	480.	489.	402.	922.00	2458.

\*SECNO 6.480

3265 DIVIDED FLOW

3280 CROSS SECTION 6.48 EXTENDED 1.69 FEET

3301 HV CHANGED MORE THAN HVINS

6.48	10835.	1426.	7217.	2191.	1.22	2	496.	
2634.78	0.0	492.	677.	826.	0.68	0	2631.00	
8.78	0.0	2.90	10.67	2.65	5.24	2636.00	2631.00	
0.006923	0.041	0.100	0.045	0.100	0.34	-0.00	174.00	
	2626.00	1000.	1000.	1000.	177.	700.	1050.00	2520.

\*SECNO 6.610

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV
ELEV	CRWS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT
DEPTH	WSELK	VLOB	VCH	VROB	HL	OLOSS	WSDR	SSTA
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	WSDR	WSDR	ENDST
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	WSDR	VOL

7135 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.61	10795.	795.	9209.	791.	2.57	3	345.	
2639.41	2639.41	263.	663.	397.	1.36	11	2633.00	
11.91	0.0	3.02	13.90	1.99	4.53	2641.97	2633.00	
0.008880	0.041	0.100	0.045	0.120	0.68	-0.00	245.80	
	2627.50	580.	580.	580.	127.	548.	920.00	2542.

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
Q	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRHS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	MSLK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTM	XNL	XNCH	XNR	OLOSE	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
6.61	10795.	1103.	8389.	1303.	1.51	5	349.	
2640.84	0.0	400.	755.	663.	-1.07	0	2633.00	
13.34	0.0	2.76	11.10	1.96	0.25	2642.35	2633.00	
0.004760	0.041	0.100	0.045	0.120	0.11	-0.00	241.55	
	2627.50	40.	40.	40.	131.	548.	920.00	2544.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2638.78 NOT 2640.84  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	45.00	2.00	402.00	0.0
	ELCHJ	ELCHD						
	2628.50	2628.50						

\*SECNO 6.610  
PRESS FLOW BECAUSE EGLMC OF 2645.41 EXCEEDS 1.5 DEPTH  
6870 D.S. ENERGY OF 2642.35 HIGHER THAN COMPUTED ENERGY OF 2641.86

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINI

PRESSURE AND WEIR FLOW

EGPRS	EGLMC	H3	QWEIR	QWR	BAREA	TAREA	ELLC
2658.76	2645.41	0.0	8267.	2576.	402.	404.	2637.90
	ELTRD						
	2636.30						

6.61	10795.	1105.	7526.	2165.	1.01	3	502.	
2641.34	0.0	450.	788.	1227.	-0.50	0	2633.00	
13.84	0.0	2.46	9.55	1.76	0.0	2642.35	2633.00	
0.003329	0.041	0.100	0.045	0.120	0.0	-0.00	240.08	
	2627.50	30.	30.	30.	132.	624.	996.17	2545.

\*SECNO 6.610

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.61	10795.	1110.	7503.	2181.	0.99	0	503.	
2641.39	0.0	454.	790.	1241.	-0.02	0	2633.00	
13.89	0.0	2.45	9.49	1.76	0.03	2642.38	2633.00	
0.003274	0.041	0.100	0.045	0.120	0.00	-0.00	239.95	

612

2627.50 10. 10. 10. 133. 625. 997.12 2546.

\*SECNO 6.740

3265 DIVIDED FLOW

3280 CROSS SECTION 6.74 EXTENDED 2.27 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL, CWSEL  
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED								
6.74	10730.	1077.	7045.	2608.	2.32	20	323.	
2645.27	2645.27	346.	475.	673.	1.33	5	2639.70	
13.87	0.0	3.11	14.84	3.87	1.18	2647.59	2655.00	
0.010492	0.041	0.100	0.045	0.100	0.66	-0.00	197.19	
	2631.40	220.	220.	220.	191.	312.	700.00	2556.

\*SECNO 6.790

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 6.49 FEET

3301 HV CHANGED MORE THAN HVINS

6.79	10705.	2800.	4789.	3116.	0.42	3	395.	
2649.49	0.0	1314.	653.	1387.	-1.90	0	2639.70	
18.09	0.0	2.13	7.34	2.25	2.12	2649.90	2639.10	
0.001474	0.041	0.100	0.045	0.100	0.19	-0.00	178.20	
	2631.40	680.	680.	680.	210.	312.	700.00	2593.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3280 CROSS SECTION 6.79 EXTENDED 6.55 FEET

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG		

H12

SLOPE	WTN ELMIN	XNL XLOBL	XNGH XLCH	XNR XLOBR	LOSS WSDL	CORAR WSDR	SSTA ENDST	VOL
6.79	10705.	2812.	4771.	3122.	0.41	2	395.	
2649.55	0.0	1326.	655.	1397.	-0.01	0	2639.70	
18.15	0.0	2.12	7.28	7.23	0.06	2649.96	2639.10	
0.001444	0.041	0.100	0.045	0.100	0.00	-0.00	178.08	
	2631.40	40.	40.	40.	210.	312.	700.00	2597.

SPECIAL BRIDGE

SB	HK	XKOR	COFq	RDLFN	BWC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	28.00	3.00	365.00	1.80
	ELCHU	ELCHD						
	2634.00	2634.00						

\*SECNO 6.790  
PRESS FLOW BECAUSE EGLWC OF 2650.01 EXCEEDS 1.5 DEPTH

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2670.92	2650.01	0.05	8850.	1855.	365.	359.	2642.80
ELTRD	2641.70						

6.79	10705.	4426.	5181.	1099.	0.52	2	383.	
2649.67	0.0	1808.	650.	488.	0.12	0	2640.50	
15.67	0.0	2.45	7.97	2.25	0.23	2650.19	2636.00	
0.001856	0.041	0.100	0.045	0.100	0.0	-0.00	85.82	
	2634.00	50.	50.	50.	277.	108.	470.53	2600.

\*SECNO 6.790

\*\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

6.79	10705.	4428.	5177.	1100.	0.52	0	383.	
2649.69	0.0	1811.	650.	489.	-0.00	0	2640.50	
15.69	0.0	2.45	7.96	2.25	0.02	2650.21	2636.00	
0.001848	0.041	0.100	0.045	0.100	0.00	-0.00	85.79	
	2634.00	10.	10.	10.	277.	108.	470.64	2601.

\*SECNO 7.000

7.00	10600.	3135.	6062.	1403.	0.68	2	1077.	
2652.40	0.0	1953.	702.	736.	0.16	0	2649.00	
10.40	0.0	1.61	8.63	1.91	2.79	2653.08	2646.50	
0.003885	0.041	0.120	0.045	0.110	0.08	-0.00	133.97	
	2642.00	1080.	1080.	1080.	731.	346.	1211.10	2679.

\*SECNO 7.230

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRHS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	WSDR	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDL	WSDR	ENDST	VOL
	ELMIN	XLOB	XLCH	XLOBR					
7185 MINIMUM SPECIFIC ENERGY									
3720 CRITICAL DEPTH ASSUMED									
7.23	10485.	997.	6889.	2589.	1.30	13		808.	
2662.23	2662.23	479.	616.	1207.	0.62	10		2657.00	
8.73	0.0	2.08	11.18	2.15	6.53	2663.53		2657.00	
0.007871	0.042	0.120	0.045	0.110	0.31	-0.00		127.08	
	2653.50	1220.	1220.	1220.	232.	576.		935.15	2759.

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID		
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	IDC	BANK ELEV	
ELEV	CRHS	ALOB	ACH	AROB	DHV	EG	CORAR	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	WSDR	WSDR	SSTA	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	WSDL	WSDR	ENDST	VOL
	ELMIN	XLOB	XLCH	XLOBR					
7.23	10485.	1181.	6095.	3210.	0.74	4		839.	
2663.08	0.0	642.	685.	1672.	-0.56	0		2657.00	
9.58	0.0	1.84	8.89	1.92	0.23	2663.81		2657.00	
0.004317	0.042	0.120	0.045	0.110	0.06	-0.00		123.70	
	2653.50	40.	40.	40.	235.	604.		982.54	2762.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2661.55 NOT 2663.08  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BLC	BLW	BAREA	SS
	1.25	1.60	3.00	0.0	53.00	3.00	402.00	2.60
	ELCHU	ELCHD						
	2653.50	2653.50						

\*SECNO 7.230

\*\*\* GR CARDS REPEATED

PRESS FLOW BECAUSE EGLWC OF 2665.16 EXCEEDS 1.5 DEPTH  
6870 D.S. ENERGY OF 2663.81 HIGHER THAN COMPUTED ENERGY OF 2663.65  
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2679.98	2665.16	0.0	8653.	1927.	402.	402.	2659.60

ELTRD  
2658.90

7.23	10485.	1182.	6090.	3213.	0.73	3	839.	
2663.08	0.0	643.	686.	1675.	-0.00	0	2657.00	
9.58	0.0	1.84	8.88	1.92	0.0	2663.81	2657.00	
0.004301	0.042	0.120	0.045	0.110	0.0	-0.00	123.68	
	2653.50	30.	30.	30.	235.	604.	962.73	2764.

\*SECHO 7.230

\*\*\* GR CARDS REPEATED

7.23	10485.	1216.	6236.	3033.	0.78	2	840.	
2663.10	0.0	647.	687.	1685.	0.05	0	2657.00	
9.60	0.0	1.88	9.07	1.80	0.04	2663.88	2657.00	
0.004477	0.042	0.120	0.045	0.120	0.02	-0.00	123.60	
	2653.50	10.	10.	10.	235.	604.	963.30	2764.

\*SECHO 7.460

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	MSLK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

7.46	10370.	1274.	5766.	3330.	1.67	4	545.	
2670.82	2670.82	383.	430.	760.	0.89	8	2668.30	
10.43	0.0	3.33	13.41	4.38	7.88	2672.49	2668.30	
0.012725	0.042	0.080	0.050	0.110	0.44	-0.00	75.00	
	2660.40	1120.	1120.	1120.	244.	301.	619.61	2823.

\*SECHO 7.540

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS?

7.54	10330.	931.	6808.	2590.	0.97	3	430.	
2674.92	0.0	363.	717.	872.	-0.70	0	2671.00	
10.62	0.0	2.57	9.49	2.97	3.32	2675.89	2668.50	
0.005380	0.042	0.090	0.050	0.110	0.07	-0.00	68.97	
	2664.30	420.	420.	420.	220.	431.	719.20	2840.

\*SECHO 7.780

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		

K12

DEPTH SLOPE	WSELK WTN ELMIN	VLOB XNL XLOBL	VCH XNCH XLCH	VROB XNR XLOBR	HL OLOSS WSDL	EG CORAR WSDR	LEFT/RIGHT SSTA ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
7.78	10195.	2610.	5049.	2535.	0.95	4	1102.	
2684.64	2684.64	991.	467.	1057.	-0.02	10	2681.60	
8.94	0.0	2.64	10.81	2.40	8.78	2685.58	2682.00	
0.009794	0.042	0.090	0.050	0.110	0.00	-0.00	236.38	
	2675.70	1240.	1240.	1240.	590.	512.	1338.01	2904.

\*SECNO 7.970

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
7185 MINIMUM SPECIFIC ENERGY								
3720 CRITICAL DEPTH ASSUMED								
7.97	10080.	565.	8276.	1239.	1.87	2	605.	
2694.02	2694.02	197.	687.	570.	0.92	11	2687.50	
12.02	0.0	2.87	12.05	2.17	9.27	2695.89	2690.50	
0.009938	0.042	0.100	0.050	0.110	0.46	-0.00	398.88	
	2682.00	940.	940.	940.	160.	581.	1140.31	2947.

\*SECNO 7.970

\*\* GR CARDS REPEATED

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7.97	10080.	833.	6982.	2265.	0.83	5	931.	
2695.41	0.0	410.	800.	1328.	-1.03	0	2687.50	
13.41	0.0	2.03	8.72	1.71	0.25	2696.24	2690.50	
0.004247	0.042	0.100	0.050	0.110	0.10	-0.00	329.60	
	2682.00	40.	40.	40.	229.	755.	1313.60	2949.

SPECIAL BRIDGE

5227 DOWNSTREAM ELEV IS 2692.10, NOT 2695.41  
HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	HK	XKOR	COFQ	RDLEN	BMC	BMP	BAREA	SS
	1.25	1.60	3.00	0.0	29.00	4.00	506.00	1.90



L12

ELCHU 2682.00  
ELCHD 2682.00

\*SECTNO 7.970  
3280 CROSS SECTION 7.97 EXTENDED 2.08 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS 2696.58 EGLWC 2696.30 H3 0.13 QWEIR 6617. QPR 3481. BAREA 506. TAREA 512. ELLC 2693.10

ELTRD 2692.60

3685 20 TRIALS ATTEMPTED WSEL, CWSEL  
3720 CRITICAL DEPTH ASSUMED

7.97	10080.	629.	6658.	2793.	1.39	20	637.	
2696.18	2696.18	225.	581.	1035.	0.55	9	2692.00	
14.18	0.0	2.80	11.47	2.70	0.16	2697.56	2693.60	
0.007044	0.042	0.080	0.050	0.080	-0.16	0.0	405.50	
	2682.00	30.	30.	30.	129.	508.	1042.00	2950.

\*SECTNO 7.970

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION 7.97 EXTENDED 2.66 FEET

7.97	10080.	748.	5961.	3371.	0.92	11	640.	
2696.75	0.0	286.	611.	1316.	-0.47	0	2692.00	
14.75	0.0	2.62	9.76	2.56	0.06	2697.67	2693.60	
0.004766	0.042	0.080	0.050	0.080	0.05	-0.00	401.61	
	2682.00	10.	10.	10.	132.	508.	1042.00	2951.

\*SECTNO 8.200

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY

M12

3720 CRITICAL DEPTH ASSUMED

8.20	9520.	1207.	6954.	1359.	1.51	2	675.	
2704.48	2704.48	533.	607.	717.	0.59	18	2700.30	
10.28	0.0	2.26	11.45	1.90	7.16	2705.99	2699.50	
0.003288	0.042	0.120	0.045	0.120	0.29	-0.00	555.41	
	2694.20	1170.	1170.	1170.	260.	416.	1230.63	3005.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

8.20	9520.	1461.	6198.	1860.	0.85	4	736.	
2705.44	0.0	753.	684.	1097.	-0.66	0	2700.30	
11.24	0.0	1.94	9.07	1.70	0.24	2706.29	2699.50	
0.004430	0.042	0.120	0.045	0.120	0.07	-0.00	536.24	
	2694.20	40.	40.	40.	279.	457.	1272.31	3007.

SPECIAL BRIDGE

SB	HK	XKOR	COFO	RDLEN	BMC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	34.00	4.00	670.00	3.92
	ELCHU	ELCHD						
	2694.20	2694.20						

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

3301 HV CHANGED MORE THAN HVINS

PRESURE AND WEIR FLOW

EGPRS	ELWC	H3	QWEIR	QPR	BAREA	TAREA	ELLC
2710.46	2706.37	0.15	2624.	6899.	670.	670.	2704.00
ELTRD							
2706.70							

8.20	9520.	1819.	4801.	2893.	0.25	2	1072.	
2707.82	0.0	1380.	875.	2494.	-0.60	0	2700.30	
13.64	0.0	1.32	5.50	1.16	1.79	2708.07	2699.50	
0.001175	0.042	0.120	0.045	0.120	0.0	-0.00	488.49	
	2694.20	30.	30.	30.	327.	745.	1560.46	3010.

\*SECNO 8.200

\*\*\* GR CARDS REPEATED

8.20	9520.	1821.	4799.	2901.	0.25	1	1074.	
2707.84	0.0	1386.	876.	2508.	-0.00	0	2700.30	
13.64	0.0	1.31	5.48	1.16	0.01	2708.08	2699.50	
0.001161	0.042	0.120	0.045	0.120	0.00	-0.00	488.08	
	2694.20	10.	10.	10.	327.	747.	1562.15	3011.

\*SECNO 8.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

8.27	8810.	1603.	6640.	567.	2.22	6	290.	
2707.75	2707.73	404.	488.	144.	1.98	15	2704.00	
8.55	0.0	3.97	13.60	3.93	0.90	2709.98	2705.00	
0.013439	0.042	0.090	0.045	0.100	0.99	-0.00	247.54	
	2699.20	340.	340.	340.	205.	236.	689.02	3034.

\*SECNO 8.410

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
8.41	8735.	1995.	5700.	1040.	1.29	5	549.	
2715.83	2715.77	509.	518.	415.	-0.93	8	2713.00	
9.63	0.0	3.92	11.00	2.28	7.05	2717.12	2713.40	
0.008681	0.042	0.070	0.045	0.090	0.09	-0.00	270.34	
	2706.20	660.	660.	360.	267.	305.	842.11	3053.

\*SECNO 8.670

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	MTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL
8.67	8590.	1055.	6710.	826.	2.72	3	246.	
2733.86	2733.86	438.	451.	195.	1.43	11	2730.00	
13.66	0.0	2.41	14.88	4.24	11.71	2736.58	2727.00	
0.009663	0.043	0.120	0.045	0.100	0.72	-0.00	62.33	
	2720.20	1280.	1280.	1280.	208.	65.	335.21	3090.

\*SECNO 8.800

3280 CROSS SECTION 8.80 EXTENDED 0.43 FEET

3301 HV CHANGED MORE THAN HVINS

8.80	8520.	3236.	3003.	2280.	0.89	2	318.	
2740.43	0.0	755.	264.	531.	-1.83	0	2734.30	
11.23	0.0	4.29	11.36	4.30	4.56	2741.32	2731.80	
0.006114	0.043	0.070	0.045	0.100	0.18	-0.00	56.37	
	2729.20	600.	600.	600.	207.	111.	374.00	3108.

\*SECH0 8.920

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

8.92	5150.	1274.	3855.	16.	1.59	3	283.	
2744.29	2744.29	461.	533.	8.	0.70	14	2741.50	
7.29	0.0	2.78	11.59	2.02	3.62	2745.88	2741.50	
0.008783	0.043	0.090	0.040	0.080	0.35	-0.00	200.64	
	2737.00	520.	520.	520.	251.	32.	483.71	3123.

\*SECH0 9.060

\*\*\* GR CARDS REPEATED

9.06	5015.	1286.	3703.	26.	1.10	2	312.	
2749.69	0.0	674.	380.	14.	-0.49	0	2746.00	
8.19	0.0	1.91	9.74	1.87	4.86	2750.79	2746.00	
0.005192	0.043	0.120	0.040	0.080	0.05	-0.00	173.72	
	2741.50	730.	730.	730.	278.	34.	485.55	3138.

\*SECH0 9.060

3280 CROSS SECTION 9.06 EXTENDED 1.77 FEET

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC	LEFT/RIGHT	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	SSTA	
SLOPE	MTN	XNL	XNCH	XNR	OLOSS	CORAR	ENDST	VOL
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR		

3685 20 TRIALS ATTEMPTED WSEL, CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

C13

9.06	5015.	1857.	2957.	201.	1.78	20	219.
2753.87	2753.87	346.	216.	60.	0.68	15	2750.10
6.47	0.0	3.40	13.67	3.38	0.16	2755.65	2751.50
0.013640	0.043	0.120	0.040	0.080	0.34	-0.00	34.13
	2747.40	20.	20.	20.	171.	48.	253.00

\*SECNO 9.060  
3280 CROSS SECTION 9.06 EXTENDED 2.73 FEET

3301 HV CHANGED MORE THAN HVINS

9.06	5015.	1785.	2988.	242.	1.06	4	220.
2754.83	0.0	493.	285.	87.	-0.72	0	2750.10
9.93	0.0	2.57	10.50	2.77	0.17	2755.90	2751.50
0.005750	0.043	0.120	0.040	0.080	0.07	-0.00	33.20
	2744.90	20.	20.	20.	172.	48.	253.00

\*SECNO 9.150

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION 9.15 EXTENDED 2.35 FEET

9.15	4945.	1953.	2827.	165.	1.03	2	219.
2757.85	0.0	635.	271.	76.	-0.03	0	2753.50
9.35	0.0	3.07	10.44	2.15	2.98	2758.87	2754.90
0.007700	0.043	0.110	0.045	0.110	0.00	-0.00	33.56
	2748.30	450.	450.	450.	172.	48.	253.00

\*SECNO 9.260  
3280 CROSS SECTION 9.26 EXTENDED 1.78 FEET

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

7185 MINIMUM SPECIFIC ENERGY  
3720 CRITICAL DEPTH ASSUMED

9.26	4945.	673.	3609.	862.	1.18	2	473.
2762.78	2762.78	316.	357.	429.	0.15	10	2761.20
8.78	0.0	1.50	10.12	2.01	3.96	2763.95	2760.50
0.007536	0.043	0.110	0.045	0.110	0.07	-0.00	226.90
	2754.00	520.	520.	520.	258.	215.	700.00

\*SECNO 9.260

\*\*\* GR CARDS REPEATED  
3280 CROSS SECTION 9.26 EXTENDED 2.57 FEET

330 HV CHANGED MORE THAN HVINS

9.26	4945.	732.	3168.	1045.	0.65	4	474.	
2763.57	0.0	502.	396.	580.	-0.52	0	2761.20	
9.57	0.0	1.46	8.00	1.80	0.22	2764.22	2760.50	
0.004086	0.043	0.110	0.045	0.110	0.05	-0.00	223.73	
	2754.00	40.	40.	40.	261.	215.	700.00	3163.

SPECIAL BRIDGE

SB	HK	XKOR	COFB	ROLEN	BMC	BWP	BAREA	SS
	1.25	1.60	3.00	0.0	42.70	2.00	305.00	0.0
	ELCHJ	ELCHD						
	2754.00	2754.00						

\*SECNO 9.260

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPMID	
ELEV	CRIMS	ALOB	ACH	AROB	DMV	IDC	BANK ELEV	
DEPTH	WSELK	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	QLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

PRESSURE AND WEIR FLOW

EGPRS	EGLMC	H3	QWEIR	QPR	BAREA	TAREA	ELIC
2770.10	2764.32	0.10	3206.	1739.	305.	305.	2761.50
ELTRD							
2761.80							

9.26	4945.	780.	2837.	1327.	0.42	3	674.	
2763.95	0.0	590.	417.	946.	-0.23	0	2761.10	
9.95	0.0	1.32	6.80	1.40	0.16	2764.38	2760.30	
0.002750	0.043	0.110	0.045	0.110	0.0	-0.00	222.46	
	2754.00	30.	30.	30.	263.	412.	896.78	3164.

\*SECNO 9.260

\*\*\* GR CARDS REPEATED

9.26	4945.	659.	3161.	1126.	0.59	2	670.	
2763.89	0.0	577.	414.	924.	0.16	0	2761.10	
9.89	0.0	1.14	7.63	1.22	0.02	2764.48	2760.30	
0.002112	0.043	0.110	0.035	0.110	0.08	-0.00	222.71	
	2754.00	10.	10.	10.	262.	408.	892.99	3165.

\*SECNO 9.390

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK	500 YEAR FLOOD	08/01/81
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MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	MSELK	VLQB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

9.39	4870.	763.	2906.	1201.	1.09	20	595.	
2769.17	2769.17	433.	271.	574.	0.50	8	2766.10	
10.97	0.0	1.76	10.71	2.09	2.61	2770.26	2766.10	
0.003353	0.043	0.110	0.045	0.110	0.25	-0.00	44.16	
	2758.20	700.	700.	700.	337.	405.	786.92	3191.

\*SECNO 9.500

3301 HV CHANGED MORE THAN HVINS

9.50	4740.	2233.	1464.	1042.	0.44	3	640.	
2776.49	0.0	995.	164.	503.	-0.65	0	2773.30	
7.09	0.0	2.24	8.95	2.07	6.60	2776.92	2773.30	
0.007230	0.043	0.110	0.045	0.110	0.07	-0.00	146.42	
	2769.40	850.	850.	850.	401.	239.	786.84	3219.

\*SECNO 9.550

\*\*\* GR CARDS REPEATED

9.55	4740.	2344.	1246.	1150.	0.23	2	660.	
2777.98	0.0	1268.	181.	681.	-0.20	0	2774.10	
7.78	0.0	1.85	6.89	1.74	1.27	2778.21	2774.10	
0.003748	0.043	0.110	0.045	0.110	0.02	-0.00	130.28	
	2770.20	250.	250.	250.	417.	243.	790.12	3230.

\*SECNO 9.820

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81			
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	TOPWID	
ELEV	CRWS	ALOB	ACH	AROB	DHV	IDC	BANK ELEV	
DEPTH	MSELK	VLQB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTH	XNL	XNCH	XNR	OLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

9.82	4610.	1977.	2057.	576.	1.13	20	405.	
2792.39	2792.39	675.	166.	188.	0.90	11	2788.50	
10.39	0.0	2.93	12.36	3.07	4.06	2793.53	2788.80	
0.013324	0.043	0.110	0.047	0.110	0.45	-0.00	64.89	
	2782.00	640.	640.	640.	513.	99.	676.96	3253.

\*SECNO 10.000

3301 HV CHANGED MORE THAN HVINS

10.00	4500.	53.	2235.	2212.	0.55	4	364.	
2800.31	0.0	27.	275.	1012.	-0.59	0	2793.50	
7.51	0.0	1.95	8.14	2.19	7.27	2800.26	2795.30	
0.004831	0.043	0.100	0.047	0.110	0.06	-0.00	226.99	
	2792.80	50.	960.	960.	27.	337.	590.95	3279.

\*SECNO 10.090

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELX	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL

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

10.09	4500.	1.	3314.	1185.	1.77	20	271.	
2808.80	2808.80	2.	268.	518.	1.22	11	2808.50	
9.80	0.0	0.65	12.37	2.29	3.00	2810.57	2805.50	
0.011599	0.043	0.070	0.045	0.120	0.61	-0.00	254.20	
	2799.00	420.	420.	420.	28.	283.	565.66	3289.

\*SECNO 10.210

10.21	4500.	5.	4444.	51.	1.81	3	103.	
2816.33	0.0	4.	409.	25.	0.04	0	2815.00	
7.63	0.0	1.43	10.87	2.06	7.55	2818.14	2814.30	
0.010635	0.043	0.080	0.045	0.080	0.02	-0.00	154.68	
	2808.50	680.	680.	680.	40.	63.	257.68	3299.

\*SECNO 10.280

10.28	4500.	0.	4500.	0.	1.83	2	78.	
2820.41	0.0	0.	415.	0.	0.01	0	2822.50	
7.41	0.0	0.0	10.85	0.0	4.08	2822.23	2824.00	
0.012129	0.043	0.080	0.045	0.080	0.01	-0.00	375.78	
	2813.00	360.	360.	360.	42.	36.	453.82	3302.

\*SECNO 10.390

RICHLAND CREEK		500 YEAR FLOOD			08/01/81		TOPWID	
MILE	Q	QLOB	QCH	QROB	HV	ITRIAL	BANK ELEV	
ELEV	CRINS	ALOB	ACH	AROB	DHV	IDC		
DEPTH	WSELX	VLOB	VCH	VROB	HL	EG	LEFT/RIGHT	
SLOPE	WTN	XNL	XNCH	XNR	GLOSS	CORAR	SSTA	
	ELMIN	XLOBL	XLCH	XLOBR	WSDL	WSDR	ENDST	VOL



G13

10.39	4500.	0.	3217.	1282.	1.71	4	207.
2826.89	2826.86	0.	262.	412.	-0.11	15	2826.50
10.49	0.0	0.53	12.27	3.11	6.36	2828.60	2817.00
0.011434	0.043	0.100	0.050	0.100	0.01	-0.00	119.86
	2816.40	540.	540.	540.	18.	189.	326.53
							3309.

H13

THIS RUN EXECUTED 08/01/81 8:18:05

\*\*\*\*\*  
 HEC2 RELEASE DATED NOV 76 UPDATED JULY1979  
 ERROR CORR - 01,02,03  
 MODIFICATION - 50,51,52,53,54  
 \*\*\*\*\*

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

IN0219) FIOCS - MISSING DD CARD OR DCB ERROR FOR ASCII TAPE FOR FT51F001

TRACEBACK ROUTINE CALLED FROM ISN REG. 14 REG. 15 REG. 0 REG. 1

IBCOM	000E2F88	000F9AFC	00000000	00006ETC
SUMP0	420C607C	000E2050	0000000c	00000000
MAIN	0002C698	000C5810	0089D2D0	000C4FF8

ENTRY POINT= 000C5810

STANDARD FIXUP TAKEN , EXECUTION CONTINUING

\*\*\*\*\*  
 RICHLAND CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	ALCH	ELTRD	ELLC	MIN	Q	CWSEL	CRWS	EG	TK+S	VCH	AREA	.01K
0.050	0.	0.0	0.0	2486.5	4800.0	2490.42	2494.88	2498.72	24.88	5.28	1640.99	962.35
0.050	0.	0.0	0.0	2483.5	8100.0	2499.65	2498.21	2499.95	24.72	5.78	2632.46	1629.08
0.050	0.	0.0	0.0	2486.5	9400.0	2500.04	2498.49	2500.34	24.84	5.96	2953.03	1885.95
0.050	0.	0.0	0.0	2486.5	13100.0	2501.02	2499.11	2501.33	24.96	6.36	3770.68	2621.98
0.230	800.	0.0	0.0	2487.8	4790.0	2500.45	0.0	2500.88	28.62	6.24	1259.44	895.37
0.230	800.	0.0	0.0	2487.8	8075.0	2501.82	0.0	2502.37	35.55	7.58	1792.05	1354.35
0.230	800.	0.0	0.0	2487.8	9335.0	2502.25	0.0	2502.84	37.58	7.99	1969.22	1522.72
0.230	800.	0.0	0.0	2487.8	13000.0	2503.31	0.0	2504.02	42.73	9.02	2428.00	1988.82
0.230	40.	0.0	0.0	2487.8	4790.0	2500.60	0.0	2500.99	25.96	6.01	1315.79	940.17
0.230	40.	0.0	0.0	2487.8	8075.0	2502.01	0.0	2502.51	31.96	7.27	1870.34	1428.40
0.230	40.	0.0	0.0	2487.8	9335.0	2502.45	0.0	2502.99	33.75	7.66	2055.24	1606.90
0.230	40.	0.0	0.0	2487.8	13000.0	2503.34	0.0	2504.19	38.25	8.64	2533.92	2102.01
0.230	1.	2498.7	2505.0	2488.0	4790.0	2500.14	0.0	2501.46	164.34	9.55	584.39	373.65
* 0.230	1.	2498.7	2505.0	2488.0	8075.0	2501.36	2501.36	2503.28	233.07	12.07	843.10	528.93
* 0.230	1.	2498.7	2505.0	2488.0	9335.0	2501.85	2501.85	2503.81	235.57	12.41	968.06	608.21
* 0.230	1.	2498.7	2505.0	2488.0	13000.0	2503.17	2503.17	2505.06	223.97	12.74	1356.34	868.65
0.230	30.	2498.7	2505.0	2488.0	4790.0	2501.11	0.0	2501.89	95.05	7.61	782.50	491.30
0.230	30.	2498.7	2505.0	2488.0	8075.0	2503.03	0.0	2503.81	93.11	8.17	1310.51	836.82
0.230	30.	2498.7	2505.0	2488.0	9335.0	2503.54	0.0	2504.35	95.33	8.42	1480.28	956.07
0.230	30.	2498.7	2505.0	2488.0	13000.0	2504.97	0.0	2505.67	124.97	7.57	1985.95	1162.91

0.230	1.	0.0	0.0	2488.2	4790.0	2501.75	0.0	2501.95	13.85	4.60	1846.67	1286.94
0.230	1.	0.0	0.0	2488.2	8075.0	2503.67	0.0	2503.87	13.16	5.00	2822.99	2225.58
0.230	1.	0.0	0.0	2488.2	9335.0	2504.20	0.0	2504.41	13.61	5.22	3104.75	2530.77
0.230	1.	0.0	0.0	2488.2	13000.0	2505.45	0.0	2505.71	14.99	5.82	3799.59	3357.94
0.230	10.	0.0	0.0	2488.2	4790.0	2501.77	0.0	2501.96	13.71	4.58	1854.30	1293.51
0.230	10.	0.0	0.0	2488.2	8075.0	2503.68	0.0	2503.88	13.13	4.99	2825.66	2228.38
0.230	10.	0.0	0.0	2488.2	9335.0	2504.21	0.0	2504.42	13.57	5.22	3108.01	2534.34
0.230	10.	0.0	0.0	2488.2	13000.0	2505.47	0.0	2505.73	14.91	5.81	3806.88	3367.20
0.270	150.	0.0	0.0	2488.2	4790.0	2501.98	0.0	2502.15	12.00	4.34	1957.45	1382.99
0.270	150.	0.0	0.0	2488.2	8075.0	2503.89	0.0	2504.07	11.91	4.80	2930.27	2340.19
0.270	150.	0.0	0.0	2488.2	9335.0	2504.42	0.0	2504.62	12.33	5.02	3218.80	2658.05
0.270	150.	0.0	0.0	2488.2	13000.0	2505.70	0.0	2505.94	13.54	5.59	3935.70	3532.92

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRHS	EG	TDK+S	VCH	AREA	.01K
0.550	1400.	0.0	0.0	2491.8	4780.0	2504.04	0.0	2504.83	22.17	6.37	902.67	1015.09
0.550	1400.	0.0	0.0	2491.8	3040.0	2503.99	0.0	2503.84	26.26	7.94	1374.28	1569.00
0.550	1400.	0.0	0.0	2491.8	9250.0	2506.58	0.0	2507.51	27.30	8.39	1532.30	1770.24
0.550	1400.	0.0	0.0	2491.8	12850.0	2508.04	0.0	2509.19	30.39	9.61	1949.65	2330.79
0.840	1520.	0.0	0.0	2497.4	4770.0	2507.76	0.0	2508.81	31.08	8.22	583.62	855.55
0.840	1520.	0.0	0.0	2497.4	8000.0	2510.26	0.0	2511.98	37.46	10.60	820.56	1307.18
0.840	1520.	0.0	0.0	2497.4	9170.0	2510.98	0.0	2512.92	39.31	11.32	909.62	1462.65
0.840	1520.	0.0	0.0	2497.4	12730.0	2512.80	0.0	2515.33	43.80	13.13	1210.69	1923.41
1.160	1440.	0.0	0.0	2503.5	4760.0	2512.73	0.0	2513.77	38.33	8.46	686.28	768.81
1.160	1440.	0.0	0.0	2503.5	7970.0	2515.69	0.0	2516.82	29.60	9.17	1208.43	1464.84
1.160	1440.	0.0	0.0	2503.5	9080.0	2516.56	0.0	2517.71	27.50	9.34	1395.17	1731.48
1.160	1440.	0.0	0.0	2503.5	12590.0	2518.85	0.0	2520.08	24.40	9.99	1923.13	2548.65
1.450	1360.	0.0	0.0	2507.2	4750.0	2516.84	0.0	2517.30	18.25	6.35	1189.34	1111.84
1.450	1360.	0.0	0.0	2507.2	7940.0	2519.29	0.0	2519.84	16.76	7.25	1797.75	1939.37
1.450	1360.	0.0	0.0	2507.2	9000.0	2520.02	0.0	2520.59	16.26	7.46	2000.27	2231.69
1.450	1360.	0.0	0.0	2507.2	12460.0	2522.10	0.0	2522.74	15.36	8.11	2591.45	3179.64
1.450	40.	0.0	0.0	2507.2	4750.0	2516.81	0.0	2517.50	27.14	6.66	712.85	911.74
1.450	40.	0.0	0.0	2507.2	7940.0	2519.43	0.0	2519.91	14.59	6.12	1625.85	2078.60
1.450	40.	0.0	0.0	2507.2	9000.0	2520.14	0.0	2520.66	14.27	6.37	1788.65	2382.46
1.450	40.	0.0	0.0	2507.2	12460.0	2522.17	0.0	2522.80	13.76	7.09	2260.64	3358.68
1.450	1.	2519.3	2524.8	2507.0	4750.0	2516.66	0.0	2517.67	64.71	8.04	591.15	590.48
1.450	1.	2519.3	2524.8	2507.0	7940.0	2518.96	0.0	2520.38	70.54	9.56	830.23	945.40
1.450	1.	2519.3	2524.8	2507.0	9000.0	2519.63	0.0	2521.17	71.33	9.96	911.41	1065.64
1.450	1.	2519.3	2524.8	2507.0	12460.0	2521.59	0.0	2523.38	73.88	10.88	1232.38	1449.61
1.450	30.	2519.3	2524.8	2507.0	4750.0	2516.94	0.0	2517.64	57.20	7.67	618.92	628.03
1.450	30.	2519.3	2524.8	2507.0	7940.0	2519.28	0.0	2520.59	62.77	9.18	864.87	1002.17
1.450	30.	2519.3	2524.8	2507.0	9000.0	2519.97	0.0	2521.39	63.44	9.55	960.94	1127.95
1.450	30.	2519.3	2524.8	2507.0	12460.0	2521.98	0.0	2523.61	61.86	10.41	1302.32	1490.71
1.450	1.	0.0	0.0	2507.2	4750.0	2517.29	0.0	2517.89	21.38	6.20	765.72	1027.22
1.450	1.	0.0	0.0	2507.2	7940.0	2519.72	0.0	2520.64	22.06	7.69	1032.48	1690.53
1.450	1.	0.0	0.0	2507.2	9000.0	2521.07	0.0	2521.49	10.26	5.74	2003.60	2810.36
1.450	1.	0.0	0.0	2507.2	12460.0	2523.22	0.0	2523.73	10.13	6.43	2505.60	3915.80
1.450	40.	0.0	0.0	2507.2	4750.0	2517.64	0.0	2517.98	12.21	5.53	1385.13	1359.58
1.450	40.	0.0	0.0	2507.2	7940.0	2520.34	0.0	2520.75	11.23	6.32	2091.96	2369.86
1.450	40.	0.0	0.0	2507.2	9000.0	2521.11	0.0	2521.53	11.04	6.53	2307.98	2708.70
1.450	40.	0.0	0.0	2507.2	12460.0	2523.28	0.0	2523.77	10.80	7.19	2937.01	3790.92
1.700	1300.	0.0	0.0	2510.3	4745.0	2519.76	0.0	2520.46	27.90	7.84	971.40	898.36
1.700	1300.	0.0	0.0	2510.3	7910.0	2522.22	0.0	2523.00	24.25	8.68	1496.93	1606.30
1.700	1300.	0.0	0.0	2510.3	8930.0	2522.94	0.0	2523.74	23.36	8.89	1654.76	1847.79
1.700	1300.	0.0	0.0	2510.3	12350.0	2525.02	0.0	2525.90	21.79	9.59	2132.36	2645.87
1.780	360.	0.0	0.0	2512.6	4740.0	2520.90	0.0	2521.94	49.52	9.46	947.99	673.56
1.780	360.	0.0	0.0	2512.6	7900.0	2523.31	0.0	2523.93	26.53	8.39	2063.28	1533.72
1.780	360.	0.0	0.0	2512.6	8900.0	2524.04	0.0	2524.59	22.57	8.12	2410.59	1873.27
1.780	360.	0.0	0.0	2512.6	12300.0	2526.17	0.0	2526.61	16.14	7.78	3453.65	3061.19

K13

SEC#0	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CAIWS	EG	TK#S	VCH	AREA	.01K	
*	1.780	40.	0.0	0.0	2512.6	4740.0	2520.73	2520.73	2522.71	80.33	11.86	594.99	528.87
	1.780	40.	0.0	0.0	2512.6	7900.0	2523.46	0.0	2524.04	24.31	8.12	2135.81	1602.13
	1.780	40.	0.0	0.0	2512.6	8900.0	2524.16	0.0	2524.68	21.21	7.94	2468.35	1932.61
	1.780	40.	0.0	0.0	2512.6	12300.0	2526.24	0.0	2526.68	15.69	7.70	3488.65	3105.02
*	1.780	30.	2524.7	2522.5	2512.6	4740.0	2522.43	0.0	2523.21	27.65	8.04	1130.50	901.40
*	1.780	30.	2524.7	2522.5	2512.6	7900.0	2527.15	0.0	2527.29	4.56	4.35	3947.80	3701.06
*	1.780	30.	2524.7	2522.5	2512.6	8900.0	2527.71	0.0	2527.85	4.75	4.56	4229.04	4084.75
*	1.780	30.	2524.7	2522.5	2512.6	12300.0	2529.10	0.0	2529.29	5.74	5.34	4957.57	5135.59
*	1.780	40.	0.0	0.0	2512.6	4740.0	2522.41	2522.41	2523.80	63.31	10.44	816.03	595.71
	1.780	40.	0.0	0.0	2512.6	7900.0	2527.16	0.0	2527.32	6.90	4.81	3932.06	3007.46
	1.780	40.	0.0	0.0	2512.6	8900.0	2527.72	0.0	2527.88	6.67	4.88	4225.18	3446.66
	1.780	40.	0.0	0.0	2512.6	12300.0	2529.15	0.0	2529.32	6.84	5.31	5244.21	4697.61
	1.950	810.	0.0	0.0	2513.1	4600.0	2525.25	0.0	2525.44	8.75	4.67	2188.71	1555.28
	1.950	810.	0.0	0.0	2513.1	7800.0	2527.70	0.0	2527.83	5.81	4.43	3855.75	3236.67
	1.950	810.	0.0	0.0	2513.1	8850.0	2528.24	0.0	2528.38	5.74	4.53	4238.15	3894.76
	1.950	810.	0.0	0.0	2513.1	12100.0	2529.68	0.0	2529.83	5.74	4.87	5268.86	5050.87
*	2.190	1260.	0.0	0.0	2519.3	4390.0	2527.87	2527.87	2528.93	69.04	9.83	888.67	528.35
	2.190	1260.	0.0	0.0	2519.3	7640.0	2529.00	2528.92	2529.96	64.20	10.62	1685.67	953.52
	2.190	1260.	0.0	0.0	2519.3	8770.0	2529.55	0.0	2530.28	49.53	9.80	2157.59	1246.08
	2.190	1260.	0.0	0.0	2519.3	12040.0	2530.92	0.0	2531.36	29.46	8.43	3399.87	2218.25
	2.320	640.	0.0	0.0	2523.4	4270.0	2530.52	0.0	2530.68	15.29	4.74	2022.41	1092.07
	2.320	640.	0.0	0.0	2523.4	7550.0	2531.51	0.0	2531.71	17.87	5.67	3005.22	1785.96
	2.320	640.	0.0	0.0	2523.4	8725.0	2531.71	0.0	2531.93	20.32	6.16	3188.25	1935.39
	2.320	640.	0.0	0.0	2523.4	11950.0	2532.40	0.0	2532.65	21.71	6.77	3928.99	2564.43
	2.320	1.	2528.3	2529.9	2523.4	4270.0	2530.59	0.0	2530.69	32.60	3.11	1836.29	747.89
	2.320	1.	2528.3	2529.9	2523.4	7550.0	2531.59	0.0	2531.72	34.78	3.57	2769.95	1280.12
	2.320	1.	2528.3	2529.9	2523.4	8725.0	2531.80	0.0	2531.94	37.52	3.78	2977.24	1424.32
	2.320	1.	2528.3	2529.9	2523.4	11950.0	2532.50	0.0	2532.66	36.35	3.96	3725.74	1982.19
	2.320	30.	2528.3	2529.9	2523.4	4270.0	2530.69	0.0	2530.78	28.84	2.95	1925.95	795.14
	2.320	30.	2528.3	2529.9	2523.4	7550.0	2531.70	0.0	2531.81	31.20	3.41	2876.27	1351.56
	2.320	30.	2528.3	2529.9	2523.4	8725.0	2531.92	0.0	2532.05	33.28	3.60	3103.58	1512.48
	2.320	30.	2528.3	2529.9	2523.4	11950.0	2532.61	0.0	2532.77	32.88	3.80	3851.93	2084.06
	2.320	1.	0.0	0.0	2523.4	4270.0	2530.69	0.0	2530.79	8.78	3.66	2186.99	1440.82
	2.320	1.	0.0	0.0	2523.4	7550.0	2531.69	0.0	2531.83	11.19	4.57	3186.42	2250.80
	2.320	1.	0.0	0.0	2523.4	8725.0	2531.91	0.0	2532.07	12.55	4.94	3413.73	2462.93
	2.320	1.	0.0	0.0	2523.4	11950.0	2532.60	0.0	2532.79	14.23	5.57	4148.24	3167.96
	2.400	500.	0.0	0.0	2523.4	4200.0	2531.05	0.0	2531.12	6.10	3.16	2534.78	1701.17
	2.400	500.	0.0	0.0	2523.4	7500.0	2532.15	0.0	2532.25	7.75	3.96	3663.27	2893.52
	2.400	500.	0.0	0.0	2523.4	8700.0	2532.42	0.0	2532.53	8.55	4.26	3956.17	2976.09
	2.400	500.	0.0	0.0	2523.4	11900.0	2533.18	0.0	2533.31	9.59	4.79	4788.10	3842.56
*	2.400	40.	0.0	0.0	2551.5	4200.0	2553.57	2553.57	2554.47	100.36	8.06	630.02	419.24
*	2.400	40.	0.0	0.0	2551.5	7500.0	2554.41	2554.41	2555.67	92.73	9.73	986.41	778.85
*	2.400	40.	0.0	0.0	2551.5	8700.0	2554.80	2554.80	2556.02	77.83	9.68	1168.91	986.18
*	2.400	40.	0.0	0.0	2551.5	11900.0	2555.39	2555.39	2556.15	76.76	10.74	1458.49	1358.22

SECH0	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K+S	VCH	AREA	.01K	
*	2.400	30.	100000.0	100000.0	2561.5	4200.0	2565.00	0.0	2565.24	14.43	4.34	1265.69	1105.58
*	2.400	30.	100000.0	100000.0	2561.5	7500.0	2566.30	0.0	2566.80	11.66	4.95	2021.36	2196.43
*	2.400	30.	100000.0	100000.0	2561.5	8700.0	2566.70	0.0	2567.06	13.51	5.46	2126.79	2366.96
*	2.400	30.	100000.0	100000.0	2561.5	11900.0	2567.60	0.0	2568.04	13.76	6.14	2617.95	3207.84
	2.400	10.	0.0	0.0	2560.0	5150.0	2565.26	0.0	2565.27	0.28	0.80	6470.82	9661.64
	2.400	10.	0.0	0.0	2560.0	8300.0	2566.81	0.0	2566.83	0.31	0.99	8389.76	14881.40
	2.400	10.	0.0	0.0	2560.0	9900.0	2567.07	0.0	2567.10	0.39	1.14	8716.82	15858.28
	2.400	10.	0.0	0.0	2560.0	13350.0	2568.06	0.0	2568.09	0.46	1.35	9933.15	19703.70
	3.230	4180.	0.0	0.0	2555.0	5080.0	2565.39	0.0	2565.42	0.42	1.47	3484.30	7817.88
	3.230	4180.	0.0	0.0	2555.0	8160.0	2566.97	0.0	2567.03	0.66	2.02	4109.27	10046.29
	3.230	4180.	0.0	0.0	2555.0	9810.0	2567.28	0.0	2567.36	0.87	2.37	4234.31	10507.78
	3.230	4180.	0.0	0.0	2555.0	13190.0	2568.30	0.0	2568.43	1.18	2.92	4658.45	12117.88
	3.690	2200.	0.0	0.0	2552.8	5040.0	2565.48	0.0	2565.80	6.46	4.65	1253.72	1983.07
	3.690	2200.	0.0	0.0	2552.8	8070.0	2567.08	0.0	2567.64	9.61	6.22	1558.07	2610.02
	3.690	2200.	0.0	0.0	2552.8	9760.0	2567.42	0.0	2568.18	12.57	7.24	1623.51	2752.33
	3.690	2200.	0.0	0.0	2552.8	13100.0	2568.46	0.0	2569.56	16.56	8.74	1830.41	3219.21
	3.810	560.	0.0	0.0	2556.8	5030.0	2565.92	0.0	2567.04	68.16	8.50	596.29	609.27
	3.810	560.	0.0	0.0	2556.8	8070.0	2567.84	0.0	2569.07	60.75	8.93	994.25	1035.42
	3.810	560.	0.0	0.0	2556.8	9740.0	2568.44	0.0	2569.85	61.85	9.62	1169.09	1238.48
	3.810	560.	0.0	0.0	2556.8	13080.0	2569.80	0.0	2571.26	52.32	10.10	1665.23	1808.28
	3.810	40.	0.0	0.0	2556.8	5030.0	2566.42	0.0	2567.32	58.60	7.60	672.47	657.11
	3.810	40.	0.0	0.0	2556.8	8070.0	2568.29	0.0	2569.30	46.30	8.20	1123.68	1186.05
	3.810	40.	0.0	0.0	2556.8	9740.0	2568.93	0.0	2570.07	46.54	8.78	1333.45	1427.75
	3.810	40.	0.0	0.0	2556.8	13080.0	2570.23	0.0	2571.47	41.91	9.38	1849.92	2020.47
	3.810	60.	2571.8	2567.0	2556.8	5030.0	2566.83	0.0	2567.58	48.04	6.94	742.83	725.71
	3.810	60.	2571.8	2567.0	2556.8	8070.0	2570.37	0.0	2570.82	14.91	5.66	1909.99	2089.64
	3.810	60.	2571.8	2567.0	2556.8	9740.0	2571.94	0.0	2572.32	10.61	5.37	2684.27	2990.37
	3.810	60.	2571.8	2567.0	2556.8	13080.0	2573.36	0.0	2573.78	10.46	5.84	3518.27	4044.63
	3.810	20.	0.0	0.0	2556.2	5030.0	2566.66	0.0	2567.92	37.97	9.17	619.05	816.26
	3.810	20.	0.0	0.0	2556.2	8070.0	2569.95	0.0	2571.33	28.37	9.68	1040.57	1515.03
	3.810	20.	0.0	0.0	2556.2	9740.0	2571.46	0.0	2572.80	25.44	10.14	1317.24	1931.04
	3.810	20.	0.0	0.0	2556.2	13080.0	2572.68	0.0	2574.52	31.13	11.90	1678.56	2344.51
	3.970	740.	0.0	0.0	2558.8	5020.0	2569.51	0.0	2570.05	21.08	6.16	1101.15	1093.26
	3.970	740.	0.0	0.0	2558.8	8050.0	2572.48	0.0	2573.12	17.26	7.00	1743.20	1834.51
	3.970	740.	0.0	0.0	2558.8	9730.0	2573.86	0.0	2574.54	18.59	7.36	2101.90	2256.96
	3.970	740.	0.0	0.0	2558.8	13050.0	2575.64	0.0	2576.49	20.50	8.36	2602.03	2882.57
	3.970	40.	0.0	0.0	2558.8	5020.0	2569.51	0.0	2570.30	49.28	7.17	699.78	715.09
	3.970	40.	0.0	0.0	2558.8	8050.0	2572.35	0.0	2573.50	58.72	8.71	1058.35	1050.48
	3.970	40.	0.0	0.0	2558.8	9730.0	2573.73	0.0	2574.90	54.37	9.00	1414.54	1319.53
	3.970	40.	0.0	0.0	2558.8	13050.0	2575.53	0.0	2576.85	55.17	9.86	1918.66	1756.87
	3.970	30.	0.0	0.0	2558.8	5020.0	2569.68	0.0	2570.45	46.99	7.05	712.15	732.30
	3.970	30.	0.0	0.0	2558.8	8050.0	2572.59	0.0	2573.68	54.18	8.47	1117.68	1093.63
	3.970	30.	0.0	0.0	2558.8	9730.0	2573.96	0.0	2575.07	50.35	8.76	1478.13	1371.29
	3.970	30.	0.0	0.0	2558.8	13050.0	2575.78	0.0	2577.02	51.20	9.60	1990.62	1823.83

M13

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K+S	VCH	AREA	.01K
3.970	10.	0.0	0.0	2558.8	5020.0	2570.05	0.0	2570.51	17.24	5.76	1205.74	1208.88
3.970	10.	0.0	0.0	2558.8	8050.0	2573.22	0.0	2573.76	15.33	6.48	1933.42	2055.67
3.970	10.	0.0	0.0	2558.8	9730.0	2574.56	0.0	2575.15	15.24	6.88	2293.69	2492.20
3.970	10.	0.0	0.0	2558.8	13050.0	2576.36	0.0	2577.09	17.11	7.86	2811.02	3154.81
4.140	940.	0.0	0.0	2562.7	5010.0	2571.79	0.0	2572.11	17.69	5.81	2001.54	1191.30
4.140	940.	0.0	0.0	2562.7	8010.0	2574.73	0.0	2575.01	12.25	5.86	3201.35	2283.47
4.140	940.	0.0	0.0	2562.7	9710.0	2576.06	0.0	2576.34	11.37	6.06	3751.50	2879.21
4.140	940.	0.0	0.0	2562.7	13010.0	2578.03	0.0	2578.36	11.30	6.63	4589.34	3871.05
4.140	40.	0.0	0.0	2562.7	5010.0	2571.87	0.0	2572.18	15.70	4.44	1128.96	1264.55
4.140	40.	0.0	0.0	2562.7	8010.0	2574.73	0.0	2575.10	11.49	4.88	1642.67	2362.62
4.140	40.	0.0	0.0	2562.7	9710.0	2576.04	0.0	2576.45	10.85	5.18	1875.92	2947.83
4.140	40.	0.0	0.0	2562.7	13010.0	2578.18	0.0	2578.40	5.80	4.28	4663.75	5403.00
4.140	115.	2577.2	2575.2	2562.7	5010.0	2571.90	0.0	2572.20	15.40	4.41	1135.43	1276.64
4.140	115.	2577.2	2575.2	2562.7	8010.0	2574.77	0.0	2575.14	11.34	4.86	1649.18	2378.24
4.140	115.	2577.2	2575.2	2562.7	9710.0	2576.42	0.0	2576.81	9.61	4.99	1945.22	3131.54
4.140	115.	2577.2	2575.2	2562.7	13010.0	2579.36	0.0	2579.54	4.23	3.88	5173.04	6324.10
4.140	30.	0.0	0.0	2562.7	5010.0	2571.96	0.0	2572.25	16.19	5.63	2068.59	1244.95
4.140	30.	0.0	0.0	2562.7	8010.0	2574.92	0.0	2575.18	11.44	5.72	3278.03	2367.73
4.140	30.	0.0	0.0	2562.7	9710.0	2576.80	0.0	2576.85	9.54	5.71	3983.95	3143.64
4.140	30.	0.0	0.0	2562.7	13010.0	2579.34	0.0	2579.59	8.00	5.90	5156.34	4600.04
4.280	710.	0.0	0.0	2562.4	4295.0	2573.15	0.0	2573.45	19.75	5.78	1630.36	966.49
4.280	710.	0.0	0.0	2562.4	6990.0	2575.76	0.0	2576.01	13.49	5.72	2701.60	1902.90
4.280	710.	0.0	0.0	2562.4	8660.0	2577.31	0.0	2577.54	11.04	5.65	3401.79	2605.82
4.280	710.	0.0	0.0	2562.4	11925.0	2579.94	0.0	2580.15	8.66	5.18	4707.05	4053.43
4.280	40.	0.0	0.0	2562.4	4295.0	2573.25	0.0	2573.53	18.66	5.66	1666.65	994.28
4.280	40.	0.0	0.0	2562.4	6990.0	2575.82	0.0	2576.56	13.20	5.68	2723.23	1923.68
4.280	40.	0.0	0.0	2562.4	8660.0	2577.36	0.0	2577.58	10.88	5.62	3421.08	2625.94
4.280	40.	0.0	0.0	2562.4	11925.0	2579.97	0.0	2580.18	8.57	5.66	4724.40	4073.64
4.280	1.	2572.1	2572.6	2562.4	4295.0	2572.99	0.0	2573.78	25.26	8.55	1158.41	383.75
4.280	1.	2572.1	2572.6	2562.4	6990.0	2575.74	0.0	2576.15	14.72	7.26	2154.07	652.61
4.280	1.	2572.1	2572.6	2562.4	8660.0	2577.31	0.0	2577.63	78.87	6.70	2864.48	975.12
4.280	1.	2572.1	2572.6	2562.4	11925.0	2579.96	0.0	2580.20	49.85	6.18	4183.41	1688.90
4.280	5.	2572.1	2572.6	2562.4	4295.0	2573.07	0.0	2573.85	123.65	8.50	1172.56	386.24
4.280	5.	2572.1	2572.6	2562.4	6990.0	2575.81	0.0	2576.21	110.30	7.16	2184.86	665.56
4.280	5.	2572.1	2572.6	2562.4	8660.0	2577.36	0.0	2577.67	77.25	6.65	2885.38	985.32
4.280	5.	2572.1	2572.6	2562.4	11925.0	2579.98	0.0	2580.23	49.66	6.17	4189.12	1692.27
4.280	1.	0.0	0.0	2562.4	4295.0	2573.68	0.0	2573.91	14.42	5.15	1839.51	1131.07
4.280	1.	0.0	0.0	2562.4	6990.0	2576.00	0.0	2576.22	12.18	5.52	2804.88	2002.77
4.280	1.	0.0	0.0	2562.4	8660.0	2577.47	0.0	2577.68	10.42	5.54	3474.98	2682.53
4.280	1.	0.0	0.0	2562.4	11925.0	2580.03	0.0	2580.23	8.43	5.63	4753.96	4108.27
4.280	10.	0.0	0.0	2562.4	4295.0	2573.70	0.0	2573.92	14.28	5.13	1846.11	1136.44
4.280	10.	0.0	0.0	2562.4	6990.0	2576.01	0.0	2576.24	12.11	5.51	2810.49	2008.25
4.280	10.	0.0	0.0	2562.4	8660.0	2577.48	0.0	2577.69	10.38	5.53	3480.20	2688.04
4.280	10.	0.0	0.0	2562.4	11925.0	2580.03	0.0	2580.24	8.40	5.62	4758.50	4113.62

SFCNO	XLCH	ELYRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K+S	VCH	AREA	.01K
4.430	735.	0.0	0.0	2566.2	4395.0	2575.14	0.0	2575.88	43.63	8.07	821.99	665.38
4.430	735.	0.0	0.0	2566.2	7115.0	2577.17	0.0	2577.97	37.39	8.77	1249.29	1163.62
4.430	735.	0.0	0.0	2566.2	8465.0	2578.42	0.0	2579.13	29.56	8.47	1506.15	1557.05
4.430	735.	0.0	0.0	2566.2	11540.0	2580.76	0.0	2581.33	20.39	8.02	2414.35	2555.70
4.630	1000.	0.0	0.0	2571.5	4275.0	2579.98	0.0	2580.87	56.02	8.76	729.96	571.18
4.630	1000.	0.0	0.0	2571.5	6950.0	2581.56	0.0	2582.66	56.72	10.10	1052.57	922.85
4.630	1000.	0.0	0.0	2571.5	8475.0	2582.23	0.0	2583.48	59.81	10.90	1195.15	1095.83
4.630	1000.	0.0	0.0	2571.5	11600.0	2583.58	0.0	2584.98	59.05	11.86	1544.03	1509.55
4.820	940.	0.0	0.0	2575.7	4260.0	2585.46	0.0	2586.57	61.99	8.83	668.86	541.08
4.820	940.	0.0	0.0	2575.7	6920.0	2587.24	0.0	2588.62	65.69	10.42	1033.99	853.78
4.820	940.	0.0	0.0	2575.7	8375.0	2588.08	0.0	2589.56	65.29	10.99	1218.92	1036.46
4.820	940.	0.0	0.0	2575.7	11420.0	2589.49	0.0	2591.20	68.13	12.20	1539.05	1383.60
4.960	610.	0.0	0.0	2579.2	4250.0	2588.79	0.0	2589.22	30.01	5.82	861.44	775.78
4.960	610.	0.0	0.0	2579.2	6900.0	2590.93	0.0	2591.57	34.14	7.06	1142.71	1180.87
4.960	610.	0.0	0.0	2579.2	8300.0	2591.86	0.0	2592.60	36.17	7.65	1267.46	1380.16
4.960	610.	0.0	0.0	2579.2	11290.0	2593.51	0.0	2594.49	40.16	8.82	1500.89	1781.65
4.960	40.	0.0	0.0	2579.2	4250.0	2589.08	0.0	2589.33	18.53	4.26	1151.99	987.17
4.960	40.	0.0	0.0	2579.2	6900.0	2591.38	0.0	2591.69	17.08	4.84	1661.23	1649.74
4.960	40.	0.0	0.0	2579.2	8300.0	2592.38	0.0	2592.73	17.10	5.11	1891.05	2007.01
4.960	40.	0.0	0.0	2579.2	11290.0	2594.23	0.0	2594.64	17.49	5.62	2327.51	2699.93
4.960	15.	2598.0	2597.5	2579.2	4250.0	2589.11	0.0	2589.36	18.20	4.23	1159.49	996.16
4.960	15.	2598.0	2597.5	2579.2	6900.0	2591.42	0.0	2591.73	16.80	4.82	1670.52	1683.46
4.960	15.	2598.0	2597.5	2579.2	8300.0	2592.43	0.0	2592.77	16.84	5.08	1901.35	2022.56
4.960	15.	2598.0	2597.5	2579.2	11290.0	2594.28	0.0	2594.69	17.22	5.59	2340.23	2720.83
4.960	10.	0.0	0.0	2579.6	4250.0	2588.26	0.0	2590.30	163.33	11.45	371.17	332.55
4.960	10.	0.0	0.0	2579.6	6900.0	2589.94	0.0	2593.28	216.22	14.67	471.58	469.25
* 4.960	10.	0.0	0.0	2579.6	8300.0	2590.64	2590.64	2594.70	239.80	16.18	518.89	535.99
* 4.960	10.	0.0	0.0	2579.6	11290.0	2592.97	2592.97	2597.28	198.47	16.82	714.57	801.39
4.960	60.	0.0	0.0	2579.6	4250.0	2589.73	0.0	2591.07	89.64	9.30	457.69	448.89
4.960	60.	0.0	0.0	2579.6	6900.0	2592.37	0.0	2594.23	90.36	11.00	659.78	725.87
4.960	60.	0.0	0.0	2579.6	8300.0	2593.74	0.0	2595.71	94.81	11.41	786.65	901.24
4.960	60.	0.0	0.0	2579.6	11290.0	2595.89	0.0	2598.22	85.56	12.57	995.54	1220.58
5.100	750.	0.0	0.0	2585.6	4240.0	2593.54	0.0	2593.75	17.68	4.09	1419.91	1008.50
5.100	750.	0.0	0.0	2585.6	6880.0	2596.06	0.0	2596.27	11.31	4.14	2318.26	2045.93
5.100	750.	0.0	0.0	2585.6	8180.0	2597.30	0.0	2597.50	9.40	4.14	2768.98	2667.35
5.100	750.	0.0	0.0	2585.6	11220.0	2599.62	0.0	2599.83	7.82	4.35	3629.48	4013.08
5.100	40.	0.0	0.0	2585.6	4240.0	2593.52	0.0	2593.95	29.48	5.27	804.73	780.96
5.100	40.	0.0	0.0	2585.6	6880.0	2595.94	0.0	2596.51	24.66	6.06	1135.08	1385.46
5.100	40.	0.0	0.0	2585.6	8180.0	2597.14	0.0	2597.76	22.27	6.30	1298.43	1733.48
5.100	40.	0.0	0.0	2585.6	11220.0	2599.62	0.0	2599.90	9.40	4.77	3047.41	3660.42
5.100	30.	2599.1	2597.8	2585.6	4240.0	2593.72	0.0	2594.13	26.27	5.09	833.05	827.30
5.100	30.	2599.1	2597.8	2585.6	6880.0	2596.21	0.0	2596.75	22.18	5.87	1171.79	1460.93
5.100	30.	2599.1	2597.8	2585.6	8180.0	2597.48	0.0	2598.06	19.82	6.08	1344.60	1837.40
5.100	30.	2599.1	2597.8	2585.6	11220.0	2600.65	0.0	2600.90	7.93	4.63	3354.70	3985.15



SECMO	XLCH	ELTRD	FILC	ELMIN	Q	FUSL	CRMS	EG	10K'S	VCH	AREA	.DJK
5.100	10.	0.0	0.0	2585.6	4240.0	2593.98	0.0	2594.17	14.00	3.82	1577.70	1133.25
5.100	10.	0.0	0.0	2585.6	4240.0	2596.61	0.0	2596.80	9.61	3.98	2316.78	2218.82
5.100	10.	0.0	0.0	2585.6	4240.0	2597.92	0.0	2598.11	8.10	4.00	2986.99	2874.97
5.100	10.	0.0	0.0	2585.6	4240.0	2600.73	0.0	2600.92	6.17	4.10	4049.79	4516.49
5.200	460.	0.0	0.0	2585.6	4190.0	2594.53	0.0	2594.76	11.05	4.89	1755.00	1260.60
5.200	460.	0.0	0.0	2585.6	4190.0	2597.01	0.0	2597.26	9.07	5.31	2446.78	2261.65
5.200	460.	0.0	0.0	2585.6	4190.0	2598.27	0.0	2598.51	8.03	5.39	3107.20	2882.27
5.200	460.	0.0	0.0	2585.6	4190.0	2600.99	0.0	2601.24	6.44	5.56	4133.91	4378.67
5.490	1530.	0.0	0.0	2594.8	4190.0	2601.57	2801.57	2603.16	96.47	10.13	581.47	428.80
5.490	1530.	0.0	0.0	2594.8	4190.0	2603.76	2603.06	2604.69	85.84	11.90	960.60	735.04
5.490	1530.	0.0	0.0	2594.8	4190.0	2605.48	2603.48	2605.31	92.16	12.82	1107.71	844.81
5.490	1530.	0.0	0.0	2594.8	4190.0	2607.53	2604.53	2608.45	89.08	13.77	1536.51	1177.65
5.580	360.	0.0	0.0	2596.5	4175.0	2604.27	0.0	2604.60	18.98	5.78	1365.48	958.37
5.580	360.	0.0	0.0	2596.5	4175.0	2605.74	0.0	2606.14	20.13	6.73	2005.45	1513.47
5.580	360.	0.0	0.0	2596.5	4175.0	2606.58	0.0	2606.80	20.20	7.07	2285.77	1799.90
5.580	360.	0.0	0.0	2596.5	4175.0	2607.50	0.0	2608.01	22.06	7.97	2784.63	2359.85
5.580	40.	0.0	0.0	2596.5	4175.0	2604.36	0.0	2604.67	17.82	5.65	1405.56	989.06
5.580	40.	0.0	0.0	2596.5	4175.0	2605.84	0.0	2606.22	19.01	6.59	2048.09	1557.21
5.580	40.	0.0	0.0	2596.5	4175.0	2606.48	0.0	2606.88	19.18	6.94	2330.29	1847.15
5.580	40.	0.0	0.0	2596.5	4175.0	2607.61	0.0	2608.10	21.02	7.84	2833.19	2417.97
5.580	35.	2604.9	2805.4	2596.5	4175.0	2605.91	0.0	2606.13	13.74	4.99	1690.80	1126.50
5.580	35.	2604.9	2805.4	2596.5	4175.0	2607.41	0.0	2607.60	11.43	5.13	2929.82	2008.82
5.580	35.	2604.9	2805.4	2596.5	4175.0	2608.00	0.0	2608.19	11.22	5.29	3336.32	2415.05
5.580	35.	2604.9	2805.4	2596.5	4175.0	2609.03	0.0	2609.25	11.87	5.82	4057.79	3216.91
5.580	40.	0.0	0.0	2597.4	4115.0	2606.04	0.0	2606.18	9.69	3.85	2088.31	1341.25
5.580	40.	0.0	0.0	2597.4	4115.0	2607.50	0.0	2607.55	8.69	4.19	3100.90	2303.94
5.580	40.	0.0	0.0	2597.4	4115.0	2608.07	0.0	2608.23	8.72	4.40	3496.54	2739.56
5.580	40.	0.0	0.0	2597.4	4115.0	2609.10	0.0	2609.29	9.41	4.54	4216.34	3614.54
5.640	340.	0.0	0.0	2599.0	4160.0	2607.83	2606.47	2607.41	70.95	9.24	923.49	493.89
5.640	340.	0.0	0.0	2599.0	4160.0	2608.42	0.0	2608.97	45.09	8.56	1719.68	1007.51
5.640	340.	0.0	0.0	2599.0	4160.0	2609.48	0.0	2610.00	39.04	8.41	2080.14	1250.69
5.710	350.	0.0	0.0	2600.5	4160.0	2608.66	0.0	2609.10	33.41	8.52	2763.97	1911.63
5.710	350.	0.0	0.0	2600.5	4160.0	2609.40	0.0	2609.99	33.02	6.82	1309.91	723.99
5.710	350.	0.0	0.0	2600.5	4160.0	2609.82	0.0	2610.41	42.67	8.38	1757.74	1035.63
5.710	350.	0.0	0.0	2600.5	4160.0	2610.72	0.0	2611.32	42.07	8.66	2022.85	1243.40
5.910	900.	0.0	0.0	2605.8	4135.0	2614.57	2614.57	2616.08	40.01	9.13	2592.90	1746.99
5.910	900.	0.0	0.0	2605.8	4135.0	2616.12	2616.12	2617.46	71.56	10.23	573.43	480.80
5.910	900.	0.0	0.0	2605.8	4135.0	2616.61	2616.61	2617.94	63.07	10.68	1173.83	847.45
5.910	900.	0.0	0.0	2605.8	4135.0	2617.34	2617.34	2618.79	61.56	11.00	1441.19	1023.48
5.970	280.	0.0	0.0	2609.3	4130.0	2618.34	0.0	2619.28	66.39	12.12	1878.41	1349.51
5.970	280.	0.0	0.0	2609.3	4130.0	2619.11	0.0	2620.13	53.56	8.07	860.88	564.33
5.970	280.	0.0	0.0	2609.3	4130.0	2619.77	0.0	2620.73	36.67	7.44	1531.63	1109.79
5.970	280.	0.0	0.0	2609.3	4130.0	2619.92	0.0	2620.88	34.67	7.50	1777.99	1362.02
5.970	280.	0.0	0.0	2609.3	4130.0	2619.99	0.0	2620.88	32.16	7.71	2260.47	1935.33

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K*S	VCH	AREA	.01K	
6.060	340.	0.0	0.0	2609.2	4115.0	2618.89	0.0	2619.44	38.78	7.60	1117.16	660.81	
6.060	340.	0.0	0.0	2609.2	6700.0	2619.65	0.0	2620.06	33.20	7.35	1807.81	1162.77	
6.060	340.	0.0	0.0	2609.2	8000.0	2620.01	0.0	2620.39	29.96	7.20	2134.42	1461.46	
6.060	340.	0.0	0.0	2609.2	10950.0	2620.75	0.0	2621.11	24.96	6.98	2818.58	2191.92	
*	6.120	280.	0.0	0.0	2611.8	4110.0	2621.50	0.0	2622.22	29.67	7.51	1032.75	754.50
*	6.120	280.	0.0	0.0	2611.8	6690.0	2622.10	2622.10	2623.29	48.78	10.12	1401.87	957.90
*	6.120	280.	0.0	0.0	2611.8	7990.0	2622.48	2622.48	2623.74	52.40	10.80	1630.69	1103.77
*	6.120	280.	0.0	0.0	2611.8	10935.0	2623.20	2623.20	2624.62	59.08	12.08	2072.35	1422.70
6.160	160.	0.0	0.0	2613.4	4105.0	2622.05	0.0	2622.75	36.87	6.99	738.33	676.03	
6.160	160.	0.0	0.0	2613.4	6685.0	2622.92	0.0	2623.20	59.59	9.63	906.81	865.99	
6.160	160.	0.0	0.0	2613.4	7985.0	2623.29	0.0	2624.86	69.86	10.77	987.38	955.35	
6.160	160.	0.0	0.0	2613.4	10925.0	2623.95	2623.63	2626.20	92.81	13.09	1164.44	1134.03	
6.160	50.	0.0	0.0	2613.4	4105.0	2622.31	0.0	2622.93	31.56	6.63	788.62	730.66	
6.160	50.	0.0	0.0	2613.4	6685.0	2623.45	0.0	2624.48	46.96	8.76	1026.28	996.95	
6.160	50.	0.0	0.0	2613.4	7985.0	2624.02	0.0	2625.19	47.94	9.45	1186.38	1153.23	
6.160	50.	0.0	0.0	2613.4	10925.0	2625.64	0.0	2626.60	36.21	9.21	1973.54	1815.50	
6.160	50.	2624.5	2622.2	2613.4	4105.0	2622.87	0.0	2623.36	23.03	5.97	897.72	855.40	
6.160	50.	2624.5	2622.2	2613.4	6685.0	2624.95	0.0	2625.51	20.99	6.70	1284.96	1459.13	
6.160	50.	2624.5	2622.2	2613.4	7985.0	2625.55	0.0	2626.16	22.01	7.14	1917.85	1701.88	
6.160	50.	2624.5	2622.2	2613.4	10925.0	2626.75	0.0	2627.37	21.87	7.66	2776.35	2335.93	
6.160	40.	0.0	0.0	2615.2	4105.0	2622.86	0.0	2623.64	53.89	7.12	601.45	539.21	
6.160	40.	0.0	0.0	2615.2	6685.0	2624.91	0.0	2625.80	44.43	7.77	1006.45	1002.95	
6.160	40.	0.0	0.0	2615.2	7985.0	2625.47	0.0	2626.49	46.58	8.39	1165.06	1170.02	
6.160	40.	0.0	0.0	2615.2	10925.0	2626.59	0.0	2627.79	48.13	9.38	1603.97	1574.71	
6.200	90.	0.0	0.0	2614.7	4100.0	2623.08	2622.79	2624.74	106.45	10.58	502.04	397.39	
6.200	90.	0.0	0.0	2614.7	6675.0	2625.29	0.0	2626.32	57.52	9.47	1401.29	880.09	
6.200	90.	0.0	0.0	2614.7	7975.0	2625.92	0.0	2626.94	54.65	9.72	1692.08	1078.77	
6.200	90.	0.0	0.0	2614.7	10915.0	2627.27	0.0	2628.24	48.31	10.07	2323.94	1570.42	
6.310	480.	0.0	0.0	2617.0	4085.0	2627.35	0.0	2628.01	44.87	8.10	1317.51	609.81	
6.310	480.	0.0	0.0	2617.0	6655.0	2628.26	0.0	2628.97	52.07	9.38	2020.66	922.28	
6.310	480.	0.0	0.0	2617.0	7955.0	2628.79	0.0	2629.44	48.19	9.38	2448.08	1145.96	
6.310	480.	0.0	0.0	2617.0	10880.0	2629.88	0.0	2630.42	41.08	9.32	3370.69	1697.51	
6.480	1000.	0.0	0.0	2626.0	4065.0	2632.35	0.0	2633.16	57.97	7.65	838.51	533.89	
6.480	1000.	0.0	0.0	2626.0	6625.0	2633.61	0.0	2634.51	56.91	8.69	1410.37	878.19	
6.480	1000.	0.0	0.0	2626.0	7920.0	2634.01	0.0	2635.02	60.96	9.35	1611.95	1014.36	
6.480	1000.	0.0	0.0	2626.0	10835.0	2634.78	0.0	2636.00	69.23	10.67	1994.39	1302.17	
6.610	580.	0.0	0.0	2627.5	4045.0	2635.81	0.0	2637.14	71.31	9.31	467.09	479.02	
6.610	580.	0.0	0.0	2627.5	6595.0	2637.16	2636.19	2639.46	98.12	12.37	617.89	665.80	
*	6.610	580.	0.0	0.0	2627.5	7900.0	2637.83	2637.83	2640.44	102.25	13.33	787.35	781.25
*	6.610	580.	0.0	0.0	2627.5	10795.0	2639.41	2639.41	2641.99	88.80	13.90	1322.83	1145.57
6.610	40.	0.0	0.0	2627.5	4045.0	2636.27	0.0	2637.41	56.39	8.66	511.26	538.67	
6.610	40.	0.0	0.0	2627.5	6595.0	2639.33	2636.18	2639.83	56.08	10.24	947.37	880.64	
6.610	40.	0.0	0.0	2627.5	7900.0	2639.51	0.0	2640.83	45.38	10.00	1357.76	1172.67	
6.610	40.	0.0	0.0	2627.5	10795.0	2640.84	0.0	2642.35	47.60	11.10	1818.85	1564.64	

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRHS	EG	10K*5	VCH	AREA	.01K
6.610	30.	2636.3	2637.9	2627.5	4045.0	2637.27	0.0	2638.09	34.60	7.41	684.49	687.68
* 6.610	30.	2636.3	2637.9	2627.5	6595.0	2638.86	0.0	2639.94	40.16	9.01	1305.00	1040.66
* 6.610	30.	2636.3	2637.9	2627.5	7900.0	2639.83	0.0	2640.83	35.42	9.02	1738.42	1327.35
* 6.610	30.	2636.3	2637.9	2627.5	10795.0	2641.34	0.0	2642.35	33.29	9.55	2464.94	1870.85
6.610	10.	0.0	0.0	2627.5	4045.0	2637.32	0.0	2638.13	33.83	7.36	696.88	695.44
6.610	10.	0.0	0.0	2627.5	6595.0	2638.93	0.0	2639.98	38.77	8.89	1334.61	1059.16
6.610	10.	0.0	0.0	2627.5	7900.0	2639.89	0.0	2640.87	34.70	8.95	1758.14	1341.15
6.610	10.	0.0	0.0	2627.5	10795.0	2641.39	0.0	2642.38	32.74	9.49	2484.83	1886.64

IHO219I FIOCS - MISSING DD CARD OR DCB ERROR FOR ASCII TAPE FOR FT51FD01

TRACEBACK ROUTINE CALLED FROM	ISN	REG. 14	REG. 15	REG. 0	REG. 1
IBCON		000E2F88	000F9A5C	00000000	000E299C
SUMPO		420C607C	000E2050	0000000C	00000000
MAIN		0002C698	000C5B10	0089D2D0	000C4FF8

ENTRY POINT= 000C5B10

STANDARD FIXUP TAKEN , EXECUTION CONTINUING

* 6.740	220.	0.0	0.0	2631.4	4030.0	2640.14	2640.14	2643.61	196.93	14.95	270.48	287.18
* 6.740	220.	0.0	0.0	2631.4	6565.0	2643.60	2643.60	2645.58	89.54	12.67	977.81	693.78
* 6.740	220.	0.0	0.0	2631.4	7860.0	2644.17	2644.17	2646.28	95.60	13.47	1148.04	803.87
* 6.740	220.	0.0	0.0	2631.4	10730.0	2645.27	2645.27	2647.59	104.92	14.84	1493.54	1047.54
6.790	680.	0.0	0.0	2631.4	4020.0	2645.51	0.0	2645.76	10.07	5.03	1798.49	1266.71
6.790	680.	0.0	0.0	2631.4	6550.0	2647.23	0.0	2647.35	12.52	6.12	2466.64	1851.35
6.790	680.	0.0	0.0	2631.4	7840.0	2648.02	0.0	2648.37	13.20	6.52	2775.46	2157.97
6.790	680.	0.0	0.0	2631.4	10705.0	2649.49	0.0	2649.90	14.74	7.34	3353.78	2788.28
6.790	40.	0.0	0.0	2631.4	4020.0	2645.55	0.0	2645.80	9.84	4.99	1816.81	1281.22
6.790	40.	0.0	0.0	2631.4	6550.0	2647.28	0.0	2647.60	12.25	6.07	2487.72	1871.41
6.790	40.	0.0	0.0	2631.4	7840.0	2648.07	0.0	2648.42	12.93	6.47	2797.35	2180.54
6.790	40.	0.0	0.0	2631.4	10705.0	2649.55	0.0	2649.96	14.44	7.28	3378.48	2816.74
6.790	50.	2641.7	2642.8	2634.0	4020.0	2645.84	0.0	2646.13	12.73	5.38	1573.58	1126.73
6.790	50.	2641.7	2642.8	2634.0	6550.0	2647.51	0.0	2647.91	15.80	6.60	2149.17	1647.80
6.790	50.	2641.7	2642.8	2634.0	7840.0	2648.26	0.0	2648.70	16.71	7.06	2420.59	1918.05
6.790	50.	2641.7	2642.8	2634.0	10705.0	2649.67	0.0	2650.19	18.56	7.97	2945.38	2485.06
6.790	10.	0.0	0.0	2634.0	4020.0	2645.85	0.0	2646.15	12.67	5.37	1576.73	1129.38
6.790	10.	0.0	0.0	2634.0	6550.0	2647.52	0.0	2647.92	15.73	6.59	2153.11	1651.61
6.790	10.	0.0	0.0	2634.0	7840.0	2648.28	0.0	2648.71	16.63	7.05	2424.69	1922.28
6.790	10.	0.0	0.0	2634.0	10705.0	2649.69	0.0	2650.21	18.48	7.96	2950.16	2490.39
* 7.000	1080.	0.0	0.0	2642.0	3990.0	2648.33	0.0	2649.93	123.70	10.30	425.50	358.75
* 7.000	1080.	0.0	0.0	2642.0	6500.0	2650.31	2650.31	2651.56	73.43	9.89	1424.40	758.51
7.000	1080.	0.0	0.0	2642.0	7780.0	2651.04	0.0	2652.02	57.63	9.38	2047.64	1024.88
7.000	1080.	0.0	0.0	2642.0	10600.0	2652.40	0.0	2653.08	38.85	8.63	3391.89	1700.56
* 7.230	1220.	0.0	0.0	2653.5	3955.0	2660.06	2658.95	2661.06	69.28	8.36	724.67	475.15
* 7.230	1220.	0.0	0.0	2653.5	6440.0	2661.18	2661.18	2662.28	69.43	9.50	1481.69	772.86

E14

*	7.230	1220.	0.0	0.0	2653.5	7710.0	2661.44	2661.44	2662.73	80.17	10.48	1675.88	861.09
*	7.230	1220.	0.0	0.0	2653.5	10485.0	2662.23	2662.23	2663.53	78.71	11.18	2302.72	1161.83
	7.230	40.	0.0	0.0	2653.5	3955.0	2660.69	0.0	2661.31	40.02	6.85	1130.57	625.15
	7.230	40.	0.0	0.0	2653.5	6440.0	2661.90	0.0	2662.53	38.53	7.59	2034.79	1037.53
	7.230	40.	0.0	0.0	2653.5	7710.0	2662.37	0.0	2663.00	38.48	7.91	2411.36	1242.84
	7.230	40.	0.0	0.0	2653.5	10485.0	2663.08	0.0	2663.81	43.17	8.89	2999.43	1595.78
	7.230	30.	2658.9	2659.6	2653.5	3955.0	2660.68	0.0	2661.31	40.41	6.87	1122.82	622.16
	7.230	30.	2658.9	2659.6	2653.5	6440.0	2661.91	0.0	2662.53	37.89	7.54	2051.54	1046.28
	7.230	30.	2658.9	2659.6	2653.5	7710.0	2662.37	0.0	2663.00	38.24	7.89	2418.47	1246.87
*	7.230	30.	2658.9	2659.6	2653.5	10485.0	2663.08	0.0	2663.81	43.01	8.88	3004.24	1598.80

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	TK+S	VCH	AREA	.01K
7.230	10.	0.0	0.0	2653.5	3955.0	2660.72	0.0	2661.35	39.87	6.85	1148.32	626.36
7.230	10.	0.0	0.0	2653.5	4440.0	2661.94	0.0	2662.58	38.25	7.60	2079.99	1041.35
7.230	10.	0.0	0.0	2653.5	7710.0	2662.40	0.0	2663.06	39.07	8.00	2443.16	1233.50
7.230	10.	0.0	0.0	2653.5	10485.0	2663.10	0.0	2663.88	44.77	9.07	3019.14	1567.03
7.460	1120.	0.0	0.0	2660.4	3920.0	2667.85	0.0	2669.29	138.06	10.75	591.62	333.62
* 7.460	1120.	0.0	0.0	2660.4	6385.0	2669.21	2669.21	2670.89	141.00	12.36	939.22	537.72
** 7.460	1120.	0.0	0.0	2660.4	7640.0	2669.79	2669.79	2671.48	135.49	12.75	1143.04	656.37
*** 7.460	1120.	0.0	0.0	2660.4	10370.0	2670.82	2670.82	2672.49	127.25	13.41	1572.25	919.29
7.540	420.	0.0	0.0	2664.3	3910.0	2671.85	0.0	2672.40	43.88	6.56	912.45	590.42
7.540	420.	0.0	0.0	2664.3	6365.0	2673.39	0.0	2674.09	45.26	7.73	1345.22	946.12
7.540	420.	0.0	0.0	2664.3	7620.0	2673.95	0.0	2674.74	48.04	8.34	1550.53	1099.35
7.540	420.	0.0	0.0	2664.3	10330.0	2677.92	0.0	2675.89	53.80	9.49	1952.72	1408.36
* 7.780	1240.	0.0	0.0	2675.7	3830.0	2683.18	2683.18	2683.93	70.08	7.90	1076.10	457.52
** 7.780	1240.	0.0	0.0	2675.7	6260.0	2683.87	2683.87	2684.72	83.08	9.26	1716.64	886.88
*** 7.780	1240.	0.0	0.0	2675.7	7495.0	2684.14	2684.14	2685.02	88.92	9.83	1982.69	794.82
**** 7.780	1240.	0.0	0.0	2675.7	10195.0	2684.64	2684.64	2685.58	97.94	10.81	2514.44	1030.18
7.970	940.	0.0	0.0	2682.0	3750.0	2690.78	0.0	2691.93	100.27	8.73	462.77	374.50
7.970	940.	0.0	0.0	2682.0	6165.0	2692.25	2691.58	2693.88	105.68	10.60	757.99	599.70
7.970	940.	0.0	0.0	2682.0	7380.0	2692.83	2692.27	2694.62	106.97	11.29	913.80	713.56
* 7.970	940.	0.0	0.0	2682.0	10080.0	2694.02	2694.02	2695.89	99.38	12.05	1453.95	1011.14
7.970	40.	0.0	0.0	2682.0	3750.0	2691.40	0.0	2692.28	66.34	7.67	567.89	460.42
7.970	40.	0.0	0.0	2682.0	6165.0	2693.18	0.0	2694.25	61.22	8.81	1031.10	787.90
7.970	40.	0.0	0.0	2682.0	7380.0	2693.95	0.0	2694.99	55.95	8.98	1405.54	986.66
7.970	40.	0.0	0.0	2682.0	10080.0	2695.41	0.0	2696.24	42.47	8.72	2538.74	1546.79
* 7.970	30.	2692.6	2693.1	2682.0	3750.0	2690.05	2690.01	2693.02	229.36	13.82	271.40	247.61
** 7.970	30.	2692.6	2693.1	2682.0	6165.0	2694.86	2694.86	2696.27	67.10	10.29	1015.45	752.60
*** 7.970	30.	2692.6	2693.1	2682.0	7380.0	2695.56	2695.49	2696.75	58.60	10.07	1447.67	964.04
**** 7.970	30.	2692.6	2693.1	2682.0	10080.0	2696.18	2696.18	2697.56	70.44	11.47	1840.18	1201.02
7.970	10.	0.0	0.0	2682.0	3750.0	2691.26	0.0	2693.28	133.62	11.41	328.72	324.41
7.970	10.	0.0	0.0	2682.0	6165.0	2695.51	0.0	2696.38	42.34	8.53	1417.34	947.43
7.970	10.	0.0	0.0	2682.0	7380.0	2695.97	0.0	2696.83	43.24	8.88	1716.76	1122.27
7.970	10.	0.0	0.0	2682.0	10080.0	2696.75	0.0	2697.67	47.66	9.76	2212.34	1460.16
* 8.200	1170.	0.0	0.0	2694.2	3520.0	2702.34	0.0	2703.17	53.76	7.53	663.85	471.40
** 8.200	1170.	0.0	0.0	2694.2	5800.0	2702.88	2702.88	2704.49	100.37	10.77	887.87	578.93
*** 8.200	1170.	0.0	0.0	2694.2	6950.0	2703.53	2703.53	2705.04	88.17	10.81	1245.50	740.15
**** 8.200	1170.	0.0	0.0	2694.2	9520.0	2704.48	2704.48	2705.99	82.88	11.45	1857.05	1045.68
8.200	40.	0.0	0.0	2694.2	3520.0	2702.72	0.0	2703.38	41.69	6.82	817.71	545.17
8.200	40.	0.0	0.0	2694.2	5800.0	2704.10	0.0	2704.82	40.43	7.73	1601.24	912.17
8.200	40.	0.0	0.0	2694.2	6950.0	2704.60	0.0	2705.35	40.76	8.12	1936.39	1088.56
8.200	40.	0.0	0.0	2694.2	9520.0	2705.44	0.0	2706.22	44.30	9.07	2533.40	1430.37
8.200	30.	2706.7	2704.0	2694.2	3520.0	2702.86	0.0	2703.46	37.57	6.57	878.24	574.28
8.200	30.	2706.7	2704.0	2694.2	5800.0	2705.69	0.0	2705.96	14.10	5.21	2723.55	1544.73
8.200	30.	2706.7	2704.0	2694.2	6950.0	2706.87	0.0	2707.08	10.29	4.84	3771.44	2166.47
8.200	30.	2706.7	2704.0	2694.2	9520.0	2707.82	0.0	2708.07	11.73	5.50	4748.25	2780.03

SEENO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K+S	VCH	AREA	.01K	
8.200	10.	0.0	0.0	2694.2	3520.0	2702.92	0.0	2703.50	36.29	6.49	399.18	584.35	
8.200	10.	0.0	0.0	2694.2	5800.0	2705.71	0.0	2705.98	13.89	5.18	2743.14	1556.45	
8.200	10.	0.0	0.0	2694.2	6950.0	2706.88	0.0	2707.09	10.19	4.83	3789.15	2177.25	
8.200	10.	0.0	0.0	2694.2	9520.0	2707.84	0.0	2708.08	11.61	5.48	4770.02	2794.12	
*	8.270	340.	0.0	0.0	2699.2	3215.0	2704.85	2704.85	2706.38	157.83	10.33	392.51	255.91
*	8.270	340.	0.0	0.0	2699.2	5340.0	2706.22	2706.22	2708.04	139.53	11.74	645.80	452.07
*	8.270	340.	0.0	0.0	2699.2	6425.0	2706.87	2706.78	2708.72	126.98	12.07	793.30	570.18
*	8.270	340.	0.0	0.0	2699.2	8810.0	2707.75	2707.73	2709.98	134.39	13.60	1036.50	759.95
*	8.410	660.	0.0	0.0	2706.2	3185.0	2713.41	0.0	2714.55	98.59	8.83	434.18	320.77
*	8.410	660.	0.0	0.0	2706.2	5295.0	2714.68	2714.68	2715.89	87.55	9.80	879.29	565.90
*	8.410	660.	0.0	0.0	2706.2	6370.0	2715.01	2715.01	2716.33	93.20	10.49	1047.44	649.84
*	8.410	660.	0.0	0.0	2706.2	8735.0	2715.83	2715.77	2717.12	86.81	11.00	1382.48	937.49
*	8.670	1280.	0.0	0.0	2720.2	3135.0	2728.64	2728.64	2731.23	162.82	13.01	259.06	245.69
*	8.670	1280.	0.0	0.0	2720.2	5205.0	2731.47	2731.47	2734.03	109.14	13.43	541.69	498.23
*	8.670	1280.	0.0	0.0	2720.2	6270.0	2732.53	2732.53	2734.99	95.04	13.54	761.69	643.16
*	8.670	1280.	0.0	0.0	2720.2	8590.0	2733.86	2733.86	2736.58	96.63	14.88	1083.54	873.84
8.800	600.	0.0	0.0	2729.2	3110.0	2737.11	0.0	2738.01	79.27	9.82	601.84	319.31	
8.800	600.	0.0	0.0	2729.2	5165.0	2738.56	0.0	2739.48	72.31	10.74	987.42	607.39	
8.800	600.	0.0	0.0	2729.2	6215.0	2739.12	0.0	2740.07	71.67	11.18	1146.39	734.15	
8.800	600.	0.0	0.0	2729.2	8520.0	2740.43	0.0	2741.32	61.14	11.36	1549.69	1089.58	
*	8.920	520.	0.0	0.0	2737.0	1780.0	2741.61	2741.48	2742.88	115.34	9.16	225.21	165.74
*	8.920	520.	0.0	0.0	2737.0	2975.0	2742.86	2742.86	2744.25	94.26	10.11	448.19	306.42
*	8.920	520.	0.0	0.0	2737.0	3615.0	2743.31	2743.31	2744.80	93.61	10.69	549.01	373.62
*	8.920	520.	0.0	0.0	2737.0	5150.0	2744.29	2744.29	2745.88	87.83	11.59	801.43	549.53
9.060	730.	0.0	0.0	2741.5	1720.0	2747.12	0.0	2747.72	41.43	6.48	398.78	267.21	
9.060	730.	0.0	0.0	2741.5	2895.0	2748.23	0.0	2749.06	47.26	7.99	651.42	421.13	
9.060	730.	0.0	0.0	2741.5	3515.0	2748.74	0.0	2749.65	48.20	8.54	787.05	506.29	
9.060	730.	0.0	0.0	2741.5	5075.0	2749.69	0.0	2750.79	51.92	9.74	1068.35	696.02	
*	9.060	20.	0.0	0.0	2747.4	1720.0	2751.77	2751.77	2752.83	117.40	9.42	367.21	158.74
*	9.060	20.	0.0	0.0	2747.4	2895.0	2752.70	2752.70	2754.02	121.94	11.14	566.71	262.17
*	9.060	20.	0.0	0.0	2747.4	3515.0	2753.08	2753.08	2754.54	126.54	11.95	649.76	312.47
*	9.060	20.	0.0	0.0	2747.4	5015.0	2753.87	2753.87	2755.65	136.40	13.67	821.95	429.40
9.060	20.	0.0	0.0	2744.9	1720.0	2752.53	0.0	2753.00	34.22	6.39	560.71	294.03	
9.060	20.	0.0	0.0	2744.9	2895.0	2753.52	0.0	2754.21	44.29	8.13	777.23	435.01	
9.060	20.	0.0	0.0	2744.9	3515.0	2753.94	0.0	2754.75	48.79	8.91	869.82	503.24	
9.060	20.	0.0	0.0	2744.9	5015.0	2754.83	0.0	2755.90	57.50	10.50	1085.17	681.34	
9.150	450.	0.0	0.0	2748.3	1690.0	2754.81	2754.70	2755.83	113.71	8.89	330.25	158.48	
9.150	450.	0.0	0.0	2748.3	2855.0	2756.13	0.0	2757.09	89.80	9.42	604.84	301.27	
9.150	450.	0.0	0.0	2748.3	3470.0	2756.69	0.0	2757.66	84.26	9.73	727.26	378.02	
9.150	450.	0.0	0.0	2748.3	4945.0	2757.84	0.0	2758.87	77.00	10.44	982.66	563.53	
*	9.260	520.	0.0	0.0	2754.0	1690.0	2759.88	0.0	2760.86	82.87	7.92	213.34	185.65
*	9.260	520.	0.0	0.0	2754.0	2855.0	2761.21	2761.21	2762.60	96.54	9.72	430.20	290.58
*	9.260	520.	0.0	0.0	2754.0	3470.0	2761.86	2761.86	2763.10	81.57	9.61	677.31	384.20
*	9.260	520.	0.0	0.0	2754.0	4945.0	2762.78	2762.78	2763.95	75.36	10.12	1101.99	569.62

H14

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRHS	EG	10K+S	VCH	AREA	.01K	
9.260	40.	0.0	0.0	2754.0	1690.0	2760.37	0.0	2761.16	61.27	7.12	246.09	215.90	
9.260	40.	0.0	0.0	2754.0	2855.0	2762.55	0.0	2762.91	36.15	6.75	898.40	474.87	
9.260	40.	0.0	0.0	2754.0	3470.0	2762.81	0.0	2763.37	36.27	7.04	1115.23	576.18	
9.260	40.	0.0	0.0	2754.0	4945.0	2763.57	0.0	2764.22	40.86	8.00	1478.17	773.55	
9.260	30.	2761.8	2761.5	2754.0	1690.0	2760.55	0.0	2761.26	53.69	6.80	273.84	230.65	
9.260	30.	2761.8	2761.5	2754.0	2855.0	2762.93	0.0	2763.24	20.62	5.40	1302.18	628.73	
9.260	30.	2761.8	2761.5	2754.0	3470.0	2763.32	0.0	2763.66	21.96	5.77	1545.38	740.51	
9.260	30.	2761.8	2761.5	2754.0	4945.0	2763.95	0.0	2764.38	27.50	6.80	1953.07	943.01	
9.260	10.	0.0	0.0	2754.0	1690.0	2760.60	0.0	2761.30	31.35	6.72	283.20	301.32	
9.260	10.	0.0	0.0	2754.0	2855.0	2762.90	0.0	2763.30	14.72	5.85	1283.95	744.18	
9.260	10.	0.0	0.0	2754.0	3470.0	2763.29	0.0	2763.73	16.18	6.35	1519.23	962.74	
9.260	10.	0.0	0.0	2754.0	4945.0	2763.89	0.0	2764.48	21.12	7.63	1914.60	1076.07	
*	9.390	700.	0.0	0.0	2758.2	1660.0	2765.69	2765.69	2767.78	215.41	11.60	143.15	113.10
*	9.390	700.	0.0	0.0	2758.2	2810.0	2768.28	2768.28	2769.19	67.53	8.83	764.11	341.95
*	9.390	700.	0.0	0.0	2758.2	3410.0	2768.49	2768.49	2769.56	80.14	9.83	881.96	380.92
*	9.390	700.	0.0	0.0	2758.2	4870.0	2769.17	2769.17	2770.26	83.53	10.71	1278.76	532.84
9.500	850.	0.0	0.0	2769.4	1605.0	2775.11	0.0	2775.41	46.43	6.13	820.72	235.54	
9.500	850.	0.0	0.0	2769.4	2740.0	2775.36	0.0	2775.95	94.54	9.02	963.88	281.81	
9.500	850.	0.0	0.0	2769.4	3320.0	2775.81	0.0	2776.27	76.38	8.56	1235.74	379.89	
9.500	850.	0.0	0.0	2769.4	4700.0	2776.49	0.0	2776.92	72.30	8.95	1661.59	557.46	
9.550	250.	0.0	0.0	2770.2	1605.0	2776.17	0.0	2776.37	31.55	5.23	975.50	285.72	
9.550	250.	0.0	0.0	2770.2	2740.0	2777.06	0.0	2777.24	30.98	5.72	1513.47	492.31	
9.550	250.	0.0	0.0	2770.2	3320.0	2777.32	0.0	2777.53	34.34	6.19	1681.76	566.57	
9.550	250.	0.0	0.0	2770.2	4740.0	2777.98	0.0	2778.21	37.48	6.89	2109.82	774.21	
*	9.820	640.	0.0	0.0	2782.0	1545.0	2790.68	2790.68	2791.46	80.91	8.33	429.29	171.76
*	9.820	640.	0.0	0.0	2782.0	2665.0	2791.48	2791.48	2792.43	105.06	10.20	686.28	260.01
*	9.820	640.	0.0	0.0	2782.0	3230.0	2791.72	2791.72	2792.80	122.12	11.22	770.65	292.28
*	9.820	640.	0.0	0.0	2782.0	4610.0	2792.39	2792.39	2793.53	133.24	12.36	1029.07	399.37
10.000	960.	0.0	0.0	2792.8	1500.0	2797.62	0.0	2798.15	59.92	6.65	444.32	193.77	
10.000	960.	0.0	0.0	2792.8	2600.0	2798.84	0.0	2799.35	51.59	7.23	812.81	362.00	
10.000	960.	0.0	0.0	2792.8	3150.0	2799.37	0.0	2799.87	48.05	7.40	985.91	454.45	
10.000	960.	0.0	0.0	2792.8	4500.0	2800.51	0.0	2800.86	48.31	8.14	1313.42	647.42	
*	10.090	420.	0.0	0.0	2799.0	500.0	2804.82	2804.82	2806.85	214.45	11.44	131.08	102.43
*	10.090	420.	0.0	0.0	2799.0	600.0	2807.32	2807.32	2808.87	109.63	10.62	421.48	248.32
*	10.090	420.	0.0	0.0	2799.0	3150.0	2807.94	2807.94	2809.44	102.47	10.84	566.96	311.18
*	10.090	420.	0.0	0.0	2799.0	4500.0	2808.80	2808.80	2810.57	115.99	12.37	787.51	417.83
10.210	680.	0.0	0.0	2808.5	1500.0	2813.85	0.0	2814.47	66.67	6.31	237.83	103.70	
10.210	680.	0.0	0.0	2808.5	2600.0	2814.81	0.0	2815.96	98.23	8.59	303.98	262.33	
10.210	680.	0.0	0.0	2808.5	3150.0	2815.21	0.0	2816.62	108.42	9.52	335.12	302.52	
10.210	680.	0.0	0.0	2808.5	4500.0	2816.33	0.0	2818.14	106.35	10.87	437.13	436.36	
10.280	360.	0.0	0.0	2813.0	1500.0	2817.04	0.0	2818.09	144.00	8.22	182.52	125.00	
10.280	360.	0.0	0.0	2813.0	2600.0	2818.62	0.0	2819.92	119.28	9.16	284.00	238.06	
10.280	360.	0.0	0.0	2813.0	3150.0	2819.24	0.0	2820.68	116.57	9.63	327.26	291.76	
10.280	360.	0.0	0.0	2813.0	4500.0	2820.41	0.0	2822.23	121.29	10.85	414.79	408.59	

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10K+S	VCH	AREA	.01K
10.390	540.	0.0	0.0	2816.4	1500.0	2823.33	0.0	2824.50	97.86	8.94	189.65	151.63
10.390	540.	0.0	0.0	2816.4	2600.0	2824.97	2823.80	2826.77	125.01	11.37	322.12	232.54
* 10.390	540.	0.0	0.0	2816.4	3150.0	2825.80	2825.80	2827.43	110.95	11.26	462.43	299.05
10.390	540.	0.0	0.0	2816.4	4500.0	2826.89	2826.86	2828.60	114.34	12.27	674.57	420.83



RICHLAND CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CMSL	DIFNSP	DIFMSX	DIFKUS	TOPMID	XLCH
0.050	4800.	2498.4	0.0	0.0	-66.6	773.30	0.0
0.050	8100.	2499.7	1.2	0.0	-65.3	823.25	0.0
0.050	9400.	2500.0	0.4	0.0	-65.0	830.40	0.0
0.050	13100.	2501.0	1.0	0.0	-64.0	848.36	0.0
0.230	4790.	2500.5	0.0	2.0	0.0	370.69	800.00
0.230	8075.	2501.6	1.4	2.2	0.0	407.75	800.00
0.230	9335.	2502.2	0.4	2.2	0.0	419.35	800.00
0.230	13000.	2503.5	1.1	2.3	0.0	448.01	800.00
0.230	4790.	2500.6	0.0	0.2	0.0	374.78	40.00
0.230	8075.	2502.0	1.4	0.2	0.0	412.96	40.00
0.230	9335.	2502.5	0.4	0.2	0.0	424.87	40.00
0.230	13000.	2503.5	1.1	0.2	0.0	454.36	40.00
0.230	4790.	2500.1	0.0	-0.5	0.0	184.23	1.00
0.230	8075.	2501.4	1.2	-0.7	0.0	241.12	1.00
0.230	9335.	2501.9	0.5	-0.6	0.0	263.88	1.00
0.230	13000.	2503.2	1.3	-0.4	0.0	324.55	1.00
0.230	4790.	2501.1	0.0	1.0	0.0	229.27	30.00
0.230	8075.	2503.0	1.9	1.7	0.0	317.97	30.00
0.230	9335.	2503.5	0.5	1.7	0.0	341.64	30.00
0.230	13000.	2505.0	1.4	1.8	0.0	404.04	30.00
0.230	4790.	2501.7	0.0	0.6	0.0	482.81	1.00
0.230	8075.	2503.7	1.9	0.6	0.0	379.31	1.00
0.230	9335.	2504.2	0.5	0.7	0.0	541.24	1.00
0.230	13000.	2505.5	1.3	0.5	0.0	561.49	1.00
0.230	4790.	2501.8	0.0	0.0	0.0	483.20	10.00
0.230	8075.	2503.7	1.9	0.0	0.0	529.62	10.00
0.230	9335.	2504.2	0.5	0.0	0.0	542.38	10.00
0.230	13000.	2505.5	1.3	0.0	0.0	561.62	10.00
0.270	4790.	2502.0	0.0	0.2	0.0	488.34	150.00
0.270	8075.	2503.9	1.9	0.2	0.0	534.39	150.00
0.270	9335.	2504.4	0.5	0.2	0.0	547.30	150.00
0.270	13000.	2505.7	1.3	0.2	0.0	563.81	150.00
0.550	4780.	2504.0	0.0	2.1	0.0	218.64	1400.00
0.550	8040.	2506.0	2.0	2.1	0.0	260.56	1400.00
0.550	9250.	2506.6	0.6	2.2	0.0	271.75	1400.00
0.550	12850.	2508.0	1.5	2.3	0.0	299.31	1400.00
0.840	4770.	2507.8	0.0	3.7	0.0	73.59	1520.00
0.840	8000.	2510.3	2.5	4.3	0.0	114.49	1520.00
0.840	9170.	2511.0	0.7	4.4	0.0	135.53	1520.00
0.840	12730.	2512.8	1.8	4.8	0.0	176.27	1520.00
1.160	4760.	2512.7	0.0	5.0	0.0	143.36	1440.00
1.160	7970.	2515.7	3.0	5.4	0.0	207.28	1440.00

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K14

1.160	9080.	2516.6	0.9	5.6	0.0	218.82	1440.00
1.160	12590.	2518.9	2.3	6.0	0.0	239.32	1440.00

L14

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWD	XLCH
1.450	4750.	2516.8	0.0	4.1	0.0	239.50	1340.00
1.450	7940.	2519.3	2.4	3.6	0.0	255.65	1360.00
1.450	9000.	2520.0	0.7	3.5	0.0	279.99	1360.00
1.450	12460.	2522.1	2.1	3.2	0.0	289.46	1360.00
1.450	4750.	2516.8	0.0	-0.0	0.0	110.00	40.00
1.450	7940.	2519.4	2.6	0.1	0.0	228.27	40.00
1.450	9000.	2520.1	0.7	0.1	0.0	229.76	40.00
1.450	12460.	2522.2	2.0	0.1	0.0	234.01	40.00
1.450	4750.	2516.7	0.0	-0.2	0.0	98.42	1.00
1.450	7940.	2519.0	2.3	-0.5	0.0	108.23	1.00
1.450	9000.	2519.6	0.7	-0.5	0.0	140.35	1.00
1.450	12460.	2521.6	2.0	-0.6	0.0	183.26	1.00
1.450	4750.	2516.9	0.0	0.3	0.0	100.24	30.00
1.450	7940.	2519.3	2.3	0.3	0.0	177.43	30.00
1.450	9000.	2520.0	0.7	0.3	0.0	151.45	30.00
1.450	12460.	2522.0	2.0	0.4	0.0	190.86	30.00
1.450	4750.	2517.3	0.0	0.4	0.0	110.00	1.00
1.450	7940.	2519.7	2.4	0.4	0.0	110.00	1.00
1.450	9000.	2521.1	1.4	1.1	0.0	231.70	1.00
1.450	12460.	2523.2	2.1	1.2	0.0	236.19	1.00
1.450	4750.	2517.6	0.0	0.4	0.0	245.37	40.00
1.450	7940.	2520.3	2.7	0.6	0.0	281.48	40.00
1.450	9000.	2521.1	0.8	0.0	0.0	284.96	40.00
1.450	12460.	2523.3	2.2	0.1	0.0	294.86	40.00
1.700	4745.	2519.8	0.0	2.1	0.0	207.10	1300.00
1.700	7910.	2522.2	2.5	1.9	0.0	219.31	1300.00
1.700	8920.	2522.9	0.7	1.8	0.0	223.06	1300.00
1.700	12350.	2525.0	2.1	1.7	0.0	236.56	1300.00
1.780	4740.	2520.9	0.0	1.1	0.0	414.13	360.00
1.780	7900.	2523.3	2.4	1.1	0.0	475.00	360.00
1.780	8900.	2524.0	0.7	1.1	0.0	480.46	360.00
1.780	12300.	2526.2	2.1	1.2	0.0	498.11	360.00
*	1.780	4740.	2520.7	0.0	-0.2	260.45	40.00
1.780	7900.	2523.5	2.7	0.2	0.0	476.15	40.00
1.780	8900.	2524.2	0.7	0.1	0.0	481.36	40.00
1.780	12300.	2526.2	2.1	0.1	0.0	498.75	40.00
1.780	4740.	2522.4	0.0	1.7	0.0	326.72	30.00
*	1.780	7900.	2527.2	4.7	3.7	507.00	30.00
*	1.780	8900.	2527.7	0.6	3.5	512.02	30.00
*	1.780	12300.	2529.1	1.4	2.9	531.48	30.00
*	1.780	4740.	2522.4	0.0	-0.0	397.56	40.00
1.780	7900.	2527.2	4.8	0.0	0.0	699.81	40.00
1.780	8900.	2527.7	0.6	0.0	0.0	708.47	40.00
1.780	12300.	2529.1	1.4	0.0	0.0	724.48	40.00

SECNO	Q	CMSEL	DIFWSP	DIFWSX	DIFKWS	TOPWD	XLCH
1.950	4600.	2525.3	0.0	2.8	0.0	659.87	810.00
1.950	7800.	2527.7	2.4	0.5	0.0	700.34	810.00
1.950	8850.	2528.2	0.5	0.5	0.0	708.76	810.00
1.950	12100.	2529.7	1.4	0.5	0.0	724.86	810.00
*	2.190	4390.	2527.9	0.0	2.6	518.22	1260.00
2.190	7640.	2529.0	1.1	1.3	0.0	843.78	1260.00
2.190	8770.	2529.5	0.6	1.3	0.0	876.31	1260.00
2.190	12040.	2530.9	1.4	1.2	0.0	919.12	1260.00
2.320	4270.	2530.5	0.0	2.7	0.0	947.24	640.00
2.320	7550.	2531.5	1.0	2.5	0.0	998.68	640.00
2.320	8725.	2531.7	0.2	2.2	0.0	1000.23	640.00
2.320	11950.	2532.4	0.7	1.5	0.0	1087.13	640.00
2.320	4270.	2530.6	0.0	0.1	0.0	916.11	1.00
2.320	7550.	2531.6	1.0	0.1	0.0	979.57	1.00
2.320	8725.	2531.8	0.2	0.1	0.0	1066.66	1.00
2.320	11950.	2532.5	0.7	0.1	0.0	1090.69	1.00
2.320	4270.	2530.7	0.0	0.1	0.0	931.25	30.00
2.320	7550.	2531.7	1.0	0.1	0.0	981.27	30.00
2.320	8725.	2531.9	0.2	0.1	0.0	1070.75	30.00
2.320	11950.	2532.6	0.7	0.1	0.0	1094.69	30.00
2.320	4270.	2530.7	0.0	-0.0	0.0	975.77	1.00
2.320	7550.	2531.7	1.0	-0.0	0.0	1000.05	1.00
2.320	8725.	2531.9	0.2	-0.0	0.0	1070.59	1.00
2.320	11950.	2532.6	0.7	-0.0	0.0	1094.10	1.00
2.400	4200.	2531.0	0.0	0.4	0.0	995.13	500.00
2.400	7500.	2532.2	1.1	0.5	0.0	1078.63	500.00
2.400	8700.	2532.4	0.3	0.5	0.0	1088.00	500.00
2.400	11900.	2533.2	0.8	0.5	0.0	1114.17	500.00
*	2.400	4200.	2553.6	0.0	22.7	388.86	40.00
*	2.400	7500.	2554.4	0.8	22.3	457.60	40.00
*	2.400	8700.	2554.8	0.4	22.4	478.12	40.00
*	2.400	11900.	2555.4	0.6	22.2	493.65	40.00
*	2.400	4200.	2565.0	0.0	11.4	483.30	30.00
*	2.400	7500.	2566.5	1.5	12.1	524.62	30.00
*	2.400	8700.	2566.7	0.2	11.9	530.22	30.00
*	2.400	11900.	2567.6	0.9	12.2	566.39	30.00
2.400	5150.	2565.3	0.0	0.3	0.0	1233.62	10.00
2.400	8300.	2566.8	1.6	0.3	0.0	1235.34	10.00
2.400	9900.	2567.1	0.3	0.4	0.0	1235.64	10.00
2.400	13350.	2568.1	1.0	0.5	0.0	1236.73	10.00
3.230	5080.	2565.4	0.0	0.1	0.0	378.60	4180.00
3.230	8160.	2567.0	1.6	0.2	0.0	406.80	4180.00
3.230	9810.	2567.3	0.3	0.2	0.0	409.67	4180.00
3.230	13190.	2568.3	1.0	0.2	0.0	419.24	4180.00

SECNO	Q	CMSEL	DIFWSP	DIFWSX	DIFKHS	TOPWID	XLCH
3.690	5040.	2565.5	0.0	0.1	0.0	186.90	2200.00
3.690	8090.	2567.1	1.8	0.1	0.0	192.57	2200.00
3.690	9760.	2567.4	0.3	0.1	0.0	193.82	2200.00
3.690	13100.	2568.5	1.0	0.2	0.0	197.70	2200.00
3.810	5030.	2565.9	0.0	0.4	0.0	133.65	560.00
3.810	8070.	2567.9	1.9	0.8	0.0	284.08	560.00
3.810	9740.	2568.4	0.6	1.0	0.0	321.21	560.00
3.810	13090.	2569.8	1.4	1.3	0.0	408.65	560.00
3.810	5030.	2566.4	0.0	0.3	0.0	163.56	40.00
3.810	8070.	2568.3	1.9	0.4	0.0	312.07	40.00
3.810	9740.	2568.9	0.6	0.5	0.0	352.59	40.00
3.810	13080.	2570.2	1.3	0.4	0.0	436.76	40.00
3.810	5030.	2566.8	0.0	0.4	0.0	190.64	60.00
3.810	8070.	2570.4	3.3	2.1	0.0	443.52	60.00
3.810	9740.	2571.9	1.6	3.0	0.0	545.99	60.00
3.810	13080.	2573.4	1.4	3.1	0.0	621.64	60.00
3.810	5030.	2566.7	0.0	-0.2	0.0	111.58	20.00
3.810	8070.	2569.9	3.3	-0.4	0.0	144.30	20.00
3.810	9740.	2571.5	1.5	-0.3	0.0	224.11	20.00
3.810	13080.	2572.7	1.2	-0.7	0.0	329.14	20.00
3.970	5020.	2569.5	0.0	2.9	0.0	191.04	740.00
3.970	8050.	2572.5	3.0	2.3	0.0	246.89	740.00
3.970	9730.	2573.9	1.4	2.4	0.0	268.98	740.00
3.970	13050.	2575.6	1.8	3.0	0.0	289.39	740.00
3.970	5020.	2569.5	0.0	-0.0	0.0	70.78	40.00
3.970	8050.	2572.4	2.8	-0.1	0.0	236.87	40.00
3.970	9730.	2573.7	1.4	-0.1	0.0	268.96	40.00
3.970	13050.	2575.5	1.8	-0.1	0.0	289.21	40.00
3.970	5020.	2569.7	0.0	0.2	0.0	70.81	30.00
3.970	8050.	2572.6	2.9	0.2	0.0	249.62	30.00
3.970	9730.	2574.0	1.4	0.2	0.0	271.60	30.00
3.970	13050.	2575.8	1.8	0.2	0.0	291.98	30.00
3.970	5020.	2570.0	0.0	0.4	0.0	200.55	10.00
3.970	8050.	2573.2	3.2	0.6	0.0	261.75	10.00
3.970	9730.	2574.6	1.3	0.6	0.0	276.98	10.00
3.970	13050.	2576.4	1.8	0.6	0.0	297.50	10.00
4.140	5010.	2571.8	0.0	1.7	0.0	400.38	940.00
4.140	8010.	2574.7	2.9	1.3	0.0	414.04	940.00
4.140	9710.	2576.1	1.3	1.5	0.0	420.15	940.00
4.140	13010.	2578.0	2.0	1.7	0.0	429.30	940.00
4.140	5010.	2571.9	0.0	0.1	0.0	179.00	40.00
4.140	8010.	2574.7	2.9	0.0	0.0	179.00	40.00
4.140	9710.	2576.0	1.3	-0.0	0.0	179.00	40.00
4.140	13010.	2578.2	2.1	0.2	0.0	430.02	40.00

SECMO	Q	CMSL	DIFMSP	DIFMSX	DIFKWS	TOPMID	MLCH
4.140	5010.	2571.9	0.0	0.0	0.0	179.00	115.00
4.140	8010.	2574.8	2.9	0.0	0.0	179.00	115.00
4.140	9710.	2576.4	1.7	0.4	0.0	179.00	115.00
4.140	13010.	2579.4	2.9	1.2	0.0	435.47	115.00
4.140	5010.	2572.0	0.0	0.1	0.0	401.15	30.00
4.140	8010.	2574.9	3.0	0.1	0.0	414.89	30.00
4.140	9710.	2576.6	1.7	0.2	0.0	422.71	30.00
4.140	13010.	2579.3	2.7	-0.0	0.0	435.38	30.00
4.280	4295.	2573.2	0.0	1.2	0.0	392.71	710.00
4.280	6990.	2575.8	2.6	0.8	0.0	435.52	710.00
4.280	8660.	2577.3	1.5	0.7	0.0	468.88	710.00
4.280	11925.	2579.9	2.6	0.6	0.0	525.44	710.00
4.280	4295.	2573.2	0.0	0.1	0.0	393.64	40.00
4.280	6990.	2575.8	2.6	0.1	0.0	436.58	40.00
4.280	8660.	2577.4	1.5	0.0	0.0	469.76	40.00
4.280	11925.	2580.0	2.6	0.0	0.0	526.15	40.00
4.280	4295.	2573.0	0.0	-0.3	0.0	391.10	1.00
4.280	6990.	2575.7	2.7	-0.1	0.0	435.06	1.00
4.280	8660.	2577.3	1.6	-0.0	0.0	468.92	1.00
4.280	11925.	2580.0	2.6	-0.0	0.0	526.04	1.00
4.280	4295.	2573.1	0.0	0.1	0.0	391.91	5.00
4.280	6990.	2575.8	2.7	0.1	0.0	436.58	5.00
4.280	8660.	2577.4	1.5	0.0	0.0	469.88	5.00
4.280	11925.	2580.0	2.6	0.0	0.0	526.28	5.00
4.280	4295.	2573.7	0.0	0.6	0.0	398.03	1.00
4.280	6990.	2576.0	2.3	0.2	0.0	440.59	1.00
4.280	8660.	2577.5	1.5	0.1	0.0	472.23	1.00
4.280	11925.	2580.0	2.6	0.0	0.0	527.36	1.00
4.280	4295.	2573.7	0.0	0.0	0.0	398.20	10.00
4.280	6990.	2576.0	2.3	0.0	0.0	440.87	10.00
4.280	8660.	2577.5	1.5	0.0	0.0	472.47	10.00
4.280	11925.	2580.0	2.6	0.0	0.0	527.55	10.00
4.430	4395.	2575.1	0.0	1.4	0.0	200.11	735.00
4.430	7115.	2577.2	2.0	1.2	0.0	229.17	735.00
4.430	8465.	2578.4	1.3	0.9	0.0	309.52	735.00
4.430	11540.	2580.8	2.3	0.7	0.0	374.85	735.00
4.630	4275.	2580.0	0.0	4.8	0.0	195.39	1000.00
4.630	6950.	2581.6	1.6	4.4	0.0	211.46	1000.00
4.630	8475.	2582.2	0.7	3.6	0.0	220.20	1000.00
4.630	11600.	2583.6	1.4	2.8	0.0	300.59	1000.00
4.820	4260.	2585.5	0.0	5.5	0.0	190.95	940.00
4.820	6920.	2587.2	1.8	5.7	0.0	214.36	940.00
4.820	8375.	2588.1	0.8	5.9	0.0	221.86	940.00
4.820	11420.	2589.5	1.4	5.9	0.0	234.27	940.00

C15

SECCO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
4.960	4250.	2588.8	0.0	3.3	0.0	128.19	610.00
4.960	6900.	2590.9	2.1	3.7	0.0	133.69	610.00
4.960	8300.	2591.9	0.9	3.8	0.0	136.96	610.00
4.960	11290.	2593.5	1.7	4.0	0.0	145.35	610.00
4.960	4250.	2589.1	0.0	0.3	0.0	217.75	40.00
4.960	6900.	2591.4	2.3	0.4	0.0	225.24	40.00
4.960	8300.	2592.4	1.0	0.5	0.0	230.75	40.00
4.960	11290.	2594.2	1.8	0.7	0.0	246.51	40.00
4.960	4250.	2589.1	0.0	0.0	0.0	217.87	15.00
4.960	6900.	2591.4	2.3	0.0	0.0	225.38	15.00
4.960	8300.	2592.4	1.0	0.0	0.0	231.01	15.00
4.960	11290.	2594.3	1.9	0.1	0.0	247.94	15.00
4.960	4250.	2589.3	0.0	-0.9	0.0	56.44	10.00
4.960	6900.	2589.9	1.7	-1.5	0.0	65.25	10.00
* 4.960	8300.	2590.6	0.7	-1.8	0.0	72.25	10.00
* 4.960	11290.	2593.0	2.3	-1.3	0.0	93.04	10.00
4.960	4250.	2589.7	0.0	1.5	0.0	63.02	60.00
4.960	6900.	2592.4	2.6	2.4	0.0	89.92	60.00
4.960	8300.	2593.7	1.4	3.1	0.0	94.75	60.00
4.960	11290.	2595.9	2.2	2.9	0.0	99.53	60.00
5.100	4240.	2593.5	0.0	3.8	0.0	349.30	750.00
5.100	6880.	2596.1	2.5	3.7	0.0	360.60	750.00
5.100	8180.	2597.3	1.2	3.6	0.0	366.13	750.00
5.100	11220.	2599.6	2.3	3.7	0.0	376.48	750.00
5.100	4240.	2593.5	0.0	-0.0	0.0	136.00	40.00
5.100	6880.	2595.9	2.4	-0.1	0.0	136.00	40.00
5.100	8180.	2597.1	1.2	-0.2	0.0	136.00	40.00
5.100	11220.	2599.6	2.5	0.0	0.0	300.05	40.00
5.100	4240.	2593.7	0.0	0.2	0.0	136.00	30.00
5.100	6880.	2596.2	2.5	0.3	0.0	136.00	30.00
5.100	8180.	2597.5	1.3	0.3	0.0	136.00	30.00
5.100	11220.	2600.6	3.2	1.0	0.0	301.96	30.00
5.100	4240.	2594.0	0.0	0.3	0.0	351.31	10.00
5.100	6880.	2596.6	2.6	0.4	0.0	363.05	10.00
5.100	8180.	2597.9	1.3	0.4	0.0	368.90	10.00
5.100	11220.	2600.7	2.8	0.1	0.0	381.43	10.00
5.200	4190.	2594.5	0.0	0.5	0.0	353.75	460.00
5.200	8110.	2597.0	2.5	0.4	0.0	364.83	460.00
5.200	8110.	2598.3	1.3	0.3	0.0	370.42	460.00
5.200	11115.	2601.0	2.7	0.3	0.0	382.59	460.00
* 5.490	4190.	2601.6	0.0	7.0	0.0	236.16	1530.00
* 5.490	6810.	2603.1	1.5	6.1	0.0	288.76	1530.00
* 5.490	8110.	2603.5	0.4	5.2	0.0	332.56	1530.00
* 5.490	11115.	2604.5	1.1	3.5	0.0	433.64	1530.00

D15

SEONO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
5.580	4175.	2604.3	0.0	2.7	0.0	432.51	340.00
5.580	6790.	2605.7	1.5	2.7	0.0	438.81	340.00
5.580	8090.	2606.4	0.6	2.9	0.0	441.56	340.00
5.580	11085.	2607.5	1.1	3.2	0.0	446.39	340.00
5.580	4173.	2604.4	0.0	0.1	0.0	432.91	40.00
5.580	6790.	2605.8	1.5	0.1	0.0	439.25	40.00
5.580	8090.	2606.5	0.6	0.1	0.0	442.00	40.00
5.580	11085.	2607.6	1.1	0.1	0.0	446.88	40.00
5.580	4175.	2605.9	0.0	1.5	0.0	681.06	35.00
5.580	6790.	2607.4	1.5	1.6	0.0	700.00	35.00
5.580	8090.	2608.0	0.6	1.5	0.0	700.00	35.00
5.580	11085.	2609.0	1.0	1.4	0.0	700.00	35.00
5.580	4175.	2606.0	0.0	0.1	0.0	681.68	40.00
5.580	6790.	2607.5	1.5	0.1	0.0	700.00	40.00
5.580	8090.	2608.1	0.6	0.1	0.0	700.00	40.00
5.580	11085.	2609.1	1.0	0.1	0.0	700.00	40.00
5.640	4160.	2606.5	0.0	0.4	0.0	548.44	340.00
5.640	6765.	2607.8	1.4	0.3	0.0	617.06	340.00
5.640	8065.	2608.4	0.6	0.4	0.0	631.60	340.00
5.640	11050.	2609.5	1.1	0.4	0.0	648.57	340.00
5.710	4160.	2608.7	0.0	2.2	0.0	583.26	350.00
5.710	6765.	2609.4	0.7	1.6	0.0	620.11	350.00
5.710	8065.	2609.8	0.4	1.4	0.0	630.16	350.00
5.710	11050.	2610.7	0.9	1.2	0.0	644.36	350.00
5.910	4135.	2614.6	0.0	5.9	0.0	316.64	900.00
5.910	6730.	2616.1	1.6	6.7	0.0	509.95	900.00
5.910	8030.	2616.6	0.5	0.8	0.0	569.04	900.00
5.910	10995.	2617.3	0.7	6.6	0.0	610.01	900.00
5.970	4130.	2617.1	0.0	2.5	0.0	508.34	280.00
5.970	6720.	2618.3	1.2	2.2	0.0	579.58	280.00
5.970	8020.	2618.8	0.4	2.2	0.0	581.21	280.00
5.970	10975.	2619.6	0.8	2.2	0.0	585.58	280.00
6.060	4115.	2618.9	0.0	1.8	0.0	891.15	340.00
6.060	6700.	2619.7	0.8	1.3	0.0	916.51	340.00
6.060	8000.	2620.0	0.4	1.2	0.0	919.41	340.00
6.060	10750.	2620.8	0.7	1.2	0.0	925.44	340.00
6.120	4110.	2621.5	0.0	2.6	0.0	599.44	280.00
6.120	6690.	2622.1	0.6	2.5	0.0	612.59	280.00
6.120	7990.	2622.5	0.4	2.5	0.0	614.19	280.00
6.120	10935.	2623.2	0.7	2.4	0.0	617.27	280.00
6.160	4105.	2622.1	0.0	0.6	0.0	191.10	160.00
6.160	6685.	2622.9	0.9	0.8	0.0	203.52	160.00
6.160	7985.	2623.3	0.4	0.8	0.0	231.46	160.00
6.160	10925.	2624.0	0.7	0.8	0.0	332.51	160.00

E15



SECNO	Q	CMSL	DIFMSP	DIFMSX	DIFMYS	TOPSID	KLCH
6.160	4105.	2622.3	0.0	0.3	0.0	192.36	50.00
6.160	6685.	2623.4	1.1	0.5	0.0	243.81	50.00
6.160	7985.	2624.0	0.6	0.7	0.0	344.16	50.00
6.160	10925.	2625.6	1.6	1.7	0.0	676.79	50.00
6.160	4105.	2622.9	0.0	0.6	0.0	200.12	50.00
6.160	6685.	2623.0	2.1	1.5	0.0	486.77	50.00
6.160	7985.	2623.6	0.6	1.5	0.0	650.46	50.00
6.160	10925.	2626.8	1.2	1.1	0.0	730.68	50.00
6.160	4105.	2622.9	0.0	-0.0	0.0	154.18	40.00
6.160	6685.	2624.9	2.0	-0.0	0.0	258.80	40.00
6.160	7985.	2625.5	0.6	-0.1	0.0	326.78	40.00
6.160	10925.	2628.6	1.1	-0.2	0.0	434.75	40.00
6.200	4100.	2623.1	0.0	0.2	0.0	246.12	90.00
6.200	6675.	2625.3	2.2	0.4	0.0	453.85	90.00
6.200	7975.	2625.9	0.6	0.5	0.0	461.97	90.00
6.200	10915.	2627.3	1.3	0.7	0.0	479.54	90.00
6.310	4085.	2627.3	0.0	4.3	0.0	744.59	480.00
6.310	6655.	2628.3	0.9	3.0	0.0	792.66	480.00
6.310	7955.	2628.8	0.5	2.9	0.0	816.49	480.00
6.310	10880.	2629.9	1.1	2.6	0.0	862.23	480.00
6.480	4085.	2632.4	0.0	5.0	0.0	426.00	1000.00
6.480	6625.	2633.6	1.3	5.3	0.0	495.00	1000.00
6.480	7920.	2634.0	0.4	5.2	0.0	496.60	1000.00
6.480	10855.	2634.8	0.8	4.9	0.0	496.00	1000.00
6.610	4055.	2635.8	0.0	3.5	0.0	92.62	580.00
6.610	6595.	2637.2	1.3	3.6	0.0	188.97	580.00
6.610	7900.	2637.8	0.7	3.8	0.0	305.48	580.00
6.610	10795.	2639.4	1.6	4.6	0.0	345.20	580.00
6.610	4045.	2636.3	0.0	0.5	0.0	101.34	40.00
6.610	6595.	2638.3	2.1	1.2	0.0	341.96	40.00
6.610	7900.	2639.5	1.2	1.7	0.0	345.51	40.00
6.610	10795.	2640.8	1.3	1.4	0.0	349.45	40.00
6.610	4045.	2637.3	0.0	1.0	0.0	270.19	30.00
6.610	6595.	2638.9	1.6	0.5	0.0	434.71	30.00
6.610	7900.	2639.8	1.0	0.3	0.0	461.05	30.00
6.610	10795.	2641.3	1.5	0.5	0.0	502.10	30.00
6.610	4045.	2637.3	0.0	0.0	0.0	279.70	10.00
6.610	6595.	2638.9	1.6	0.1	0.0	436.56	10.00
6.610	7900.	2639.9	1.0	0.1	0.0	462.21	10.00
6.610	10795.	2641.4	1.5	0.0	0.0	503.18	10.00
6.740	4030.	2640.1	0.0	2.8	0.0	45.89	220.00
6.740	6565.	2643.6	3.5	4.7	0.0	294.98	220.00
6.740	7860.	2644.2	0.6	4.3	0.0	304.45	220.00
6.740	10730.	2645.3	1.1	3.9	0.0	322.81	220.00

F15

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
6.790	4020.	2645.5	0.0	5.4	0.0	379.78	680.00
6.790	6550.	2647.2	1.7	7.6	0.0	390.40	680.00
6.790	7840.	2648.0	0.8	3.8	0.0	391.93	680.00
6.790	10705.	2649.5	1.5	4.2	0.0	394.80	680.00
6.790	4020.	2645.6	0.0	0.0	0.0	380.58	40.00
6.790	6550.	2647.3	1.7	0.1	0.0	390.50	40.00
6.790	7840.	2648.1	0.8	0.1	0.0	392.04	40.00
6.790	10705.	2649.6	1.5	0.1	0.0	394.92	40.00
6.790	4020.	2645.8	0.0	0.3	0.0	333.25	50.00
6.790	6550.	2647.5	1.7	0.2	0.0	355.79	50.00
6.790	7840.	2648.3	0.8	0.2	0.0	363.40	50.00
6.790	10705.	2649.7	1.4	0.1	0.0	383.19	50.00
6.790	4020.	2645.9	0.0	0.0	0.0	333.38	10.00
6.790	6550.	2647.5	1.7	0.0	0.0	355.94	10.00
6.790	7840.	2648.3	0.8	0.0	0.0	363.44	10.00
6.790	10705.	2649.7	1.4	0.0	0.0	383.39	10.00
* 7.000	3990.	2648.3	0.0	2.5	0.0	103.94	1080.00
* 7.000	6500.	2650.3	2.0	2.8	0.0	849.29	1080.00
7.000	7780.	2651.0	0.7	2.8	0.0	882.84	1080.00
7.000	10600.	2652.4	1.4	2.7	0.0	1077.13	1080.00
* 7.230	3955.	2660.1	0.0	11.7	0.0	570.26	1220.00
* 7.230	6440.	2661.2	1.1	10.9	0.0	744.79	1220.00
* 7.230	7710.	2661.4	0.3	10.4	0.0	766.54	1220.00
* 7.230	10485.	2662.2	0.8	9.8	0.0	803.06	1220.00
7.230	3955.	2660.7	0.0	0.6	0.0	703.22	40.00
7.230	6440.	2661.9	1.2	0.7	0.0	795.91	40.00
7.230	7710.	2662.4	0.5	0.9	0.0	812.94	40.00
7.230	10485.	2663.1	0.7	0.8	0.0	838.84	40.00
7.230	3955.	2660.7	0.0	-0.0	0.0	700.89	30.00
7.230	6440.	2661.9	1.2	0.0	0.0	796.68	30.00
7.230	7710.	2662.4	0.5	0.0	0.0	813.26	30.00
* 7.230	10485.	2663.1	0.7	0.0	0.0	839.05	30.00
7.230	3955.	2660.7	0.0	0.0	0.0	705.84	10.00
7.230	6440.	2661.9	1.2	0.0	0.0	797.97	10.00
7.230	7710.	2662.4	0.5	0.0	0.0	814.36	10.00
7.230	10485.	2663.1	0.7	0.0	0.0	839.70	10.00
7.460	3920.	2667.9	0.0	7.1	0.0	186.18	1120.00
* 7.460	6385.	2669.2	1.4	7.3	0.0	307.24	1120.00
* 7.460	7640.	2669.8	0.6	7.4	0.0	377.85	1120.00
* 7.460	10370.	2670.8	1.0	7.7	0.0	544.61	1120.00
7.540	3910.	2671.8	0.0	4.0	0.0	262.47	420.00
7.540	6365.	2673.4	1.5	4.2	0.0	320.62	420.00
7.540	7620.	2674.0	0.6	4.2	0.0	396.05	420.00
7.540	10330.	2674.9	1.0	4.1	0.0	430.23	420.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH	
*	7.780	3830.	2683.2	0.0	11.3	0.0	857.86	1240.00
*	7.780	6260.	2685.9	0.7	10.5	0.0	985.27	1240.00
*	7.780	7495.	2684.1	0.3	10.2	0.0	1029.05	1240.00
*	7.780	10195.	2684.6	0.5	9.7	0.0	1101.63	1240.00
	7.970	3750.	2690.8	0.0	7.6	0.0	132.95	940.00
	7.970	6165.	2692.2	1.5	8.4	0.0	245.92	940.00
	7.970	7380.	2692.8	0.6	8.7	0.0	304.79	940.00
*	7.970	10080.	2694.0	1.2	9.4	0.0	604.91	940.00
	7.970	3750.	2691.4	0.0	0.6	0.0	200.46	40.00
	7.970	6165.	2693.2	1.8	0.9	0.0	386.76	40.00
	7.970	7380.	2693.9	0.8	1.1	0.0	584.90	40.00
	7.970	10080.	2695.4	1.5	1.4	0.0	930.73	40.00
*	7.970	3750.	2690.1	0.0	-1.3	0.0	45.60	30.00
*	7.970	6165.	2694.9	4.0	1.7	0.0	606.72	30.00
*	7.970	7380.	2695.6	0.7	1.6	0.0	632.38	30.00
*	7.970	10080.	2696.2	0.6	0.8	0.0	636.50	30.00
	7.970	3750.	2691.3	0.0	1.2	0.0	48.59	10.00
	7.970	6165.	2695.5	4.2	0.7	0.0	632.06	10.00
	7.970	7380.	2696.0	0.5	0.4	0.0	635.21	10.00
	7.970	10080.	2696.8	0.8	0.6	0.0	640.39	10.00
*	8.200	3520.	2702.3	0.0	11.1	0.0	360.65	1170.00
*	8.200	5800.	2702.9	0.5	7.4	0.0	451.34	1170.00
*	8.200	6950.	2703.5	0.7	7.6	0.0	615.06	1170.00
*	8.200	9520.	2704.5	0.9	7.7	0.0	675.22	1170.00
	8.200	3520.	2702.7	0.0	0.4	0.0	430.78	40.00
	8.200	5800.	2704.1	1.4	1.2	0.0	650.74	40.00
	8.200	6950.	2704.6	0.5	1.1	0.0	682.64	40.00
	8.200	9520.	2705.4	0.8	1.0	0.0	736.07	40.00
	8.200	3520.	2702.9	0.0	0.1	0.0	448.57	30.00
	8.200	5800.	2705.7	2.8	1.6	0.0	781.75	30.00
	8.200	6950.	2706.9	1.2	2.3	0.0	973.26	30.00
	8.200	9520.	2707.8	1.0	2.4	0.0	1071.97	30.00
	8.200	3520.	2702.9	0.0	0.1	0.0	454.54	10.00
	8.200	5800.	2705.7	2.8	0.0	0.0	787.27	10.00
	8.200	6950.	2706.9	1.2	0.0	0.0	975.15	10.00
	8.200	9520.	2707.8	1.0	0.0	0.0	1074.07	10.00
*	8.270	3215.	2704.9	0.0	1.9	0.0	149.81	340.00
*	8.270	5340.	2706.2	1.4	0.5	0.0	218.57	340.00
	8.270	6425.	2706.9	0.6	-0.0	0.0	248.82	340.00
	8.270	8810.	2707.8	0.9	-0.1	0.0	290.22	340.00
	8.410	3185.	2713.4	0.0	8.6	0.0	174.77	660.00
*	8.410	5295.	2714.7	1.3	8.5	0.0	495.92	660.00
*	8.410	6370.	2715.0	0.3	8.1	0.0	510.11	660.00
	8.410	8735.	2715.8	0.8	8.1	0.0	549.00	660.00

M15

SECNO	Q	CMSEL	DIFMSP	DIFMSX	DIFKMS	TOPMID	XLCH	
*	8.670	3135	2728.6	0.0	15.2	0.0	61.85	1280.00
*	8.670	5205	2731.5	2.8	16.8	0.0	159.78	1280.00
*	8.670	6270	2732.5	1.1	17.5	0.0	238.21	1280.00
*	8.670	8590	2733.9	1.3	18.0	0.0	245.88	1280.00
	8.800	3110	2737.1	0.0	8.5	0.0	229.80	600.00
	8.800	5165	2738.6	1.5	7.1	0.0	281.29	600.00
	8.800	6215	2739.1	0.6	6.6	0.0	28.40	600.00
	8.800	8520	2740.4	1.3	6.6	0.0	317.63	600.00
	8.920	1780	2741.6	0.0	4.5	0.0	135.81	520.00
*	8.920	2975	2742.9	1.3	4.3	0.0	212.25	520.00
*	8.920	3615	2743.3	0.5	4.2	0.0	234.64	520.00
*	8.920	5150	2744.3	1.0	3.9	0.0	283.77	520.00
	9.060	1720	2747.1	0.0	5.5	0.0	200.36	730.00
	9.060	2895	2748.2	1.1	5.4	0.0	255.39	730.00
	9.060	3515	2749.7	0.5	5.4	0.0	280.54	730.00
	9.060	5015	2749.7	1.0	5.4	0.0	311.82	730.00
*	9.060	1720	2751.8	0.0	4.6	0.0	199.70	20.00
*	9.060	2895	2752.7	0.9	4.3	0.0	217.74	20.00
*	9.060	3515	2753.1	0.4	4.3	0.0	218.11	20.00
*	9.060	5015	2753.9	0.8	4.2	0.0	218.87	20.00
	9.060	1720	2752.5	0.0	0.8	0.0	217.57	20.00
	9.060	2895	2753.5	1.0	0.8	0.0	218.53	20.00
	9.060	3515	2753.9	0.4	0.9	0.0	218.94	20.00
	9.060	5015	2754.8	0.9	1.0	0.0	219.80	20.00
	9.150	1690	2754.8	0.0	2.3	0.0	187.34	450.00
	9.150	2855	2756.1	1.3	2.6	0.0	217.77	450.00
	9.150	3470	2756.7	0.6	2.7	0.0	218.31	450.00
	9.150	4945	2757.8	1.2	3.0	0.0	219.44	450.00
*	9.260	1690	2759.9	0.0	5.1	0.0	46.68	520.00
*	9.260	2855	2761.2	1.3	5.1	0.0	315.78	520.00
*	9.260	3470	2761.9	0.6	5.2	0.0	433.28	520.00
*	9.260	4945	2762.8	0.9	4.9	0.0	473.10	520.00
	9.260	1690	2763.4	0.0	0.5	0.0	115.12	40.00
	9.260	2855	2762.4	2.0	1.1	0.0	471.38	40.00
	9.260	3470	2762.8	0.5	0.9	0.0	473.21	40.00
	9.260	4945	2763.6	0.8	0.8	0.0	476.27	40.00
	9.260	1690	2760.5	0.0	0.2	0.0	155.64	30.00
	9.260	2855	2762.9	2.4	0.6	0.0	601.87	30.00
	9.260	3470	2763.3	0.4	0.5	0.0	639.92	30.00
	9.260	4945	2764.0	0.6	0.4	0.0	674.32	30.00
	9.260	1690	2760.6	0.0	0.1	0.0	166.51	10.00
	9.260	2855	2762.9	2.3	-0.0	0.0	599.71	10.00
	9.260	3470	2763.3	0.4	-0.0	0.0	626.98	10.00
	9.260	4945	2763.9	0.6	-0.1	0.0	670.28	10.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH	
*	9.390	1660.	2765.7	0.0	5.1	0.0	35.23	700.00
*	9.390	2810.	2768.3	2.6	5.4	0.0	546.62	710.00
*	9.390	3410.	2768.5	0.2	5.2	0.0	568.14	700.00
*	9.390	4870.	2769.2	0.7	5.3	0.0	594.75	700.00
	9.500	1605.	2775.1	0.0	9.4	0.0	576.01	850.00
	9.500	2740.	2775.4	0.2	7.1	0.0	589.33	850.00
	9.500	3320.	2775.8	0.5	7.3	0.0	613.82	850.00
	9.500	4740.	2776.5	0.7	7.3	0.0	640.43	850.00
	9.550	1605.	2776.2	0.0	1.1	0.0	590.37	250.00
	9.550	2740.	2777.1	0.9	1.7	0.0	633.86	250.00
	9.550	3320.	2777.3	0.3	1.5	0.0	641.30	250.00
	9.550	4740.	2778.0	0.7	1.5	0.0	659.85	250.00
*	9.820	1545.	2790.7	0.0	14.5	0.0	297.69	640.00
*	9.820	2685.	2791.5	0.8	14.4	0.0	323.89	640.00
*	9.820	3230.	2791.7	0.2	14.4	0.0	357.86	640.00
*	9.820	4610.	2792.4	0.7	14.4	0.0	405.27	640.00
	10.000	1500.	2797.6	0.0	6.9	0.0	284.15	960.00
	10.000	2600.	2798.8	1.2	7.4	0.0	319.28	960.00
	10.000	3150.	2799.4	0.5	7.7	0.0	334.51	960.00
	10.000	4500.	2800.3	0.9	7.9	0.0	363.96	960.00
*	10.090	1500.	2804.8	0.0	7.2	0.0	32.70	420.00
*	10.090	2600.	2807.3	2.5	8.5	0.0	214.87	420.00
*	10.090	3150.	2807.9	0.6	8.6	0.0	247.19	420.00
*	10.090	4500.	2808.8	0.9	8.5	0.0	271.47	420.00
	10.210	1500.	2813.9	0.0	9.0	0.0	65.11	680.00
	10.210	2800.	2814.0	1.0	7.5	0.0	75.52	680.00
	10.210	3150.	2815.2	0.4	7.3	0.0	81.53	680.00
	10.210	4500.	2816.3	1.1	7.5	0.0	103.00	680.00
	10.280	1500.	2817.0	0.0	3.2	0.0	59.88	360.00
	10.280	2600.	2818.6	1.6	3.8	0.0	68.41	360.00
	10.280	3150.	2819.2	0.6	4.0	0.0	71.74	360.00
	10.280	4500.	2820.4	1.2	4.1	0.0	78.05	360.00
	10.390	1500.	2823.3	0.0	6.3	0.0	37.44	540.00
	10.390	2600.	2825.0	1.6	6.3	0.0	147.10	540.00
*	10.390	3150.	2825.8	0.8	6.6	0.0	182.87	540.00
	10.390	4500.	2826.9	1.1	6.5	0.0	206.67	540.00

SUMMARY OF ERRORS

CAUTION SECNO= 0.230 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SELNO= 0.230 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 0.230 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 1.780 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 1.780 PROFILE= 2 HYDRAULIC JUMP D.S.

CAUTION SECNO= 1.780 PROFILE= 3 HYDRAULIC JUMP D.S.  
 CAUTION SECNO= 1.780 PROFILE= 4 HYDRAULIC JUMP D.S.  
 CAUTION SECNO= 1.780 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.190 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.190 PROFILE= 1  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 2.190 PROFILE= 1  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 2.400 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.400 PROFILE= 1  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 2.400 PROFILE= 1  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 2.400 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.400 PROFILE= 2  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 2.400 PROFILE= 2  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 2.400 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.400 PROFILE= 3  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 2.400 PROFILE= 3  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 2.400 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 2.400 PROFILE= 4  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 2.400 PROFILE= 4  
 20 TRIALS ATTEMPTED TO BALANCE WSEL

NOTE SECNO= 2.400 PROFILE= 1 WSEL BASED ON X5 CARD  
 NOTE SECNO= 2.400 PROFILE= 2 WSEL BASED ON X5 CARD  
 NOTE SECNO= 2.400 PROFILE= 3 WSEL BASED ON X5 CARD  
 NOTE SECNO= 2.400 PROFILE= 4 WSEL BASED ON X5 CARD

CAUTION SECNO= 4.960 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 4.960 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 5.490 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 5.490 PROFILE= 1  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 5.490 PROFILE= 1  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 5.490 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 5.490 PROFILE= 2  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 5.490 PROFILE= 2  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 5.490 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 5.490 PROFILE= 3  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 5.490 PROFILE= 3  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 5.490 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 5.490 PROFILE= 4  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 5.490 PROFILE= 4  
 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION	SECNO=	5.580	PROFILE=	2	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	5.640	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	5.910	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	5.910	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	5.910	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	5.910	PROFILE=	4	CRITICAL DEPTH ASSUMED
NOTE	SECNO=	6.120	PROFILE=	1	WSEL BASED ON X5 CARD
CAUTION	SECNO=	6.120	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.120	PROFILE=	2	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.120	PROFILE=	2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.120	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.120	PROFILE=	3	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.120	PROFILE=	3	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.120	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.120	PROFILE=	4	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.120	PROFILE=	4	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.610	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.610	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.610	PROFILE=	2	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	6.610	PROFILE=	3	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	6.610	PROFILE=	4	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	6.740	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.740	PROFILE=	1	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.740	PROFILE=	1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.740	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.740	PROFILE=	2	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.740	PROFILE=	2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.740	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.740	PROFILE=	3	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.740	PROFILE=	3	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	6.740	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	6.740	PROFILE=	4	CRITICAL DEPTH ASSUMED
PROBABLE MINIMUM SPECIFIC ENERGY					
CAUTION	SECNO=	6.740	PROFILE=	4	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	7.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.230	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.230	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.230	PROFILE=	4	CRITICAL DEPTH ASSUMED

CAUTION	SECNO=	7.230	PROFILE=	4	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	7.460	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.460	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.460	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.780	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.780	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.780	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.780	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.970	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.970	PROFILE=	1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	7.970	PROFILE=	1	WSEL ASSUMED BASED ON MIN DIFF
CAUTION	SECNO=	7.970	PROFILE=	1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	7.970	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.970	PROFILE=	2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	7.970	PROFILE=	2	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	7.970	PROFILE=	3	WSEL ASSUMED BASED ON MIN DIFF
CAUTION	SECNO=	7.970	PROFILE=	3	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	7.970	PROFILE=	3	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	7.970	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	7.970	PROFILE=	4	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	7.970	PROFILE=	4	HYDRAULIC JUMP D.S.
CAUTION	SECNO=	8.200	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.200	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.200	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.270	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.270	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.410	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.410	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.670	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.670	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.670	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.670	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.920	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.920	PROFILE=	3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.920	PROFILE=	4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	9.060	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	9.060	PROFILE=	1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	9.060	PROFILE=	1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	9.060	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	9.060	PROFILE=	2	



PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.060 PROFILE= 2  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.060 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.060 PROFILE= 3  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.060 PROFILE= 3  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.060 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.060 PROFILE= 4  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.060 PROFILE= 4  
 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.260 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.260 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.260 PROFILE= 4 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 9.390 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.390 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.390 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.390 PROFILE= 2  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.390 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.390 PROFILE= 3

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.390 PROFILE= 3  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.390 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.390 PROFILE= 4

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.390 PROFILE= 4  
 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 9.820 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.820 PROFILE= 1

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.820 PROFILE= 1  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.820 PROFILE= 2 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.820 PROFILE= 2

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.820 PROFILE= 2  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.820 PROFILE= 3 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.820 PROFILE= 3

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.820 PROFILE= 3  
 20 TRIALS ATTEMPTED TO BALANCE WSEL  
 CAUTION SECNO= 9.820 PROFILE= 4 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 9.820 PROFILE= 4

PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 9.820 PROFILE= 4  
 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 10.090 PROFILE= 1 CRITICAL DEPTH ASSUMED  
 CAUTION SECNO= 10.090 PROFILE= 1  
 PROBABLE MINIMUM SPECIFIC ENERGY  
 CAUTION SECNO= 10.090 PROFILE= 1

20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 10.090 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 10.090 PROFILE= 2  
PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 10.090 PROFILE= 2  
20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 10.090 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 10.090 PROFILE= 3  
PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 10.090 PROFILE= 3  
20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 10.090 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 10.090 PROFILE= 4  
PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 10.090 PROFILE= 4  
20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 10.390 PROFILE= 3 CRITICAL DEPTH ASSUMED

## RICHLAND CREEK

WAYNESVILLE NC  
100 YEAR FLOOD

500 YEAR FLOOD

50 YEAR FLOOD

10 YEAR FLOOD

MILE	Q	ELEV	Q	ELEV	Q	ELEV	Q	ELEV
0.050	13100.	2501.0	9400.	2500.0	8100.	2499.7	4800.	2490.4
0.230	13000.	2503.3	9335.	2502.2	8075.	2501.8	4790.	2500.5
0.230	13000.	2505.5	9335.	2504.2	8075.	2503.7	4790.	2501.8
0.270	13000.	2505.7	9335.	2504.4	8075.	2503.9	4790.	2502.0
0.550	12850.	2508.0	9250.	2506.6	8040.	2506.0	4780.	2504.0
0.840	12730.	2512.8	9170.	2511.0	8000.	2510.3	4770.	2507.8
1.160	12590.	2518.9	9080.	2516.6	7970.	2515.7	4760.	2512.7
1.450	12460.	2522.1	9000.	2520.0	7940.	2519.3	4750.	2516.8
1.450	12460.	2523.3	9000.	2521.1	7940.	2520.3	4750.	2517.6
1.700	12350.	2525.0	8930.	2522.9	7910.	2522.2	4745.	2519.8
1.780	12300.	2526.2	8900.	2524.0	7900.	2523.3	4740.	2520.9
1.780	12300.	2529.1	8900.	2527.7	7900.	2527.2	4740.	2522.4
1.950	12100.	2529.7	8850.	2528.2	7800.	2527.7	4600.	2525.3
2.190	12040.	2530.9	8770.	2529.5	7640.	2529.0	4390.	2527.9
2.320	11950.	2532.4	8725.	2531.7	7550.	2531.5	4270.	2530.5
2.320	11950.	2532.6	8725.	2531.9	7350.	2531.7	4270.	2530.7
2.400	11900.	2533.2	8700.	2532.4	7500.	2532.2	4200.	2531.0
2.400	13350.	2568.1	9900.	2567.1	8300.	2566.8	5150.	2565.3
3.230	13190.	2568.3	9810.	2567.3	8160.	2567.0	5080.	2565.4
3.690	13100.	2568.5	9760.	2567.4	8090.	2567.1	5040.	2565.5
3.810	13080.	2569.8	9740.	2568.4	8070.	2567.9	5030.	2565.9
3.810	13080.	2572.7	9740.	2571.5	8070.	2569.9	5030.	2566.7
3.970	13050.	2575.6	9730.	2573.9	8050.	2572.5	5020.	2569.5
3.970	13050.	2576.4	9730.	2574.6	8050.	2573.2	5020.	2570.0
4.140	13010.	2578.0	9710.	2576.1	8010.	2574.7	5010.	2571.8
4.140	13010.	2579.3	9710.	2576.6	8010.	2574.9	5010.	2572.0

C16

4.280	11925.	2579.9	8660.	2577.3	6990.	2575.8	4295.	2573.2
4.280	11925.	2580.0	8660.	2577.5	6990.	2576.0	4295.	2573.7
4.430	11540.	2580.8	8465.	2578.6	7115.	2577.2	4395.	2575.1
4.630	11600.	2583.6	8475.	2582.2	6950.	2581.6	4275.	2580.0
4.820	11420.	2589.5	8375.	2588.1	6920.	2587.2	4260.	2585.5
4.960	11290.	2593.5	8300.	2591.9	6900.	2590.9	4250.	2588.8
4.960	11290.	2595.9	8300.	2593.7	6900.	2592.4	4250.	2589.7
5.100	11220.	2599.6	8180.	2597.3	6880.	2596.1	4240.	2593.5
5.100	11220.	2600.7	8180.	2597.9	6880.	2596.6	4240.	2594.0
5.200	11115.	2601.0	8110.	2598.3	6810.	2597.0	4190.	2594.5
5.490	11115.	2604.5	8110.	2603.5	6810.	2603.1	4190.	2601.6
5.580	11085.	2607.5	8090.	2606.4	6790.	2605.7	4175.	2604.3
5.580	11085.	2609.1	8090.	2608.1	6790.	2607.5	4175.	2606.0
5.640	11050.	2609.5	8065.	2608.4	6765.	2607.8	4160.	2606.5
5.710	11050.	2610.7	8065.	2609.8	6765.	2609.4	4160.	2608.7
5.910	10995.	2617.3	8030.	2616.6	6730.	2616.1	4135.	2614.6
5.970	10975.	2619.6	8020.	2618.8	6720.	2618.3	4130.	2617.1
6.060	10950.	2620.8	8000.	2620.0	6700.	2619.7	4115.	2618.9
6.120	10935.	2623.2	7990.	2622.5	6690.	2622.1	4110.	2621.5
6.160	10925.	2624.0	7985.	2623.3	6685.	2622.9	4105.	2622.1
6.160	10925.	2626.6	7985.	2625.5	6685.	2624.9	4105.	2622.9
6.200	10915.	2627.3	7975.	2625.9	6675.	2625.3	4100.	2623.1
6.310	10880.	2629.9	7955.	2628.8	6655.	2628.3	4085.	2627.3
6.480	10835.	2634.8	7920.	2634.0	6625.	2633.6	4065.	2632.4
6.610	10795.	2639.4	7900.	2637.8	6595.	2637.2	4045.	2635.8
6.610	10795.	2641.4	7900.	2639.9	6595.	2638.9	4045.	2637.3
6.740	10730.	2645.3	7860.	2644.2	6565.	2643.6	4030.	2640.1
6.790	10705.	2649.5	7840.	2648.0	6550.	2647.2	4020.	2645.5
6.790	10705.	2649.7	7840.	2648.3	6550.	2647.5	4020.	2645.9
7.000	10600.	2652.4	7780.	2651.0	6500.	2650.3	3990.	2648.3

## D16

7.230	10485.	2662.2	7710.	2661.4	6440.	2661.2	3955.	2660.1
7.230	10485.	2663.1	7710.	2662.4	6440.	2661.9	3955.	2660.7
7.460	10370.	2670.8	7540.	2669.8	6385.	2669.2	3920.	2667.9
7.540	10330.	2674.9	7620.	2674.0	6365.	2673.4	3910.	2671.6
7.780	10195.	2684.6	7495.	2684.1	6260.	2683.9	3830.	2683.2
7.970	10080.	2694.0	7380.	2692.8	6165.	2692.2	3750.	2690.8
7.970	10080.	2696.8	7380.	2696.0	6165.	2695.5	3750.	2691.3
8.200	9520.	2704.5	6950.	2703.5	5800.	2702.9	3520.	2702.3
8.200	9520.	2707.8	6950.	2706.9	5800.	2705.7	3520.	2702.9
8.270	8810.	2707.8	6425.	2706.9	5340.	2706.2	3215.	2704.9
8.410	8735.	2715.8	6370.	2715.0	5295.	2714.7	3185.	2713.4
8.670	8590.	2733.9	6270.	2732.5	5205.	2731.5	3135.	2728.6
8.800	8520.	2740.4	6215.	2739.1	5165.	2738.6	3110.	2737.1
8.920	5150.	2744.3	3615.	2743.3	2975.	2742.9	1780.	2741.6
9.060	5015.	2749.7	3515.	2748.7	2895.	2748.2	1720.	2747.1
9.060	5015.	2754.8	3515.	2753.9	2895.	2753.5	1720.	2752.5
9.150	4945.	2757.8	3470.	2756.7	2855.	2756.1	1690.	2754.8
9.260	4945.	2762.8	3470.	2761.9	2855.	2761.2	1690.	2759.9
9.260	4945.	2763.9	3470.	2763.3	2855.	2762.9	1690.	2760.6
9.390	4870.	2769.2	3410.	2768.5	2810.	2768.3	1660.	2765.7
9.500	4740.	2776.5	3320.	2775.8	2740.	2775.4	1605.	2775.1
9.550	4740.	2778.0	3320.	2777.3	2740.	2777.1	1605.	2776.2
9.820	4610.	2792.4	3230.	2791.7	2665.	2791.5	1545.	2790.7
10.000	4500.	2800.3	3150.	2799.4	2600.	2798.8	1500.	2797.6
10.090	4500.	2808.8	3150.	2807.9	2600.	2807.3	1500.	2804.8
10.210	4500.	2816.3	3150.	2815.2	2600.	2814.8	1500.	2813.9
10.280	4500.	2820.4	3150.	2819.2	2600.	2818.6	1500.	2817.0
10.390	4500.	2826.9	3150.	2825.8	2600.	2825.0	1500.	2823.3

FLOOD INSURANCE ZONE DATA FOR RICHLAND CREEK

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10% 2% 1% 0.2% 0.1% 0.05% 0.02% 0.01%	10%	2%	1%	0.2%	0.1%	0.05%	0.02%	0.01%
0.050	G.	-1.62	-0.39	0.97						
0.230	800.	-1.80	-0.43	1.06						
0.230	840.	-1.85	-0.44	1.09						
0.230	841.	-1.71	-0.50	1.32						
0.230	871.	-2.44	-0.52	1.43						
0.230	872.	-2.45	-0.53	1.26						
0.230	882.	-2.44	-0.53	1.26						
0.270	1032.	-2.44	-0.53	1.28						
0.550	2632.	-2.54	-0.59	1.46						
0.840	3952.	-3.21	-0.72	1.82						
1.160	5392.	-3.84	-0.88	2.29						
1.450	6752.	-3.18	-0.73	2.08						
1.450	6792.	-3.33	-0.71	2.03						
1.450	6793.	-2.97	-0.67	1.96						
1.450	6823.	-3.03	-0.69	2.01						
1.450	6824.	-3.78	-1.36	2.14						
1.450	6864.	-3.47	-0.77	2.17						
1.700	8164.	-3.14	-0.71	2.08						
1.780	8524.	-3.14	-0.73	2.13						
1.780	8564.	-3.43	-0.69	2.08						
1.780	8594.	-3.27	-0.55	1.40						
1.780	8634.	-5.32	-0.56	1.43						
1.950	9446.	-2.99	-0.54	1.44						
2.190	10700.	-1.60	-0.55	1.57						
2.320	11344.	-1.19	-0.20	0.69						
2.320	11345.	-1.21	-0.21	0.69						
2.320	11375.	-1.23	-0.22	0.69						
2.320	11376.	-1.22	-0.22	0.69						
2.400	11876.	-1.37	-0.27	0.76						
2.400	11916.	-1.23	-0.39	0.60						
2.400	11946.	-1.70	-0.20	0.90						
2.400	11956.	-1.82	-0.26	0.98						
3.250	16136.	-1.89	-0.31	1.02						
3.690	18336.	-1.94	-0.34	1.05						
3.810	18876.	-2.52	-0.59	1.36						
3.810	18936.	-2.51	-0.64	1.30						
3.810	18996.	-5.10	-1.56	1.42						
3.810	19016.	-4.80	-1.51	1.22						
3.970	19756.	-4.34	-1.37	1.79						
3.970	19796.	-4.22	-1.38	1.81						
3.970	19826.	-4.28	-1.37	1.82						
3.970	19836.	-4.51	-1.34	1.80						
4.140	20776.	-4.26	-1.33	1.97						
4.140	20816.	-4.17	-1.30	2.14						
4.140	20931.	-4.52	-1.65	2.93						
4.140	20961.	-4.64	-1.69	2.73						
4.280	21671.	-4.16	-1.55	2.63						
4.280	21711.	-4.11	-1.54	2.61						
4.280	21712.	-4.32	-1.57	2.64						

4.280	21717.	-4.28	-1.55	2.62
4.280	21718.	-3.78	-1.47	2.56
4.280	21728.	-3.78	-1.47	2.56
4.430	22463.	-3.28	-1.25	2.34
4.630	23463.	-2.25	-0.66	1.35
4.820	24403.	-2.62	-0.85	1.41
4.960	25013.	-3.07	-0.92	1.65
4.960	25053.	-3.51	-1.01	1.85
4.960	25068.	-3.32	-1.01	1.85
4.960	25078.	-2.38	-0.69	2.33
4.960	25138.	-4.01	-1.36	2.15
5.100	25888.	-3.76	-1.23	2.32
5.100	25928.	-3.63	-1.20	2.48
5.100	25958.	-3.76	-1.27	3.16
5.100	25968.	-3.94	-1.31	2.81
5.200	26428.	-3.73	-1.25	2.73
5.490	27938.	-1.92	-0.42	1.05
5.580	28318.	-2.11	-0.64	1.12
5.580	28358.	-2.11	-0.64	1.13
5.580	28393.	-2.08	-0.58	1.03
5.580	28433.	-2.03	-0.57	1.03
5.640	28773.	-1.95	-0.59	1.04
5.710	29123.	-1.16	-0.42	0.90
5.910	30023.	-2.04	-0.49	0.74
5.970	30303.	-1.66	-0.42	0.82
6.060	30643.	-1.12	-0.36	0.74
6.120	30923.	-0.98	-0.31	0.72
6.160	31083.	-1.23	-0.37	0.66
6.160	31133.	-1.71	-0.57	1.63
6.160	31183.	-2.69	-0.60	1.20
6.160	31223.	-2.61	-0.56	1.12
6.200	31313.	-2.84	-0.64	1.34
6.310	31793.	-1.44	-0.53	1.09
6.480	32793.	-1.66	-0.41	0.77
6.610	33373.	-2.02	-0.67	1.58
6.610	33413.	-3.24	-1.18	1.33
6.610	33443.	-2.56	-0.97	1.51
6.610	33453.	-2.56	-0.95	1.51
6.740	33673.	-4.03	-0.57	1.10
6.790	34353.	-2.51	-0.79	1.47
6.790	34393.	-2.52	-0.79	1.48
6.790	34443.	-2.42	-0.75	1.41
6.790	34453.	-2.43	-0.75	1.41
7.000	35533.	-2.71	-0.72	1.37
7.230	36753.	-1.38	-0.26	0.79
7.230	36793.	-1.68	-0.46	0.71
7.230	36823.	-1.69	-0.46	0.71
7.230	36833.	-1.67	-0.45	0.70
7.460	37953.	-1.94	-0.58	1.03
7.540	38373.	-2.11	-0.56	0.97
7.780	39613.	-0.96	-0.26	0.50
7.970	40553.	-2.05	-0.58	1.20
7.970	40593.	-2.55	-0.77	1.46
7.970	40623.	-5.50	-0.70	0.62
7.970	40633.	-4.71	-0.46	0.78
8.200	41803.	-1.19	-0.65	0.95
8.200	41843.	-1.88	-0.50	0.84
8.200	41873.	-4.01	-1.18	0.96
8.200	41883.	-3.97	-1.18	0.96
8.270	42223.	-2.01	-0.65	0.89

8.410	42883.	-1.60	-0.33	0.82
8.670	44163.	-3.89	-1.06	1.33
8.800	44763.	-2.01	-0.56	1.31
8.920	45283.	-1.71	-0.45	0.98
9.060	46013.	-1.61	-0.51	0.95
9.060	46033.	-1.31	-0.38	0.79
9.060	46053.	-1.41	-0.42	0.89
9.150	46303.	-1.88	-0.56	1.16
9.260	47023.	-1.98	-0.65	0.92
9.260	47063.	-2.43	-0.46	0.76
9.260	47093.	-2.77	-0.39	0.63
9.260	47103.	-2.68	-0.38	0.61
9.390	47803.	-2.80	-0.21	0.68
9.500	48653.	-0.70	-0.45	0.68
9.550	48903.	-1.15	-0.27	0.66
9.820	49543.	-1.04	-0.24	0.67
10.000	50503.	-1.75	-0.53	0.94
10.090	50923.	-3.12	-0.62	0.86
10.210	51603.	-1.36	-0.40	1.12
10.260	51963.	-2.20	-0.62	1.17
10.390	52503.	-2.47	-0.83	1.09

WEIGHTED AVG FOR REACH -2.45 -0.62 1.30

FHF FOR THE REACH = 0.25 WITH 76.3% OF THE REACH WITHIN 1.0 FEET ZONE FOR THE REACH = A 5

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	AVG ELEVATION DATA			WTD. AVG.	FHF	PERCENT WITHIN
		10'	1'	DIFF.			
	0.					SEC.	0.050
1	100.	2498.54	2500.18	-1.63	-1.63	015	100.
2	200.	2498.80	2500.46	-1.66	-1.65	015	100.
3	300.	2499.05	2500.73	-1.68	-1.66	015	100.
4	400.	2499.31	2501.01	-1.70	-1.67	015	100.
5	500.	2499.56	2501.28	-1.72	-1.68	015	100.
6	600.	2499.82	2501.56	-1.74	-1.69	015	100.
7	700.	2500.07	2501.83	-1.76	-1.70	015	100.
8	800.					SEC.	0.230
	800.	2500.32	2502.11	-1.79	-1.71	015	100.
	840.					SEC.	0.230
	841.					SEC.	0.230
	871.					SEC.	0.230
	872.					SEC.	0.230
	882.					SEC.	0.230
9	900.	2501.12	2503.24	-2.12	-1.75	020	100.
10	1000.	2501.86	2504.30	-2.44	-1.82	020	90.
	1032.					SEC.	0.270
11	1100.	2502.01	2504.45	-2.44	-1.88	020	82.
12	1200.	2502.15	2504.60	-2.45	-1.93	020	75.
13	1300.	2502.30	2504.76	-2.46	-1.97	020	100.
14	1400.	2502.45	2504.91	-2.46	-2.00	020	100.



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15	1500.	2502.60	2505.06	-2.47	-2.03	020	100.
16	1600.	2502.74	2505.27	-2.48	-2.06	020	100.
17	1700.	2502.89	2505.77	-2.48	-2.09	020	100.
18	1800.	2503.04	2505.53	-2.49	-2.11	020	100.
19	1900.	2503.18	2505.68	-2.50	-2.13	020	100.
20	2000.	2503.33	2505.84	-2.51	-2.15	020	100.
21	2100.	2503.47	2505.99	-2.52	-2.17	020	100.
22	2200.	2503.62	2506.14	-2.52	-2.18	020	100.
23	2300.	2503.77	2506.30	-2.53	-2.20	020	100.
24	2400.	2503.91	2506.45	-2.54	-2.21	020	100.
	2432.					SEC.	0.550
25	2500.	2504.09	2506.65	-2.56	-2.23	020	100.
26	2600.	2504.32	2506.92	-2.60	-2.24	020	100.
27	2700.	2504.57	2507.21	-2.64	-2.25	025	100.
28	2800.	2504.81	2507.50	-2.69	-2.27	025	100.
29	2900.	2505.06	2507.79	-2.73	-2.29	025	100.
30	3000.	2505.30	2508.08	-2.77	-2.30	025	100.
31	3100.	2505.55	2508.37	-2.82	-2.32	025	100.
32	3200.	2505.79	2508.66	-2.86	-2.34	025	100.
33	3300.	2506.04	2508.95	-2.90	-2.35	025	100.
34	3400.	2506.29	2509.23	-2.95	-2.37	025	100.
35	3500.	2506.53	2509.52	-2.99	-2.39	025	100.
36	3600.	2506.78	2509.81	-3.04	-2.41	025	100.
37	3700.	2507.02	2510.10	-3.08	-2.42	025	100.
38	3800.	2507.27	2510.39	-3.13	-2.44	025	100.
39	3900.	2507.51	2510.68	-3.17	-2.46	025	100.
	3952.					SEC.	0.840
40	4000.	2507.78	2510.99	-3.21	-2.48	025	100.
41	4100.	2508.10	2511.36	-3.26	-2.50	025	100.
42	4200.	2508.45	2511.74	-3.30	-2.52	025	100.
43	4300.	2508.79	2512.13	-3.34	-2.54	025	100.
44	4400.	2509.13	2512.52	-3.38	-2.56	025	100.
45	4500.	2509.48	2512.91	-3.43	-2.58	025	100.
46	4600.	2509.82	2513.29	-3.47	-2.60	025	100.
47	4700.	2510.17	2513.68	-3.52	-2.62	025	100.
48	4800.	2510.51	2514.07	-3.56	-2.64	025	100.
49	4900.	2510.86	2514.46	-3.60	-2.65	025	98.
50	5000.	2511.20	2514.85	-3.65	-2.67	025	96.
51	5100.	2511.55	2515.23	-3.69	-2.69	025	94.
52	5200.	2511.89	2515.62	-3.73	-2.71	025	90.
53	5300.	2512.23	2516.01	-3.78	-2.73	025	89.
	5392.					SEC.	1.160
54	5400.	2512.58	2516.39	-3.81	-2.75	030	85.
55	5500.	2512.90	2516.71	-3.81	-2.77	030	82.
56	5600.	2513.20	2516.96	-3.76	-2.79	030	82.
57	5700.	2513.51	2517.22	-3.71	-2.81	030	82.
58	5800.	2513.81	2517.47	-3.66	-2.82	030	86.
59	5900.	2514.11	2517.73	-3.62	-2.84	030	86.
60	6000.	2514.41	2517.98	-3.57	-2.85	030	87.
61	6100.	2514.72	2518.23	-3.52	-2.86	030	87.
62	6200.	2515.02	2518.49	-3.47	-2.87	030	87.
63	6300.	2515.32	2518.74	-3.42	-2.88	030	87.
64	6400.	2515.62	2519.00	-3.37	-2.89	030	88.
65	6500.	2515.93	2519.25	-3.32	-2.89	030	88.
66	6600.	2516.23	2519.51	-3.28	-2.90	030	88.
67	6700.	2516.53	2519.76	-3.23	-2.90	030	88.
	6752.					SEC.	1.450
	6792.					SEC.	1.450
	6793.					SEC.	1.450
68	6800.	2516.71	2519.80	-3.09	-2.91	030	88.

	6823.				SEC.	1.450	
	6824.				SEC.	1.450	
	6864.				SEC.	1.450	
69	6900.	2517.21	2520.44	-3.22	-2.91	030	88.
70	7000.	2517.78	2521.23	-3.45	-2.92	030	89.
71	7100.	2517.95	2521.37	-3.43	-2.92	030	89.
72	7200.	2518.11	2521.51	-3.40	-2.93	030	89.
73	7300.	2518.27	2521.65	-3.38	-2.94	030	89.
74	7400.	2518.43	2521.79	-3.36	-2.94	030	89.
75	7500.	2518.60	2521.93	-3.34	-2.95	030	89.
76	7600.	2518.76	2522.07	-3.31	-2.95	030	89.
77	7700.	2518.92	2522.21	-3.29	-2.96	030	90.
78	7800.	2519.08	2522.36	-3.27	-2.96	030	90.
79	7900.	2519.25	2522.49	-3.25	-2.97	030	90.
80	8000.	2519.41	2522.63	-3.22	-2.97	030	90.
81	8100.	2519.57	2522.78	-3.20	-2.97	030	90.
	8164.				SEC.	1.700	
82	8200.	2519.76	2522.95	-3.18	-2.97	030	90.
83	8300.	2520.03	2523.20	-3.17	-2.98	030	90.
84	8400.	2520.35	2523.50	-3.16	-2.98	030	90.
85	8500.	2520.66	2523.81	-3.15	-2.98	030	91.
	8524.				SEC.	1.780	
	8564.				SEC.	1.780	
	8594.				SEC.	1.780	
86	8600.	2521.62	2525.64	-4.21	-2.99	030	90.
	8634.				SEC.	1.780	
87	8700.	2522.53	2527.74	-5.20	-3.02	030	89.
88	8800.	2522.81	2527.80	-4.98	-3.04	030	88.
89	8900.	2523.15	2527.86	-4.70	-3.06	030	87.
90	9000.	2523.52	2527.92	-4.41	-3.08	030	86.
91	9100.	2523.87	2527.99	-4.12	-3.09	030	85.
92	9200.	2524.22	2528.05	-3.84	-3.10	030	85.
93	9300.	2524.57	2528.12	-3.55	-3.10	030	85.
94	9400.	2524.92	2528.18	-3.26	-3.10	030	85.
	9444.				SEC.	1.950	
95	9500.	2525.23	2528.26	-3.03	-3.10	030	85.
96	9600.	2525.47	2528.35	-2.88	-3.10	030	85.
97	9700.	2525.68	2528.45	-2.78	-3.10	030	86.
98	9800.	2525.88	2528.56	-2.67	-3.09	030	86.
99	9900.	2526.09	2528.66	-2.57	-3.09	030	86.
100	10000.	2526.30	2528.76	-2.46	-3.08	030	85.
101	10100.	2526.51	2528.87	-2.36	-3.07	030	86.
102	10200.	2526.72	2528.97	-2.25	-3.06	030	86.
103	10300.	2526.92	2529.07	-2.15	-3.06	030	86.
104	10400.	2527.13	2529.18	-2.04	-3.05	030	86.
105	10500.	2527.34	2529.28	-1.94	-3.04	030	86.
106	10600.	2527.55	2529.38	-1.84	-3.02	030	85.
107	10700.	2527.76	2529.49	-1.73	-3.01	030	84.
	10704.				SEC.	2.190	
108	10800.	2528.06	2529.71	-1.64	-3.00	030	83.
109	10900.	2528.47	2530.04	-1.57	-2.99	030	83.
110	11000.	2528.89	2530.38	-1.49	-2.97	030	82.
111	11100.	2529.30	2530.71	-1.41	-2.96	030	81.
112	11200.	2529.72	2531.05	-1.33	-2.94	030	80.
113	11300.	2530.13	2531.39	-1.26	-2.93	030	81.
	11344.				SEC.	2.320	
	11345.				SEC.	2.320	
	11375.				SEC.	2.320	
	11376.				SEC.	2.320	
114	11400.	2530.52	2531.75	-1.22	-2.91	030	80.

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115	11500.	2530.74	2531.98	-1.25	-2.90	030	79.
116	11600.	2530.81	2532.09	-1.28	-2.89	030	78.
117	11700.	2530.88	2532.19	-1.31	-2.87	030	78.
118	11800.	2530.96	2532.29	-1.34	-2.86	030	77.
	11876.				SEC.	2.400	
119	11900.	2537.78	2539.09	-1.32	-2.85	030	76.
	11916.				SEC.	2.400	
	11946.				SEC.	2.400	
	11956.				SEC.	2.400	
120	12000.	2554.91	2556.46	-1.55	-2.74	030	77.
121	12100.	2565.26	2567.09	-1.82	-2.73	030	75.
122	12200.	2565.26	2567.08	-1.82	-2.82	030	76.
123	12300.	2565.26	2567.09	-1.82	-2.81	030	76.
124	12400.	2565.27	2567.09	-1.83	-2.80	030	75.
125	12500.	2565.27	2567.10	-1.83	-2.80	030	75.
126	12600.	2565.27	2567.10	-1.83	-2.79	030	75.
127	12700.	2565.28	2567.11	-1.83	-2.78	030	76.
128	12800.	2565.28	2567.11	-1.83	-2.77	030	76.
129	12900.	2565.28	2567.12	-1.83	-2.77	030	76.
130	13000.	2565.29	2567.12	-1.84	-2.76	030	76.
131	13100.	2565.29	2567.13	-1.84	-2.75	030	76.
132	13200.	2565.29	2567.13	-1.84	-2.74	025	77.
133	13300.	2565.29	2567.14	-1.84	-2.74	025	77.
134	13400.	2565.30	2567.14	-1.84	-2.73	025	78.
135	13500.	2565.30	2567.14	-1.84	-2.72	025	78.
136	13600.	2565.30	2567.15	-1.85	-2.72	025	79.
137	13700.	2565.31	2567.15	-1.85	-2.71	025	79.
138	13800.	2565.31	2567.16	-1.85	-2.71	025	78.
139	13900.	2565.31	2567.16	-1.85	-2.70	025	79.
140	14000.	2565.32	2567.17	-1.85	-2.69	025	79.
141	14100.	2565.32	2567.17	-1.85	-2.69	025	79.
142	14200.	2565.32	2567.18	-1.86	-2.68	025	79.
143	14300.	2565.33	2567.18	-1.86	-2.68	025	80.
144	14400.	2565.33	2567.19	-1.86	-2.67	025	80.
145	14500.	2565.33	2567.19	-1.86	-2.66	025	80.
146	14600.	2565.34	2567.20	-1.86	-2.66	025	79.
147	14700.	2565.34	2567.20	-1.86	-2.65	025	80.
148	14800.	2565.34	2567.21	-1.87	-2.65	025	80.
149	14900.	2565.35	2567.21	-1.87	-2.64	025	81.
150	15000.	2565.35	2567.22	-1.87	-2.64	025	81.
151	15100.	2565.35	2567.22	-1.87	-2.63	025	81.
152	15200.	2565.36	2567.23	-1.87	-2.63	025	82.
153	15300.	2565.36	2567.23	-1.88	-2.62	025	82.
154	15400.	2565.36	2567.24	-1.88	-2.62	025	82.
155	15500.	2565.37	2567.24	-1.88	-2.61	025	81.
156	15600.	2565.37	2567.25	-1.88	-2.61	025	81.
157	15700.	2565.37	2567.25	-1.88	-2.60	025	82.
158	15800.	2565.37	2567.26	-1.88	-2.60	025	81.
159	15900.	2565.38	2567.26	-1.88	-2.59	025	81.
160	16000.	2565.38	2567.27	-1.88	-2.59	025	81.
161	16100.	2565.38	2567.27	-1.89	-2.59	025	81.
	16136.				SEC.	3.230	
162	16200.	2565.39	2567.28	-1.89	-2.58	025	81.
163	16300.	2565.39	2567.28	-1.89	-2.58	025	82.
164	16400.	2565.39	2567.29	-1.89	-2.57	025	82.
165	16500.	2565.40	2567.29	-1.90	-2.57	025	82.
166	16600.	2565.40	2567.30	-1.90	-2.56	025	82.
167	16700.	2565.41	2567.31	-1.90	-2.56	025	82.
168	16800.	2565.41	2567.31	-1.90	-2.56	025	82.
169	16900.	2565.42	2567.32	-1.90	-2.55	025	82.

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170	17000.	2565.42	2567.33	-1.91	-2.55	025	82.
171	17100.	2565.42	2567.33	-1.91	-2.55	025	82.
172	17200.	2565.43	2567.34	-1.91	-2.54	025	82.
173	17300.	2565.43	2567.35	-1.91	-2.54	025	82.
174	17400.	2565.44	2567.35	-1.92	-2.53	025	82.
175	17500.	2565.44	2567.36	-1.92	-2.53	025	82.
176	17600.	2565.44	2567.37	-1.92	-2.53	025	82.
177	17700.	2565.45	2567.37	-1.92	-2.52	025	82.
178	17800.	2565.45	2567.38	-1.93	-2.52	025	83.
179	17900.	2565.46	2567.38	-1.93	-2.52	025	83.
180	18000.	2565.46	2567.39	-1.93	-2.51	025	82.
181	18100.	2565.46	2567.40	-1.93	-2.51	025	82.
182	18200.	2565.47	2567.40	-1.94	-2.51	025	82.
183	18300.	2565.47	2567.41	-1.94	-2.50	025	82.
	18336.				SEC.	3.690	
184	18400.	2565.50	2567.47	-1.97	-2.50	025	82.
185	18500.	2565.57	2567.62	-2.06	-2.50	025	82.
186	18600.	2565.65	2567.81	-2.16	-2.50	025	82.
187	18700.	2565.73	2567.99	-2.27	-2.50	025	82.
188	18800.	2565.81	2568.18	-2.37	-2.50	025	82.
	18896.				SEC.	3.810	
189	18900.	2565.91	2568.38	-2.47	-2.50	025	83.
	18936.				SEC.	3.810	
	18996.				SEC.	3.810	
190	19000.	2566.38	2570.17	-3.78	-2.50	025	82.
	19016.				SEC.	3.810	
191	19100.	2566.89	2571.78	-4.90	-2.51	025	82.
192	19200.	2567.17	2571.89	-4.72	-2.53	025	82.
193	19300.	2567.56	2572.21	-4.66	-2.54	025	82.
194	19400.	2567.95	2572.54	-4.59	-2.55	025	82.
195	19500.	2568.33	2572.86	-4.53	-2.56	025	81.
196	19600.	2568.72	2573.19	-4.47	-2.57	025	81.
197	19700.	2569.10	2573.51	-4.41	-2.58	025	81.
	19756.				SEC.	3.970	
	19796.				SEC.	3.970	
198	19800.	2569.41	2573.71	-4.30	-2.59	025	80.
	19826.				SEC.	3.970	
	19836.				SEC.	3.970	
199	19900.	2569.85	2574.21	-4.36	-2.59	025	80.
200	20000.	2570.26	2574.74	-4.48	-2.60	025	80.
201	20100.	2570.44	2574.90	-4.46	-2.61	025	80.
202	20200.	2570.63	2575.06	-4.43	-2.62	025	80.
203	20300.	2570.81	2575.22	-4.40	-2.63	025	79.
204	20400.	2571.00	2575.38	-4.38	-2.64	025	78.
205	20500.	2571.19	2575.54	-4.35	-2.65	025	78.
206	20600.	2571.37	2575.70	-4.32	-2.66	025	78.
207	20700.	2571.56	2575.86	-4.30	-2.66	025	77.
	20776.				SEC.	4.140	
208	20800.	2571.75	2575.99	-4.24	-2.67	025	77.
	20816.				SEC.	4.140	
209	20900.	2571.87	2576.18	-4.32	-2.68	025	76.
	20931.				SEC.	4.140	
	20961.				SEC.	4.140	
210	21000.	2571.96	2576.48	-4.52	-2.69	025	76.
211	21100.	2572.11	2576.69	-4.58	-2.70	025	76.
212	21200.	2572.28	2576.79	-4.51	-2.71	025	75.
213	21300.	2572.45	2576.89	-4.45	-2.71	025	75.
214	21400.	2572.61	2576.99	-4.38	-2.72	025	74.
215	21500.	2572.78	2577.09	-4.31	-2.73	025	74.
216	21600.	2572.95	2577.19	-4.24	-2.74	025	74.

217	21671. 21700. 21711. 21712. 21717. 21718. 21728.	2573.12 2577.29	-4.17	-2.74	SEC. 025	4.280	75.
218	21800.	2573.53	2577.46	-3.93	-2.75	025	72.
219	21900.	2573.94	2577.63	-3.70	-2.75	030	73.
220	22000.	2574.13	2577.76	-3.63	-2.76	030	73.
221	22100.	2574.33	2577.89	-3.56	-2.76	030	73.
222	22200.	2574.53	2578.02	-3.49	-2.76	030	73.
223	22300.	2574.72	2578.14	-3.42	-2.77	030	73.
224	22400.	2574.92	2578.27	-3.36	-2.77	030	75.
225	22463. 22500.	2575.17	2578.45	-3.28	-2.77	SEC. 030	4.430 73.
226	22600.	2575.56	2578.75	-3.19	-2.77	030	73.
227	22700.	2576.04	2579.13	-3.09	-2.77	030	74.
228	22800.	2576.53	2579.51	-2.98	-2.78	030	74.
229	22900.	2577.01	2579.89	-2.88	-2.78	030	74.
230	23000.	2577.50	2580.27	-2.78	-2.78	030	74.
231	23100.	2577.98	2580.65	-2.67	-2.78	030	74.
232	23200.	2578.46	2581.03	-2.57	-2.77	030	75.
233	23300.	2578.95	2581.41	-2.47	-2.77	030	74.
234	23400.	2579.43	2581.79	-2.37	-2.77	030	74.
235	23463. 23500.	2579.93	2582.22	-2.29	-2.77	SEC. 030	4.630 74.
236	23600.	2580.48	2582.77	-2.28	-2.77	030	75.
237	23700.	2581.07	2583.39	-2.32	-2.77	030	75.
238	23800.	2581.65	2584.01	-2.36	-2.76	030	75.
239	23900.	2582.23	2584.64	-2.40	-2.76	030	75.
240	24000.	2582.82	2585.26	-2.44	-2.76	030	75.
241	24100.	2583.40	2585.88	-2.48	-2.76	030	76.
242	24200.	2583.98	2586.51	-2.52	-2.76	030	76.
243	24300.	2584.57	2587.13	-2.56	-2.76	030	75.
244	24400.	2585.15	2587.75	-2.60	-2.76	030	75.
245	24403. 24500.	2585.71	2588.37	-2.66	-2.76	SEC. 030	4.820 76.
246	24600.	2586.26	2588.99	-2.73	-2.76	030	76.
247	24700.	2586.81	2589.61	-2.80	-2.76	030	76.
248	24800.	2587.35	2590.23	-2.88	-2.76	030	76.
249	24900.	2587.90	2590.85	-2.95	-2.76	030	76.
250	25000.	2588.44	2591.47	-3.02	-2.76	030	76.
251	25013. 25053. 25068. 25078. 25100.	2588.76	2591.77	-3.02	-2.76	SEC. 030	4.960 4.960 4.960 4.960 76.
252	25138. 25200.	2589.42	2592.90	-3.48	-2.76	SEC. 030	4.960 77.
253	25300.	2590.30	2594.27	-3.97	-2.77	030	76.
254	25400.	2590.81	2594.74	-3.94	-2.77	030	76.
255	25500.	2591.31	2595.22	-3.91	-2.78	030	76.
256	25600.	2591.82	2595.69	-3.87	-2.78	030	76.
257	25700.	2592.33	2596.17	-3.84	-2.79	030	75.
258	25800.	2592.83	2596.64	-3.81	-2.79	030	75.
259	25888. 25900. 25928. 25958.	2593.31	2597.07	-3.76	-2.79	SEC. 030	5.100 75.
					SEC.	5.100	
					SEC.	5.100	

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	25968.				SEC.	5.100	
260	26000.	2593.77	2597.60	-3.83	-2.80	030	75.
261	26100.	2594.08	2597.98	-3.90	-2.80	030	74.
262	26200.	2594.20	2598.06	-3.86	-2.81	030	74.
263	26300.	2594.32	2598.13	-3.81	-2.81	030	75.
264	26400.	2594.44	2598.21	-3.77	-2.81	030	75.
	26428.				SEC.	5.200	
265	26500.	2594.68	2598.34	-3.70	-2.82	030	75.
266	26600.	2595.09	2598.63	-3.59	-2.82	030	76.
267	26700.	2593.55	2599.02	-3.47	-2.82	030	75.
268	26800.	2596.01	2599.36	-3.35	-2.82	030	75.
269	26900.	2596.47	2599.70	-3.23	-2.83	030	75.
270	27000.	2596.93	2600.04	-3.12	-2.83	030	75.
271	27100.	2597.39	2600.38	-2.99	-2.83	030	75.
272	27200.	2597.85	2600.73	-2.88	-2.83	030	75.
273	27300.	2598.31	2601.07	-2.76	-2.83	030	75.
274	27400.	2598.77	2601.41	-2.64	-2.83	030	76.
275	27500.	2599.23	2601.75	-2.52	-2.83	030	76.
276	27600.	2599.69	2602.09	-2.40	-2.82	030	76.
277	27700.	2600.15	2602.43	-2.28	-2.82	030	76.
278	27800.	2600.61	2602.77	-2.16	-2.82	030	77.
279	27900.	2601.07	2603.11	-2.04	-2.82	030	77.
	27958.				SEC.	5.490	
280	28000.	2601.59	2603.55	-1.96	-2.81	030	76.
281	28100.	2602.26	2604.22	-1.97	-2.81	030	76.
282	28200.	2603.01	2605.03	-2.02	-2.81	030	76.
283	28300.	2603.76	2605.83	-2.07	-2.80	030	76.
	28318.				SEC.	5.580	
	28358.				SEC.	5.580	
	28393.				SEC.	5.580	
284	28400.	2605.03	2607.12	-2.09	-2.80	030	76.
	28433.				SEC.	5.580	
285	28500.	2605.03	2608.07	-2.04	-2.80	030	76.
286	28600.	2606.19	2608.19	-2.01	-2.80	030	76.
287	28700.	2606.31	2608.29	-1.98	-2.79	030	76.
	28773.				SEC.	5.640	
288	28800.	2606.51	2608.44	-1.93	-2.79	030	76.
289	28900.	2606.95	2608.73	-1.78	-2.79	030	76.
290	29000.	2607.58	2609.13	-1.55	-2.78	030	76.
291	29100.	2608.20	2609.53	-1.33	-2.78	030	75.
	29123.				SEC.	5.710	
292	29200.	2608.84	2610.06	-1.22	-2.77	030	75.
293	29300.	2609.49	2610.78	-1.29	-2.77	030	74.
294	29400.	2610.15	2611.53	-1.38	-2.76	030	74.
295	29500.	2610.80	2612.29	-1.48	-2.76	030	74.
296	29600.	2611.46	2613.04	-1.58	-2.75	030	73.
297	29700.	2612.12	2613.79	-1.68	-2.75	030	73.
298	29800.	2612.77	2614.55	-1.78	-2.75	025	73.
299	29900.	2613.43	2615.30	-1.87	-2.75	025	73.
300	30000.	2614.09	2616.05	-1.97	-2.74	025	74.
	30023.				SEC.	5.910	
301	30100.	2614.84	2616.82	-1.98	-2.74	025	74.
302	30200.	2615.72	2617.39	-1.87	-2.74	025	74.
303	30300.	2616.63	2618.36	-1.73	-2.73	025	74.
	30303.				SEC.	5.970	
304	30400.	2617.35	2618.93	-1.58	-2.73	025	74.
305	30500.	2617.88	2619.30	-1.42	-2.73	025	73.
306	30600.	2618.40	2619.67	-1.27	-2.72	025	74.
	30643.				SEC.	6.060	
307	30700.	2619.04	2620.18	-1.14	-2.72	025	73.

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308	31000	2619.79	2620.55	-1.04	-2.71	025	73.
309	31000	2620.32	2621.83	-1.02	-2.70	025	72.
					SEC.	6.120	
310	31000	2621.53	2622.57	-1.04	-2.70	025	73.
					SEC.	6.160	
311	31100	2621.15	2623.20	-1.25	-2.69	025	72.
					SEC.	6.160	
					SEC.	6.160	
312	31200	2622.50	2624.53	-2.03	-2.69	025	72.
					SEC.	6.160	
313	31300	2622.95	2625.69	-2.73	-2.69	025	72.
					SEC.	6.200	
314	31400	2623.45	2626.15	-2.70	-2.69	025	72.
315	31500	2623.30	2626.74	-2.45	-2.69	025	72.
316	31600	2625.19	2627.34	-2.15	-2.69	025	72.
317	31700	2626.08	2627.94	-1.86	-2.69	025	72.
					SEC.	6.310	
318	31800	2626.95	2628.53	-1.58	-2.68	025	72.
319	31900	2627.03	2629.09	-1.45	-2.68	025	71.
320	32000	2628.13	2629.61	-1.48	-2.68	025	72.
321	32100	2628.63	2630.13	-1.50	-2.67	025	72.
322	32200	2629.13	2630.65	-1.52	-2.67	025	71.
323	32300	2629.63	2631.18	-1.54	-2.67	025	71.
324	32400	2630.13	2631.70	-1.56	-2.66	025	71.
325	32500	2630.63	2632.22	-1.59	-2.66	025	70.
326	32600	2631.13	2632.74	-1.61	-2.66	025	71.
327	32700	2631.64	2633.27	-1.63	-2.65	025	70.
					SEC.	6.480	
328	32800	2632.14	2633.79	-1.65	-2.65	025	70.
329	32900	2632.69	2634.39	-1.73	-2.65	025	71.
330	33000	2633.29	2635.05	-1.76	-2.64	025	70.
331	33100	2633.88	2635.71	-1.82	-2.64	025	71.
332	33200	2634.48	2636.35	-1.88	-2.64	025	71.
333	33300	2635.08	2637.02	-1.95	-2.64	025	71.
					SEC.	6.610	
334	33400	2633.75	2638.16	-2.41	-2.64	025	71.
					SEC.	6.610	
					SEC.	6.610	
335	33500	2637.02	2639.88	-2.86	-2.64	025	71.
336	33600	2638.56	2641.77	-3.21	-2.64	025	71.
					SEC.	6.740	
337	33700	2639.78	2643.53	-3.75	-2.64	025	71.
338	33800	2640.75	2644.60	-3.86	-2.65	025	71.
339	33900	2641.54	2645.17	-3.63	-2.65	025	71.
340	34000	2642.53	2645.73	-3.41	-2.65	025	71.
341	34100	2643.12	2646.30	-3.18	-2.65	025	71.
342	34200	2643.90	2646.87	-2.96	-2.65	025	71.
343	34300	2644.69	2647.43	-2.74	-2.65	025	71.
					SEC.	6.790	
					SEC.	6.790	
344	34400	2645.34	2647.91	-2.57	-2.65	025	71.
					SEC.	6.790	
					SEC.	6.790	
345	34500	2645.77	2648.25	-2.47	-2.65	025	71.
346	34600	2646.07	2648.52	-2.45	-2.65	025	71.
347	34700	2646.30	2648.78	-2.48	-2.65	025	71.
348	34800	2646.53	2649.04	-2.50	-2.65	025	72.
349	34900	2646.76	2649.29	-2.53	-2.65	025	72.
350	35000	2646.99	2649.54	-2.56	-2.65	025	72.

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351	35100.	2647.22	2649.80	-2.58	-2.65	025	72.
352	35200.	2647.45	2650.06	-2.61	-2.65	025	72.
353	35300.	2647.68	2650.31	-2.64	-2.65	025	72.
354	35400.	2647.91	2650.57	-2.66	-2.65	025	72.
355	35500.	2648.13	2650.82	-2.69	-2.65	025	72.
	35533.				SEC.	7.000	
356	35600.	2648.61	2651.29	-2.67	-2.65	025	72.
357	35700.	2648.15	2652.03	-2.58	-2.65	025	72.
358	35800.	2650.41	2652.88	-2.47	-2.65	025	72.
359	35900.	2651.37	2653.74	-2.37	-2.65	025	72.
360	36000.	2652.32	2654.59	-2.26	-2.65	025	73.
361	36100.	2653.30	2655.44	-2.15	-2.65	025	73.
362	36200.	2654.26	2656.29	-2.04	-2.65	025	72.
363	36300.	2655.22	2657.15	-1.93	-2.64	025	73.
364	36400.	2656.18	2658.00	-1.82	-2.64	025	73.
365	36500.	2657.14	2658.85	-1.71	-2.64	025	73.
366	36600.	2658.10	2659.71	-1.60	-2.64	025	73.
367	36700.	2659.06	2660.56	-1.49	-2.63	025	73.
	36753.				SEC.	7.230	
	36795.				SEC.	7.230	
368	36800.	2660.11	2661.68	-1.56	-2.63	025	73.
	36823.				SEC.	7.230	
	36833.				SEC.	7.230	
369	36900.	2660.92	2662.60	-1.69	-2.63	025	72.
370	37000.	2661.47	2663.17	-1.70	-2.62	025	72.
371	37100.	2662.10	2663.83	-1.72	-2.62	025	73.
372	37200.	2662.74	2664.49	-1.75	-2.62	025	73.
373	37300.	2663.38	2665.15	-1.77	-2.62	025	73.
374	37400.	2664.01	2665.81	-1.79	-2.62	025	73.
375	37500.	2664.65	2666.47	-1.82	-2.61	025	73.
376	37600.	2665.29	2667.13	-1.84	-2.61	025	73.
377	37700.	2665.92	2667.79	-1.87	-2.61	025	73.
378	37800.	2666.56	2668.45	-1.89	-2.61	025	73.
379	37900.	2667.20	2669.11	-1.92	-2.61	025	73.
	37953.				SEC.	7.460	
380	38000.	2667.91	2669.85	-1.94	-2.60	025	73.
381	38100.	2668.77	2670.75	-1.98	-2.60	025	73.
382	38200.	2669.72	2671.74	-2.02	-2.60	025	73.
383	38300.	2670.68	2672.73	-2.06	-2.60	025	73.
	38373.				SEC.	7.540	
384	38400.	2671.62	2673.70	-2.08	-2.60	025	73.
385	38500.	2672.55	2674.59	-2.04	-2.60	025	74.
386	38600.	2673.46	2675.41	-1.94	-2.59	025	74.
387	38700.	2674.38	2676.23	-1.85	-2.59	025	74.
388	38800.	2675.29	2677.05	-1.76	-2.59	025	74.
389	38900.	2676.20	2677.87	-1.67	-2.59	025	74.
390	39000.	2677.12	2678.69	-1.57	-2.59	025	74.
391	39100.	2678.03	2679.51	-1.48	-2.58	025	74.
392	39200.	2678.95	2680.33	-1.39	-2.58	025	74.
393	39300.	2679.86	2681.15	-1.30	-2.58	025	74.
394	39400.	2680.77	2681.98	-1.21	-2.57	025	74.
395	39500.	2681.69	2682.80	-1.11	-2.57	025	74.
396	39600.	2682.60	2683.62	-1.02	-2.57	025	74.
	39613.				SEC.	7.780	
397	39700.	2683.47	2684.48	-1.02	-2.56	025	74.
398	39800.	2684.28	2685.40	-1.12	-2.56	025	73.
399	39900.	2685.09	2686.33	-1.24	-2.55	025	73.
400	40000.	2685.90	2687.25	-1.35	-2.55	025	73.
401	40100.	2686.71	2688.18	-1.47	-2.55	025	73.
402	40200.	2687.52	2689.10	-1.58	-2.55	025	73.



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403	40500.	2688.32	2690.02	-1.70	-2.54	025	73.
404	40400.	2687.13	2690.95	-1.82	-2.54	025	73.
405	40500.	2687.54	2691.87	-1.93	-2.54	025	73.
	40553.				SEC.	7.970	
	40593.				SEC.	7.970	
406	40600.	2690.71	2693.33	-2.61	-2.54	025	73.
	40623.				SEC.	7.970	
	40633.				SEC.	7.970	
407	40700.	2691.49	2695.36	-3.87	-2.54	025	73.
408	40800.	2692.37	2696.73	-4.36	-2.55	025	73.
409	40900.	2693.32	2697.57	-4.06	-2.55	025	73.
410	41000.	2694.27	2698.02	-3.76	-2.56	025	72.
411	41100.	2695.21	2698.67	-3.46	-2.56	025	73.
412	41200.	2696.16	2699.31	-3.15	-2.56	025	73.
413	41300.	2697.11	2699.96	-2.85	-2.56	025	73.
414	41400.	2698.15	2700.61	-2.55	-2.56	025	73.
415	41500.	2699.00	2701.25	-2.25	-2.56	025	73.
416	41600.	2699.95	2701.90	-1.95	-2.56	025	73.
417	41700.	2700.89	2702.54	-1.65	-2.56	025	73.
418	41800.	2701.84	2703.19	-1.35	-2.55	025	73.
	41803.				SEC.	8.200	
	41843.				SEC.	8.200	
	41873.				SEC.	8.200	
	41883.				SEC.	8.200	
419	41900.	2702.66	2705.20	-2.53	-2.55	025	73.
420	42000.	2703.30	2706.88	-3.58	-2.55	025	72.
421	42100.	2703.87	2706.87	-3.01	-2.56	025	72.
422	42200.	2704.44	2706.87	-2.43	-2.56	025	73.
	42223.				SEC.	8.270	
423	42300.	2705.29	2707.34	-2.05	-2.55	025	73.
424	42400.	2706.50	2708.43	-1.94	-2.55	025	73.
425	42500.	2707.79	2709.67	-1.87	-2.55	025	73.
426	42600.	2709.09	2710.90	-1.81	-2.55	025	73.
427	42700.	2710.38	2712.13	-1.75	-2.55	025	73.
428	42800.	2711.68	2713.37	-1.69	-2.55	025	73.
	42883.				SEC.	8.410	
429	42900.	2712.97	2714.61	-1.64	-2.54	025	73.
430	43000.	2714.20	2715.93	-1.72	-2.54	025	73.
431	43100.	2715.39	2717.29	-1.90	-2.54	025	74.
432	43200.	2716.58	2718.66	-2.08	-2.54	025	74.
433	43300.	2717.77	2720.03	-2.26	-2.54	025	74.
434	43400.	2718.96	2721.40	-2.44	-2.54	025	74.
435	43500.	2720.15	2722.77	-2.62	-2.54	025	74.
436	43600.	2721.34	2724.14	-2.80	-2.54	025	74.
437	43700.	2722.53	2725.51	-2.97	-2.54	025	74.
438	43800.	2723.72	2726.87	-3.15	-2.54	025	74.
439	43900.	2724.91	2728.24	-3.33	-2.54	025	74.
440	44000.	2726.10	2729.61	-3.51	-2.55	025	74.
441	44100.	2727.29	2730.98	-3.69	-2.55	025	74.
	44163.				SEC.	8.670	
442	44200.	2728.52	2732.30	-3.78	-2.55	025	74.
443	44300.	2729.87	2733.49	-3.62	-2.55	025	73.
444	44400.	2731.28	2734.58	-3.31	-2.56	025	73.
445	44500.	2732.69	2735.68	-2.99	-2.56	025	73.
446	44600.	2734.10	2736.78	-2.68	-2.56	025	73.
447	44700.	2735.51	2737.88	-2.37	-2.56	025	73.
	44763.				SEC.	8.800	
448	44800.	2736.82	2738.92	-2.10	-2.55	025	73.
449	44900.	2737.86	2739.82	-1.96	-2.55	025	74.
450	45000.	2738.72	2740.63	-1.90	-2.55	025	74.

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451	45100.	2739.59	2741.43	-1.84		025	71.
	45200.	2740.46	2742.24	-1.78	-2.55	025	74.
	45283.						8.920
	45300.	2741.31	2743.04	-1.73	-2.55	025	74.
454	45400.	2742.11	2743.81	-1.70	-2.55	025	74.
455	45500.	2742.87	2744.55	-1.68	-2.54	025	74.
456	45600.	2743.62	2745.29	-1.67	-2.54	025	74.
457	45700.	2744.38	2746.04	-1.66	-2.54	025	74.
458	45800.	2745.13	2746.78	-1.65	-2.54	025	74.
459	45900.	2745.89	2747.52	-1.63	-2.54	025	75.
460	46000.	2746.64	2748.27	-1.62	-2.54	025	75.
	46013.						9.060
	46033.				SEC.		9.060
	46053.				SEC.		9.060
461	46100.	2749.89	2751.43	-1.54	-2.53	025	75.
462	46200.	2753.02	2754.53	-1.51	-2.53	025	74.
463	46300.	2753.53	2755.14	-1.62	-2.53	025	75.
464	46400.	2754.03	2755.75	-1.72	-2.53	025	75.
465	46500.	2754.54	2756.36	-1.82	-2.52	025	75.
	46503.				SEC.		9.150
466	46600.	2755.27	2757.16	-1.88	-2.52	025	75.
467	46700.	2756.24	2758.15	-1.90	-2.52	025	75.
468	46800.	2757.22	2759.14	-1.93	-2.52	025	75.
469	46900.	2758.19	2760.14	-1.94	-2.52	025	75.
470	47000.	2759.17	2761.13	-1.96	-2.52	025	75.
	47023.				SEC.		9.260
	47063.				SEC.		9.260
	47093.				SEC.		9.260
471	47100.	2760.12	2762.46	-2.34	-2.52	025	75.
	47103.				SEC.		9.260
472	47200.	2760.95	2763.65	-2.71	-2.52	025	75.
473	47300.	2761.67	2764.38	-2.71	-2.52	025	75.
474	47400.	2762.40	2765.12	-2.72	-2.52	025	75.
475	47500.	2763.12	2765.86	-2.74	-2.52	025	75.
476	47600.	2763.85	2766.61	-2.76	-2.52	025	75.
477	47700.	2764.58	2767.35	-2.77	-2.52	025	75.
478	47800.	2765.30	2768.09	-2.79	-2.52	025	76.
	47803.				SEC.		9.390
479	47900.	2766.22	2768.89	-2.68	-2.52	025	75.
480	48000.	2767.32	2769.75	-2.43	-2.52	025	75.
481	48100.	2768.43	2770.62	-2.19	-2.52	025	76.
482	48200.	2769.54	2771.48	-1.94	-2.52	025	76.
483	48300.	2770.45	2772.34	-1.69	-2.52	025	76.
484	48400.	2771.75	2773.20	-1.45	-2.51	025	75.
485	48500.	2772.86	2774.06	-1.20	-2.51	025	75.
486	48600.	2773.97	2774.97	-0.95	-2.51	025	75.
	48653.				SEC.		9.500
487	48700.	2774.92	2775.72	-0.80	-2.51	025	75.
488	48800.	2775.52	2776.40	-0.87	-2.50	025	75.
489	48900.	2775.95	2777.00	-1.05	-2.50	025	75.
	48903.				SEC.		9.550
490	49000.	2777.27	2778.40	-1.14	-2.50	025	74.
491	49100.	2779.50	2780.61	-1.13	-2.49	025	75.
492	49200.	2781.77	2782.88	-1.11	-2.49	025	74.
493	49300.	2784.04	2785.13	-1.09	-2.49	025	74.
494	49400.	2786.30	2787.38	-1.07	-2.48	025	74.
495	49500.	2788.57	2789.62	-1.06	-2.48	025	74.
	49543.				SEC.		9.820
496	49600.	2790.39	2791.46	-1.07	-2.48	025	74.
497	49700.	2791.45	2792.57	-1.12	-2.48	025	74.

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498	4900.	2792.17	2793.37	-1.20	-2.47	025	74.
499	4990.	2792.90	2794.16	-1.27	-2.47	025	74.
500	5000.	2793.62	2794.96	-1.34	-2.47	025	73.
501	5010.	2794.34	2795.76	-1.42	-2.47	025	73.
502	5020.	2795.07	2796.53	-1.49	-2.47	025	73.
503	5030.	2795.79	2797.35	-1.56	-2.46	025	73.
504	5040.	2796.51	2798.15	-1.64	-2.45	025	73.
505	5050.	2797.23	2798.95	-1.71	-2.45	025	73.
	50503.				SEC.	10.000	
506	5060.	2798.44	2800.35	-1.91	-2.46	025	73.
507	5070.	2800.14	2802.37	-2.23	-2.46	025	73.
508	5080.	2801.85	2804.41	-2.55	-2.46	025	73.
509	5090.	2803.57	2806.45	-2.88	-2.46	025	73.
	50923.				SEC.	10.090	
510	5100.	2805.13	2807.12	-2.98	-2.46	025	74.
511	5110.	2806.51	2809.30	-2.79	-2.46	025	74.
512	5120.	2807.84	2810.37	-2.53	-2.46	025	74.
513	5130.	2809.16	2811.44	-2.27	-2.46	025	74.
514	5140.	2810.49	2812.50	-2.01	-2.46	025	74.
515	5150.	2811.82	2813.57	-1.75	-2.46	025	74.
516	5160.	2813.15	2814.64	-1.49	-2.46	025	74.
	51603.				SEC.	10.210	
517	5170.	2814.26	2815.73	-1.47	-2.46	025	74.
518	5180.	2815.15	2816.85	-1.70	-2.45	025	74.
519	5190.	2816.04	2817.97	-1.94	-2.45	025	74.
	51963.				SEC.	10.280	
520	5200.	2816.97	2819.11	-2.14	-2.45	025	74.
521	5210.	2818.05	2820.29	-2.25	-2.45	025	74.
522	5220.	2819.21	2821.51	-2.29	-2.45	025	74.
523	5230.	2820.38	2822.72	-2.34	-2.45	025	74.
524	5240.	2821.54	2823.94	-2.39	-2.45	025	74.
525	5250.	2822.71	2825.15	-2.45	-2.45	025	74.
	52503.				SEC.	10.390	

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS  
 INPUT 200 WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END  
 OF EACH REACH BY INC NO. FOR EXAMPLE: 202 200 525  
 A NEGATIVE INC NO. WILL SUPPRESS INTERMEDIATE INC OUTPUT.

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	ELEVATION DATA		MTD. AVG.	FHF	PERCENT WITHIN
		100	DIFF.			
	0.					0.050
1	100.	2498.54	2500.18	-1.63	015	100.
2	200.	2498.80	2500.46	-1.66	015	100.
3	300.	2499.05	2500.73	-1.68	015	100.
4	400.	2499.31	2501.01	-1.70	015	100.
5	500.	2499.56	2501.28	-1.72	015	100.
6	600.	2499.82	2501.56	-1.74	015	100.
7	700.	2500.07	2501.83	-1.76	015	100.
	800.				SEC.	0.230
8	800.	2500.32	2502.11	-1.79	015	100.
	840.				SEC.	0.230
	841.				SEC.	0.230

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	871.					SEC.	0.230	
	872.					SEC.	0.230	
	882.					SEC.	0.230	
9	900.	2501.12	2503.24	-2.12	-1.76	020	100.	
10	1000.	2501.86	2504.30	-2.44	-1.82	020	90.	
	1032.					SEC.	0.270	
11	1100.	2502.01	2504.45	-2.44	-1.88	020	82.	
12	1200.	2502.15	2504.60	-2.45	-1.93	020	75.	
13	1300.	2502.30	2504.76	-2.46	-1.97	020	100.	
14	1400.	2502.45	2504.91	-2.46	-2.00	020	100.	
15	1500.	2502.60	2505.06	-2.47	-2.03	020	100.	
16	1600.	2502.74	2505.22	-2.48	-2.06	020	100.	
17	1700.	2502.89	2505.37	-2.48	-2.09	020	100.	
18	1800.	2503.04	2505.53	-2.49	-2.11	020	100.	
19	1900.	2503.18	2505.68	-2.50	-2.13	020	100.	
20	2000.	2503.33	2505.84	-2.51	-2.15	020	100.	
21	2100.	2503.47	2505.99	-2.52	-2.17	020	100.	
22	2200.	2503.62	2506.14	-2.52	-2.18	020	100.	
23	2300.	2503.77	2506.30	-2.53	-2.20	020	100.	
24	2400.	2503.91	2506.45	-2.54	-2.21	020	100.	
	2432.					SEC.	0.550	
25	2500.	2504.09	2506.65	-2.56	-2.23	020	100.	
26	2600.	2504.32	2506.92	-2.60	-2.24	020	100.	
27	2700.	2504.57	2507.21	-2.64	-2.25	025	100.	
28	2800.	2504.81	2507.50	-2.69	-2.27	025	100.	
29	2900.	2505.06	2507.79	-2.73	-2.29	025	100.	
30	3000.	2505.30	2508.08	-2.77	-2.30	025	100.	
31	3100.	2505.55	2508.37	-2.82	-2.32	025	100.	
32	3200.	2505.79	2508.66	-2.86	-2.34	025	100.	
33	3300.	2506.04	2508.95	-2.90	-2.35	025	100.	
34	3400.	2506.29	2509.23	-2.95	-2.37	025	100.	
35	3500.	2506.53	2509.52	-2.99	-2.39	025	100.	
36	3600.	2506.78	2509.81	-3.04	-2.41	025	100.	
37	3700.	2507.02	2510.10	-3.08	-2.42	025	100.	
38	3800.	2507.27	2510.39	-3.13	-2.44	025	100.	
39	3900.	2507.51	2510.68	-3.17	-2.46	025	100.	
	3952.					SEC.	0.840	
40	4000.	2507.78	2510.99	-3.21	-2.48	025	100.	
41	4100.	2508.10	2511.36	-3.26	-2.50	025	100.	
42	4200.	2508.45	2511.74	-3.30	-2.52	025	100.	
43	4300.	2508.79	2512.13	-3.34	-2.54	025	100.	
44	4400.	2509.13	2512.52	-3.38	-2.56	025	100.	
45	4500.	2509.48	2512.91	-3.43	-2.58	025	100.	
46	4600.	2509.82	2513.29	-3.47	-2.60	025	100.	
47	4700.	2510.17	2513.68	-3.52	-2.62	025	100.	
48	4800.	2510.51	2514.07	-3.56	-2.64	025	100.	
49	4900.	2510.86	2514.46	-3.60	-2.65	025	98.	
50	5000.	2511.20	2514.85	-3.65	-2.67	025	96.	
51	5100.	2511.55	2515.23	-3.69	-2.69	025	94.	
52	5200.	2511.89	2515.62	-3.73	-2.71	025	90.	
53	5300.	2512.23	2516.01	-3.78	-2.73	025	89.	
	5392.					SEC.	1.160	
54	5400.	2512.58	2516.39	-3.81	-2.75	030	85.	
55	5500.	2512.90	2516.71	-3.81	-2.77	030	82.	
56	5600.	2513.20	2516.96	-3.76	-2.79	030	82.	
57	5700.	2513.51	2517.22	-3.71	-2.81	030	82.	
58	5800.	2513.81	2517.47	-3.66	-2.82	030	86.	
59	5900.	2514.11	2517.73	-3.62	-2.84	030	86.	
60	6000.	2514.41	2517.98	-3.57	-2.85	030	87.	
61	6100.	2514.72	2518.23	-3.52	-2.86	030	87.	

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62	6200.	2515.02	2518.49	-3.47	-2.87	030	87.
63	6300.	2515.32	2518.74	-3.42	-2.88	030	87.
64	6400.	2515.62	2519.00	-3.37	-2.89	030	88.
65	6500.	2515.93	2519.25	-3.32	-2.89	030	88.
66	6600.	2516.23	2519.51	-3.28	-2.90	030	88.
67	6700.	2516.53	2519.76	-3.23	-2.90	030	88.
	6752.				SEC.	1.450	
	6792.				SEC.	1.450	
	6793.				SEC.	1.450	
68	6800.	2516.71	2519.80	-3.09	-2.91	030	88.
	6823.				SEC.	1.450	
	6824.				SEC.	1.450	
	6864.				SEC.	1.450	
69	6900.	2517.21	2520.44	-3.22	-2.91	030	88.
70	7000.	2517.78	2521.23	-3.45	-2.92	030	89.
71	7100.	2517.95	2521.37	-3.43	-2.92	030	89.
72	7200.	2518.11	2521.51	-3.40	-2.93	030	89.
73	7300.	2518.27	2521.65	-3.38	-2.94	030	89.
74	7400.	2518.43	2521.79	-3.36	-2.94	030	89.
75	7500.	2518.60	2521.93	-3.34	-2.95	030	89.
76	7600.	2518.76	2522.07	-3.31	-2.95	030	89.
77	7700.	2518.92	2522.21	-3.29	-2.96	030	90.
78	7800.	2519.08	2522.35	-3.27	-2.96	030	90.
79	7900.	2519.25	2522.49	-3.25	-2.97	030	90.
80	8000.	2519.41	2522.63	-3.22	-2.97	030	90.
81	8100.	2519.57	2522.78	-3.20	-2.97	030	90.
	8164.				SEC.	1.700	
82	8200.	2519.76	2522.95	-3.18	-2.97	030	90.
83	8300.	2520.03	2523.20	-3.17	-2.98	030	90.
84	8400.	2520.35	2523.50	-3.16	-2.98	030	90.
85	8500.	2520.66	2523.81	-3.15	-2.98	030	91.
	8524.				SEC.	1.780	
	8564.				SEC.	1.780	
	8594.				SEC.	1.780	
86	8600.	2521.62	2525.84	-4.21	-2.99	030	90.
	8634.				SEC.	1.780	
87	8700.	2522.53	2527.74	-5.20	-3.02	030	89.
88	8800.	2522.81	2527.80	-4.98	-3.04	030	88.
89	8900.	2523.16	2527.86	-4.70	-3.06	030	87.
90	9000.	2523.52	2527.92	-4.41	-3.08	030	86.
91	9100.	2523.87	2527.99	-4.12	-3.09	030	85.
92	9200.	2524.22	2528.05	-3.84	-3.10	030	85.
93	9300.	2524.57	2528.12	-3.55	-3.10	030	85.
94	9400.	2524.92	2528.18	-3.26	-3.10	030	85.
	9444.				SEC.	1.950	
95	9500.	2525.23	2528.26	-3.03	-3.10	030	85.
96	9600.	2525.47	2528.35	-2.88	-3.10	030	85.
97	9700.	2525.68	2528.45	-2.78	-3.10	030	86.
98	9800.	2525.88	2528.56	-2.67	-3.09	030	86.
99	9900.	2526.09	2528.60	-2.57	-3.09	030	86.
100	10000.	2526.30	2528.76	-2.46	-3.08	030	86.
101	10100.	2526.51	2528.87	-2.36	-3.07	030	86.
102	10200.	2526.72	2528.97	-2.25	-3.06	030	86.
103	10300.	2526.92	2529.07	-2.15	-3.06	030	86.
104	10400.	2527.13	2529.18	-2.04	-3.05	030	86.
105	10500.	2527.34	2529.28	-1.94	-3.04	030	86.
106	10600.	2527.55	2529.38	-1.84	-3.02	030	85.
107	10700.	2527.76	2529.49	-1.73	-3.01	030	84.
	10704.				SEC.	2.190	
108	10800.	2528.06	2529.71	-1.64	-3.00	030	83.

109	10900.	2528.47	2530.04	-1.57	-2.99	030	83.
110	11000.	2528.89	2530.38	-1.49	-2.97	030	82.
111	11100.	2529.30	2530.71	-1.41	-2.96	030	81.
112	11200.	2529.72	2531.05	-1.33	-2.94	030	80.
113	11300.	2530.13	2531.39	-1.26	-2.93	030	81.
	11344.				SEC.	2.320	
	11345.				SEC.	2.320	
	11375.				SEC.	2.320	
	11376.				SEC.	2.320	
114	11400.	2530.52	2531.75	-1.22	-2.91	030	80.
115	11500.	2530.74	2531.98	-1.25	-2.90	030	79.
116	11600.	2530.81	2532.09	-1.28	-2.89	030	78.
117	11700.	2530.88	2532.19	-1.31	-2.87	030	78.
118	11800.	2530.96	2532.29	-1.34	-2.86	030	77.
	11876.				SEC.	2.400	
119	11900.	2537.78	2539.09	-1.32	-2.85	030	76.
	11916.				SEC.	2.400	
	11946.				SEC.	2.400	
	11956.				SEC.	2.400	
120	12000.	2554.91	2556.46	-1.55	-2.84	030	77.
121	12100.	2565.26	2567.08	-1.82	-2.83	030	75.
122	12200.	2565.26	2567.08	-1.82	-2.82	030	76.
123	12300.	2565.26	2567.09	-1.82	-2.81	030	76.
124	12400.	2565.27	2567.09	-1.83	-2.80	030	75.
125	12500.	2565.27	2567.10	-1.83	-2.80	030	75.
126	12600.	2565.27	2567.10	-1.83	-2.79	030	75.
127	12700.	2565.28	2567.11	-1.83	-2.78	030	76.
128	12800.	2565.28	2567.11	-1.83	-2.77	030	76.
129	12900.	2565.28	2567.12	-1.83	-2.77	030	76.
130	13000.	2565.29	2567.12	-1.84	-2.76	030	76.
131	13100.	2565.29	2567.13	-1.84	-2.75	030	76.
132	13200.	2565.29	2567.13	-1.84	-2.74	025	77.
133	13300.	2565.29	2567.14	-1.84	-2.74	025	77.
134	13400.	2565.30	2567.14	-1.84	-2.73	025	78.
135	13500.	2565.30	2567.14	-1.84	-2.72	025	78.
136	13600.	2565.30	2567.15	-1.85	-2.72	025	79.
137	13700.	2565.31	2567.15	-1.85	-2.71	025	79.
138	13800.	2565.31	2567.16	-1.85	-2.71	025	78.
139	13900.	2565.31	2567.16	-1.85	-2.70	025	79.
140	14000.	2565.32	2567.17	-1.85	-2.69	025	79.
141	14100.	2565.32	2567.17	-1.85	-2.69	025	79.
142	14200.	2565.32	2567.18	-1.86	-2.68	025	79.
143	14300.	2565.33	2567.18	-1.86	-2.68	025	80.
144	14400.	2565.33	2567.19	-1.86	-2.67	025	80.
145	14500.	2565.33	2567.19	-1.86	-2.66	025	80.
146	14600.	2565.34	2567.20	-1.86	-2.66	025	79.
147	14700.	2565.34	2567.20	-1.86	-2.65	025	80.
148	14800.	2565.34	2567.21	-1.87	-2.65	025	80.
149	14900.	2565.35	2567.21	-1.87	-2.64	025	81.
150	15000.	2565.35	2567.22	-1.87	-2.64	025	81.
151	15100.	2565.35	2567.22	-1.87	-2.63	025	81.
152	15200.	2565.36	2567.23	-1.87	-2.63	025	82.
153	15300.	2565.36	2567.23	-1.88	-2.62	025	82.
154	15400.	2565.36	2567.24	-1.88	-2.62	025	82.
155	15500.	2565.37	2567.24	-1.88	-2.61	025	81.
156	15500.	2565.37	2567.25	-1.88	-2.61	025	81.
157	15700.	2565.37	2567.25	-1.88	-2.60	025	82.
158	15800.	2565.37	2567.26	-1.88	-2.60	025	81.
159	15900.	2565.38	2567.26	-1.88	-2.59	025	81.
160	16000.	2565.38	2567.27	-1.88	-2.59	025	81.

161	16100.	2565.38	2567.27	-1.89	-2.59	025	81.
	16136.				SEC.	3.230	
162	16200.	2565.39	2567.28	-1.89	-2.58	025	81.
163	16300.	2565.39	2567.28	-1.89	-2.58	025	82.
164	16400.	2565.39	2567.29	-1.89	-2.57	025	82.
165	16500.	2565.40	2567.29	-1.90	-2.57	025	82.
166	16600.	2565.40	2567.30	-1.90	-2.56	025	82.
167	16700.	2565.41	2567.31	-1.90	-2.56	025	82.
168	16800.	2565.41	2567.31	-1.90	-2.56	025	82.
169	16900.	2565.42	2567.32	-1.90	-2.55	025	82.
170	17000.	2565.42	2567.33	-1.91	-2.55	025	82.
171	17100.	2565.42	2567.33	-1.91	-2.55	025	82.
172	17200.	2565.43	2567.34	-1.91	-2.54	025	82.
173	17300.	2565.43	2567.35	-1.91	-2.54	025	82.
174	17400.	2565.44	2567.35	-1.92	-2.53	025	82.
175	17500.	2565.44	2567.36	-1.92	-2.53	025	82.
176	17600.	2565.44	2567.37	-1.92	-2.53	025	82.
177	17700.	2565.45	2567.37	-1.92	-2.52	025	82.
178	17800.	2565.45	2567.38	-1.93	-2.52	025	83.
179	17900.	2565.46	2567.38	-1.93	-2.52	025	83.
180	18000.	2565.46	2567.39	-1.93	-2.51	025	82.
181	18100.	2565.46	2567.40	-1.93	-2.51	025	82.
182	18200.	2565.47	2567.40	-1.94	-2.51	025	82.
183	18300.	2565.47	2567.41	-1.94	-2.50	025	82.
	18336.				SEC.	3.690	
184	18400.	2565.50	2567.47	-1.97	-2.50	025	82.
185	18500.	2565.57	2567.62	-2.06	-2.50	025	82.
186	18600.	2565.65	2567.81	-2.16	-2.50	025	82.
187	18700.	2565.73	2567.99	-2.27	-2.50	025	82.
188	18800.	2565.81	2568.18	-2.37	-2.50	025	82.
	18896.				SEC.	3.810	
189	18900.	2565.91	2568.38	-2.47	-2.50	025	83.
	18936.				SEC.	3.810	
	18996.				SEC.	3.810	
190	19000.	2566.38	2570.17	-3.78	-2.50	025	82.
	19016.				SEC.	3.810	
191	19100.	2566.89	2571.78	-4.90	-2.51	025	82.
192	19200.	2567.17	2571.89	-4.72	-2.53	025	82.
193	19300.	2567.56	2572.21	-4.66	-2.54	025	82.
194	19400.	2567.95	2572.54	-4.59	-2.53	025	82.
195	19500.	2568.33	2572.86	-4.53	-2.56	025	81.
196	19600.	2568.72	2573.19	-4.47	-2.57	025	81.
197	19700.	2569.10	2573.51	-4.41	-2.58	025	81.
	19756.				SEC.	3.970	
	19796.				SEC.	3.970	
198	19800.	2569.41	2573.71	-4.30	-2.59	025	80.
	19826.				SEC.	3.970	
	19836.				SEC.	3.970	
199	19900.	2569.85	2574.21	-4.36	-2.59	025	80.
200	20000.	2570.26	2574.74	-4.48	-2.59	025	80.

ELEVATION DIFFERENCE  
BETWEEN BASE FLOOD AND

WEIGHTED AVG FOR REACH 10% 2% 0.2%  
-2.60 -0.55 1.41

FHF FOR REACH 1 = 025 WITH 80.4 OF THE REACH WITHIN 1.0 FEET  
ZONE FOR THE REACH = A 5

J01

201	20100.	2570.44	2574.90	-4.46	-4.46	045	100.
202	20200.	2570.63	2575.06	-4.43	-4.44	045	100.
203	20300.	2570.81	2575.22	-4.40	-4.43	045	100.
204	20400.	2571.00	2575.38	-4.38	-4.42	045	100.
205	20500.	2571.19	2575.54	-4.35	-4.40	045	100.
206	20600.	2571.37	2575.70	-4.32	-4.39	045	100.
207	20700.	2571.56	2575.86	-4.30	-4.38	045	100.
	20776.					SEC.	4.140
208	20800.	2571.75	2575.99	-4.24	-4.36	045	100.
	20816.					SEC.	4.140
209	20900.	2571.87	2576.18	-4.32	-4.35	045	100.
	20931.					SEC.	4.140
	20961.					SEC.	4.140
210	21000.	2571.96	2576.48	-4.52	-4.37	045	100.
211	21100.	2572.11	2576.69	-4.58	-4.39	045	100.
212	21200.	2572.28	2576.79	-4.51	-4.40	045	100.
213	21300.	2572.45	2576.89	-4.45	-4.40	045	100.
214	21400.	2572.61	2576.99	-4.38	-4.40	045	100.
215	21500.	2572.78	2577.09	-4.31	-4.40	045	100.
216	21600.	2572.95	2577.19	-4.24	-4.39	045	100.
	21671.					SEC.	4.280
217	21700.	2573.12	2577.29	-4.17	-4.37	045	100.
	21711.					SEC.	4.280
	21712.					SEC.	4.280
	21717.					SEC.	4.280
	21718.					SEC.	4.280
	21728.					SEC.	4.280
218	21800.	2573.53	2577.46	-3.93	-4.35	045	100.
219	21900.	2573.94	2577.83	-3.70	-4.31	045	100.
220	22000.	2574.13	2577.76	-3.63	-4.28	045	100.
221	22100.	2574.33	2577.89	-3.56	-4.25	040	100.
222	22200.	2574.53	2578.02	-3.49	-4.21	040	100.
223	22300.	2574.72	2578.14	-3.42	-4.18	040	100.
224	22400.	2574.92	2578.27	-3.36	-4.14	040	100.
	22463.					SEC.	4.430
225	22500.	2575.17	2578.45	-3.28	-4.11	040	100.
226	22600.	2575.56	2578.75	-3.19	-4.07	040	100.
227	22700.	2576.04	2579.13	-3.09	-4.04	040	100.
228	22800.	2576.53	2579.51	-2.98	-4.00	040	96.
229	22900.	2577.01	2579.89	-2.88	-3.96	040	97.
230	23000.	2577.50	2580.27	-2.78	-3.92	040	93.
231	23100.	2577.98	2580.65	-2.67	-3.88	040	94.
232	23200.	2578.46	2581.03	-2.57	-3.84	040	91.
233	23300.	2578.95	2581.41	-2.47	-3.80	040	88.
234	23400.	2579.43	2581.79	-2.37	-3.76	040	88.
	23463.					SEC.	4.630
235	23500.	2579.93	2582.22	-2.29	-3.71		86.
236	23600.	2580.48	2582.77	-2.28	-3.67		86.
237	23700.	2581.07	2583.39	-2.32	-3.64		84.
238	23800.	2581.65	2584.01	-2.36	-3.60	035	82.
239	23900.	2582.23	2584.64	-2.40	-3.57	035	77.
240	24000.	2582.82	2585.26	-2.44	-3.55	035	78.
241	24100.	2583.40	2585.88	-2.48	-3.52	035	73.
242	24200.	2583.98	2586.51	-2.52	-3.50	035	71.
243	24300.	2584.57	2587.13	-2.56	-3.47	035	74.
244	24400.	2585.15	2587.75	-2.60	-3.45	035	75.
	24403.					SEC.	4.820
245	24500.	2585.71	2588.37	-2.66	-3.44	035	76.
246	24600.	2586.26	2588.99	-2.73	-3.42	035	74.
247	24700.	2586.81	2589.61	-2.80	-3.41	035	74.



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248	24800.	2587.35	2590.23	-2.88	-3.40	035	75.
249	24900.	2587.90	2590.85	-2.95	-3.39	035	76.
250	25000.	2588.44	2591.47	-3.02	-3.38	035	76.
	25013.					SEC.	4.960
	25053.					SEC.	4.960
	25068.					SEC.	4.960
	25078.					SEC.	4.960
251	25100.	2588.78	2591.77	-3.02	-3.37	035	75.
	25138.					SEC.	4.960
252	25200.	2589.42	2592.90	-3.48	-3.38	035	75.
253	25300.	2590.30	2594.27	-3.97	-3.39	035	77.
254	25400.	2590.81	2594.74	-3.94	-3.40	035	78.
255	25500.	2591.31	2595.22	-3.91	-3.41	035	78.
256	25600.	2591.82	2595.69	-3.87	-3.41	035	79.
257	25700.	2592.33	2596.17	-3.84	-3.42	035	79.
258	25800.	2592.83	2596.64	-3.81	-3.43	035	79.
	25888.					SEC.	5.100
259	25900.	2593.31	2597.07	-3.76	-3.43	035	81.
	25928.					SEC.	5.100
	25958.					SEC.	5.100
	25968.					SEC.	5.100
260	26000.	2593.77	2597.60	-3.83	-3.44	035	82.
261	26100.	2594.08	2597.98	-3.90	-3.45	035	82.
262	26200.	2594.20	2598.06	-3.86	-3.45	035	84.
263	26300.	2594.32	2598.13	-3.81	-3.46	035	84.
264	26400.	2594.44	2598.21	-3.77	-3.47	035	84.
	26428.					SEC.	5.200
265	26500.	2594.68	2598.38	-3.70	-3.47	035	83.
266	26600.	2595.09	2598.68	-3.59	-3.47	035	83.
267	26700.	2595.55	2599.02	-3.47	-3.47	035	84.
268	26800.	2596.01	2599.36	-3.35	-3.47	035	84.
269	26900.	2596.47	2599.70	-3.23	-3.47	035	86.
270	27000.	2596.93	2600.04	-3.12	-3.46	035	86.
271	27100.	2597.39	2600.38	-2.99	-3.45	035	85.
272	27200.	2597.85	2600.73	-2.88	-3.45	035	85.
273	27300.	2598.31	2601.07	-2.76	-3.44	035	85.
274	27400.	2598.77	2601.41	-2.64	-3.43	035	84.
275	27500.	2599.23	2601.75	-2.52	-3.41	035	84.
276	27600.	2599.69	2602.09	-2.40	-3.40	035	84.
277	27700.	2600.15	2602.43	-2.28	-3.39	035	83.
278	27800.	2600.61	2602.77	-2.16	-3.37	035	79.
279	27900.	2601.07	2603.11	-2.04	-3.35	035	81.
	27958.					SEC.	5.490
280	28000.	2601.59	2603.55	-1.96	-3.34	035	79.
281	28100.	2602.26	2604.22	-1.97	-3.32	035	78.
282	28200.	2603.01	2605.03	-2.02	-3.30	035	74.
283	28300.	2603.76	2605.83	-2.07	-3.29	035	72.
	28318.					SEC.	5.580
	28358.					SEC.	5.580
	28393.					SEC.	5.580
284	28400.	2605.03	2607.12	-2.09	-3.27	035	75.
	28433.					SEC.	5.580
285	28500.	2606.03	2608.07	-2.04	-3.26	035	74.
286	28600.	2606.19	2608.19	-2.01	-3.25	030	73.
287	28700.	2606.31	2608.29	-1.98	-3.23	030	70.
	28773.					SEC.	5.640
288	28800.	2606.51	2608.44	-1.93	-3.22	030	69.
289	28900.	2606.95	2608.73	-1.78	-3.20	030	69.
290	29000.	2607.58	2609.13	-1.55	-3.18	030	68.
291	29100.	2608.20	2609.53	-1.33	-3.16	030	67.

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	29123.				SEC.	5.710	
292	29200.	2608.84	2610.06	-1.22	-3.14	030	66.
293	29300.	2609.49	2610.78	-1.29	-3.12	030	66.
294	29400.	2610.15	2611.53	-1.38	-3.10	030	65.
295	29500.	2610.80	2612.29	-1.48	-3.08	030	65.
296	29600.	2611.46	2613.04	-1.58	-3.07	030	66.
297	29700.	2612.12	2613.79	-1.68	-3.05	030	65.
298	29800.	2612.77	2614.55	-1.78	-3.04	030	66.
299	29900.	2613.43	2615.30	-1.87	-3.03	030	66.
300	30000.	2614.09	2616.05	-1.97	-3.02	030	66.
	30023.				SEC.	5.910	
301	30100.	2614.84	2616.82	-1.98	-3.01	030	65.
302	30200.	2615.72	2617.59	-1.87	-3.00	030	66.
303	30300.	2616.63	2618.36	-1.73	-2.98	030	65.
	30303.				SEC.	5.970	
304	30400.	2617.35	2618.93	-1.58	-2.97	030	66.
305	30500.	2617.88	2619.30	-1.42	-2.96	030	68.
306	30600.	2618.40	2619.67	-1.27	-2.94	030	67.
	30643.				SEC.	6.060	
307	30700.	2619.04	2620.18	-1.14	-2.92	030	65.
308	30800.	2619.89	2620.95	-1.06	-2.91	030	65.
309	30900.	2620.82	2621.83	-1.02	-2.89	030	62.
	30923.				SEC.	6.120	
310	31000.	2621.53	2622.57	-1.04	-2.87	030	63.
	31083.				SEC.	6.160	
311	31100.	2621.95	2623.20	-1.25	-2.86	030	61.
	31133.				SEC.	6.160	
	31183.				SEC.	6.160	
312	31200.	2622.50	2624.53	-2.03	-2.85	030	62.
	31223.				SEC.	6.160	
313	31300.	2622.95	2625.69	-2.73	-2.85	030	62.
	31313.				SEC.	6.200	
314	31400.	2623.45	2626.15	-2.70	-2.85	030	62.
315	31500.	2624.55	2626.74	-2.45	-2.84	030	63.
316	31600.	2625.19	2627.34	-2.15	-2.84	030	62.
317	31700.	2626.08	2627.94	-1.86	-2.83	030	62.
	31793.				SEC.	6.310	
318	31800.	2626.95	2628.53	-1.58	-2.82	030	61.
319	31900.	2627.63	2629.09	-1.45	-2.81	030	60.
320	32000.	2628.13	2629.61	-1.48	-2.80	030	58.
321	32100.	2628.63	2630.13	-1.50	-2.79	030	58.
322	32200.	2629.13	2630.65	-1.52	-2.78	030	59.
323	32300.	2629.63	2631.18	-1.54	-2.77	030	58.
324	32400.	2630.13	2631.70	-1.56	-2.76	030	56.
325	32500.	2630.63	2632.22	-1.59	-2.75	025	56.
326	32600.	2631.13	2632.74	-1.61	-2.74	025	56.
327	32700.	2631.64	2633.27	-1.63	-2.73	025	56.
	32793.				SEC.	6.480	
328	32800.	2632.14	2633.79	-1.65	-2.72	025	55.
329	32900.	2632.69	2634.39	-1.70	-2.71	025	55.
330	33000.	2633.29	2635.05	-1.76	-2.71	025	55.
331	33100.	2633.88	2635.71	-1.82	-2.70	025	56.
332	33200.	2634.48	2636.38	-1.88	-2.69	025	55.
333	33300.	2635.08	2637.02	-1.95	-2.69	025	56.
	33373.				SEC.	6.610	
334	33400.	2635.75	2638.16	-2.41	-2.68	025	56.
	33413.				SEC.	6.610	
	33443.				SEC.	6.610	
	33453.				SEC.	6.610	
335	33500.	2637.02	2639.88	-2.86	-2.69	025	56.

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336	33600.	2638.56	2641.77	-3.21	-2.69	025		57.
	33673.					SEC.	6.740	
337	33700.	2639.78	2643.53	-3.75	-2.70	025		58.
338	33800.	2640.75	2644.60	-3.86	-2.71	025		57.
339	33900.	2641.54	2645.17	-3.63	-2.71	025		57.
340	34000.	2642.33	2645.73	-3.41	-2.72	025		57.
341	34100.	2643.12	2646.30	-3.18	-2.72	025		57.
342	34200.	2643.90	2646.87	-2.96	-2.72	025		58.
343	34300.	2644.69	2647.43	-2.74	-2.72	025		58.
	34353.					SEC.	6.790	
	34393.					SEC.	6.790	
344	34400.	2645.34	2647.91	-2.57	-2.72	025		58.
	34443.					SEC.	6.790	
	34453.					SEC.	6.790	
345	34500.	2645.77	2648.25	-2.47	-2.72	025		59.
346	34600.	2646.07	2648.52	-2.45	-2.72	025		59.
347	34700.	2646.30	2648.78	-2.48	-2.72	025		59.
348	34800.	2646.53	2649.04	-2.50	-2.72	025		59.
349	34900.	2646.76	2649.29	-2.53	-2.71	025		60.
350	35000.	2646.99	2649.54	-2.56	-2.71	025		60.
351	35100.	2647.22	2649.80	-2.58	-2.71	025		60.
352	35200.	2647.45	2650.06	-2.61	-2.71	025		61.
353	35300.	2647.68	2650.31	-2.64	-2.71	025		61.
354	35400.	2647.91	2650.57	-2.66	-2.71	025		61.
355	35500.	2648.13	2650.82	-2.69	-2.71	025		61.
	35533.					SEC.	7.000	
356	35600.	2648.61	2651.28	-2.67	-2.71	025		62.
357	35700.	2649.45	2652.03	-2.58	-2.71	025		62.
358	35800.	2650.41	2652.88	-2.47	-2.71	025		62.
359	35900.	2651.37	2653.74	-2.37	-2.71	025		62.
360	36000.	2652.33	2654.59	-2.26	-2.70	025		63.
361	36100.	2653.30	2655.44	-2.15	-2.70	025		63.
362	36200.	2654.26	2656.29	-2.04	-2.70	025		63.
363	36300.	2655.22	2657.15	-1.93	-2.69	025		63.
364	36400.	2656.18	2658.00	-1.82	-2.69	025		63.
365	36500.	2657.14	2658.85	-1.71	-2.68	025		63.
366	36600.	2658.10	2659.71	-1.60	-2.67	025		63.
367	36700.	2659.06	2660.56	-1.49	-2.67	025		63.
	36753.					SEC.	7.230	
	36793.					SEC.	7.230	
368	36800.	2660.12	2661.68	-1.56	-2.66	025		63.
	36823.					SEC.	7.230	
	36833.					SEC.	7.230	
369	36900.	2660.92	2662.60	-1.69	-2.65	025		63.
370	37000.	2661.47	2663.17	-1.70	-2.65	025		64.
371	37100.	2662.10	2663.83	-1.72	-2.64	025		64.
372	37200.	2662.74	2664.49	-1.75	-2.64	025		64.
373	37300.	2663.38	2665.15	-1.77	-2.63	025		64.
374	37400.	2664.01	2665.81	-1.79	-2.63	025		64.
375	37500.	2664.65	2666.47	-1.82	-2.62	025		64.
376	37600.	2665.29	2667.13	-1.84	-2.62	025		64.
377	37700.	2665.92	2667.79	-1.87	-2.61	025		64.
378	37800.	2666.56	2668.45	-1.89	-2.61	025		65.
379	37900.	2667.20	2669.11	-1.92	-2.61	025		65.
	37953.					SEC.	7.460	
380	38000.	2667.91	2669.85	-1.94	-2.60	025		66.
381	38100.	2668.77	2670.75	-1.98	-2.60	025		66.
382	38200.	2669.72	2671.74	-2.02	-2.60	025		66.
383	38300.	2670.68	2672.73	-2.06	-2.59	025		67.
	38373.					SEC.	7.540	

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384	38400.	2671.62	2673.70	-2.08	-2.59	025	67.
385	38500.	2672.55	2674.59	-2.04	-2.59	025	68.
386	38600.	2673.46	2675.41	-1.94	-2.58	025	68.
387	38700.	2674.38	2676.23	-1.85	-2.58	025	68.
388	38800.	2675.29	2677.05	-1.76	-2.58	025	69.
389	38900.	2676.20	2677.87	-1.67	-2.57	025	69.
390	39000.	2677.12	2678.69	-1.57	-2.57	025	69.
391	39100.	2678.03	2679.51	-1.48	-2.56	025	70.
392	39200.	2678.95	2680.33	-1.39	-2.55	025	69.
393	39300.	2679.86	2681.15	-1.30	-2.55	025	69.
394	39400.	2680.77	2681.98	-1.21	-2.54	025	70.
395	39500.	2681.69	2682.80	-1.11	-2.53	025	69.
396	39600.	2682.60	2683.62	-1.02	-2.53	025	69.
	39613.				SEC.	7.730	
397	39700.	2683.47	2684.48	-1.02	-2.52	025	69.
398	39800.	2684.28	2685.40	-1.12	-2.51	025	69.
399	39900.	2685.09	2686.33	-1.24	-2.50	025	68.
400	40000.	2685.90	2687.25	-1.35	-2.50	025	69.
401	40100.	2686.71	2688.18	-1.47	-2.49	025	69.
402	40200.	2687.52	2689.10	-1.58	-2.49	025	68.
403	40300.	2688.32	2690.02	-1.70	-2.48	025	68.
404	40400.	2689.13	2690.95	-1.82	-2.48	025	70.
405	40500.	2689.94	2691.87	-1.93	-2.48	025	69.
	40553.				SEC.	7.970	
	40593.				SEC.	7.970	
406	40600.	2690.71	2693.33	-2.61	-2.48	025	70.
	40623.				SEC.	7.970	
	40633.				SEC.	7.970	
407	40700.	2691.49	2693.36	-3.87	-2.49	025	69.
408	40800.	2692.37	2696.73	-4.36	-2.50	025	68.
409	40900.	2693.32	2697.37	-4.06	-2.50	025	67.
410	41000.	2694.26	2698.02	-3.76	-2.51	025	67.
411	41100.	2695.21	2698.67	-3.46	-2.51	025	67.
412	41200.	2696.16	2699.31	-3.15	-2.52	025	67.
413	41300.	2697.11	2699.96	-2.85	-2.52	025	68.
414	41400.	2698.05	2700.61	-2.55	-2.52	025	68.
415	41500.	2699.00	2701.25	-2.25	-2.52	025	68.
416	41600.	2699.95	2701.90	-1.95	-2.51	025	68.
417	41700.	2700.89	2702.54	-1.65	-2.51	025	68.
418	41800.	2701.84	2703.19	-1.35	-2.50	025	68.
	41803.				SEC.	8.200	
	41843.				SEC.	8.200	
	41873.				SEC.	8.200	
	41883.				SEC.	8.200	
419	41900.	2702.66	2705.20	-2.53	-2.50	025	68.
420	42000.	2703.30	2706.88	-3.58	-2.51	025	68.
421	42100.	2703.87	2708.87	-3.01	-2.51	025	68.
422	42200.	2704.44	2706.87	-2.43	-2.51	025	68.
	42223.				SEC.	8.270	
423	42300.	2705.29	2707.34	-2.06	-2.51	025	68.
424	42400.	2706.50	2708.43	-1.94	-2.51	025	68.
425	42500.	2707.75	2709.67	-1.92	-2.50	025	68.
426	42600.	2709.09	2710.90	-1.81	-2.50	025	69.
427	42700.	2710.38	2712.13	-1.75	-2.50	025	69.
428	42800.	2711.68	2713.37	-1.69	-2.49	025	70.
	42883.				SEC.	8.410	
429	42900.	2712.97	2714.61	-1.64	-2.49	025	69.
430	43000.	2714.20	2715.93	-1.72	-2.49	025	70.
431	43100.	2715.39	2717.29	-1.90	-2.48	025	70.
432	43200.	2716.58	2718.66	-2.08	-2.48	025	71.

433	43300.	2717.77	2720.03	-2.26	-2.48	025	71.
434	43400.	2718.96	2721.40	-2.44	-2.48	025	71.
435	43500.	2720.15	2722.77	-2.62	-2.48	025	71.
436	43600.	2721.34	2724.14	-2.80	-2.48	025	70.
437	43700.	2722.53	2725.51	-2.97	-2.49	025	70.
438	43800.	2723.72	2726.87	-3.15	-2.49	025	71.
439	43900.	2724.91	2728.24	-3.33	-2.49	025	71.
440	44000.	2726.10	2729.61	-3.51	-2.50	025	70.
441	44100.	2727.29	2730.98	-3.69	-2.50	025	70.
	44163.				SEC.	8.670	
442	44200.	2728.52	2732.30	-3.78	-2.51	025	69.
443	44300.	2729.87	2733.48	-3.62	-2.51	025	70.
444	44400.	2731.28	2734.58	-3.31	-2.51	025	70.
445	44500.	2732.69	2735.79	-2.99	-2.52	025	70.
446	44600.	2734.10	2736.78	-2.68	-2.52	025	70.
447	44700.	2733.51	2737.88	-2.37	-2.52	025	70.
	44783.				SEC.	8.700	
448	44800.	2736.82	2738.92	-2.10	-2.51	025	70.
449	44900.	2737.86	2739.82	-1.96	-2.51	025	70.
450	45000.	2738.72	2740.63	-1.90	-2.51	025	70.
451	45100.	2739.59	2741.43	-1.84	-2.51	025	70.
452	45200.	2740.46	2742.24	-1.78	-2.50	025	70.
	45283.				SEC.	8.920	
453	45300.	2741.31	2743.04	-1.73	-2.50	025	70.
454	45400.	2742.11	2743.81	-1.70	-2.50	025	71.
455	45500.	2742.87	2744.55	-1.68	-2.50	025	71.
456	45600.	2743.62	2745.29	-1.67	-2.49	025	71.
457	45700.	2744.38	2746.04	-1.66	-2.49	025	71.
458	45800.	2745.13	2746.78	-1.65	-2.49	025	71.
459	45900.	2745.89	2747.52	-1.63	-2.48	025	72.
460	46000.	2746.64	2748.27	-1.62	-2.48	025	72.
	46013.				SEC.	9.060	
	46033.				SEC.	9.060	
	46053.				SEC.	9.060	
461	46100.	2749.89	2751.43	-1.54	-2.48	025	72.
462	46200.	2753.02	2754.53	-1.51	-2.47	025	73.
463	46300.	2753.53	2755.14	-1.62	-2.47	025	73.
464	46400.	2754.03	2755.75	-1.72	-2.47	025	73.
465	46500.	2754.54	2756.36	-1.82	-2.46	025	73.
	46503.				SEC.	9.150	
466	46600.	2755.27	2757.16	-1.88	-2.46	025	73.
467	46700.	2756.24	2758.15	-1.90	-2.46	025	73.
468	46800.	2757.22	2759.14	-1.93	-2.46	025	73.
469	46900.	2758.19	2760.14	-1.94	-2.45	025	73.
470	47000.	2759.17	2761.13	-1.96	-2.45	025	73.
	47023.				SEC.	9.260	
	47043.				SEC.	9.260	
	47093.				SEC.	9.260	
471	47100.	2760.12	2762.44	-2.34	-2.45	025	73.
	47103.				SEC.	9.260	
472	47200.	2760.95	2763.45	-2.71	-2.45	025	74.
473	47300.	2761.67	2764.11	-2.71	-2.45	025	74.
474	47400.	2762.40	2765.12	-2.72	-2.46	025	74.
475	47500.	2763.12	2765.86	-2.74	-2.46	025	74.
476	47600.	2763.85	2766.61	-2.76	-2.46	025	74.
477	47700.	2764.58	2767.35	-2.77	-2.46	025	74.
478	47800.	2765.30	2768.09	-2.79	-2.46	025	74.
	47803.				SEC.	9.390	
479	47900.	2766.22	2768.89	-2.58	-2.46	025	74.
480	48000.	2767.32	2769.75	-2.43	-2.46	025	74.

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481	48100.	2768.43	2770.62	-2.19	-2.46	025	74.
482	48200.	2769.34	2771.48	-1.94	-2.46	025	74.
483	48300.	2770.65	2772.34	-1.69	-2.46	025	75.
484	48400.	2771.75	2773.20	-1.45	-2.45	025	74.
485	48500.	2772.86	2774.06	-1.20	-2.45	025	74.
486	48600.	2773.97	2774.92	-0.95	-2.44	025	74.
48453. SEC.							9.500
487	48700.	2774.92	2775.72	-0.80	-2.44	025	74.
488	48800.	2775.52	2776.40	-0.87	-2.43	025	74.
489	48900.	2775.95	2777.00	-1.05	-2.43	025	73.
48903. SEC.							9.550
490	49000.	2777.27	2778.40	-1.14	-2.42	025	73.
491	49100.	2777.50	2780.63	-1.13	-2.42	025	73.
492	49200.	2781.77	2782.88	-1.11	-2.41	025	73.
493	49300.	2784.04	2785.17	-1.09	-2.41	025	72.
494	49400.	2786.30	2787.38	-1.07	-2.40	025	72.
495	49500.	2788.57	2789.62	-1.05	-2.40	025	72.
49543. SEC.							9.820
496	49600.	2790.39	2791.46	-1.07	-2.39	025	71.
497	49700.	2791.45	2792.57	-1.12	-2.39	025	71.
498	49800.	2792.17	2793.37	-1.20	-2.39	025	71.
499	49900.	2792.90	2794.16	-1.27	-2.38	025	71.
500	50000.	2793.62	2794.96	-1.34	-2.38	025	71.
501	50100.	2794.36	2795.76	-1.42	-2.38	025	71.
502	50200.	2795.07	2796.55	-1.49	-2.37	025	71.
503	50300.	2795.79	2797.35	-1.56	-2.37	025	71.
504	50400.	2796.51	2798.15	-1.64	-2.37	025	71.
505	50500.	2797.23	2798.95	-1.71	-2.37	025	71.
50503. SEC.							10.000
506	50600.	2798.44	2800.35	-1.91	-2.36	025	72.
507	50700.	2800.14	2802.37	-2.23	-2.36	025	72.
508	50800.	2801.85	2804.41	-2.55	-2.36	025	72.
509	50900.	2803.57	2806.65	-2.88	-2.37	025	72.
50923. SEC.							10.090
510	51000.	2805.13	2808.12	-2.98	-2.37	025	72.
511	51100.	2806.51	2809.30	-2.79	-2.37	025	72.
512	51200.	2807.84	2810.37	-2.53	-2.37	025	72.
513	51300.	2809.16	2811.44	-2.27	-2.37	025	72.
514	51400.	2810.49	2812.50	-2.01	-2.37	025	72.
515	51500.	2811.82	2813.57	-1.75	-2.37	025	72.
516	51600.	2813.15	2814.64	-1.47	-2.36	025	72.
51603. SEC.							10.210
517	51700.	2814.26	2815.73	-1.47	-2.36	025	73.
518	51800.	2815.15	2816.85	-1.70	-2.36	025	73.
519	51900.	2816.04	2817.97	-1.94	-2.36	025	73.
51963. SEC.							10.280
520	52000.	2816.97	2819.11	-2.14	-2.36	025	73.
521	52100.	2818.05	2820.29	-2.25	-2.36	025	73.
522	52200.	2819.21	2821.51	-2.29	-2.36	025	73.
523	52300.	2820.38	2822.72	-2.34	-2.36	025	73.
524	52400.	2821.54	2823.94	-2.39	-2.36	025	73.
525	52500.	2822.71	2825.15	-2.45	-2.36	025	73.
52503. SEC.							10.390

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ELEVATION DIFFERENCE

BETWEEN BASE FLOOD AND

WEIGHTED AVG FOR REACH	104	24	0.24
	-2.36	-0.67	1.23

FHF FOR REACH 2 @ 025 WITH 73.4 OF THE REACH WITHIN 1.0 FEET

ZONE FOR THE REACH = A 5

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A large rectangular area containing approximately 25 horizontal lines, serving as a template for data entry or notes.