

5) Simulación analítica del tránsito de la avenida para un vertedor de cresta libre con longitud efectiva de 100 m.

VERTEDOR DEL PROYECTO: PRESA ARCEDIANO (Vertedor sin control)

| | |
|---------------------------------------|---------------------|
| INTERVALO DE TIEMPO DEL CÁLCULO | 6 horas |
| NÚMERO DE INTERVALOS | 121 m |
| GASTO POR TURBINAS | 0 m ³ /s |
| NIVEL DE LA CRESTA | 1120 msnm |
| TIPO DE OPERACIÓN | 1 |
| COEFICIENTE DE DESCARGA | 2 |
| LONGITUD EFECTIVA | 100 m |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO | EVOLUCIÓN DEL VASO | |
|-----|--------|------|-------------------|-------------------|-------------------|--------------------|---------------------|
| | DIA | HORA | ENTRADA | SALIDA | TURBINADO | ELEVACIÓN | VOLUMEN |
| | | | m ³ /s | m ³ /s | m ³ /s | msnm | Mill.m ³ |
| 1 | 1 | 0 | 900.5 | 900.5 | 0 | 1122.73 | 566.4 |
| 2 | 1 | 6 | 903.4 | 901.6 | 0 | 1122.73 | 566.4 |
| 3 | 1 | 12 | 906.3 | 903.8 | 0 | 1122.73 | 566.4 |
| 4 | 1 | 18 | 909.2 | 906.5 | 0 | 1122.74 | 566.5 |
| 5 | 2 | 0 | 912.2 | 909.4 | 0 | 1122.74 | 566.5 |
| 6 | 2 | 6 | 894.0 | 905.0 | 0 | 1122.74 | 566.5 |
| 7 | 2 | 12 | 875.9 | 891.3 | 0 | 1122.71 | 566.2 |
| 8 | 2 | 18 | 857.7 | 874.6 | 0 | 1122.67 | 565.8 |
| 9 | 3 | 0 | 839.6 | 857.0 | 0 | 1122.64 | 565.5 |
| 10 | 3 | 6 | 853.7 | 849.9 | 0 | 1122.62 | 565.3 |
| 11 | 3 | 12 | 867.9 | 857.3 | 0 | 1122.64 | 565.5 |
| 12 | 3 | 18 | 882.0 | 869.2 | 0 | 1122.66 | 565.7 |
| 13 | 4 | 0 | 896.2 | 882.8 | 0 | 1122.69 | 566.0 |
| 14 | 4 | 6 | 897.5 | 892.3 | 0 | 1122.71 | 566.2 |
| 15 | 4 | 12 | 898.8 | 896.3 | 0 | 1122.72 | 566.3 |
| 16 | 4 | 18 | 900.1 | 898.5 | 0 | 1122.72 | 566.3 |
| 17 | 5 | 0 | 901.5 | 900.1 | 0 | 1122.73 | 566.4 |
| 18 | 5 | 6 | 898.2 | 899.9 | 0 | 1122.73 | 566.3 |
| 19 | 5 | 12 | 894.9 | 897.5 | 0 | 1122.72 | 566.3 |
| 20 | 5 | 18 | 891.6 | 894.6 | 0 | 1122.71 | 566.2 |
| 21 | 6 | 0 | 888.3 | 891.4 | 0 | 1122.71 | 566.2 |
| 22 | 6 | 6 | 871.0 | 883.3 | 0 | 1122.69 | 566.0 |
| 23 | 6 | 12 | 853.7 | 869.1 | 0 | 1122.66 | 565.7 |
| 24 | 6 | 18 | 836.4 | 852.7 | 0 | 1122.63 | 565.4 |
| 25 | 7 | 0 | 819.1 | 835.9 | 0 | 1122.59 | 565.0 |
| 26 | 7 | 6 | 842.9 | 832.6 | 0 | 1122.59 | 564.9 |
| 27 | 7 | 12 | 866.7 | 847.5 | 0 | 1122.62 | 565.3 |
| 28 | 7 | 18 | 890.5 | 868.6 | 0 | 1122.66 | 565.7 |
| 29 | 8 | 0 | 914.3 | 891.6 | 0 | 1122.71 | 566.2 |
| 30 | 8 | 6 | 1043.5 | 951.7 | 0 | 1122.83 | 567.4 |
| 31 | 8 | 12 | 1172.8 | 1061.4 | 0 | 1123.04 | 569.6 |
| 32 | 8 | 18 | 1302.0 | 1187.6 | 0 | 1123.28 | 572.0 |
| 33 | 9 | 0 | 1431.2 | 1319.2 | 0 | 1123.52 | 574.5 |
| 34 | 9 | 6 | 1680.1 | 1497.2 | 0 | 1123.83 | 577.7 |
| 35 | 9 | 12 | 1928.9 | 1735.2 | 0 | 1124.22 | 581.7 |
| 36 | 9 | 18 | 2177.8 | 1988.8 | 0 | 1124.62 | 585.9 |
| 37 | 10 | 0 | 2426.6 | 2245.0 | 0 | 1125.01 | 589.9 |
| 38 | 10 | 6 | 2077.6 | 2250.9 | 0 | 1125.02 | 590.0 |
| 39 | 10 | 12 | 1728.5 | 1966.6 | 0 | 1124.59 | 585.5 |
| 40 | 10 | 18 | 1379.5 | 1639.9 | 0 | 1124.07 | 580.1 |
| 41 | 11 | 0 | 1030.4 | 1309.4 | 0 | 1123.50 | 574.3 |
| 42 | 11 | 6 | 1004.0 | 1096.6 | 0 | 1123.11 | 570.3 |
| 43 | 11 | 12 | 977.6 | 1021.6 | 0 | 1122.97 | 568.8 |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO | EVOLUCIÓN DEL VASO | |
|-----|--------|------|-------------------|-------------------|-------------------|--------------------|---------------------|
| | DIA | HORA | ENTRADA | SALIDA | TURBINADO | ELEVACIÓN | VOLUMEN |
| | | | m ³ /s | m ³ /s | m ³ /s | msnm | Mill.m ³ |
| 44 | 11 | 18 | 951.1 | 981.6 | 0 | 1122.89 | 568.0 |
| 45 | 12 | 0 | 924.7 | 951.1 | 0 | 1122.83 | 567.4 |
| 46 | 12 | 6 | 1096.3 | 992.6 | 0 | 1122.91 | 568.2 |
| 47 | 12 | 12 | 1267.9 | 1126.9 | 0 | 1123.17 | 570.9 |
| 48 | 12 | 18 | 1439.4 | 1292.1 | 0 | 1123.47 | 574.0 |
| 49 | 13 | 0 | 1611.0 | 1466.9 | 0 | 1123.77 | 577.1 |
| 50 | 13 | 6 | 1771.6 | 1639.3 | 0 | 1124.07 | 580.1 |
| 51 | 13 | 12 | 1932.2 | 1806.1 | 0 | 1124.34 | 582.9 |
| 52 | 13 | 18 | 2092.8 | 1971.2 | 0 | 1124.60 | 585.6 |
| 53 | 14 | 0 | 2253.4 | 2135.3 | 0 | 1124.85 | 588.2 |
| 54 | 14 | 6 | 2145.8 | 2188.2 | 0 | 1124.93 | 589.0 |
| 55 | 14 | 12 | 2038.2 | 2109.3 | 0 | 1124.81 | 587.8 |
| 56 | 14 | 18 | 1930.6 | 2007.7 | 0 | 1124.65 | 586.2 |
| 57 | 15 | 0 | 1822.9 | 1902.3 | 0 | 1124.49 | 584.5 |
| 58 | 15 | 6 | 2287.1 | 2025.3 | 0 | 1124.68 | 586.5 |
| 59 | 15 | 12 | 2751.2 | 2433.2 | 0 | 1125.29 | 592.7 |
| 60 | 15 | 18 | 3215.4 | 2903.6 | 0 | 1125.95 | 599.5 |
| 61 | 16 | 0 | 3679.5 | 3383.3 | 0 | 1126.59 | 606.1 |
| 62 | 16 | 6 | 3758.4 | 3685.9 | 0 | 1126.98 | 610.1 |
| 63 | 16 | 12 | 3837.3 | 3787.9 | 0 | 1127.11 | 611.4 |
| 64 | 16 | 18 | 3916.2 | 3869.2 | 0 | 1127.21 | 612.4 |
| 65 | 17 | 0 | 3995.1 | 3948.5 | 0 | 1127.30 | 613.4 |
| 66 | 17 | 6 | 3585.3 | 3803.4 | 0 | 1127.12 | 611.6 |
| 67 | 17 | 12 | 3175.6 | 3420.6 | 0 | 1126.64 | 606.6 |
| 68 | 17 | 18 | 2765.9 | 3022.0 | 0 | 1126.11 | 601.2 |
| 69 | 18 | 0 | 2356.1 | 2623.5 | 0 | 1125.56 | 595.5 |
| 70 | 18 | 6 | 2360.5 | 2399.2 | 0 | 1125.24 | 592.2 |
| 71 | 18 | 12 | 2364.8 | 2368.6 | 0 | 1125.20 | 591.8 |
| 72 | 18 | 18 | 2369.2 | 2367.3 | 0 | 1125.19 | 591.7 |
| 73 | 19 | 0 | 2373.5 | 2370.6 | 0 | 1125.20 | 591.8 |
| 74 | 19 | 6 | 2195.3 | 2298.8 | 0 | 1125.09 | 590.7 |
| 75 | 19 | 12 | 2017.2 | 2139.8 | 0 | 1124.86 | 588.3 |
| 76 | 19 | 18 | 1839.0 | 1967.7 | 0 | 1124.59 | 585.5 |
| 77 | 20 | 0 | 1660.8 | 1793.7 | 0 | 1124.32 | 582.7 |
| 78 | 20 | 6 | 1638.8 | 1680.6 | 0 | 1124.13 | 580.8 |
| 79 | 20 | 12 | 1616.7 | 1639.3 | 0 | 1124.07 | 580.1 |
| 80 | 20 | 18 | 1594.7 | 1613.3 | 0 | 1124.02 | 579.7 |
| 81 | 21 | 0 | 1572.6 | 1590.3 | 0 | 1123.98 | 579.3 |
| 82 | 21 | 6 | 1587.5 | 1582.4 | 0 | 1123.97 | 579.2 |
| 83 | 21 | 12 | 1602.4 | 1592.1 | 0 | 1123.99 | 579.3 |
| 84 | 21 | 18 | 1617.4 | 1605.9 | 0 | 1124.01 | 579.6 |
| 85 | 22 | 0 | 1632.3 | 1620.6 | 0 | 1124.03 | 579.8 |
| 86 | 22 | 6 | 1631.3 | 1629.3 | 0 | 1124.05 | 580.0 |
| 87 | 22 | 12 | 1630.4 | 1630.5 | 0 | 1124.05 | 580.0 |
| 88 | 22 | 18 | 1629.4 | 1630.0 | 0 | 1124.05 | 580.0 |
| 89 | 23 | 0 | 1628.5 | 1629.2 | 0 | 1124.05 | 580.0 |
| 90 | 23 | 6 | 1632.1 | 1630.0 | 0 | 1124.05 | 580.0 |
| 91 | 23 | 12 | 1635.8 | 1633.1 | 0 | 1124.05 | 580.0 |
| 92 | 23 | 18 | 1639.4 | 1636.6 | 0 | 1124.06 | 580.1 |
| 93 | 24 | 0 | 1643.1 | 1640.2 | 0 | 1124.07 | 580.1 |
| 94 | 24 | 6 | 1634.6 | 1639.1 | 0 | 1124.06 | 580.1 |
| 95 | 24 | 12 | 1626.1 | 1632.3 | 0 | 1124.05 | 580.0 |
| 96 | 24 | 18 | 1617.6 | 1624.2 | 0 | 1124.04 | 579.9 |
| 97 | 25 | 0 | 1609.2 | 1615.8 | 0 | 1124.03 | 579.7 |
| 98 | 25 | 6 | 1587.4 | 1602.3 | 0 | 1124.00 | 579.5 |
| 99 | 25 | 12 | 1565.7 | 1582.4 | 0 | 1123.97 | 579.2 |
| 100 | 25 | 18 | 1544.0 | 1561.2 | 0 | 1123.94 | 578.8 |
| 101 | 26 | 0 | 1522.3 | 1539.6 | 0 | 1123.90 | 578.4 |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO TURBINADO m ³ /s | EVOLUCIÓN DEL VASO | |
|-----|--------|------|-------------------|-------------------|---|--------------------|---------------------|
| | DIA | HORA | ENTRADA | SALIDA | | ELEVACIÓN | VOLUMEN |
| | | | m ³ /s | m ³ /s | | msnm | Mill.m ³ |
| 102 | 26 | 6 | 1536.5 | 1531.8 | 0 | 1123.89 | 578.3 |
| 103 | 26 | 12 | 1550.7 | 1540.8 | 0 | 1123.90 | 578.4 |
| 104 | 26 | 18 | 1564.9 | 1553.8 | 0 | 1123.92 | 578.7 |
| 105 | 27 | 0 | 1579.1 | 1567.8 | 0 | 1123.95 | 578.9 |
| 106 | 27 | 6 | 1588.8 | 1580.3 | 0 | 1123.97 | 579.1 |
| 107 | 27 | 12 | 1598.4 | 1590.6 | 0 | 1123.98 | 579.3 |
| 108 | 27 | 18 | 1608.1 | 1600.4 | 0 | 1124.00 | 579.5 |
| 109 | 28 | 0 | 1617.8 | 1610.0 | 0 | 1124.02 | 579.6 |
| 110 | 28 | 6 | 1614.4 | 1614.7 | 0 | 1124.02 | 579.7 |
| 111 | 28 | 12 | 1611.1 | 1613.2 | 0 | 1124.02 | 579.7 |
| 112 | 28 | 18 | 1607.7 | 1610.3 | 0 | 1124.02 | 579.6 |
| 113 | 29 | 0 | 1604.4 | 1607.0 | 0 | 1124.01 | 579.6 |
| 114 | 29 | 6 | 1607.2 | 1606.1 | 0 | 1124.01 | 579.6 |
| 115 | 29 | 12 | 1610.0 | 1608.0 | 0 | 1124.01 | 579.6 |
| 116 | 29 | 18 | 1612.8 | 1610.6 | 0 | 1124.02 | 579.6 |
| 117 | 30 | 0 | 1615.6 | 1613.3 | 0 | 1124.02 | 579.7 |
| 118 | 30 | 6 | 1615.6 | 1615.1 | 0 | 1124.03 | 579.7 |
| 119 | 30 | 12 | 1615.6 | 1615.4 | 0 | 1124.03 | 579.7 |
| 120 | 30 | 18 | 1615.6 | 1615.6 | 0 | 1124.03 | 579.7 |
| 121 | 31 | 0 | 1615.6 | 1615.6 | 0 | 1124.03 | 579.7 |

| | | |
|--|----------|----------------------|
| El volumen de la avenida es | 4134.559 | Mill. m ³ |
| El gasto máximo del hidrograma de entrada es | 3995.085 | m ³ /s |
| El gasto máximo descagado es | 3948.503 | m ³ /s |
| La elevación máxima alcanzada es | 1127.305 | msnm |

6) Simulación analítica del tránsito de la avenida para un vertedor de cresta libre con longitud efectiva de 300 m.

VERTEDOR DEL PROYECTO: PRESA ARCEDIANO (Vertedor sin control)

| | |
|---------------------------------------|---------------------|
| INTERVALO DE TIEMPO DEL CÁLCULO | 6 horas |
| NÚMERO DE INTERVALOS | 121 m |
| GASTO POR TURBINAS | 0 m ³ /s |
| NIVEL DE LA CRESTA | 1120 msnm |
| TIPO DE OPERACIÓN | 1 |
| COEFICIENTE DE DESCARGA | 2 |
| LONGITUD EFECTIVA | 300 m |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO TURBINADO m ³ /s | EVOLUCIÓN DEL VASO | |
|-----|--------|------|------------------------------|-----------------------------|--------------------------------------|--------------------|--------------------------------|
| | DIA | HORA | ENTRADA m ³ /s | SALIDA m ³ /s | | ELEVACIÓN msnm | VOLUMEN Mill.m ³ |
| 1 | 1 | 0.0 | 900.5 | 900.5 | 0.0 | 1121.31 | 551.8 |
| 2 | 1 | 6.0 | 903.4 | 901.9 | 0.0 | 1121.31 | 551.8 |
| 3 | 1 | 12.0 | 906.3 | 905.0 | 0.0 | 1121.32 | 551.9 |
| 4 | 1 | 18.0 | 909.2 | 907.9 | 0.0 | 1121.32 | 551.9 |
| 5 | 2 | 0.0 | 912.2 | 910.9 | 0.0 | 1121.32 | 551.9 |
| 6 | 2 | 6.0 | 894.0 | 902.7 | 0.0 | 1121.31 | 551.8 |
| 7 | 2 | 12.0 | 875.9 | 884.3 | 0.0 | 1121.30 | 551.6 |
| 8 | 2 | 18.0 | 857.7 | 866.2 | 0.0 | 1121.28 | 551.5 |
| 9 | 3 | 0.0 | 839.6 | 848.1 | 0.0 | 1121.26 | 551.3 |
| 10 | 3 | 6.0 | 853.7 | 846.6 | 0.0 | 1121.26 | 551.3 |
| 11 | 3 | 12.0 | 867.9 | 861.2 | 0.0 | 1121.27 | 551.4 |
| 12 | 3 | 18.0 | 882.0 | 875.4 | 0.0 | 1121.29 | 551.6 |
| 13 | 4 | 0.0 | 896.2 | 889.5 | 0.0 | 1121.30 | 551.7 |
| 14 | 4 | 6.0 | 897.5 | 897.2 | 0.0 | 1121.31 | 551.8 |
| 15 | 4 | 12.0 | 898.8 | 898.2 | 0.0 | 1121.31 | 551.8 |
| 16 | 4 | 18.0 | 900.1 | 899.6 | 0.0 | 1121.31 | 551.8 |
| 17 | 5 | 0.0 | 901.5 | 900.8 | 0.0 | 1121.31 | 551.8 |
| 18 | 5 | 6.0 | 898.2 | 899.8 | 0.0 | 1121.31 | 551.8 |
| 19 | 5 | 12.0 | 894.9 | 896.4 | 0.0 | 1121.31 | 551.8 |
| 20 | 5 | 18.0 | 891.6 | 893.0 | 0.0 | 1121.30 | 551.7 |
| 21 | 6 | 0.0 | 888.3 | 889.8 | 0.0 | 1121.30 | 551.7 |
| 22 | 6 | 6.0 | 871.0 | 879.3 | 0.0 | 1121.29 | 551.6 |
| 23 | 6 | 12.0 | 853.7 | 861.7 | 0.0 | 1121.27 | 551.4 |
| 24 | 6 | 18.0 | 836.4 | 844.6 | 0.0 | 1121.26 | 551.2 |
| 25 | 7 | 0.0 | 819.1 | 827.3 | 0.0 | 1121.24 | 551.1 |
| 26 | 7 | 6.0 | 842.9 | 831.0 | 0.0 | 1121.24 | 551.1 |
| 27 | 7 | 12.0 | 866.7 | 855.4 | 0.0 | 1121.27 | 551.4 |
| 28 | 7 | 18.0 | 890.5 | 879.4 | 0.0 | 1121.29 | 551.6 |
| 29 | 8 | 0.0 | 914.3 | 903.3 | 0.0 | 1121.31 | 551.8 |
| 30 | 8 | 6.0 | 1043.5 | 982.5 | 0.0 | 1121.39 | 552.6 |
| 31 | 8 | 12.0 | 1172.8 | 1116.3 | 0.0 | 1121.51 | 553.9 |
| 32 | 8 | 18.0 | 1302.0 | 1247.5 | 0.0 | 1121.63 | 555.1 |
| 33 | 9 | 0.0 | 1431.2 | 1378.7 | 0.0 | 1121.74 | 556.2 |
| 34 | 9 | 6.0 | 1680.1 | 1577.2 | 0.0 | 1121.90 | 557.9 |
| 35 | 9 | 12.0 | 1928.9 | 1837.4 | 0.0 | 1122.11 | 560.0 |
| 36 | 9 | 18.0 | 2177.8 | 2089.6 | 0.0 | 1122.30 | 562.0 |
| 37 | 10 | 0.0 | 2426.6 | 2342.1 | 0.0 | 1122.48 | 563.8 |
| 38 | 10 | 6.0 | 2077.6 | 2234.8 | 0.0 | 1122.40 | 563.0 |
| 39 | 10 | 12.0 | 1728.5 | 1845.3 | 0.0 | 1122.11 | 560.1 |
| 40 | 10 | 18.0 | 1379.5 | 1512.6 | 0.0 | 1121.85 | 557.4 |
| 41 | 11 | 0.0 | 1030.4 | 1172.7 | 0.0 | 1121.56 | 554.4 |
| 42 | 11 | 6.0 | 1004.0 | 1006.2 | 0.0 | 1121.41 | 552.8 |
| 43 | 11 | 12.0 | 977.6 | 989.9 | 0.0 | 1121.40 | 552.7 |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO | EVOLUCIÓN DEL VASO | |
|-----|--------|------|-------------------|-------------------|-------------------|--------------------|---------------------|
| | DIA | HORA | ENTRADA | SALIDA | TURBINADO | ELEVACIÓN | VOLUMEN |
| | | | m ³ /s | m ³ /s | m ³ /s | msnm | Mill.m ³ |
| 44 | 11 | 18.0 | 951.1 | 963.0 | 0.0 | 1121.37 | 552.4 |
| 45 | 12 | 0.0 | 924.7 | 936.6 | 0.0 | 1121.35 | 552.2 |
| 46 | 12 | 6.0 | 1096.3 | 1014.4 | 0.0 | 1121.42 | 552.9 |
| 47 | 12 | 12.0 | 1267.9 | 1194.3 | 0.0 | 1121.58 | 554.6 |
| 48 | 12 | 18.0 | 1439.4 | 1369.2 | 0.0 | 1121.73 | 556.2 |
| 49 | 13 | 0.0 | 1611.0 | 1543.8 | 0.0 | 1121.88 | 557.6 |
| 50 | 13 | 6.0 | 1771.6 | 1711.7 | 0.0 | 1122.01 | 559.0 |
| 51 | 13 | 12.0 | 1932.2 | 1873.4 | 0.0 | 1122.14 | 560.3 |
| 52 | 13 | 18.0 | 2092.8 | 2035.7 | 0.0 | 1122.26 | 561.5 |
| 53 | 14 | 0.0 | 2253.4 | 2197.9 | 0.0 | 1122.38 | 562.8 |
| 54 | 14 | 6.0 | 2145.8 | 2200.0 | 0.0 | 1122.38 | 562.8 |
| 55 | 14 | 12.0 | 2038.2 | 2072.3 | 0.0 | 1122.29 | 561.8 |
| 56 | 14 | 18.0 | 1930.6 | 1969.2 | 0.0 | 1122.21 | 561.0 |
| 57 | 15 | 0.0 | 1822.9 | 1861.7 | 0.0 | 1122.13 | 560.2 |
| 58 | 15 | 6.0 | 2287.1 | 2087.6 | 0.0 | 1122.30 | 561.9 |
| 59 | 15 | 12.0 | 2751.2 | 2603.8 | 0.0 | 1122.66 | 565.7 |
| 60 | 15 | 18.0 | 3215.4 | 3069.3 | 0.0 | 1122.97 | 568.9 |
| 61 | 16 | 0.0 | 3679.5 | 3542.4 | 0.0 | 1123.27 | 571.9 |
| 62 | 16 | 6.0 | 3758.4 | 3765.7 | 0.0 | 1123.40 | 573.3 |
| 63 | 16 | 12.0 | 3837.3 | 3806.7 | 0.0 | 1123.43 | 573.6 |
| 64 | 16 | 18.0 | 3916.2 | 3895.9 | 0.0 | 1123.48 | 574.1 |
| 65 | 17 | 0.0 | 3995.1 | 3972.2 | 0.0 | 1123.53 | 574.6 |
| 66 | 17 | 6.0 | 3585.3 | 3740.4 | 0.0 | 1123.39 | 573.2 |
| 67 | 17 | 12.0 | 3175.6 | 3286.8 | 0.0 | 1123.11 | 570.3 |
| 68 | 17 | 18.0 | 2765.9 | 2894.9 | 0.0 | 1122.86 | 567.7 |
| 69 | 18 | 0.0 | 2356.1 | 2488.0 | 0.0 | 1122.58 | 564.9 |
| 70 | 18 | 6.0 | 2360.5 | 2332.2 | 0.0 | 1122.47 | 563.7 |
| 71 | 18 | 12.0 | 2364.8 | 2368.6 | 0.0 | 1122.50 | 564.0 |
| 72 | 18 | 18.0 | 2369.2 | 2366.7 | 0.0 | 1122.50 | 564.0 |
| 73 | 19 | 0.0 | 2373.5 | 2372.2 | 0.0 | 1122.50 | 564.0 |
| 74 | 19 | 6.0 | 2195.3 | 2267.4 | 0.0 | 1122.43 | 563.3 |
| 75 | 19 | 12.0 | 2017.2 | 2076.6 | 0.0 | 1122.29 | 561.9 |
| 76 | 19 | 18.0 | 1839.0 | 1902.7 | 0.0 | 1122.16 | 560.5 |
| 77 | 20 | 0.0 | 1660.8 | 1726.2 | 0.0 | 1122.02 | 559.1 |
| 78 | 20 | 6.0 | 1638.8 | 1639.0 | 0.0 | 1121.95 | 558.4 |
| 79 | 20 | 12.0 | 1616.7 | 1626.1 | 0.0 | 1121.94 | 558.3 |
| 80 | 20 | 18.0 | 1594.7 | 1602.9 | 0.0 | 1121.93 | 558.1 |
| 81 | 21 | 0.0 | 1572.6 | 1581.1 | 0.0 | 1121.91 | 557.9 |
| 82 | 21 | 6.0 | 1587.5 | 1579.9 | 0.0 | 1121.91 | 557.9 |
| 83 | 21 | 12.0 | 1602.4 | 1597.1 | 0.0 | 1121.92 | 558.1 |
| 84 | 21 | 18.0 | 1617.4 | 1611.6 | 0.0 | 1121.93 | 558.2 |
| 85 | 22 | 0.0 | 1632.3 | 1626.7 | 0.0 | 1121.94 | 558.3 |
| 86 | 22 | 6.0 | 1631.3 | 1632.5 | 0.0 | 1121.95 | 558.4 |
| 87 | 22 | 12.0 | 1630.4 | 1630.7 | 0.0 | 1121.95 | 558.4 |
| 88 | 22 | 18.0 | 1629.4 | 1629.8 | 0.0 | 1121.95 | 558.3 |
| 89 | 23 | 0.0 | 1628.5 | 1628.8 | 0.0 | 1121.95 | 558.3 |
| 90 | 23 | 6.0 | 1632.1 | 1630.5 | 0.0 | 1121.95 | 558.3 |
| 91 | 23 | 12.0 | 1635.8 | 1634.4 | 0.0 | 1121.95 | 558.4 |
| 92 | 23 | 18.0 | 1639.4 | 1638.1 | 0.0 | 1121.95 | 558.4 |
| 93 | 24 | 0.0 | 1643.1 | 1641.7 | 0.0 | 1121.96 | 558.4 |
| 94 | 24 | 6.0 | 1634.6 | 1638.4 | 0.0 | 1121.95 | 558.4 |
| 95 | 24 | 12.0 | 1626.1 | 1629.3 | 0.0 | 1121.95 | 558.3 |
| 96 | 24 | 18.0 | 1617.6 | 1620.9 | 0.0 | 1121.94 | 558.3 |
| 97 | 25 | 0.0 | 1609.2 | 1612.3 | 0.0 | 1121.93 | 558.2 |
| 98 | 25 | 6.0 | 1587.4 | 1596.5 | 0.0 | 1121.92 | 558.1 |
| 99 | 25 | 12.0 | 1565.7 | 1573.8 | 0.0 | 1121.90 | 557.9 |
| 100 | 25 | 18.0 | 1544.0 | 1552.4 | 0.0 | 1121.88 | 557.7 |
| 101 | 26 | 0.0 | 1522.3 | 1530.7 | 0.0 | 1121.87 | 557.5 |

| NO. | TIEMPO | | HIDROGRAMAS | | GASTO TURBINADO | EVOLUCIÓN DEL VASO | |
|-----|--------|------|------------------------------|-----------------------------|--------------------|--------------------|--------------------------------|
| | DIA | HORA | ENTRADA m ³ /s | SALIDA m ³ /s | | ELEVACIÓN msnm | VOLUMEN Mill.m ³ |
| 102 | 26 | 6.0 | 1536.5 | 1529.2 | 0.0 | 1121.87 | 557.5 |
| 103 | 26 | 12.0 | 1550.7 | 1545.4 | 0.0 | 1121.88 | 557.6 |
| 104 | 26 | 18.0 | 1564.9 | 1559.3 | 0.0 | 1121.89 | 557.8 |
| 105 | 27 | 0.0 | 1579.1 | 1573.7 | 0.0 | 1121.90 | 557.9 |
| 106 | 27 | 6.0 | 1588.8 | 1585.4 | 0.0 | 1121.91 | 558.0 |
| 107 | 27 | 12.0 | 1598.4 | 1594.6 | 0.0 | 1121.92 | 558.1 |
| 108 | 27 | 18.0 | 1608.1 | 1604.4 | 0.0 | 1121.93 | 558.1 |
| 109 | 28 | 0.0 | 1617.8 | 1614.2 | 0.0 | 1121.93 | 558.2 |
| 110 | 28 | 6.0 | 1614.4 | 1616.3 | 0.0 | 1121.94 | 558.2 |
| 111 | 28 | 12.0 | 1611.1 | 1612.3 | 0.0 | 1121.93 | 558.2 |
| 112 | 28 | 18.0 | 1607.7 | 1609.0 | 0.0 | 1121.93 | 558.2 |
| 113 | 29 | 0.0 | 1604.4 | 1605.6 | 0.0 | 1121.93 | 558.1 |
| 114 | 29 | 6.0 | 1607.2 | 1605.9 | 0.0 | 1121.93 | 558.1 |
| 115 | 29 | 12.0 | 1610.0 | 1609.0 | 0.0 | 1121.93 | 558.2 |
| 116 | 29 | 18.0 | 1612.8 | 1611.7 | 0.0 | 1121.93 | 558.2 |
| 117 | 30 | 0.0 | 1615.6 | 1614.5 | 0.0 | 1121.93 | 558.2 |
| 118 | 30 | 6.0 | 1615.6 | 1615.7 | 0.0 | 1121.94 | 558.2 |
| 119 | 30 | 12.0 | 1615.6 | 1615.5 | 0.0 | 1121.94 | 558.2 |
| 120 | 30 | 18.0 | 1615.6 | 1615.5 | 0.0 | 1121.94 | 558.2 |
| 121 | 31 | 0.0 | 1615.6 | 1615.5 | 0.0 | 1121.94 | 558.2 |

El volumen de la avenida es 4134.559 Mill. m³
 El gasto máximo del hidrograma de entrada es 3995.085 m³/s
 El gasto máximo descagado es 3972.188 m³/s
 La elevación máxima alcanzada es 1123.526 msnm