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6A-1 Consumptive Use of Each Crop in Old Land

Water Requirement in Old Land (50,000 feddan)
Old Land Each Crop Area

(Unit /feddan)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|-----------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (48,736) | | | | | | | | | | | | |
| Wheat | 20,000 | 20,000 | 20,000 | 20,000 | 18,000 | 10,000 | | | | | | 10,000 | 18,000 |
| Broad Beans | 7,084 | 7,084 | 7,084 | 6,376 | 3,542 | | | | | | | 3,542 | 6,376 |
| Fenugreek | 288 | 288 | 259 | 144 | | | | | | | | 144 | 259 |
| Long Berseem | 8,762 | 8,762 | 8,762 | 8,762 | 7,886 | 4,381 | | | | | | 4,381 | 7,886 |
| Short Berseem | 7,682 | 7,682 | 3,841 | | | | | | | | | 3,841 | 7,682 |
| Onion | 2,114 | 2,114 | 2,114 | 1,903 | 1,057 | | | | | | | | 1,057 |
| Garlic | 658 | 658 | 658 | 592 | 329 | | | | | | | | 329 |
| Potato | 212 | 212 | | | | | | | | | | 106 | 191 |
| Vegetables | 1,810 | 1,810 | 1,810 | 1,629 | 1,810 | | | | 905 | 1,629 | 1,810 | 1,810 | 1,810 |
| Sugarbeet | 126 | 126 | 113 | 63 | | | | | | | | 63 | 113 |
| Summer Season | (46,466) | | | | | | | | | | | | |
| Cotton | 12,062 | | | 4,825 | 10,856 | 12,062 | 12,062 | 12,062 | 10,856 | 6,031 | | | |
| Maize | 29,114 | | | | | 14,557 | 29,114 | 29,114 | 26,203 | 14,557 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Soybeans | | | | | | 0 | 0 | 0 | 0 | 0 | | | |
| Sesame | 936 | | | | | 468 | 936 | 936 | 468 | | | | |
| Groundnuts | 602 | | | | 301 | 602 | 602 | 602 | 301 | | | | |
| Vegetables | 3,752 | | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 | 3,752 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nile Seasons | (2,270) | | | | | | | | | | | | |
| Maize | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| Vegetables | 2,270 | | | | | | | | 2,270 | 2,270 | 2,270 | | |
| Perennial Crop | (1,264) | | | | | | | | | | | | |
| Sugar Cane | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 |
| Total Area | | 50,000 | 49,658 | 49,309 | 48,797 | 47,086 | 47,730 | 47,730 | 46,018 | 29,503 | 9,409 | 29,153 | 48,781 |

Net Water Requirement in Old Land

(Unit: 1,000m³)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--------------------------------------|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|--------------|--------------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (48,736) | | | | | | | | | | | | |
| Wheat | 20,000 | 3,180 | 3,936 | 6,708 | 5,260 | 426 | | | | | | 1,158 | 2,655 |
| Broad Beans | 7,084 | 1,160 | 1,284 | 1,913 | 215 | | | | | | | 616 | 949 |
| Fenugreek | 288 | 54 | 49 | 8 | | | | | | | | 11 | 44 |
| Long Berseem | 8,762 | 1,304 | 1,856 | 2,849 | 3,142 | 1,446 | | | | | | 994 | 1,230 |
| Short Berseem | 7,682 | 1,143 | 814 | | | | | | | | | 880 | 1,198 |
| Onion | 2,114 | 410 | 458 | 523 | 205 | | | | | | | | 231 |
| Garlic | 658 | 110 | 122 | 140 | 55 | | | | | | | | 62 |
| Potato | 212 | 48 | | | | | | | | | | 17 | 28 |
| Vegetables | 1,810 | 132 | 132 | 65 | 60 | | | | 93 | 172 | 365 | 392 | 305 |
| Sugarbeet | 126 | 29 | 32 | 24 | | | | | | | | 6 | 16 |
| Summer Season | (46,466) | | | | | | | | | | | | |
| Cotton | 12,062 | | | 796 | 2,547 | 4,806 | 5,927 | 6,622 | 2,801 | 753 | | | |
| Maize | 29,114 | | | | | 3,066 | 11,180 | 16,438 | 10,706 | 1,275 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Soybeans | | | | | | 0 | 0 | 0 | 0 | 0 | | | |
| Sesame | 936 | | | | | 95 | 370 | 420 | 88 | | | | |
| Groundnuts | 602 | | | | 68 | 152 | 190 | 182 | 34 | | | | |
| Vegetables | 3,752 | | 358 | 198 | 171 | 389 | 756 | 946 | 491 | 396 | 434 | 275 | 171 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nile Seasons | (2,270) | | | | | | | | | | | | |
| Nili Maize | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| Vegetables | 2,270 | | | | | | | | 1,946 | 2,501 | 2,343 | | |
| Perennial Crop | (1,264) | | | | | | | | | | | | |
| Sugar Cane | 1,264 | 148 | 223 | 325 | 392 | 543 | 583 | 651 | 720 | 679 | 523 | 411 | 237 |
| Monthly Net Water Requirement | | 7,718 | 9,264 | 13,550 | 12,114 | 10,923 | 19,006 | 25,259 | 16,881 | 5,775 | 3,699 | 4,814 | 7,151 |

Water Requirement in Old Land (Irrigation Efficiency 60.5 %)

| Item | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--|---------------|---------------|--------|--------|--------|---------------|--------|---------------|--------|-------|---------------|-------|--------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Water Requirement (1,000m ³ /month) | 50,000 | 12.757 | 15.312 | 22.396 | 20.023 | 18.054 | 31.416 | 41.750 | 27.902 | 9.546 | 6.114 | 7.957 | 11.821 |
| (m ³ /s) | 50,000 | 4.763 | 6.329 | 8.362 | 7.725 | 6.741 | 12.120 | 15.588 | 10.417 | 3.683 | 2.283 | 3.070 | 4.413 |
| | | | | | | | | (Max.) | | | (Min.) | | |
| 支線水路別 (m³/s) | | | | | | | | | | | | | |
| Saab | (17,000) | 1.619 | 2.152 | 2.843 | 2.626 | 2.292 | 4.121 | 5.300 | 3.542 | 1.252 | 0.776 | 1.044 | 1.501 |
| Harika | (25,000) | 2.382 | 3.165 | 4.181 | 3.862 | 3.370 | 6.060 | 7.794 | 5.209 | 1.841 | 1.141 | 1.535 | 2.207 |
| El Bahanasa | (4,700) | 0.448 | 0.595 | 0.786 | 0.726 | 0.634 | 1.139 | 1.465 | 0.979 | 0.346 | 0.215 | 0.289 | 0.415 |
| Borbat, Ganabit, etc. | (3,300) | 0.314 | 0.418 | 0.552 | 0.510 | 0.445 | 0.800 | 1.029 | 0.688 | 0.243 | 0.151 | 0.203 | 0.291 |

6A-2 Consumptive Use of Each Crop in Reclaimed Area

Water Requirement in Kamader Reclamation Land (13,600 feddan)

Kamader Area of Each Crop

(Unit :/feddan)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|-----------------------|---------------|---------------|--------|--------|--------|---------------|-------|--------|-------|-------|---------------|-------|--------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (12,300) | | | | | | | | | | | | |
| Wheat | 4,000 | 4,000 | 4,000 | 4,000 | 3,600 | 2,000 | | | | | | 2,000 | 3,600 |
| Barley | 1,000 | 1,000 | 1,000 | 1,000 | 900 | 500 | | | | | | 500 | 900 |
| Broad Beans | 500 | 500 | 500 | 450 | 250 | | | | | | | 250 | 450 |
| Fenugreek | 150 | 150 | 135 | 75 | | | | | | | 75 | 135 | 150 |
| Long Berseem | 3,000 | 3,000 | 3,000 | 3,000 | 2,700 | 1,500 | | | | | | 1,500 | 2,700 |
| Short Berseem | 600 | 600 | 300 | | | | | | | | | 300 | 540 |
| Onion | 700 | 700 | 700 | 630 | 350 | | | | | | | | 350 |
| Garlic | 80 | 80 | 80 | 72 | 40 | | | | | | | | 40 |
| Vegetables | 1,770 | 1,770 | 1,770 | 1,593 | 885 | | | | 885 | 1,593 | 1,770 | 1,770 | 1,770 |
| Sugarbeet | 500 | 500 | 450 | 250 | | | | | | | 250 | 450 | 500 |
| Summer Season | (8,794) | | | | | | | | | | | | |
| Cotton | 60 | | | 30 | 54 | 60 | 60 | 60 | 54 | 30 | | | |
| Maize | 4,000 | | | | | 2,000 | 4,000 | 4,000 | 4,000 | 2,000 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Sun-flower | 500 | | | | 250 | 500 | 500 | 500 | | | | | |
| Sesame | 2,000 | | | | | 1,000 | 2,000 | 2,000 | 1,000 | | | | |
| Groundnuts | 2,000 | | | | 1,000 | 2,000 | 2,000 | 2,000 | 1,000 | | | | |
| Vegetables | 234 | | 234 | 234 | 234 | 234 | 234 | 234 | 234 | 234 | 234 | 234 | 234 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nile Seasons | (1,000) | | | | | | | | | | | | |
| Nili Maize | 1,000 | | | | | | | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | |
| Vegetables | | | | | | | | | 0 | 0 | 0 | | |
| Perennial Crop | (717) | | | | | | | | | | | | |
| Sugar Cane | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 | 717 |
| Total Area | | 13,017 | 12,886 | 12,051 | 10,980 | 10,511 | 9,511 | 10,511 | 8,890 | 5,574 | 4,046 | 8,856 | 11,951 |

Net Water Requirement of Each Crop in Kamader

(Unit: 1,000m³)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--------------------------------------|---------------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|---------------|-------|-------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (12,300) | | | | | | | | | | | | |
| Wheat | 4,000 | 649 | 803 | 1,369 | 1,073 | 87 | | | | | | 236 | 538 |
| Barley | 1,000 | 162 | 201 | 342 | 268 | 22 | | | | | | 59 | 134 |
| Broad Beans | 500 | 89 | 98 | 147 | 16 | | | | | | | 47 | 73 |
| Fenugreek | 150 | 31 | 28 | 5 | | | | | | | 6 | 25 | 31 |
| Long Berseem | 3,000 | 475 | 676 | 1,038 | 1,144 | 527 | | | | | | 362 | 448 |
| Short Berseem | 600 | 95 | 68 | | | | | | | | | 73 | 90 |
| Onion | 700 | 152 | 170 | 195 | 76 | | | | | | | | 86 |
| Garlic | 80 | 15 | 17 | 19 | 7 | | | | | | | | 8 |
| Vegetables | 1,770 | 151 | 151 | 74 | 34 | | | | 106 | 196 | 415 | 446 | 347 |
| Sugarbeet | 500 | 116 | 151 | 98 | | | | | | | 24 | 65 | 103 |
| Summer Season | (8,794) | | | | | | | | | | | | |
| Cotton | 60 | | | 5 | 13 | 24 | 30 | 34 | 14 | 4 | | | |
| Maize | 4,000 | | | | | 453 | 1,652 | 2,428 | 1,757 | 188 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Sun-flower | 500 | | | | 56 | 365 | 404 | 138 | | | | | |
| Sesame | 2,000 | | | | | 222 | 860 | 976 | 205 | | | | |
| Groundnuts | 2,000 | | | | 236 | 525 | 656 | 630 | 118 | | | | |
| Vegetables | 234 | | 23 | 13 | 11 | 26 | 50 | 62 | 32 | 26 | 29 | 18 | 11 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nile Seasons | (1,000) | | | | | | | | | | | | |
| Nili Maize | 1,000 | | | | | | | 352 | 428 | 485 | 341 | 73 | |
| Vegetables | | | | | | | | | 0 | 0 | 0 | | |
| Perennial Crop | (717) | | | | | | | | | | | | |
| Sugar Cane | 717 | 91 | 137 | 200 | 242 | 335 | 360 | 402 | 444 | 419 | 323 | 253 | 146 |
| Monthly Net Water Requirement | | 2,026 | 2,503 | 3,505 | 3,179 | 2,585 | 4,011 | 6,021 | 3,106 | 1,317 | 1,137 | 1,657 | 2,015 |

Water Requirement in Kamader (Irrigation Efficiency 60.5%)

| Item | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--|---------------|---------------|-------|-------|-------|---------------|-------|--------------|-------|-------|---------------|-------|-------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Water Requirement (1,000m ³ /month) | 13,600 | 3,349 | 4,137 | 5,794 | 5,254 | 4,272 | 6,630 | 8,300 | 5,134 | 2,178 | 1,880 | 2,740 | 3,330 |
| (m ³ /s) | 13,600 | 1,250 | 1,710 | 2,163 | 2,027 | 1,595 | 2,558 | 3,099 (Max.) | 1,917 | 0,840 | 0,702 (Min.) | 1,057 | 1,243 |

Water Requirement in Terfa Reclamation Land (20,700 feddan)

Terfa Area of Each Crop

(Unit /feddan)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|-----------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (17,680) | | | | | | | | | | | | |
| Wheat | 5,200 | 5,200 | 5,200 | 5,200 | 4,680 | 2,600 | | | | | | 2,600 | 4,680 |
| Barley | 1,500 | 1,500 | 1,500 | 1,500 | 1,350 | 750 | | | | | | 750 | 1,350 |
| Broad Beans | 1,000 | 1,000 | 1,000 | 900 | 500 | | | | | | | 500 | 900 |
| Fenugreek | 120 | 120 | 108 | 60 | | | | | | | 60 | 108 | 120 |
| Long Berseem | 4,500 | 4,500 | 4,500 | 4,500 | 4,050 | 2,250 | | | | | | 2,250 | 4,050 |
| Short Berseem | 600 | 600 | 300 | | | | | | | | | 300 | 540 |
| Onion | 800 | 800 | 800 | 720 | 400 | | | | | | | | 400 |
| Garlic | 120 | 120 | 120 | 108 | 60 | | | | | | | | 60 |
| Vegetables | 3,440 | 3,440 | 3,440 | 3,096 | 1,720 | | | | 1,720 | 3,096 | 3,440 | 3,440 | 3,440 |
| Sugarbeet | 400 | 400 | 360 | 200 | | | | | | | 200 | 360 | 400 |
| Summer Season | (13,150) | | | | | | | | | | | | |
| Cotton | 50 | | | 25 | 45 | 50 | 50 | 50 | 45 | 25 | | | |
| Maize | 5,200 | | | | | 2,600 | 5,200 | 5,200 | 5,200 | 2,600 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Sun flower | 500 | | | | 250 | 500 | 500 | 500 | | | | | |
| Sesame | 2,000 | | | | | 1,000 | 2,000 | 2,000 | 1,000 | | | | |
| Groundnuts | 2,000 | | | | 1,000 | 2,000 | 2,000 | 2,000 | 1,000 | | | | |
| Vegetables | 3,400 | | 340 | 1,360 | 3,400 | 3,400 | 4,000 | 4,000 | 3,400 | 3,400 | 3,400 | 3,400 | 1,700 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nile Seasons | (2,400) | | | | | | | | | | | | |
| Nili Maize | 1,800 | | | | | | | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 | |
| Vegetables | 600 | | | | | | | | 600 | 600 | 600 | | |
| Perennial Crop | (926) | | | | | | | | | | | | |
| Sugar Cane | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 | 926 |
| Total Area | | 18,606 | 18,594 | 18,595 | 18,381 | 16,076 | 14,676 | 16,476 | 15,691 | 12,447 | 10,426 | 16,434 | 18,566 |

Terfa Net Water Requirement Terfa 20,700 feddan

(Unit: 1,000m³)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--------------------------------------|-----------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (17,680) | | | | | | | | | | | | |
| Wheat | 5,200 | 844 | 1,044 | 1,780 | 1,395 | 113 | | | | | | 307 | 699 |
| Barley | 1,500 | 243 | 301 | 513 | 405 | 33 | | | | | | 89 | 202 |
| Broad Beans | 1,000 | 178 | 197 | 295 | 33 | | | | | | | 95 | 146 |
| Fenugreek | 120 | 25 | 22 | 4 | | | | | | | 5 | 20 | 25 |
| Long Berseem | 4,500 | 712 | 1,014 | 1,557 | 1,717 | 790 | | | | | | 543 | 672 |
| Short Berseem | 600 | 95 | 68 | | | | | | | | | 73 | 90 |
| Onion | 800 | 174 | 195 | 222 | 87 | | | | | | | | 98 |
| Garlic | 120 | 22 | 25 | 29 | 11 | | | | | | | | 13 |
| Vegetables | 3,440 | 293 | 293 | 145 | 66 | | | | 206 | 380 | 806 | 866 | 674 |
| Sugarbeet | 400 | 93 | 104 | 79 | | | | | | | 19 | 52 | 82 |
| Summer Season | (13,150) | | | | | | | | | | | | |
| Cotton | 50 | | | 4 | 11 | 20 | 25 | 28 | 12 | 3 | | | |
| Maize | 5,200 | | | | | 589 | 2,147 | 3,157 | 2,285 | 245 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Sun-flower | 500 | | | | 56 | 365 | 404 | 138 | | | | | |
| Sesame | 2,000 | | | | | 222 | 860 | 976 | 205 | | | | |
| Groundnuts | 2,000 | | | | 236 | 525 | 656 | 630 | 118 | | | | |
| Vegetables | 3,400 | | 34 | 76 | 163 | 371 | 849 | 1,061 | 468 | 378 | 414 | 262 | 82 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nile Seasons | (2,400) | | | | | | | | | | | | |
| Nili Maize | 1,800 | | | | | | | 634 | 771 | 873 | 614 | 131 | |
| Vegetables | 600 | | | | | | | | 542 | 696 | 652 | | |
| Perennial Crop | (926) | | | | | | | | | | | | |
| Sugar Cane | 926 | 118 | 178 | 258 | 312 | 432 | 464 | 519 | 574 | 541 | 417 | 327 | 188 |
| Monthly Net Water Requirement | | 2,797 | 3,475 | 4,960 | 4,490 | 3,460 | 5,406 | 7,142 | 5,181 | 3,116 | 2,928 | 2,765 | 2,970 |

Terfa Water requirement (Irrigation Efficiency 60.5%)

| Item | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--|---------------|---------------|-------|-------|-------|---------------|-------|--------|-------|-------|---------------|-------|-------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Water Requirement (1,000m ³ /month) | 20,700 | 4,623 | 5,744 | 8,198 | 7,422 | 5,719 | 8,935 | 11,805 | 8,563 | 5,150 | 4,839 | 4,570 | 4,910 |
| (mm ³ /s) | 20,700 | 1,726 | 2,374 | 3,061 | 2,864 | 2,135 | 3,447 | 4,407 | 3,197 | 1,987 | 1,807 | 1,763 | 1,833 |
| | | | | | | | | (Max.) | | | (Min.) | | |

Water Requirement in Sakoula Reclamation Land (11,900 feddan)

Sakoula Area of Each Crop

(Unit :/feddan)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|-------------------|---------------|---------------|--------|--------|--------|---------------|-------|-------|-------|-------|---------------|-------|--------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Winter Season | (11,288) | | | | | | | | | | | | |
| Wheat | 3,488 | 3,488 | 3,488 | 3,488 | 3,139 | 1,744 | | | | | | 1,744 | 3,139 |
| Barley | 1,000 | 1,000 | 1,000 | 1,000 | 900 | 500 | | | | | | 500 | 900 |
| Broad Beans | 500 | 500 | 500 | 450 | 250 | | | | | | | 250 | 450 |
| Fenugreek | 80 | 80 | 72 | 40 | | | | | | | 40 | 72 | 80 |
| Long Berseem | 3,400 | 3,400 | 3,400 | 3,400 | 3,060 | 1,700 | | | | | | 1,700 | 3,060 |
| Short Berseem | 400 | 400 | 200 | | | | | | | | 200 | 360 | |
| Onion | 300 | 300 | 300 | 270 | 150 | | | | | | | 150 | |
| Garlic | 60 | 60 | 60 | 54 | 30 | | | | | | | 30 | |
| Vegetables | 1,760 | 1,760 | 1,760 | 1,584 | 880 | | | | 880 | 1,584 | 1,760 | 1,760 | 1,760 |
| Sugarbeet | 300 | 300 | 270 | 150 | | | | | | 150 | 270 | 300 | |
| Summer Season | (8,340) | | | | | | | | | | | | |
| Cotton | 40 | | | 20 | 36 | 40 | 40 | 40 | 36 | 20 | | | |
| Maize | 3,400 | | | | | 1,700 | 3,400 | 3,400 | 3,400 | 1,700 | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | |
| Sun-flower | 300 | | | | 150 | 300 | 300 | 300 | | | | | |
| Sesame | 1,500 | | | | | 750 | 1,500 | 1,500 | 750 | | | | |
| Groundnuts | 2,000 | | | | 1,000 | 2,000 | 2,000 | 2,000 | 1,000 | | | | |
| Vegetables | 1,100 | | 110 | 440 | 1,100 | 1,100 | 1,500 | 1,500 | 1,100 | 1,100 | 1,100 | 1,100 | 550 |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nile Seasons | (1,000) | | | | | | | | | | | | |
| Nili Maize | 600 | | | | | | | 600 | 600 | 600 | 600 | 600 | |
| Vegetables | 400 | | | | | | | 400 | 400 | 400 | | | |
| Perennial Crop | (612) | | | | | | | | | | | | |
| Sugar Cane | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 | 612 |
| Total Area | | 11,900 | 11,772 | 11,508 | 11,307 | 10,446 | 9,352 | 9,952 | 8,778 | 6,016 | 4,662 | 8,808 | 11,391 |

Sakoula Net Water Requirement of Each Crop

(Unit: 1,000m³)

| Season / Crops | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | | |
|--------------------------------------|---------------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|---------------|-------|-------|-----|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | (11,288) | | | | | | | | | | | | | |
| Wheat | 3,488 | 566 | 700 | 1,194 | 936 | 76 | | | | | | | 206 | 469 |
| Barley | 1,000 | 162 | 201 | 342 | 268 | 22 | | | | | | | 59 | 134 |
| Broad Beans | 500 | 89 | 98 | 147 | 16 | | | | | | | | 47 | 73 |
| Fenugreek | 80 | 16 | 15 | 3 | | | | | | | 3 | 13 | 16 | |
| Long Berseem | 3,400 | 538 | 766 | 1,176 | 1,297 | 597 | | | | | | | 410 | 508 |
| Short Berseem | 400 | 63 | 45 | | | | | | | | | 49 | 60 | |
| Onion | 300 | 65 | 73 | 83 | 33 | | | | | | | | 37 | |
| Garlic | 60 | 11 | 13 | 14 | 6 | | | | | | | | 6 | |
| Vegetables | 1,760 | 150 | 150 | 74 | 34 | | | | 106 | 195 | 413 | 443 | 345 | |
| Sugarbeet | 300 | 69 | 78 | 59 | | | | | | | 14 | 39 | 62 | |
| Summer Season | (8,340) | | | | | | | | | | | | | |
| Cotton | 40 | | | 3 | 9 | 16 | 20 | 22 | 9 | 3 | | | | |
| Maize | 3,400 | | | | | 385 | 1,404 | 2,064 | 1,494 | 160 | | | | |
| Sorghum | | | | | | | 0 | 0 | 0 | 0 | | | | |
| Sun-flower | 300 | | | | 34 | 219 | 243 | 83 | | | | | | |
| Sesame | 1,500 | | | | | 166 | 645 | 732 | 154 | | | | | |
| Groundnuts | 2,000 | | | | 236 | 525 | 656 | 630 | 118 | | | | | |
| Vegetables | 1,100 | | 11 | 24 | 53 | 120 | 318 | 398 | 151 | 122 | 134 | 85 | 26 | |
| Others | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Nile Seasons | (1,000) | | | | | | | | | | | | | |
| Nili Maize | 600 | | | | | | | 211 | 257 | 291 | 205 | 44 | | |
| Vegetables | 400 | | | | | | | 361 | 464 | 435 | | | | |
| Perennial Crop | (612) | | | | | | | | | | | | | |
| Sugar Cane | 612 | 78 | 117 | 171 | 206 | 286 | 307 | 345 | 379 | 357 | 275 | 216 | 125 | |
| Monthly Net Water Requirement | | 1,809 | 2,268 | 3,291 | 3,128 | 2,412 | 3,593 | 4,483 | 3,030 | 1,592 | 1,479 | 1,612 | 1,861 | |

Sakoula Water Requirement (irrigation Efficiency 60.5%)

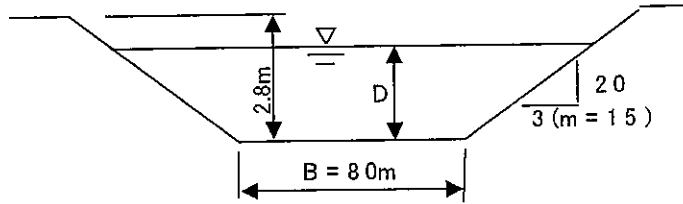
| Item | Area (feddan) | Winter Season | | | | Summer Season | | | | | Winter Season | | |
|--|---------------|---------------|-------|-------|-------|---------------|-------|--------------|-------|-------|---------------|-------|-------|
| | | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| Water Requirement (1,000m ³ /month) | 11,900 | 2,990 | 3,748 | 5,439 | 5,170 | 3,986 | 5,938 | 7,410 | 5,008 | 2,631 | 2,445 | 2,664 | 3,076 |
| (m ³ /s) | 11,900 | 1.116 | 1.549 | 2.031 | 1.994 | 1.488 | 2.291 | 2.767 (Max.) | 1.870 | 1.015 | 0.913 (Min.) | 1.028 | 1.148 |

Flow Capacity of Branch Canal of Gravity Irrigation

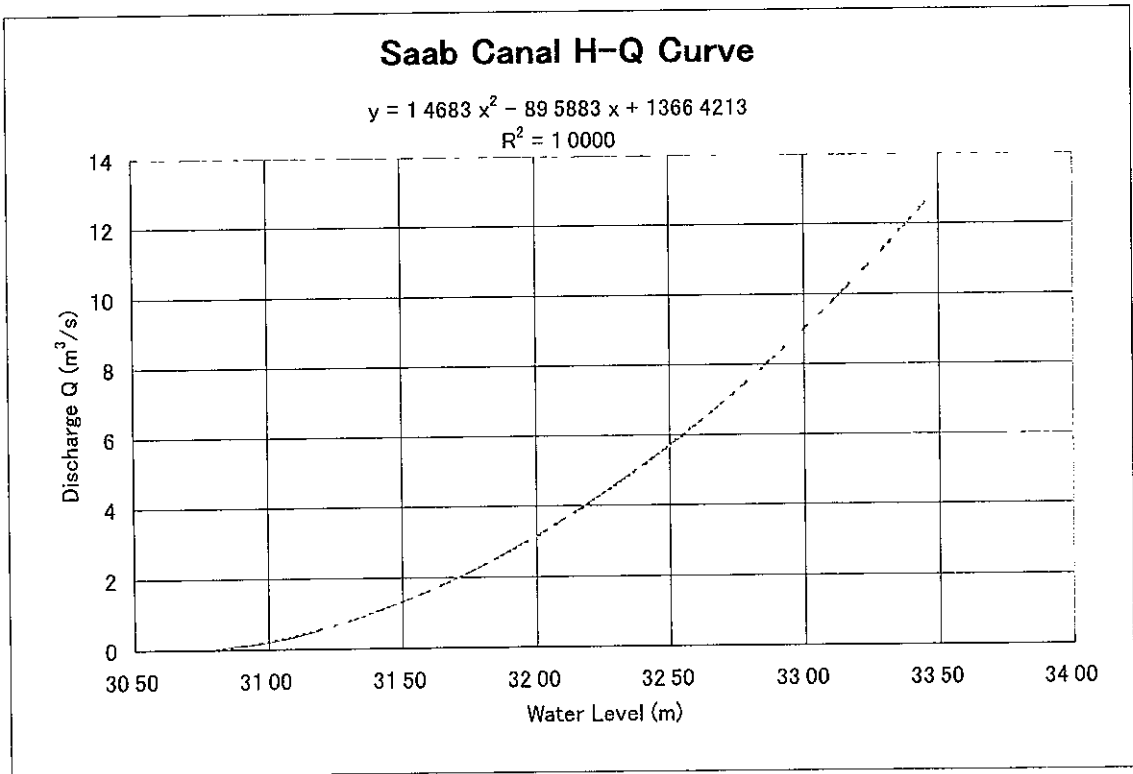
(1) Saab Canal

Calculation of Uniform Flow Depth (D) & Discharge (Q)

$Q = \text{Discharge (m}^3/\text{s)}$
 $n = 0.030$
 $S = 0.000060 (=0.06/1,000)$
 $V = 1/n \times 1^{1/2} \times R^{2/3}$
 $R = A/P$
 $A = D \times (B + m \times D)$
 $P = B + 2 \times D \times (1 + m^2)^{1/2}$
 $Q = A \times V$



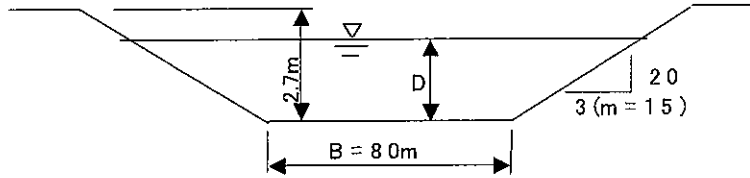
| D (m) | WL (m) | B (m) | m | A (m ²) | P (m) | R (m) | V (m/S) | Q (m ³ /s) | y (m ³ /s) |
|-------|--------|-------|------|---------------------|--------|-------|---------|-----------------------|-----------------------|
| 0 | 30.75 | | | | | | 0 | 0 | -0.050 |
| 0.25 | 31.00 | 8.00 | 1.50 | 2.094 | 8.901 | 0.235 | 0.098 | 0.206 | 0.220 |
| 0.50 | 31.25 | 8.00 | 1.50 | 4.375 | 9.803 | 0.446 | 0.151 | 0.660 | 0.674 |
| 0.75 | 31.50 | 8.00 | 1.50 | 6.844 | 10.704 | 0.639 | 0.192 | 1.311 | 1.311 |
| 1.00 | 31.75 | 8.00 | 1.50 | 9.500 | 11.606 | 0.819 | 0.226 | 2.146 | 2.131 |
| 1.25 | 32.00 | 8.00 | 1.50 | 12.344 | 12.507 | 0.987 | 0.256 | 3.159 | 3.135 |
| 1.50 | 32.25 | 8.00 | 1.50 | 15.375 | 13.408 | 1.147 | 0.283 | 4.349 | 4.322 |
| 1.75 | 32.50 | 8.00 | 1.50 | 18.594 | 14.310 | 1.299 | 0.307 | 5.717 | 5.693 |
| 2.00 | 32.75 | 8.00 | 1.50 | 22.000 | 15.211 | 1.446 | 0.330 | 7.265 | 7.248 |
| 2.10 | 32.85 | 8.00 | 1.50 | 23.415 | 15.572 | 1.504 | 0.339 | 7.935 | 7.921 |
| 2.25 | 33.00 | 8.00 | 1.50 | 25.594 | 16.112 | 1.588 | 0.352 | 8.996 | 8.986 |
| 2.50 | 33.25 | 8.00 | 1.50 | 29.375 | 17.014 | 1.727 | 0.372 | 10.916 | 10.908 |
| 2.70 | 33.45 | 8.00 | 1.50 | 32.535 | 17.735 | 1.835 | 0.387 | 12.589 | 12.577 |



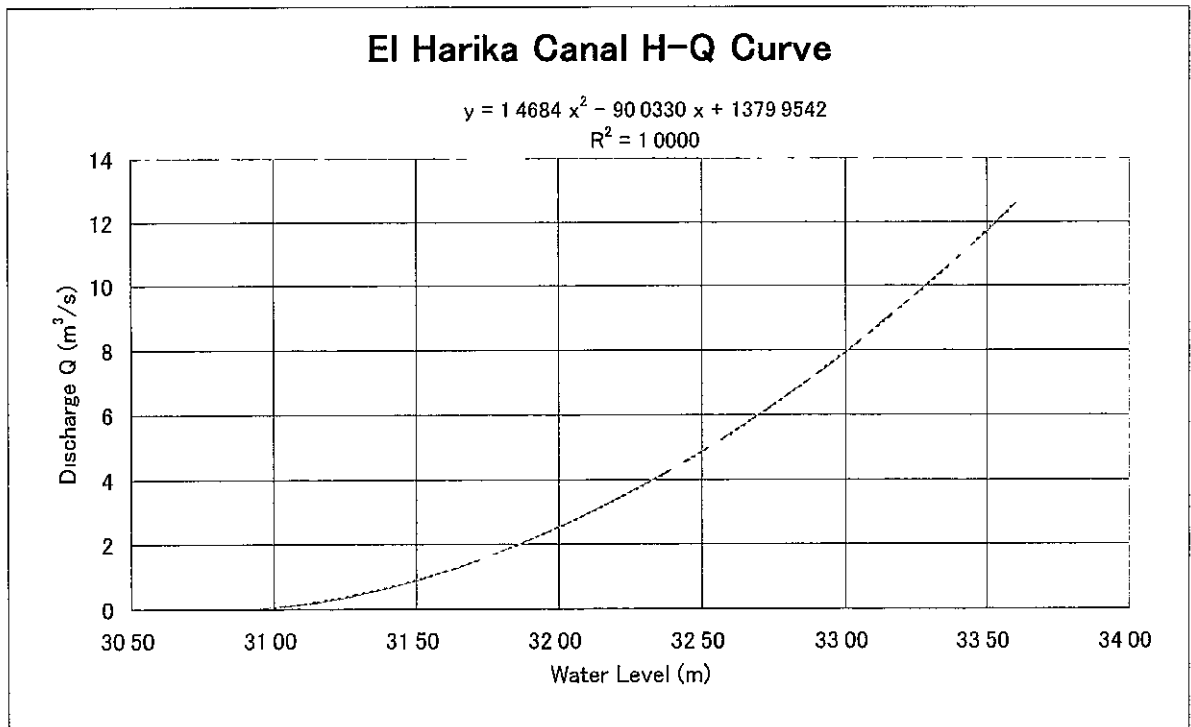
(2) Harika Canal

Calculation of Uniform Flow Depth (D) & Discharge (Q)

$Q = \text{Discharge (m}^3/\text{s)}$
 $n = 0.030$
 $S = 0.000060 (=0.06/1,000)$
 $V = 1/n \times I^{1/2} \times R^{2/3}$
 $R = A/P$
 $A = D \times (B + m \times D)$
 $P = B + 2 \times D \times (1 + m^2)^{1/2}$
 $Q = A \times V$



| D (m) | WL (m) | B (m) | m | A (m ²) | P (m) | R (m) | V (m/s) | Q (m ³ /s) | y (m ³ /s) |
|-------|--------|-------|------|---------------------|--------|-------|---------|-----------------------|-----------------------|
| 0 | 30.90 | | | | | | 0 | 0 | -0.022 |
| 0.25 | 31.15 | 8.00 | 1.50 | 2.094 | 8.901 | 0.235 | 0.098 | 0.206 | 0.248 |
| 0.50 | 31.40 | 8.00 | 1.50 | 4.375 | 9.803 | 0.446 | 0.151 | 0.660 | 0.702 |
| 0.75 | 31.65 | 8.00 | 1.50 | 6.844 | 10.704 | 0.639 | 0.192 | 1.311 | 1.339 |
| 1.00 | 31.90 | 8.00 | 1.50 | 9.500 | 11.606 | 0.819 | 0.226 | 2.146 | 2.160 |
| 1.25 | 32.15 | 8.00 | 1.50 | 12.344 | 12.507 | 0.987 | 0.256 | 3.159 | 3.165 |
| 1.50 | 32.40 | 8.00 | 1.50 | 15.375 | 13.408 | 1.147 | 0.283 | 4.349 | 4.353 |
| 1.75 | 32.65 | 8.00 | 1.50 | 18.594 | 14.310 | 1.299 | 0.307 | 5.717 | 5.724 |
| 2.00 | 32.90 | 8.00 | 1.50 | 22.000 | 15.211 | 1.446 | 0.330 | 7.265 | 7.279 |
| 2.10 | 33.00 | 8.00 | 1.50 | 23.415 | 15.572 | 1.504 | 0.339 | 7.935 | 7.953 |
| 2.50 | 33.40 | 8.00 | 1.50 | 29.375 | 17.014 | 1.727 | 0.372 | 10.916 | 10.940 |
| 2.70 | 33.60 | 8.00 | 1.50 | 32.535 | 17.735 | 1.835 | 0.387 | 12.589 | 12.610 |

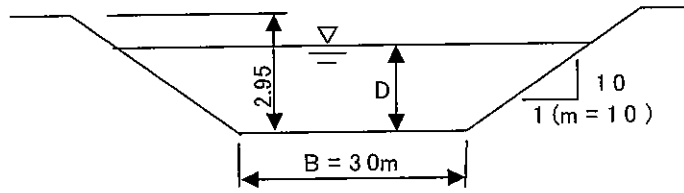


(3) Bahnsa Canal

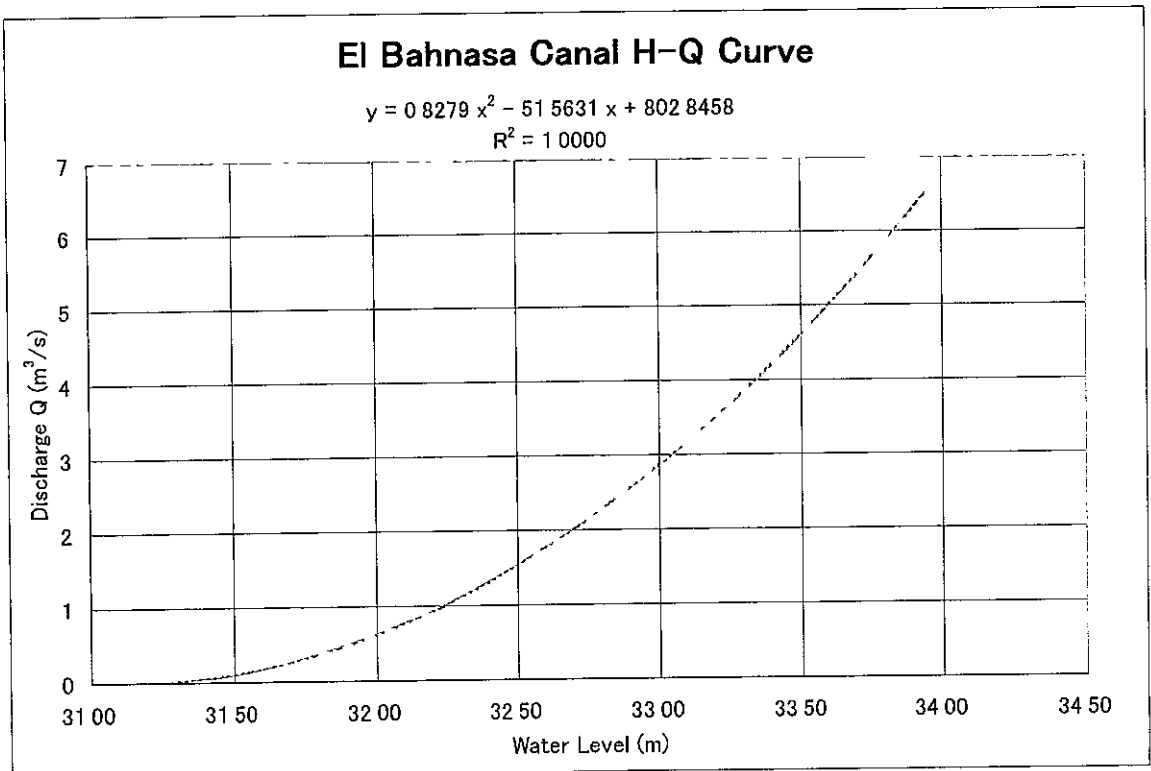
Calculation of Uniform Flow Depth (D) & Discharge (Q)

Q = Discharge (m³/s)
 n = 0.030
 S = 0.000100 (=0.10/1,000)

$V = \frac{1}{n} \times I^{1/2} \times R^{2/3}$
 $R = A/P$
 $A = D \times (B + m \times D)$
 $P = B + 2 \times D \times (1 + m^2)^{1/2}$
 $Q = A \times V$



| D (m) | WL (m) | B (m) | m (m) | A (m ²) | P (m) | R (m) | V (m/S) | Q (m ³ /s) | y (m ³ /s) |
|-------|--------|-------|-------|---------------------|--------|-------|---------|-----------------------|-----------------------|
| 0 | 31.25 | | | | | | 0 | 0 | -0.005 |
| 0.25 | 31.50 | 3.00 | 1.00 | 0.813 | 3.707 | 0.219 | 0.121 | 0.098 | 0.092 |
| 0.50 | 31.75 | 3.00 | 1.00 | 1.750 | 4.414 | 0.396 | 0.180 | 0.315 | 0.292 |
| 0.75 | 32.00 | 3.00 | 1.00 | 2.813 | 5.121 | 0.549 | 0.224 | 0.629 | 0.596 |
| 1.00 | 32.25 | 3.00 | 1.00 | 4.000 | 5.828 | 0.686 | 0.259 | 1.037 | 1.004 |
| 1.25 | 32.50 | 3.00 | 1.00 | 5.313 | 6.536 | 0.813 | 0.290 | 1.542 | 1.514 |
| 1.50 | 32.75 | 3.00 | 1.00 | 6.750 | 7.243 | 0.932 | 0.318 | 2.147 | 2.129 |
| 1.75 | 33.00 | 3.00 | 1.00 | 8.313 | 7.950 | 1.046 | 0.343 | 2.854 | 2.847 |
| 2.00 | 33.25 | 3.00 | 1.00 | 10.000 | 8.657 | 1.155 | 0.367 | 3.670 | 3.668 |
| 2.10 | 33.35 | 3.00 | 1.00 | 10.710 | 8.940 | 1.198 | 0.376 | 4.027 | 4.025 |
| 2.25 | 33.50 | 3.00 | 1.00 | 11.813 | 9.364 | 1.261 | 0.389 | 4.597 | 4.593 |
| 2.50 | 33.75 | 3.00 | 1.00 | 13.750 | 10.071 | 1.365 | 0.410 | 5.641 | 5.621 |
| 2.70 | 33.95 | 3.00 | 1.00 | 15.390 | 10.637 | 1.447 | 0.426 | 6.563 | 6.518 |



6A-4 Pumping Performance Curve of Terfa No.1 Old Pump

Terfa No 1 Old Pump Station

Axial Flow Pump • Performance Curve (Motor Drive)

Type : Vertical Axial Flow Pump

Pump Apertue : 300 (mm)

Design Discharge : 1 472 (m³/s)

Design Total Head : 2 70 (m)

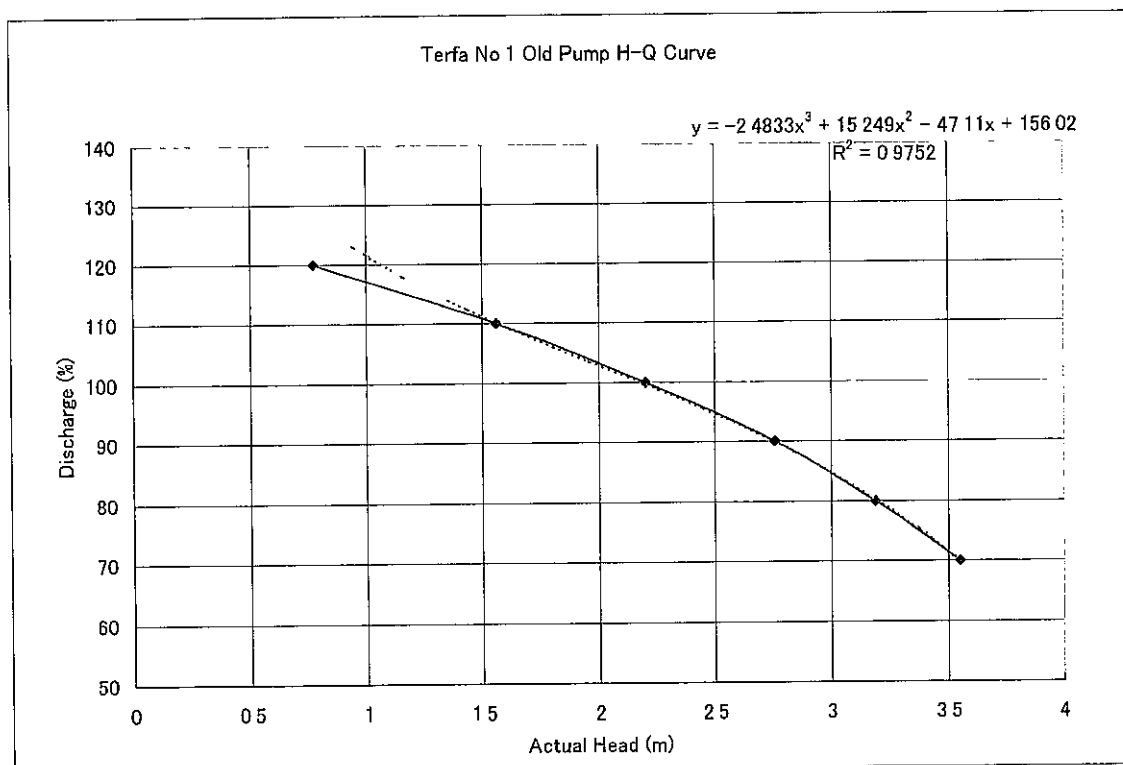
Design Actual Head : 2 20 (m)

Out Put Power of Prime Mover : 74 (kw)

Pump Efficiency : 78 0 (%)

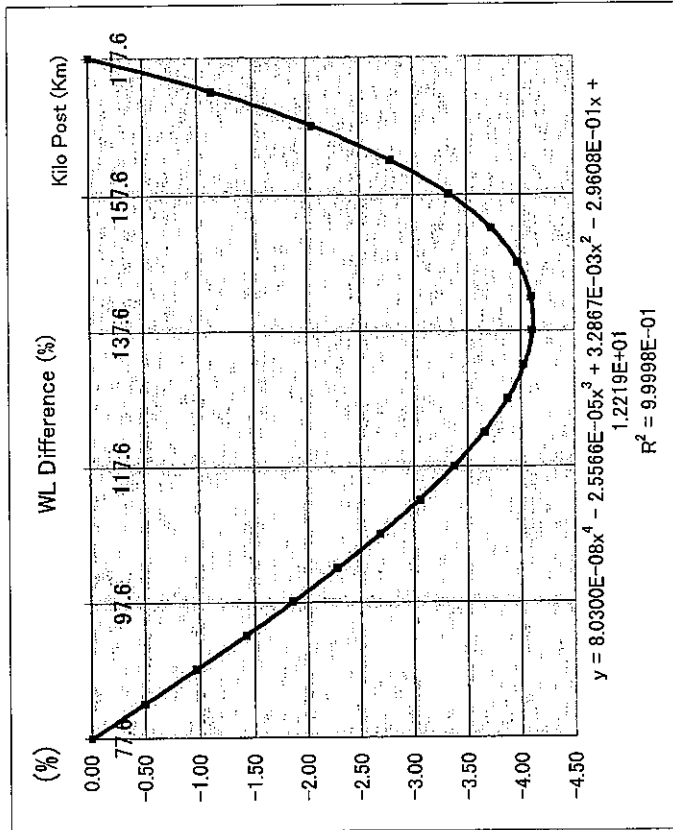
Decelerater Efficiency : 97 0 (%)

| Pump Specific Characteristic Performance (%) | | | | Pump Pformance | | | | | |
|--|------------|------------|-------------|-----------------------|-----------------------|--------------------|--------------------|--------------------|----------------------|
| Discharge | Total Head | Efficiency | Shaft Power | Discharge | | Total Hcad | Actual Head | Efficiency | Shaft Power |
| Q | H | η | P | Q (m ³ /s) | Q (m ³ /m) | H _t (m) | H _a (m) | η _p (%) | P _{SH} (kw) |
| 0 | - | - | - | 0.000 | 0.0 | - | - | - | - |
| 10 | - | - | - | 0.147 | 8.8 | - | - | - | - |
| 20 | - | - | - | 0.294 | 17.6 | - | - | - | - |
| 30 | - | - | - | 0.442 | 26.5 | - | - | - | - |
| 40 | - | - | - | 0.589 | 35.3 | - | - | - | - |
| 50 | - | - | - | 0.736 | 44.2 | - | - | - | - |
| 60 | - | - | - | 0.883 | 53.0 | - | - | - | - |
| 70 | 141 | 82.0 | 119.9 | 1.030 | 61.8 | 3.79 | 3.55 | 64.0 | 61.6 |
| 80 | 130 | 92.0 | 113.0 | 1.178 | 70.7 | 3.51 | 3.19 | 71.8 | 58.1 |
| 90 | 117 | 98.0 | 107.4 | 1.325 | 79.5 | 3.16 | 2.76 | 76.4 | 55.2 |
| 100 | 100 | 100.0 | 100.0 | 1.472 | 88.3 | 2.70 | 2.20 | 78.0 | 51.4 |
| 110 | 80 | 96.0 | 91.7 | 1.619 | 97.1 | 2.16 | 1.56 | 74.9 | 47.1 |
| 120 | 55 | 82.0 | 80.5 | 1.766 | 106.0 | 1.49 | 0.77 | 64.0 | 41.4 |
| 130 | 22 | 50.0 | 57.2 | 1.914 | 114.8 | 0.59 | -0.26 | 39.0 | 29.4 |
| 133 | 0 | - | - | 1.958 | 117.5 | 0.00 | -0.88 | - | - |
| - | - | - | - | - | - | - | - | - | - |

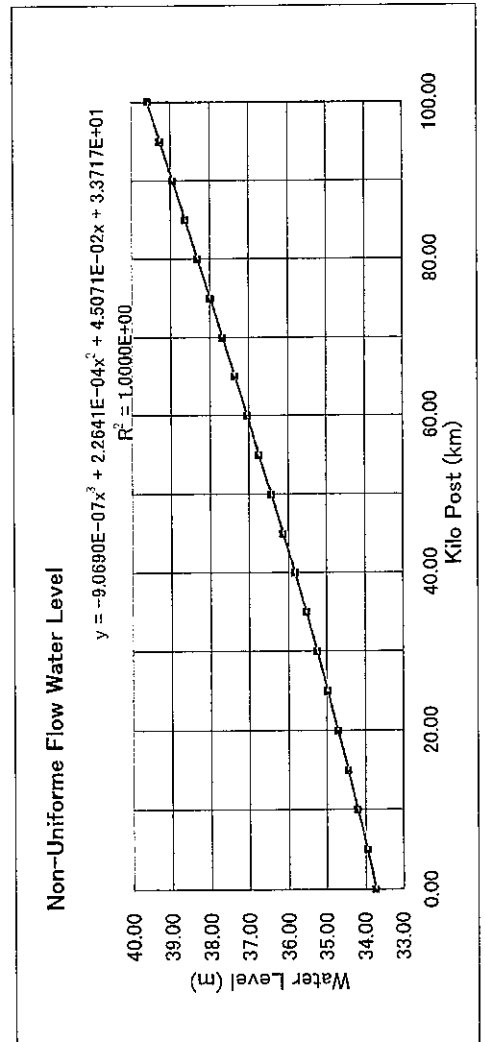


Total WL Dif = 39.594 - 33.721 = 5.873 m

| Location | Sta. | B.E.L (m) | Dist (m) | Acc. Dist. (km) | K.P (km) | WL Linearization (m) | WL Difference | % of Total Estimated WL Dif. | Y (%) |
|------------|------|-----------|----------|-----------------|----------|----------------------|---------------|------------------------------|-------|
| Sakoula R. | 1 | 27.550 | 0 | 0.00 | 177.73 | 33.721 | 0.000 | 0.00 | 0.01 |
| | 2 | 27.875 | 5.000 | 5.00 | 172.73 | 33.948 | -0.066 | -1.13 | -1.14 |
| | 3 | 28.200 | 5.000 | 10.00 | 167.73 | 34.187 | -0.121 | -2.05 | -2.06 |
| | 4 | 28.525 | 5.000 | 15.00 | 162.73 | 34.437 | -0.164 | -2.79 | -2.79 |
| Terfa | 5 | 28.850 | 5.000 | 20.00 | 157.73 | 34.688 | -0.196 | -3.34 | -3.34 |
| | 6 | 29.175 | 5.000 | 25.00 | 152.73 | 34.968 | -0.219 | -3.73 | -3.72 |
| | 7 | 29.500 | 5.000 | 30.00 | 147.73 | 35.247 | -0.234 | -3.98 | -3.97 |
| | 8 | 29.825 | 5.000 | 35.00 | 142.73 | 35.533 | -0.241 | -4.10 | -4.10 |
| | 9 | 30.150 | 5.000 | 40.00 | 137.73 | 35.826 | -0.241 | -4.11 | -4.11 |
| | 10 | 30.475 | 5.000 | 45.00 | 132.73 | 36.124 | -0.236 | -4.03 | -4.04 |
| | 11 | 30.800 | 5.000 | 50.00 | 127.73 | 36.426 | -0.228 | -3.88 | -3.88 |
| Dahab R. | 12 | 31.125 | 5.000 | 55.00 | 122.73 | 36.732 | -0.215 | -3.66 | -3.66 |
| | 13 | 31.450 | 5.000 | 60.00 | 117.73 | 37.042 | -0.198 | -3.38 | -3.38 |
| | 14 | 31.775 | 5.000 | 65.00 | 112.73 | 37.354 | -0.179 | -3.06 | -3.05 |
| | 15 | 32.100 | 5.000 | 70.00 | 107.73 | 37.669 | -0.158 | -2.69 | -2.68 |
| | 16 | 32.425 | 5.000 | 75.00 | 102.73 | 37.986 | -0.134 | -2.28 | -2.29 |
| | 17 | 32.750 | 5.000 | 80.00 | 97.73 | 38.304 | -0.109 | -1.86 | -1.86 |
| | 18 | 33.075 | 5.000 | 85.00 | 92.73 | 38.623 | -0.084 | -1.42 | -1.42 |
| Dahab R. | 19 | 33.400 | 5.000 | 90.00 | 87.73 | 38.943 | -0.057 | -0.97 | -0.97 |
| | 20 | 33.725 | 5.000 | 95.00 | 82.73 | 39.264 | -0.029 | -0.50 | -0.50 |
| | 21 | 34.050 | 5.130 | 100.13 | 77.6 | 39.594 | 0.000 | 0.00 | 0.00 |



| Canal | K.P (km) | % of WL Diff |
|------------|----------|--------------|
| El Harika | 177.23 | -0.12 |
| Saab | 177.23 | -0.12 |
| El Bahansa | 173.40 | -1.00 |
| Terfa P | 143.90 | -4.08 |
| Sakoula P | 88.18 | -1.01 |



6A-6 Monthly Water Level and Requirement at Each Equipment on Bahr Yussef Canal

January 2002

| Date | Kamader No 5 I P | Terfa No 1 I P | Bahansa Canal | | Intake WL of Harika & Saab | Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|---|-----------------------------|-------------------------------|--|-------------------------------|--|--|------------------------------|
| | WL (m) [KP 104 6km] (19 1km El Dahab C) | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [K P 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [K P 184 00 km] |
| 1 | 37.70 | 32.53 | 31.08 | 0.000 | 30.93 | 0.000 | 0.000 | 30.63 |
| 2 | 38.00 | 32.31 | 30.66 | 0.000 | 30.48 | 0.000 | 0.000 | 30.17 |
| 3 | 35.60 | 32.55 | 30.93 | 0.000 | 30.75 | 0.000 | 0.000 | 30.39 |
| 4 | 35.30 | 32.30 | 30.70 | 0.000 | 30.53 | 0.000 | 0.000 | 30.23 |
| 5 | 35.25 | 32.28 | 30.70 | 0.000 | 30.53 | 0.000 | 0.000 | 30.32 |
| 6 | 35.25 | 32.07 | 30.41 | 0.000 | 30.23 | 0.000 | 0.000 | 30.03 |
| 7 | 35.10 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.75 |
| 8 | 34.85 | 31.83 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.75 |
| 9 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.58 |
| 10 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.58 |
| 11 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.56 |
| 12 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.56 |
| 13 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.56 |
| 14 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.55 |
| 15 | 34.80 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.55 |
| 16 | 34.85 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.55 |
| 17 | 34.85 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.54 |
| 18 | 34.85 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.54 |
| 19 | 34.85 | 31.81 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.54 |
| 20 | 36.40 | 30.84 | 30.89 | 0.000 | 30.90 | 0.000 | 0.000 | 30.38 |
| 21 | 36.70 | 33.15 | 31.33 | 0.000 | 31.13 | 0.004 | 0.132 | 30.61 |
| 22 | 36.88 | 34.11 | 32.59 | 0.448 | 32.43 | 2.382 | 2.911 | 30.85 |
| 23 | 36.90 | 34.61 | 33.27 | 0.448 | 33.13 | 2.382 | 2.911 | 30.50 |
| 24 | 37.70 | 34.52 | 33.26 | 0.448 | 33.12 | 2.382 | 2.911 | 30.51 |
| 25 | 38.50 | 34.90 | 33.92 | 0.448 | 33.82 | 2.382 | 2.911 | 30.49 |
| 26 | 38.70 | 34.87 | 33.92 | 0.448 | 33.82 | 2.382 | 2.911 | 30.48 |
| 27 | 38.80 | 34.95 | 33.84 | 0.448 | 33.72 | 2.382 | 2.911 | 30.55 |
| 28 | 38.85 | 34.93 | 33.93 | 0.448 | 33.82 | 2.382 | 2.911 | 30.55 |
| 29 | 38.95 | 35.03 | 34.03 | 0.448 | 33.92 | 2.382 | 2.911 | 30.55 |
| 30 | 39.10 | 34.99 | 33.93 | 0.448 | 33.82 | 2.382 | 2.911 | 30.57 |
| 31 | 39.10 | 35.03 | 34.03 | 0.448 | 33.92 | 2.382 | 2.911 | 30.65 |
| Max | 39.10 | 35.03 | 34.03 | 0.448 | 33.92 | 2.382 | 2.911 | 30.85 |
| Min | 34.80 | 30.84 | 30.20 | 0.000 | 30.03 | 0.000 | 0.000 | 29.54 |
| Ave | 36.34 | 32.89 | 31.49 | 0.144 | 31.34 | 0.768 | 0.943 | 30.10 |
| Accumulated 1,000m ³ /month | | | | 386 8 | | 2,058 0 | 2,526 8 | |

February 2002

| Date | Kamader No 5 I P | Terfa No 1 I P | El Bahansa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|---|-----------------------------|-------------------------------|--|-------------------------------|--|--|------------------------------|
| | WL (m) [KP 104 6km] (19 1km El Dahab C) | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [K P 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [K P 184 00 km] |
| 1 | 39.10 | 34.99 | 33.98 | 0.595 | 33.87 | 3.165 | 5.757 | 30.70 |
| 2 | 39.00 | 35.02 | 33.98 | 0.595 | 33.87 | 3.165 | 5.757 | 30.79 |
| 3 | 39.10 | 35.10 | 34.03 | 0.595 | 33.92 | 3.165 | 5.757 | 30.85 |
| 4 | 39.10 | 35.12 | 34.04 | 0.595 | 33.92 | 3.165 | 5.757 | 30.98 |
| 5 | 39.10 | 34.90 | 33.66 | 0.595 | 33.52 | 3.165 | 5.757 | 31.41 |
| 6 | 38.95 | 34.28 | 32.70 | 0.595 | 32.53 | 3.165 | 4.741 | 31.65 |
| 7 | 38.00 | 34.19 | 32.47 | 0.595 | 32.28 | 2.876 | 3.507 | 31.81 |
| 8 | 37.45 | 34.31 | 32.66 | 0.595 | 32.48 | 3.165 | 4.484 | 31.82 |
| 9 | 37.38 | 34.40 | 32.80 | 0.595 | 32.63 | 3.165 | 5.293 | 31.80 |
| 10 | 37.40 | 34.48 | 32.90 | 0.595 | 32.73 | 3.165 | 5.757 | 31.72 |
| 11 | 37.40 | 34.48 | 32.90 | 0.595 | 32.73 | 3.165 | 5.757 | 31.72 |
| 12 | 37.35 | 34.50 | 32.95 | 0.595 | 32.78 | 3.165 | 5.757 | 31.67 |
| 13 | 37.35 | 34.49 | 32.94 | 0.595 | 32.78 | 3.165 | 5.757 | 31.69 |
| 14 | 37.35 | 34.51 | 32.99 | 0.595 | 32.83 | 3.165 | 5.757 | 31.64 |
| 15 | 38.40 | 34.48 | 33.02 | 0.595 | 32.86 | 3.165 | 5.757 | 31.63 |
| 16 | 38.50 | 34.59 | 33.16 | 0.595 | 33.01 | 3.165 | 5.757 | 32.41 |
| 17 | 38.50 | 34.64 | 33.23 | 0.595 | 33.08 | 3.165 | 5.757 | 32.36 |
| 18 | 38.50 | 34.62 | 33.20 | 0.595 | 33.05 | 3.165 | 5.757 | 32.33 |
| 19 | 38.50 | 34.49 | 32.99 | 0.595 | 32.83 | 3.165 | 5.757 | 31.49 |
| 20 | 38.40 | 34.24 | 32.61 | 0.595 | 32.43 | 3.165 | 4.225 | 31.57 |
| 21 | 38.50 | 34.32 | 32.66 | 0.595 | 32.48 | 3.165 | 4.485 | 31.65 |
| 22 | 37.40 | 34.68 | 33.19 | 0.595 | 33.03 | 3.165 | 5.757 | 31.65 |
| 23 | 38.05 | 34.95 | 33.66 | 0.595 | 33.52 | 3.165 | 5.757 | 31.47 |
| 24 | 38.85 | 34.94 | 33.75 | 0.595 | 33.62 | 3.165 | 5.757 | 31.46 |
| 25 | 38.75 | 34.72 | 33.46 | 0.595 | 33.32 | 3.165 | 5.757 | 31.47 |
| 26 | 38.50 | 34.62 | 33.05 | 0.595 | 32.88 | 3.165 | 5.757 | 31.49 |
| 27 | 37.70 | 34.06 | 32.32 | 0.595 | 32.13 | 2.282 | 2.848 | 32.41 |
| 28 | 37.55 | 34.06 | 32.32 | 0.595 | 32.13 | 2.282 | 2.848 | 30.75 |
| Max | 39.10 | 35.12 | 34.04 | 0.595 | 33.92 | 3.165 | 5.757 | 32.41 |
| Min | 37.35 | 34.06 | 32.32 | 0.595 | 32.13 | 2.282 | 2.848 | 30.70 |
| Ave | 38.22 | 34.58 | 33.13 | 0.595 | 32.97 | 3.091 | 5.271 | 31.59 |
| Accumulated 1,000m ³ /month | | | | 1,439 | | 7,479 | 12,751 | |

March 2002

| Date | Kamader | | Terfa | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula |
|--|--|----------------|------------------------|--------------------------------------|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------|---------|
| | WL (m) [KP 104 6km] (19 1km El Dahab C) | [KP 143 90 km] | WL (m) [KP 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | |
| 1 | 37.52 | 34.15 | 32.40 | 0.786 | 32.21 | 2.592 | 3.192 | 31.71 | | |
| 2 | 37.57 | 34.24 | 32.52 | 0.786 | 32.33 | 3.089 | 3.742 | 31.76 | | |
| 3 | 38.50 | 34.19 | 32.51 | 0.786 | 32.33 | 3.085 | 3.738 | 31.76 | | |
| 4 | 38.05 | 34.26 | 32.52 | 0.786 | 32.33 | 3.090 | 3.744 | 31.72 | | |
| 5 | 38.00 | 34.33 | 32.62 | 0.786 | 32.43 | 3.536 | 4.233 | 31.81 | | |
| 6 | 38.06 | 34.51 | 32.86 | 0.786 | 32.68 | 4.181 | 5.533 | 31.79 | | |
| 7 | 38.30 | 34.29 | 32.52 | 0.786 | 32.33 | 3.092 | 3.746 | 31.78 | | |
| 8 | 38.00 | 34.40 | 32.60 | 0.786 | 32.40 | 3.406 | 4.091 | 31.85 | | |
| 9 | 37.90 | 34.59 | 32.87 | 0.786 | 32.68 | 4.181 | 5.533 | 31.80 | | |
| 10 | 37.88 | 34.58 | 32.87 | 0.786 | 32.68 | 4.181 | 5.533 | 31.88 | | |
| 11 | 37.82 | 34.74 | 33.11 | 0.786 | 32.93 | 4.181 | 5.533 | 31.88 | | |
| 12 | 38.15 | 34.71 | 33.10 | 0.786 | 32.93 | 4.181 | 5.533 | 31.88 | | |
| 13 | 38.08 | 34.68 | 33.05 | 0.786 | 32.88 | 4.181 | 5.533 | 31.88 | | |
| 14 | 38.20 | 34.57 | 32.91 | 0.786 | 32.73 | 4.181 | 5.533 | 31.91 | | |
| 15 | 38.25 | 34.63 | 32.92 | 0.786 | 32.73 | 4.181 | 5.533 | 31.98 | | |
| 16 | 38.30 | 34.77 | 33.11 | 0.786 | 32.93 | 4.181 | 5.533 | 31.99 | | |
| 17 | 38.60 | 34.99 | 33.44 | 0.786 | 33.28 | 4.181 | 5.533 | 32.07 | | |
| 18 | 38.60 | 35.09 | 33.59 | 0.786 | 33.43 | 4.181 | 5.533 | 32.07 | | |
| 19 | 38.95 | 34.82 | 33.29 | 0.786 | 33.13 | 4.181 | 5.533 | 32.07 | | |
| 20 | 39.00 | 34.58 | 32.93 | 0.786 | 32.75 | 4.181 | 5.533 | 32.07 | | |
| 21 | 39.00 | 34.59 | 32.89 | 0.786 | 32.71 | 4.181 | 5.533 | 32.09 | | |
| 22 | 38.70 | 34.75 | 33.08 | 0.786 | 32.90 | 4.181 | 5.533 | 32.05 | | |
| 23 | 38.10 | 34.84 | 33.19 | 0.786 | 33.01 | 4.181 | 5.533 | 32.05 | | |
| 24 | 38.40 | 34.82 | 33.25 | 0.786 | 33.08 | 4.181 | 5.533 | 32.04 | | |
| 25 | 38.50 | 34.71 | 33.10 | 0.786 | 32.93 | 4.181 | 5.533 | 32.01 | | |
| 26 | 38.50 | 34.57 | 32.91 | 0.786 | 32.73 | 4.181 | 5.533 | 31.98 | | |
| 27 | 38.18 | 34.52 | 32.77 | 0.786 | 32.58 | 4.181 | 5.030 | 32.03 | | |
| 28 | 38.02 | 34.55 | 32.77 | 0.786 | 32.58 | 4.181 | 5.033 | 32.07 | | |
| 29 | 38.05 | 34.81 | 33.11 | 0.786 | 32.93 | 4.181 | 5.533 | 32.08 | | |
| 30 | 38.08 | 34.89 | 33.21 | 0.786 | 33.03 | 4.181 | 5.533 | 32.12 | | |
| 31 | 38.15 | 35.19 | 33.64 | 0.786 | 33.48 | 4.181 | 5.533 | 32.02 | | |
| Max | 39.00 | 35.19 | 33.64 | 0.786 | 33.48 | 4.181 | 5.533 | 32.12 | | |
| Min | 37.52 | 34.15 | 32.40 | 0.786 | 32.21 | 2.592 | 3.192 | 31.71 | | |
| Ave | 38.24 | 34.62 | 32.96 | 0.786 | 32.78 | 3.943 | 5.106 | 31.94 | | |
| Accumulated 1,000m ³ /month | | | | 2 105 | | 10 561 | 13 676 | | | |

April 2002

| Date | Kamader | | Terfa | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula |
|--|--|----------------|-------------------------|--------------------------------------|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------|---------|
| | WL (m) [KP 104 6km] (19 1km El Dahab C) | [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | |
| 1 | 38.52 | 35.25 | 33.83 | 0.726 | 33.68 | 3.862 | 6.219 | 32.01 | | |
| 2 | 38.50 | 35.10 | 33.68 | 0.726 | 33.53 | 3.862 | 6.219 | 32.01 | | |
| 3 | 38.65 | 34.93 | 33.48 | 0.726 | 33.33 | 3.862 | 6.219 | 31.94 | | |
| 4 | 38.75 | 34.72 | 33.19 | 0.726 | 33.03 | 3.862 | 6.219 | 31.91 | | |
| 5 | 38.80 | 34.61 | 33.00 | 0.726 | 32.83 | 3.862 | 6.219 | 31.90 | | |
| 6 | 38.10 | 34.84 | 33.21 | 0.726 | 33.03 | 3.862 | 6.219 | 31.87 | | |
| 7 | 38.20 | 34.77 | 33.20 | 0.726 | 33.03 | 3.862 | 6.219 | 31.88 | | |
| 8 | 38.20 | 34.99 | 33.49 | 0.726 | 33.33 | 3.862 | 6.219 | 31.90 | | |
| 9 | 38.20 | 34.92 | 33.39 | 0.726 | 33.23 | 3.862 | 6.219 | 31.87 | | |
| 10 | 38.10 | 34.99 | 33.44 | 0.726 | 33.28 | 3.862 | 6.219 | 31.87 | | |
| 11 | 37.95 | 35.12 | 33.59 | 0.726 | 33.43 | 3.862 | 6.219 | 31.90 | | |
| 12 | 38.00 | 35.34 | 33.93 | 0.726 | 33.78 | 3.862 | 6.219 | 31.91 | | |
| 13 | 38.70 | 35.28 | 33.97 | 0.726 | 33.92 | 3.862 | 6.219 | 31.88 | | |
| 14 | 39.10 | 35.24 | 33.87 | 0.726 | 33.73 | 3.862 | 6.219 | 31.86 | | |
| 15 | 39.10 | 35.28 | 33.97 | 0.726 | 33.82 | 3.862 | 6.219 | 31.82 | | |
| 16 | 39.10 | 35.04 | 33.63 | 0.726 | 33.48 | 3.862 | 6.219 | 31.85 | | |
| 17 | 39.10 | 34.97 | 33.53 | 0.726 | 33.38 | 3.862 | 6.219 | 31.85 | | |
| 18 | 38.98 | 34.63 | 33.34 | 0.726 | 33.18 | 3.862 | 6.219 | 31.83 | | |
| 19 | 38.90 | 34.76 | 33.24 | 0.726 | 33.08 | 3.862 | 6.219 | 31.85 | | |
| 20 | 38.80 | 34.84 | 33.34 | 0.726 | 33.18 | 3.862 | 6.219 | 31.84 | | |
| 21 | 38.70 | 34.98 | 33.53 | 0.726 | 33.38 | 3.862 | 6.219 | 31.84 | | |
| 22 | 38.65 | 35.25 | 33.92 | 0.726 | 33.78 | 3.862 | 6.219 | 31.82 | | |
| 23 | 39.10 | 35.32 | 34.06 | 0.726 | 33.92 | 3.862 | 6.219 | 31.73 | | |
| 24 | 39.10 | 35.30 | 34.06 | 0.726 | 33.92 | 3.862 | 6.219 | 31.73 | | |
| 25 | 39.10 | 35.25 | 34.05 | 0.726 | 33.92 | 3.862 | 6.219 | 31.73 | | |
| 26 | 39.10 | 35.22 | 34.05 | 0.726 | 33.92 | 3.862 | 6.219 | 31.68 | | |
| 27 | 39.10 | 35.21 | 34.05 | 0.726 | 33.92 | 3.862 | 6.219 | 31.47 | | |
| 28 | 39.10 | 35.18 | 34.04 | 0.726 | 33.92 | 3.862 | 6.219 | 31.34 | | |
| 29 | 38.75 | 35.05 | 33.76 | 0.726 | 33.62 | 3.862 | 6.219 | 31.37 | | |
| 30 | 38.00 | 35.01 | 33.67 | 0.726 | 33.53 | 3.862 | 6.219 | 31.46 | | |
| Max | 39.10 | 35.34 | 34.06 | 0.726 | 33.92 | 3.862 | 6.219 | 32.01 | | |
| Min | 37.95 | 34.61 | 33.00 | 0.726 | 32.83 | 3.862 | 6.219 | 31.34 | | |
| Ave | 38.68 | 35.05 | 33.65 | 0.726 | 33.50 | 3.862 | 6.219 | 31.80 | | |
| Accumulated 1,000m ³ /month | | | | 1 882 | | 10,011 | 16,119 | | | |

May 2002

| Date | Kamader No 5 I P | | Terfa No 1 I P | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|--|-----|-----------------------------|-------------------------------|--|-----------------------------|--|--|-----------------------------|---------------------|
| | WL (m) 104 Gkm] (19 1km El Dahab C) | [KP | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | |
| 1 | 38.40 | | 35.13 | 34.04 | 0.634 | 33.92 | 3.370 | 4.905 | 31.51 | |
| 2 | 38.90 | | 34.40 | 32.98 | 0.634 | 32.83 | 3.370 | 4.905 | 31.49 | |
| 3 | 38.50 | | 34.21 | 32.60 | 0.634 | 32.43 | 3.370 | 4.223 | 31.51 | |
| 4 | 38.40 | | 34.17 | 32.55 | 0.634 | 32.38 | 3.300 | 3.974 | 31.57 | |
| 5 | 38.40 | | 34.01 | 32.36 | 0.634 | 32.18 | 2.466 | 3.053 | 31.68 | |
| 6 | 37.60 | | 34.13 | 32.34 | 0.634 | 32.15 | 2.361 | 2.935 | 31.68 | |
| 7 | 37.55 | | 34.45 | 32.81 | 0.634 | 32.63 | 3.370 | 4.905 | 31.75 | |
| 8 | 37.60 | | 34.68 | 33.10 | 0.634 | 32.93 | 3.370 | 4.905 | 31.84 | |
| 9 | 37.75 | | 34.79 | 33.20 | 0.634 | 33.03 | 3.370 | 4.905 | 31.90 | |
| 10 | 38.40 | | 34.91 | 33.35 | 0.634 | 33.18 | 3.370 | 4.905 | 31.93 | |
| 11 | 37.80 | | 34.91 | 33.35 | 0.634 | 33.18 | 3.370 | 4.905 | 31.96 | |
| 12 | 37.88 | | 35.15 | 33.68 | 0.634 | 33.53 | 3.370 | 4.905 | 31.89 | |
| 13 | 37.98 | | 35.10 | 33.63 | 0.634 | 33.48 | 3.370 | 4.905 | 31.88 | |
| 14 | 38.50 | | 34.80 | 33.25 | 0.634 | 33.08 | 3.370 | 4.905 | 32.02 | |
| 15 | 38.20 | | 34.57 | 32.84 | 0.634 | 32.65 | 3.370 | 4.905 | 32.14 | |
| 16 | 38.40 | | 34.54 | 32.84 | 0.634 | 32.65 | 3.370 | 4.905 | 32.13 | |
| 17 | 38.50 | | 34.57 | 32.84 | 0.634 | 32.65 | 3.370 | 4.905 | 32.16 | |
| 18 | 38.50 | | 34.69 | 33.01 | 0.634 | 32.83 | 3.370 | 4.905 | 32.17 | |
| 19 | 38.60 | | 34.90 | 33.35 | 0.634 | 33.18 | 3.370 | 4.905 | 32.08 | |
| 20 | 38.55 | | 34.80 | 33.20 | 0.634 | 33.03 | 3.370 | 4.905 | 32.02 | |
| 21 | 38.40 | | 34.67 | 33.01 | 0.634 | 32.83 | 3.370 | 4.905 | 32.18 | |
| 22 | 37.92 | | 34.59 | 32.87 | 0.634 | 32.68 | 3.370 | 4.905 | 32.11 | |
| 23 | 37.90 | | 34.62 | 32.82 | 0.634 | 32.73 | 3.370 | 4.905 | 32.17 | |
| 24 | 38.10 | | 34.70 | 32.95 | 0.634 | 32.76 | 3.370 | 4.905 | 32.20 | |
| 25 | 38.20 | | 34.85 | 33.12 | 0.634 | 32.93 | 3.370 | 4.905 | 32.26 | |
| 26 | 38.34 | | 34.97 | 33.22 | 0.634 | 33.03 | 3.370 | 4.905 | 32.33 | |
| 27 | 38.35 | | 35.11 | 33.41 | 0.634 | 33.23 | 3.370 | 4.905 | 32.37 | |
| 28 | 38.52 | | 35.28 | 33.65 | 0.634 | 33.48 | 3.370 | 4.905 | 32.34 | |
| 29 | 38.55 | | 35.35 | 33.75 | 0.634 | 33.58 | 3.370 | 4.905 | 32.37 | |
| 30 | 38.90 | | 35.28 | 33.70 | 0.634 | 33.53 | 3.370 | 4.905 | 32.41 | |
| 31 | 39.00 | | 35.25 | 33.65 | 0.634 | 33.48 | 3.370 | 4.905 | 32.40 | |
| Max | 39.00 | | 35.35 | 34.04 | 0.634 | 33.92 | 3.370 | 4.905 | 32.41 | |
| Min | 37.55 | | 34.01 | 32.34 | 0.634 | 32.15 | 2.361 | 2.935 | 31.49 | |
| Ave | 38.27 | | 34.76 | 33.15 | 0.634 | 32.97 | 3.306 | 4.729 | 32.01 | |
| Accumulated 1,000m ³ /month | | | | | 1,697 | | 8,856 | 12 667 | | |

June 2002

| Date | Kamader No 5 I P | | Terfa No 1 I P | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|--|-----|-----------------------------|-------------------------------|--|-----------------------------|--|--|-----------------------------|---------------------|
| | WL (m) 104 Gkm] (19 1km El Dahab C) | [KP | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | |
| 1 | 38.80 | | 35.18 | 33.55 | 1.139 | 33.38 | 6.060 | 6.851 | 32.45 | |
| 2 | 38.50 | | 35.13 | 33.50 | 1.139 | 33.33 | 6.060 | 6.851 | 32.44 | |
| 3 | 38.65 | | 35.01 | 33.36 | 1.139 | 33.18 | 6.060 | 6.851 | 32.42 | |
| 4 | 39.10 | | 34.90 | 33.21 | 1.139 | 33.03 | 6.060 | 6.851 | 32.40 | |
| 5 | 38.80 | | 35.04 | 33.36 | 1.139 | 33.18 | 6.060 | 6.851 | 32.38 | |
| 6 | 38.65 | | 35.00 | 33.31 | 1.139 | 33.13 | 6.060 | 6.851 | 32.38 | |
| 7 | 38.50 | | 34.92 | 33.20 | 1.139 | 33.01 | 6.060 | 6.851 | 32.40 | |
| 8 | 38.20 | | 34.92 | 33.22 | 1.139 | 33.03 | 6.060 | 6.851 | 32.41 | |
| 9 | 38.22 | | 34.96 | 33.26 | 1.139 | 33.08 | 6.060 | 6.851 | 32.43 | |
| 10 | 38.25 | | 34.90 | 33.17 | 1.139 | 32.98 | 6.060 | 6.851 | 32.43 | |
| 11 | 38.35 | | 34.91 | 33.14 | 1.139 | 32.95 | 6.060 | 6.851 | 32.40 | |
| 12 | 38.42 | | 34.93 | 33.15 | 1.139 | 32.95 | 6.060 | 6.851 | 32.41 | |
| 13 | 38.42 | | 35.06 | 33.32 | 1.139 | 33.13 | 6.060 | 6.851 | 32.45 | |
| 14 | 38.45 | | 35.13 | 33.42 | 1.139 | 33.23 | 6.060 | 6.851 | 32.47 | |
| 15 | 38.50 | | 35.33 | 33.70 | 1.139 | 33.53 | 6.060 | 6.851 | 32.50 | |
| 16 | 39.10 | | 35.53 | 34.08 | 1.139 | 33.93 | 6.060 | 6.851 | 32.33 | |
| 17 | 39.10 | | 35.36 | 33.89 | 1.139 | 33.73 | 6.060 | 6.851 | 32.36 | |
| 18 | 38.90 | | 35.18 | 33.60 | 1.139 | 33.43 | 6.060 | 6.851 | 32.36 | |
| 19 | 38.70 | | 35.18 | 33.55 | 1.139 | 33.38 | 6.060 | 6.851 | 32.35 | |
| 20 | 38.70 | | 35.11 | 33.46 | 1.139 | 33.28 | 6.060 | 6.851 | 32.38 | |
| 21 | 38.60 | | 35.09 | 33.41 | 1.139 | 33.23 | 6.060 | 6.851 | 32.41 | |
| 22 | 38.40 | | 35.12 | 33.46 | 1.139 | 33.28 | 6.060 | 6.851 | 32.44 | |
| 23 | 38.35 | | 35.53 | 34.04 | 1.139 | 33.88 | 6.060 | 6.851 | 32.44 | |
| 24 | 38.80 | | 35.32 | 33.75 | 1.139 | 33.58 | 6.060 | 6.851 | 32.40 | |
| 25 | 39.05 | | 35.15 | 33.55 | 1.139 | 33.38 | 6.060 | 6.851 | 32.35 | |
| 26 | 39.08 | | 34.87 | 33.14 | 1.139 | 32.95 | 6.060 | 6.851 | 32.40 | |
| 27 | 38.70 | | 34.90 | 33.14 | 1.139 | 32.95 | 6.060 | 6.851 | 32.40 | |
| 28 | 38.50 | | 34.97 | 33.22 | 1.139 | 33.03 | 6.060 | 6.851 | 32.41 | |
| 29 | 38.40 | | 35.04 | 33.32 | 1.139 | 33.13 | 6.060 | 6.851 | 32.45 | |
| 30 | 38.60 | | 35.11 | 33.46 | 1.139 | 33.28 | 6.060 | 6.851 | 32.42 | |
| Max | 39.10 | | 35.53 | 34.08 | 1.139 | 33.93 | 6.060 | 6.851 | 32.50 | |
| Min | 38.20 | | 34.87 | 33.14 | 1.139 | 32.95 | 6.060 | 6.851 | 32.33 | |
| Ave | 38.63 | | 35.09 | 33.43 | 1.139 | 33.25 | 6.060 | 6.851 | 32.41 | |
| Accumulated 1,000m ³ /month | | | | | 2,953 | | 15 708 | 17,757 | | |

July 2002

| Date | Kamader No 5 I P | Terfa No 1 I P | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|------------------------------------|-----------------------------|-------------------------------|--|-------------------------------|--|--|-----------------------------|
| | WL (m) 104 6km [KP Dahab C) | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] |
| 1 | 38.65 | 35.15 | 33.53 | 1.465 | 33.35 | 7.794 | 8.779 | 32.41 |
| 2 | 38.65 | 35.14 | 33.51 | 1.465 | 33.33 | 7.794 | 8.779 | 32.46 |
| 3 | 38.68 | 35.04 | 33.36 | 1.465 | 33.18 | 7.794 | 8.779 | 32.41 |
| 4 | 38.60 | 34.99 | 33.27 | 1.465 | 33.08 | 7.166 | 8.148 | 32.39 |
| 5 | 38.30 | 34.95 | 33.22 | 1.465 | 33.03 | 6.844 | 7.804 | 32.43 |
| 6 | 38.24 | 34.86 | 33.25 | 1.465 | 33.06 | 7.034 | 8.007 | 32.44 |
| 7 | 38.32 | 35.03 | 33.32 | 1.465 | 33.13 | 7.495 | 8.498 | 32.44 |
| 8 | 38.34 | 35.11 | 33.41 | 1.465 | 33.23 | 7.794 | 8.779 | 32.42 |
| 9 | 38.32 | 34.97 | 33.24 | 1.465 | 33.05 | 6.972 | 7.941 | 32.41 |
| 10 | 38.30 | 34.91 | 33.16 | 1.465 | 32.97 | 6.467 | 7.401 | 32.41 |
| 11 | 38.34 | 34.92 | 33.16 | 1.465 | 32.97 | 6.469 | 7.403 | 32.41 |
| 12 | 38.34 | 34.92 | 33.16 | 1.465 | 32.97 | 6.469 | 7.403 | 32.41 |
| 13 | 38.40 | 34.94 | 33.16 | 1.465 | 32.97 | 6.470 | 7.405 | 32.41 |
| 14 | 38.40 | 34.96 | 33.19 | 1.465 | 33.00 | 6.657 | 7.605 | 32.41 |
| 15 | 38.50 | 35.02 | 33.32 | 1.465 | 33.13 | 7.494 | 8.498 | 32.41 |
| 16 | 38.55 | 34.97 | 33.24 | 1.465 | 33.05 | 6.972 | 7.941 | 32.44 |
| 17 | 38.50 | 34.86 | 33.22 | 1.465 | 33.03 | 6.844 | 7.804 | 32.43 |
| 18 | 38.50 | 34.94 | 33.22 | 1.465 | 33.03 | 6.843 | 7.803 | 32.43 |
| 19 | 38.50 | 34.94 | 33.22 | 1.465 | 33.03 | 6.843 | 7.803 | 32.43 |
| 20 | 38.50 | 34.97 | 33.24 | 1.465 | 33.05 | 6.972 | 7.941 | 32.43 |
| 21 | 38.30 | 34.97 | 33.25 | 1.465 | 33.06 | 7.036 | 8.009 | 32.43 |
| 22 | 38.55 | 34.96 | 33.24 | 1.465 | 33.05 | 6.971 | 7.940 | 32.42 |
| 23 | 38.30 | 34.99 | 33.27 | 1.465 | 33.08 | 7.165 | 8.147 | 32.43 |
| 24 | 38.35 | 34.99 | 33.26 | 1.465 | 33.07 | 7.101 | 8.079 | 32.44 |
| 25 | 38.30 | 34.93 | 33.18 | 1.465 | 32.99 | 6.592 | 7.534 | 32.42 |
| 26 | 38.37 | 34.95 | 33.18 | 1.465 | 32.99 | 6.594 | 7.537 | 32.42 |
| 27 | 38.40 | 34.95 | 33.18 | 1.465 | 32.99 | 6.595 | 7.538 | 32.43 |
| 28 | 38.55 | 34.93 | 33.22 | 1.465 | 33.03 | 6.841 | 7.801 | 32.43 |
| 29 | 38.50 | 34.93 | 33.18 | 1.465 | 32.99 | 6.592 | 7.534 | 32.41 |
| 30 | 38.40 | 34.95 | 33.18 | 1.465 | 32.99 | 6.595 | 7.538 | 32.42 |
| 31 | 38.35 | 34.91 | 33.19 | 1.465 | 33.00 | 6.652 | 7.598 | 32.44 |
| Max | 38.68 | 35.15 | 33.53 | 1.465 | 33.35 | 7.794 | 8.779 | 32.46 |
| Min | 38.24 | 34.91 | 33.16 | 1.465 | 32.97 | 6.467 | 7.401 | 32.39 |
| Ave | 38.43 | 34.98 | 33.25 | 1.465 | 33.06 | 6.965 | 7.928 | 32.42 |
| Accumulated 1,000m ³ /month | | | | 3 925 | | 18 655 | 21 235 | |

August 2002

| Date | Kamader No 5 I P | Terfa No 1 I P | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|------------------------------------|-----------------------------|-------------------------------|--|-------------------------------|--|--|-----------------------------|
| | WL (m) 104 6km [KP Dahab C) | WL (m) [KP 143 90 km] | WL (m) [K P 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] |
| 1 | 38.45 | 34.88 | 33.17 | 0.979 | 32.99 | 5.209 | 7.227 | 32.43 |
| 2 | 38.50 | 34.87 | 33.16 | 0.979 | 32.97 | 5.209 | 7.227 | 32.41 |
| 3 | 38.50 | 34.90 | 33.18 | 0.979 | 32.99 | 5.209 | 7.227 | 32.43 |
| 4 | 38.28 | 34.93 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 5 | 38.32 | 34.94 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.44 |
| 6 | 38.30 | 34.99 | 33.27 | 0.979 | 33.08 | 5.209 | 7.227 | 32.43 |
| 7 | 38.32 | 35.01 | 33.29 | 0.979 | 33.10 | 5.209 | 7.227 | 32.43 |
| 8 | 38.28 | 34.95 | 33.22 | 0.979 | 33.03 | 5.209 | 7.227 | 32.43 |
| 9 | 38.28 | 34.91 | 33.16 | 0.979 | 32.97 | 5.209 | 7.227 | 32.40 |
| 10 | 38.40 | 34.88 | 33.09 | 0.979 | 32.89 | 5.209 | 6.884 | 32.33 |
| 11 | 38.45 | 34.95 | 33.16 | 0.979 | 32.97 | 5.209 | 7.227 | 32.40 |
| 12 | 38.42 | 34.97 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 13 | 38.40 | 34.96 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 14 | 38.50 | 34.93 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 15 | 38.50 | 34.91 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 16 | 38.50 | 34.93 | 33.20 | 0.979 | 33.01 | 5.209 | 7.227 | 32.43 |
| 17 | 38.50 | 34.91 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 18 | 38.50 | 34.93 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 19 | 38.40 | 34.95 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 20 | 38.40 | 34.95 | 33.19 | 0.979 | 33.00 | 5.209 | 7.227 | 32.43 |
| 21 | 38.32 | 34.99 | 33.27 | 0.979 | 33.08 | 5.209 | 7.227 | 32.43 |
| 22 | 38.30 | 35.06 | 33.36 | 0.979 | 33.18 | 5.209 | 7.227 | 32.41 |
| 23 | 38.34 | 35.09 | 33.39 | 0.979 | 33.21 | 5.209 | 7.227 | 32.40 |
| 24 | 38.35 | 35.14 | 33.46 | 0.979 | 33.28 | 5.209 | 7.227 | 32.38 |
| 25 | 38.60 | 35.28 | 33.70 | 0.979 | 33.53 | 5.209 | 7.227 | 32.38 |
| 26 | 38.85 | 35.43 | 33.94 | 0.979 | 33.78 | 5.209 | 7.227 | 32.29 |
| 27 | 38.88 | 35.43 | 33.98 | 0.979 | 33.83 | 5.209 | 7.227 | 32.28 |
| 28 | 38.75 | 35.21 | 33.69 | 0.979 | 33.53 | 5.209 | 7.227 | 32.32 |
| 29 | 38.55 | 35.03 | 33.45 | 0.979 | 33.28 | 5.209 | 7.227 | 32.31 |
| 30 | 38.50 | 34.70 | 33.01 | 0.979 | 32.83 | 5.209 | 6.491 | 32.32 |
| 31 | 38.50 | 34.72 | 33.06 | 0.979 | 32.88 | 5.209 | 6.804 | 32.30 |
| Max | 38.88 | 35.43 | 33.98 | 0.979 | 33.83 | 5.209 | 7.227 | 32.44 |
| Min | 38.28 | 34.70 | 33.01 | 0.979 | 32.83 | 5.209 | 6.491 | 32.28 |
| Ave | 38.45 | 34.99 | 33.29 | 0.979 | 33.11 | 5.209 | 7.178 | 32.40 |
| Accumulated 1,000m ³ /month | | | | 2 623 | | 13 951 | 19 226 | |

September 2002

| Date | Kamader | | Terfa | | El Bahnasa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula |
|---|-----------|-----------|----------|-----|------------------|---------------------|----------------------------|---------------------|---------------------|------------|
| | No 5 I P | | No 1 I P | | WL (m) | Intake | WL (m) | Intake | Intake | WL (m) |
| | WL (m) | [KP | WL (m) | [KP | [K P 173 4 | Discharge | [KP 177 23 | Discharge | Discharge | [KP 184 00 |
| | 104 6km] | 19 1km El | 143 90 | km] | (km)] | (m ³ /s) | km] | (m ³ /s) | (m ³ /s) | km] |
| | Dahab C) | | km] | | | | | | | |
| 1 | 38.45 | | 34.97 | | 33.40 | 0.346 | 33.23 | 1.841 | 5.037 | 32.22 |
| 2 | 38.45 | | 34.95 | | 33.37 | 0.346 | 33.20 | 1.841 | 5.037 | 32.17 |
| 3 | 38.38 | | 34.93 | | 33.37 | 0.346 | 33.20 | 1.841 | 5.037 | 32.13 |
| 4 | 38.40 | | 34.93 | | 33.37 | 0.346 | 33.20 | 1.841 | 5.037 | 32.10 |
| 5 | 38.38 | | 34.90 | | 33.30 | 0.346 | 33.13 | 1.841 | 5.037 | 32.14 |
| 6 | 38.15 | | 34.84 | | 33.21 | 0.346 | 33.03 | 1.841 | 5.037 | 32.45 |
| 7 | 37.98 | | 34.84 | | 33.21 | 0.346 | 33.03 | 1.841 | 5.037 | 32.47 |
| 8 | 38.25 | | 34.81 | | 33.16 | 0.346 | 32.98 | 1.841 | 5.037 | 32.22 |
| 9 | 38.40 | | 34.99 | | 33.44 | 0.346 | 33.28 | 1.841 | 5.037 | 32.11 |
| 10 | 38.80 | | 35.03 | | 33.54 | 0.346 | 33.38 | 1.841 | 5.037 | 32.01 |
| 11 | 38.90 | | 35.06 | | 33.59 | 0.346 | 33.43 | 1.841 | 5.037 | 31.97 |
| 12 | 38.60 | | 34.99 | | 33.49 | 0.346 | 33.33 | 1.841 | 5.037 | 32.02 |
| 13 | 38.00 | | 34.89 | | 33.34 | 0.346 | 33.18 | 1.841 | 5.037 | 32.05 |
| 14 | 37.65 | | 34.97 | | 33.49 | 0.346 | 33.33 | 1.841 | 5.037 | 32.05 |
| 15 | 37.00 | | 35.05 | | 33.76 | 0.346 | 33.62 | 1.841 | 5.037 | 31.83 |
| 16 | 37.00 | | 34.94 | | 33.57 | 0.346 | 33.43 | 1.841 | 5.037 | 31.81 |
| 17 | 38.65 | | 34.77 | | 33.38 | 0.346 | 33.23 | 1.841 | 5.037 | 31.78 |
| 18 | 38.70 | | 34.49 | | 32.99 | 0.346 | 32.83 | 1.841 | 5.037 | 31.79 |
| 19 | 38.20 | | 34.27 | | 32.54 | 0.346 | 32.35 | 1.841 | 3.839 | 31.86 |
| 20 | 38.60 | | 34.36 | | 32.66 | 0.346 | 32.48 | 1.841 | 4.488 | 31.85 |
| 21 | 37.45 | | 34.24 | | 32.56 | 0.346 | 32.38 | 1.841 | 3.981 | 31.88 |
| 22 | 37.42 | | 34.38 | | 32.76 | 0.346 | 32.58 | 1.841 | 5.017 | 31.82 |
| 23 | 37.50 | | 34.50 | | 32.90 | 0.346 | 32.73 | 1.841 | 5.037 | 31.79 |
| 24 | 37.56 | | 34.60 | | 33.05 | 0.346 | 32.88 | 1.841 | 5.037 | 31.73 |
| 25 | 37.54 | | 34.59 | | 33.00 | 0.346 | 32.83 | 1.841 | 5.037 | 31.72 |
| 26 | 37.55 | | 34.55 | | 32.95 | 0.346 | 32.78 | 1.841 | 5.037 | 31.73 |
| 27 | 37.55 | | 34.48 | | 32.86 | 0.346 | 32.68 | 1.841 | 5.037 | 31.73 |
| 28 | 37.55 | | 34.48 | | 32.86 | 0.346 | 32.68 | 1.841 | 5.037 | 31.72 |
| 29 | 38.50 | | 34.33 | | 32.75 | 0.346 | 32.58 | 1.841 | 5.012 | 31.78 |
| 30 | 38.50 | | 34.15 | | 32.48 | 0.346 | 32.30 | 1.841 | 3.595 | 31.79 |
| Max | 38.90 | | 35.06 | | 33.76 | 0.346 | 33.62 | 1.841 | 5.037 | 32.47 |
| Min | 37.00 | | 34.15 | | 32.48 | 0.346 | 32.30 | 1.841 | 3.595 | 31.72 |
| Ave | 38.07 | | 34.71 | | 33.14 | 0.346 | 32.98 | 1.841 | 4.894 | 31.96 |
| Accumulated 1.000m ³ /month | | | | | | 897 | | 4 773 | 12 686 | |

October 2002

| Date | Kamader | | Terfa | | El Bahnasa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula |
|---|-----------|-----------|----------|-----|------------------|---------------------|----------------------------|---------------------|---------------------|------------|
| | No 5 I P | | No 1 I P | | WL (m) | Intake | WL (m) | Intake | Intake | WL (m) |
| | WL (m) | [KP | WL (m) | [KP | [K P 173 4 | Discharge | [KP 177 23 | Discharge | Discharge | [KP 184 00 |
| | 104 6km] | 19 1km El | 143 90 | km] | (km)] | (m ³ /s) | km] | (m ³ /s) | (m ³ /s) | km] |
| | Dahab C) | | km] | | | | | | | |
| 1 | 38.35 | | 34.16 | | 32.42 | 0.215 | 32.23 | 1.141 | 3.281 | 31.72 |
| 2 | 38.35 | | 34.23 | | 32.52 | 0.215 | 32.33 | 1.141 | 3.741 | 31.85 |
| 3 | 37.85 | | 34.40 | | 32.62 | 0.215 | 32.43 | 1.141 | 4.239 | 31.75 |
| 4 | 37.68 | | 34.56 | | 32.91 | 0.215 | 32.73 | 1.141 | 4.400 | 31.81 |
| 5 | 37.60 | | 34.68 | | 33.10 | 0.215 | 32.93 | 1.141 | 4.400 | 31.83 |
| 6 | 37.60 | | 34.75 | | 33.20 | 0.215 | 33.03 | 1.141 | 4.400 | 31.76 |
| 7 | 37.60 | | 34.74 | | 33.19 | 0.215 | 33.03 | 1.141 | 4.400 | 31.74 |
| 8 | 37.55 | | 34.66 | | 33.10 | 0.215 | 32.93 | 1.141 | 4.400 | 31.75 |
| 9 | 37.57 | | 34.63 | | 33.05 | 0.215 | 32.88 | 1.141 | 4.400 | 31.74 |
| 10 | 37.55 | | 34.59 | | 33.00 | 0.215 | 32.83 | 1.141 | 4.400 | 31.75 |
| 11 | 37.55 | | 34.52 | | 32.90 | 0.215 | 32.73 | 1.141 | 4.400 | 31.76 |
| 12 | 37.55 | | 34.55 | | 32.95 | 0.215 | 32.78 | 1.141 | 4.400 | 31.76 |
| 13 | 38.50 | | 34.44 | | 32.94 | 0.215 | 32.78 | 1.141 | 4.400 | 31.74 |
| 14 | 38.50 | | 34.33 | | 32.75 | 0.215 | 32.58 | 1.141 | 4.400 | 31.69 |
| 15 | 38.50 | | 34.32 | | 32.68 | 0.215 | 32.50 | 1.141 | 4.400 | 31.62 |
| 16 | 38.50 | | 34.34 | | 32.71 | 0.215 | 32.53 | 1.141 | 4.400 | 31.61 |
| 17 | 37.70 | | 34.43 | | 32.85 | 0.215 | 32.68 | 1.141 | 4.400 | 31.61 |
| 18 | 37.60 | | 34.68 | | 33.10 | 0.215 | 32.93 | 1.141 | 4.400 | 31.65 |
| 19 | 37.55 | | 34.72 | | 33.17 | 0.215 | 33.01 | 1.141 | 4.400 | 31.71 |
| 20 | 37.45 | | 34.74 | | 33.26 | 0.215 | 33.10 | 1.141 | 4.400 | 31.71 |
| 21 | 37.70 | | 34.70 | | 33.23 | 0.215 | 33.08 | 1.141 | 4.400 | 31.67 |
| 22 | 38.10 | | 34.69 | | 33.28 | 0.215 | 33.13 | 1.141 | 4.400 | 31.64 |
| 23 | 38.50 | | 34.50 | | 33.03 | 0.215 | 32.88 | 1.141 | 4.400 | 31.60 |
| 24 | 38.38 | | 34.49 | | 32.94 | 0.215 | 32.78 | 1.141 | 4.400 | 31.53 |
| 25 | 37.58 | | 34.56 | | 32.95 | 0.215 | 32.78 | 1.141 | 4.400 | 31.58 |
| 26 | 37.52 | | 34.62 | | 33.05 | 0.215 | 32.88 | 1.141 | 4.400 | 31.69 |
| 27 | 37.52 | | 34.69 | | 33.14 | 0.215 | 32.98 | 1.141 | 4.400 | 31.66 |
| 28 | 38.50 | | 34.46 | | 32.99 | 0.215 | 32.83 | 1.141 | 4.400 | 31.68 |
| 29 | 38.50 | | 34.43 | | 32.87 | 0.215 | 32.70 | 1.141 | 4.400 | 31.64 |
| 30 | 38.50 | | 34.42 | | 32.85 | 0.215 | 32.68 | 1.141 | 4.400 | 31.67 |
| 31 | 38.50 | | 34.45 | | 32.87 | 0.215 | 32.70 | 1.141 | 4.400 | 31.68 |
| Max | 38.50 | | 34.75 | | 33.28 | 0.215 | 33.13 | 1.141 | 4.400 | 31.85 |
| Min | 37.45 | | 34.16 | | 32.42 | 0.215 | 32.23 | 1.141 | 3.281 | 31.53 |
| Ave | 37.95 | | 34.53 | | 32.96 | 0.215 | 32.79 | 1.141 | 4.338 | 31.70 |
| Accumulated 1.000m ³ /month | | | | | | 575 | | 3,057 | 11 618 | |

November 2002

| Date | Kamader No 5 I P | | Terfa No 1 I P | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|--|--|----------------|------------------------|--------------------------------------|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------|------------------|
| | WL (m) 104 6km [KP 19 1km El Dahab C) | [KP 143 90 km] | WL (m) [KP 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | |
| 1 | 38.50 | 34.50 | 32.93 | 0.289 | 32.76 | 1.535 | 4.886 | 31.67 | | |
| 2 | 38.10 | 34.56 | 32.97 | 0.289 | 32.80 | 1.535 | 4.886 | 31.68 | | |
| 3 | 37.50 | 34.89 | 33.43 | 0.289 | 33.28 | 1.535 | 4.886 | 31.69 | | |
| 4 | 37.60 | 34.96 | 33.57 | 0.289 | 33.43 | 1.535 | 4.886 | 31.70 | | |
| 5 | 37.70 | 34.94 | 33.57 | 0.289 | 33.43 | 1.535 | 4.886 | 31.67 | | |
| 6 | 38.15 | 34.61 | 33.14 | 0.289 | 32.98 | 1.535 | 4.886 | 31.74 | | |
| 7 | 37.95 | 34.41 | 32.76 | 0.289 | 32.58 | 1.535 | 4.886 | 31.75 | | |
| 8 | 37.52 | 34.45 | 32.83 | 0.289 | 32.65 | 1.535 | 4.886 | 31.77 | | |
| 9 | 37.45 | 34.63 | 33.09 | 0.289 | 32.93 | 1.535 | 4.886 | 31.69 | | |
| 10 | 37.60 | 34.74 | 33.33 | 0.289 | 33.18 | 1.535 | 4.886 | 31.60 | | |
| 11 | 38.25 | 34.96 | 33.71 | 0.289 | 33.57 | 1.535 | 4.886 | 31.55 | | |
| 12 | 38.80 | 34.75 | 33.46 | 0.289 | 33.32 | 1.535 | 4.886 | 31.55 | | |
| 13 | 39.10 | 34.63 | 33.25 | 0.289 | 33.11 | 1.535 | 4.886 | 31.57 | | |
| 14 | 38.85 | 34.53 | 33.08 | 0.289 | 32.93 | 1.535 | 4.886 | 31.56 | | |
| 15 | 38.55 | 34.56 | 33.09 | 0.289 | 32.93 | 1.535 | 4.886 | 31.58 | | |
| 16 | 38.50 | 34.55 | 33.08 | 0.289 | 32.93 | 1.535 | 4.886 | 31.60 | | |
| 17 | 38.10 | 34.59 | 33.09 | 0.289 | 32.93 | 1.535 | 4.886 | 31.59 | | |
| 18 | 37.60 | 34.63 | 33.18 | 0.289 | 33.03 | 1.535 | 4.886 | 31.65 | | |
| 19 | 37.90 | 34.53 | 33.08 | 0.289 | 32.93 | 1.535 | 4.886 | 31.71 | | |
| 20 | 37.70 | 34.25 | 32.65 | 0.289 | 32.48 | 1.535 | 4.478 | 31.77 | | |
| 21 | 37.50 | 34.33 | 32.73 | 0.289 | 32.56 | 1.535 | 4.886 | 31.75 | | |
| 22 | 37.35 | 34.35 | 32.75 | 0.289 | 32.58 | 1.535 | 4.886 | 31.74 | | |
| 23 | 37.35 | 34.35 | 32.75 | 0.289 | 32.58 | 1.535 | 4.886 | 31.74 | | |
| 24 | 37.40 | 34.65 | 33.14 | 0.289 | 32.98 | 1.535 | 4.886 | 31.60 | | |
| 25 | 37.45 | 34.75 | 33.30 | 0.289 | 33.15 | 1.535 | 4.886 | 31.59 | | |
| 26 | 38.05 | 34.74 | 33.37 | 0.289 | 33.23 | 1.535 | 4.886 | 31.60 | | |
| 27 | 38.60 | 34.79 | 33.42 | 0.289 | 33.28 | 1.535 | 4.886 | 31.59 | | |
| 28 | 38.75 | 34.78 | 33.42 | 0.289 | 33.28 | 1.535 | 4.886 | 31.48 | | |
| 29 | 38.90 | 34.78 | 33.47 | 0.289 | 33.32 | 1.535 | 4.886 | 31.44 | | |
| 30 | 38.90 | 35.03 | 33.80 | 0.289 | 33.67 | 1.535 | 4.886 | 31.37 | | |
| Max | 39.10 | 35.03 | 33.80 | 0.289 | 33.67 | 1.535 | 4.886 | 31.77 | | |
| Min | 37.35 | 34.25 | 32.65 | 0.289 | 32.48 | 1.535 | 4.478 | 31.37 | | |
| Ave | 38.05 | 34.64 | 33.18 | 0.289 | 33.03 | 1.535 | 4.873 | 31.63 | | |
| Accumulated 1,000m ³ /month | | | | 748 | | 3 979 | 12,630 | | | |

December 2002

| Date | Kamader No 5 I P | | Terfa No 1 I P | | El Bahnsa Canal | | Intake WL of Harika & Saab | El Harika Canal | Saab Canal | Sakoula No 4 I P |
|---|--|----------------|------------------------|--------------------------------------|-----------------------|--------------------------------------|--------------------------------------|-----------------------|------------|------------------|
| | WL (m) 104 6km [KP 19 1km El Dahab C) | [KP 143 90 km] | WL (m) [KP 173 4 (km)] | Intake Discharge (m ³ /s) | WL (m) [KP 177 23 km] | Intake Discharge (m ³ /s) | Intake Discharge (m ³ /s) | WL (m) [KP 184 00 km] | | |
| 1 | 39.10 | 35.01 | 33.89 | 0.415 | 33.77 | 2.207 | 4.844 | 31.36 | | |
| 2 | 39.10 | 34.91 | 33.79 | 0.415 | 33.67 | 2.207 | 4.844 | 31.34 | | |
| 3 | 39.00 | 34.80 | 33.60 | 0.415 | 33.47 | 2.207 | 4.844 | 31.36 | | |
| 4 | 38.70 | 34.48 | 33.17 | 0.415 | 33.02 | 2.207 | 4.844 | 31.37 | | |
| 5 | 38.05 | 34.75 | 33.42 | 0.415 | 33.28 | 2.207 | 4.844 | 31.29 | | |
| 6 | 36.70 | 35.03 | 33.94 | 0.415 | 33.82 | 2.207 | 4.844 | 31.28 | | |
| 7 | 36.75 | 34.95 | 33.84 | 0.415 | 33.72 | 2.207 | 4.844 | 31.13 | | |
| 8 | 37.45 | 34.71 | 33.59 | 0.415 | 33.47 | 2.207 | 4.844 | 31.06 | | |
| 9 | 37.40 | 34.30 | 33.01 | 0.415 | 32.87 | 2.207 | 4.844 | 31.16 | | |
| 10 | 37.30 | 34.07 | 32.68 | 0.415 | 32.53 | 2.207 | 4.722 | 31.19 | | |
| 11 | 37.30 | 34.07 | 32.68 | 0.415 | 32.53 | 2.207 | 4.722 | 31.11 | | |
| 12 | 37.30 | 34.14 | 32.76 | 0.415 | 32.61 | 2.207 | 4.844 | 31.08 | | |
| 13 | 37.30 | 34.32 | 32.88 | 0.415 | 32.73 | 2.207 | 4.844 | 31.09 | | |
| 14 | 37.15 | 34.54 | 33.13 | 0.415 | 32.98 | 2.207 | 4.844 | 31.19 | | |
| 15 | 38.10 | 34.52 | 33.21 | 0.415 | 33.07 | 2.207 | 4.844 | 31.27 | | |
| 16 | 38.15 | 34.65 | 33.32 | 0.415 | 33.18 | 2.207 | 4.844 | 31.26 | | |
| 17 | 38.18 | 33.95 | 32.35 | 0.415 | 32.18 | 2.207 | 3.049 | 31.29 | | |
| 18 | 38.25 | 34.61 | 33.27 | 0.415 | 33.13 | 2.207 | 4.844 | 31.35 | | |
| 19 | 38.42 | 34.51 | 33.12 | 0.415 | 32.98 | 2.207 | 4.844 | 31.41 | | |
| 20 | 38.40 | 34.57 | 33.18 | 0.415 | 33.03 | 2.207 | 4.844 | 31.42 | | |
| 21 | 38.25 | 34.60 | 33.18 | 0.415 | 33.03 | 2.207 | 4.844 | 31.43 | | |
| 22 | 38.55 | 34.67 | 33.13 | 0.415 | 32.98 | 2.207 | 4.844 | 31.43 | | |
| 23 | 38.58 | 34.53 | 33.08 | 0.415 | 32.93 | 2.207 | 4.844 | 31.44 | | |
| 24 | 38.55 | 34.57 | 33.13 | 0.415 | 32.98 | 2.207 | 4.844 | 31.39 | | |
| 25 | 38.45 | 34.57 | 33.13 | 0.415 | 32.98 | 2.207 | 4.844 | 31.35 | | |
| 26 | 37.90 | 34.60 | 33.18 | 0.415 | 33.03 | 2.207 | 4.844 | 31.26 | | |
| 27 | 37.80 | 34.53 | 33.08 | 0.415 | 32.93 | 2.207 | 4.844 | 31.25 | | |
| 28 | 37.70 | 34.53 | 33.04 | 0.415 | 32.88 | 2.207 | 4.844 | 31.20 | | |
| 29 | 37.80 | 35.09 | 33.81 | 0.415 | 33.67 | 2.207 | 4.844 | 31.17 | | |
| 30 | 37.80 | 35.02 | 33.71 | 0.415 | 33.57 | 2.207 | 4.844 | 31.16 | | |
| 31 | 37.60 | 34.98 | 33.67 | 0.415 | 33.52 | 2.207 | 4.844 | 31.22 | | |
| Max | 39.10 | 35.09 | 33.94 | 0.415 | 33.82 | 2.207 | 4.844 | 31.44 | | |
| Min | 36.70 | 33.95 | 32.35 | 0.415 | 32.18 | 2.207 | 3.049 | 31.06 | | |
| Ave | 37.97 | 34.60 | 33.26 | 0.415 | 33.11 | 2.207 | 4.778 | 31.27 | | |
| Accumulated 1,000m ³ /month | | | | 1 111 | | 5,910 | 12 798 | | | |
| Yearly Max | 39.70 | 35.53 | 34.08 | 1.465 | 33.93 | 7.794 | 8.779 | 32.95 | | |
| Yearly Min | 36.70 | 33.95 | 32.32 | 0.000 | 32.13 | 0.000 | 0.000 | 30.70 | | |
| Yearly Ave | 38.36 | 34.78 | 33.22 | 0.644 | 33.05 | 3.327 | 5.259 | 31.96 | | |
| Yearly Accum 1,000m ³ /month | | | | 20,342 | | 104,998 | 165,690 | | | |

6A-7 Discharge after Sakoula No.4 New Pump on Saab Branch Canal

Discharge After Sakoula No 4 New Pump on Saab Branch Canal

| Month | Days | Intake Discharge of Branch Canal (1,000m ³) | Sakoula 4 New IP Pumping Discharge (1,000m ³) | Discharge of Saab Canal after Pumping | | | |
|-------|------|---|---|---------------------------------------|---------------------|------------------------|---------------------------------|
| | | | | Discharge (1,000m ³) | Water Requirement | | shortage (1,000m ³) |
| | | | | | (m ³ /s) | (1,000m ³) | |
| Jan | 31 | 2,527 | 3,460 | (-934) | 1 619 | 4,337 | (-5,271) |
| Feb | 28 | 12,751 | 8,722 | 4,029 | 2 152 | 5,206 | -1,177 |
| Mar | 31 | 13,676 | 7,206 | 6,470 | 2 843 | 7,615 | -1,145 |
| Apr. | 30 | 16,119 | 9,312 | 6,808 | 2 626 | 6,808 | 0 |
| May | 31 | 12,667 | 6,998 | 5,669 | 2 292 | 6,138 | -469 |
| Jun | 30 | 17,757 | 7,076 | 10,681 | 4 121 | 10,681 | 0 |
| Jul. | 31 | 21,235 | 9,318 | 11,916 | 5 300 | 14,195 | -2,279 |
| Aug. | 31 | 19,226 | 9,869 | 9,357 | 3 542 | 9,487 | -130 |
| Sep. | 30 | 12,686 | 9,811 | 2,875 | 1 252 | 3,246 | -371 |
| Oct | 31 | 11,618 | 9,707 | 1,911 | 0 776 | 2,079 | -168 |
| Nov | 30 | 12,630 | 9,960 | 2,670 | 1 044 | 2,705 | -35 |
| Dec. | 31 | 12,798 | 8,955 | 3,843 | 1.501 | 4,019 | -176 |
| Total | 365 | 165,690 | 100,395 | 66,229 | (2 426) | 76,516 | -5,950 |

6A-9 Change of Agricultural Product Before and After Project

Pump Irrigation Area (Reclaimed Area)

| Items | Cropping Area | | | | Unit Production (5) / fed | Total Production (6) =(4)*(5) unit | Ratio to Home Consumption / Selling | | | | Selling Price (11) LE/unit | Gross Income from Selling (12) =(10)*(11) LE |
|----------------------------|---------------|-----------|-------------|-------------------------------------|------------------------------|--|-------------------------------------|--------------------------------------|-------------|---------------------------------------|-------------------------------|--|
| | Sakoula (1) | Terfa (2) | Kamader (3) | Total (4) =(1)+(2)+(3) feddan | | | H/C (7) | Amount (8) =(6)*(7) Ardeb, ton | Selling (9) | Amount (10) =(6)*(9) Ardeb, ton | | |
| | feddan | feddan | feddan | feddan | | | % | % | % | Ardeb, ton | | |
| Wheat | 3,488 | 5,200 | 0 | 8,688 | 20.25 Ardeb | 175,932 Ardeb | 60 | 105,559 | 40 | 70,373 | 107.7 | 7,580,000 |
| Barley | 1,000 | 1,500 | 0 | 2,500 | 15.40 Ardeb | 38,500 Ardeb | 35 | 13,475 | 65 | 25,025 | 86.0 | 2,153,000 |
| Bean | 500 | 1,000 | 0 | 1,500 | 6.59 Ardeb | 9,885 Ardeb | 35 | 3,460 | 65 | 6,425 | 197.0 | 1,266,000 |
| Sugar Beet | 300 | 400 | 0 | 700 | 24.20 Ton | 16,940 Ton | 0 | 0 | 100 | 16,940 | 110.0 | 1,864,000 |
| Vegetables | 1,500 | 2,500 | 0 | 4,000 | 14.76 Ton | 59,040 Ton | 0 | 0 | 100 | 59,040 | 700.0 | 41,328,000 |
| Long Berseem/ Clover | 3,400 | 4,500 | 0 | 7,900 | 6.01 Ton | 47,479 Ton | 90 | 42,731 | 10 | 4,748 | 325.0 | 1,544,000 |
| Short Berseem/ Clover | 400 | 600 | 0 | 1,000 | 6.01 Ton | 6,010 Ton | 90 | 5,409 | 10 | 601 | 325.0 | 196,000 |
| Onion | 300 | 800 | 0 | 1,100 | 7.48 Ton | 8,228 Ton | 0 | 0 | 100 | 8,228 | 228.4 | 1,880,000 |
| Garlic | 60 | 120 | 0 | 180 | 9.61 Ton | 1,730 Ton | 0 | 0 | 100 | 1,730 | 650.4 | 1,126,000 |
| Fenugreek | 80 | 120 | 0 | 200 | 5.87 Ton | 1,174 Ton | 100 | 1,174 | 0 | 0 | 1500.0 | 0 |
| Flowers of Plants | 260 | 940 | 0 | 1,200 | 0.00 Ton | 0 Ton | 0 | 0 | 100 | 0 | 0.0 | 0 |
| Sub-total | 11,288 | 17,680 | 0 | 28,968 | | | | | | | | 58,937,000 |
| Cotton | 40 | 50 | 0 | 90 | 6.20 Cantar | 558 Cantar | 0 | 0 | 100 | 558 | 350.1 | 196,000 |
| Niie & Summer Maize | 4,000 | 7,000 | 0 | 11,000 | 23.21 Ardeb | 255,310 Ardeb | 85 | 217,014 | 15 | 38,297 | 85.8 | 3,286,000 |
| Sesame | 1,500 | 2,000 | 0 | 3,500 | 5.01 Ardeb | 17,535 Ardeb | 20 | 3,507 | 80 | 14,028 | 406.8 | 5,707,000 |
| Peanut | 2,000 | 2,000 | 0 | 4,000 | 13.89 Ardeb | 55,560 Ardeb | 0 | 0 | 100 | 55,560 | 145.0 | 8,057,000 |
| Sun-flower | 300 | 500 | 0 | 800 | 0.87 Ton | 696 Ton | 5 | 35 | 95 | 661 | 700.0 | 463,000 |
| Summer & Niie Vegetable | 1,500 | 4,000 | 0 | 5,500 | 14.76 Ton | 81,180 Ton | 0 | 0 | 100 | 81,180 | 700.0 | 56,826,000 |
| Sub-total | 9,340 | 15,550 | 0 | 24,890 | | | | | | | | 74,535,000 |
| Annual Sugar Cane | 612 | 926 | 0 | 1,538 | 48.04 Ton | 73,886 Ton | 0 | 0 | 100 | 73,886 | 95.0 | 7,020,000 |
| (Winter Cropping) | 11,900 | 18,606 | 0 | 30,506 | | | | | | | | |
| (Summer Cropping) | 9,952 | 16,476 | 0 | 26,428 | | | | | | | | |
| Total | 21,852 | 35,082 | 0 | 56,934 | | | | | | | | 140,492,000 |

* Kamader Pump Irrigation Area is excluded from the beneficial area

* Product of flower of plants is excluded from the calculation due to lack of detailed data

| Items | Cropping Area | | | | Unit Production (5) / fed | Total Production (6) =(4)*(5) unit | Ratio to Home Consumption / Selling | | | | Selling Price (11) LE/unit | Gross Income from Selling (12) =(10)*(11) LE |
|----------------------------|---------------|-----------|-------------|-------------------------------------|------------------------------|--|-------------------------------------|--------------------------------------|-------------|---------------------------------------|-------------------------------|--|
| | Sakoula (1) | Terfa (2) | Kamader (3) | Total (4) =(1)+(2)+(3) feddan | | | H/C (7) | Amount (8) =(6)*(7) Ardeb, ton | Selling (9) | Amount (10) =(6)*(9) Ardeb, ton | | |
| | feddan | feddan | feddan | feddan | | | % | % | % | Ardeb, ton | | |
| Wheat | 3,488 | 5,365 | 0 | 8,853 | 20.25 Ardeb | 179,267 Ardeb | 60 | 107,560 | 40 | 71,707 | 107.7 | 7,723,000 |
| Barley | 1,000 | 1,548 | 0 | 2,548 | 15.40 Ardeb | 39,232 Ardeb | 35 | 13,731 | 65 | 25,501 | 86.0 | 2,194,000 |
| Bean | 500 | 1,032 | 0 | 1,532 | 6.59 Ardeb | 10,094 Ardeb | 35 | 3,533 | 65 | 6,561 | 197.0 | 1,293,000 |
| Sugar Beet | 300 | 413 | 0 | 713 | 24.20 Ton | 17,247 Ton | 0 | 0 | 100 | 17,247 | 110.0 | 1,898,000 |
| Vegetables | 1,500 | 2,579 | 0 | 4,079 | 14.76 Ton | 60,209 Ton | 0 | 0 | 100 | 60,209 | 700.0 | 42,147,000 |
| Long Berseem/ Clover | 3,400 | 4,643 | 0 | 8,043 | 6.01 Ton | 48,336 Ton | 90 | 43,502 | 10 | 4,834 | 325.0 | 1,571,000 |
| Short Berseem/ Clover | 400 | 619 | 0 | 1,019 | 6.01 Ton | 6,124 Ton | 90 | 5,512 | 10 | 612 | 325.0 | 200,000 |
| Onion | 300 | 825 | 0 | 1,125 | 7.48 Ton | 8,418 Ton | 0 | 0 | 100 | 8,418 | 228.4 | 1,923,000 |
| Garlic | 60 | 124 | 0 | 184 | 9.61 Ton | 1,766 Ton | 0 | 0 | 100 | 1,766 | 650.4 | 1,149,000 |
| Fenugreek | 80 | 124 | 0 | 204 | 5.87 Ton | 1,196 Ton | 100 | 1,196 | 0 | 0 | 1500.0 | 0 |
| Flowers of Plants | 260 | 970 | 0 | 1,230 | 0.00 Ton | 0 Ton | 0 | 0 | 100 | 0 | 0.0 | 0 |
| Sub-total | 11,288 | 18,240 | 0 | 29,528 | | | | | | | | 60,098,000 |
| Cotton | 44 | 52 | 0 | 96 | 6.20 Cantar | 590 Cantar | 0 | 0 | 100 | 590 | 350.1 | 207,000 |
| Niie & Summer Maize | 4,363 | 7,221 | 0 | 11,584 | 23.21 Ardeb | 268,859 Ardeb | 85 | 228,530 | 15 | 40,329 | 85.8 | 3,461,000 |
| Sesame | 1,636 | 2,063 | 0 | 3,699 | 5.01 Ardeb | 18,533 Ardeb | 20 | 3,707 | 80 | 14,826 | 406.8 | 6,032,000 |
| Peanut | 2,182 | 2,063 | 0 | 4,245 | 13.89 Ardeb | 58,958 Ardeb | 0 | 0 | 100 | 58,958 | 145.0 | 8,549,000 |
| Sun-flower | 327 | 516 | 0 | 843 | 0.87 Ton | 733 Ton | 5 | 37 | 95 | 697 | 700.0 | 488,000 |
| Summer & Niie Vegetable | 1,636 | 4,126 | 0 | 5,762 | 14.76 Ton | 85,051 Ton | 0 | 0 | 100 | 85,051 | 700.0 | 59,536,000 |
| Sub-total | 10,188 | 16,040 | 0 | 26,228 | | | | | | | | 78,273,000 |
| Annual Sugar Cane | 612 | 960 | 0 | 1,572 | 48.04 Ton | 75,519 Ton | 0 | 0 | 100 | 75,519 | 95.0 | 7,175,000 |
| (Winter Cropping) | 11,900 | 19,200 | 0 | 31,100 | | | | | | | | |
| (Summer Cropping) | 10,800 | 17,000 | 0 | 27,800 | | | | | | | | |
| Total | 22,700 | 36,200 | 0 | 58,900 | | | | | | | | 145,546,000 |

* Cultivation area proposed is increased for 3% of the existing one

Change of Agricultural Product Before and After Project (Pump Irrigation Area)

| Items | Before Project (LE) | After Project (LE) | Difference (LE) |
|----------------------------|---------------------|--------------------|-----------------|
| Total Amount of Production | 140,492,000 | 145,546,000 | 5,054,000 |
| (Winter Cropping) | 58,937,000 | 60,098,000 | 1,161,000 |
| (Summer Cropping) | 74,535,000 | 78,273,000 | 3,738,000 |
| (Annual Cropping) | 7,020,000 | 7,175,000 | 155,000 |

6A-10 Cultivation Area and Unit Crop Yield of Main Crops in the Latest Last Five Years

| Wheat | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|------------|---------------------------------|-----------|---------|---------------|-----------|------------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 159,181 | 20.04 | 3,189,901 | 14,244 | 13.09 | 186,461 | 173,425 | 19.47 | 3,376,362 |
| 1999 | 161,582 | 20.04 | 3,237,355 | 10,427 | 13.93 | 145,260 | 172,009 | 19.67 | 3,382,615 |
| 2000 | 176,044 | 20.34 | 3,581,575 | 11,264 | 15.47 | 174,253 | 187,308 | 20.05 | 3,755,828 |
| 2001 | 175,231 | 19.96 | 3,498,109 | 11,786 | 16.11 | 189,839 | 187,017 | 19.72 | 3,687,948 |
| 2002 | 163,430 | 20.88 | 3,413,001 | 13,747 | 17.04 | 234,279 | 177,177 | 20.59 | 3,647,280 |
| Total/Average | 835,468 | 20.25 | 16,919,941 | 61,468 | 15.13 | 930,092 | 896,936 | 19.90 | 17,850,033 |
| ton/ha | | 7.23 | | | 5.40 | | | 7.11 | |

| Barley | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|--------|---------------------------------|-----------|--------|---------------|-----------|--------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 802 | 14.07 | 11,287 | 1,201 | 7.73 | 9,282 | 2,003 | 10.27 | 20,569 |
| 1999 | 485 | 15.56 | 7,548 | 1,108 | 7.35 | 8,140 | 1,593 | 9.85 | 15,688 |
| 2000 | 566 | 15.86 | 8,977 | 104 | 12.50 | 1,300 | 670 | 15.34 | 10,277 |
| 2001 | 322 | 16.31 | 5,252 | 862 | 12.55 | 10,820 | 1,184 | 13.57 | 16,072 |
| 2002 | 380 | 16.52 | 6,277 | 1,416 | 12.80 | 18,124 | 1,796 | 13.59 | 24,401 |
| Total/Average | 2,555 | 15.40 | 39,341 | 4,691 | 10.16 | 47,666 | 7,246 | 12.01 | 87,007 |
| ton/ha | | 4.40 | | | 2.90 | | | 3.43 | |

| Beans | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|---------|---------------------------------|-----------|--------|---------------|-----------|---------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 31,022 | 7.03 | 218,228 | 0 | 0.00 | 0 | 31,022 | 7.03 | 218,228 |
| 1999 | 15,902 | 4.82 | 76,622 | 963 | 4.27 | 4,112 | 16,865 | 4.79 | 80,734 |
| 2000 | 10,017 | 6.02 | 60,266 | 212 | 3.98 | 843 | 10,229 | 5.97 | 61,109 |
| 2001 | 12,212 | 6.83 | 83,443 | 641 | 6.69 | 4,287 | 12,853 | 6.83 | 87,730 |
| 2002 | 13,896 | 7.82 | 108,680 | 720 | 8.04 | 5,792 | 14,616 | 7.83 | 114,472 |
| Total/Average | 83,049 | 6.59 | 547,239 | 2,536 | 5.93 | 15,034 | 85,585 | 6.57 | 562,273 |
| ton/ha | | 2.51 | | | 2.26 | | | 2.50 | |

| Onion | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|---------|---------|---------------------------------|---------|--------|---------------|---------|---------|
| | fed | ton/fed | ton | fed | ton/fed | ton | fed | ton/fed | ton |
| Year | | | | | | | | | |
| 1998 | 2,935 | 7.23 | 21,215 | 0 | 0.00 | 0 | 2,935 | 7.23 | 21,215 |
| 1999 | 4,214 | 7.07 | 29,797 | 787 | 7.53 | 5,926 | 5,001 | 7.14 | 35,723 |
| 2000 | 2,434 | 7.57 | 18,426 | 732 | 8.37 | 6,124 | 3,166 | 7.75 | 24,550 |
| 2001 | 1,900 | 7.78 | 14,781 | 905 | 8.35 | 7,561 | 2,805 | 7.97 | 22,342 |
| 2002 | 2,493 | 8.14 | 20,285 | 677 | 8.71 | 5,894 | 3,170 | 8.26 | 26,179 |
| Total/Average | 13,976 | 7.48 | 104,504 | 3,101 | 8.22 | 25,505 | 17,077 | 7.61 | 130,009 |

| Garlic | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|---------|---------|---------------------------------|---------|-----|---------------|---------|---------|
| | fed | ton/fed | ton | fed | ton/fed | ton | fed | ton/fed | ton |
| Year | | | | | | | | | |
| 1998 | 12,495 | 10.01 | 125,037 | 0 | 0.00 | 0 | 12,495 | 10.01 | 125,037 |
| 1999 | 13,281 | 8.98 | 119,289 | 6 | 8.00 | 48 | 13,287 | 8.98 | 119,337 |
| 2000 | 14,431 | 9.88 | 142,568 | 17 | 5.06 | 86 | 14,448 | 9.87 | 142,654 |
| 2001 | 10,214 | 9.70 | 99,048 | 50 | 6.20 | 310 | 10,264 | 9.68 | 99,358 |
| 2002 | 11,510 | 9.48 | 109,162 | 60 | 8.25 | 495 | 11,570 | 9.48 | 109,657 |
| Total/Average | 61,931 | 9.61 | 595,104 | 133 | 7.06 | 939 | 62,064 | 9.60 | 596,043 |

| Fenugreek | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|---------|---------|---------------------------------|---------|-------|---------------|---------|---------|
| | fed | ton/fed | ton | fed | ton/fed | ton | fed | ton/fed | ton |
| Year | | | | | | | | | |
| 1998 | 3,639 | 5.25 | 19,111 | 0 | 0.00 | 0 | 3,639 | 5.25 | 19,111 |
| 1999 | 6,116 | 5.74 | 35,131 | 481 | 4.17 | 2,005 | 6,597 | 5.63 | 37,136 |
| 2000 | 8,025 | 5.60 | 44,943 | 178 | 4.65 | 827 | 8,203 | 5.58 | 45,770 |
| 2001 | 7,451 | 6.09 | 45,401 | 103 | 5.64 | 581 | 7,554 | 6.09 | 45,982 |
| 2002 | 5,468 | 6.51 | 35,590 | 161 | 6.11 | 984 | 5,629 | 6.50 | 36,574 |
| Total/Average | 30,699 | 5.87 | 180,176 | 923 | 4.76 | 4,397 | 31,622 | 5.84 | 184,573 |

| Cotton | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|------------|-----------|---------------------------------|------------|--------|---------------|------------|-----------|
| | fed | cantar/fed | Cantar | fed | cantar/fed | Cantar | fed | cantar/fed | Cantar |
| Year | | | | | | | | | |
| 1998 | 57,727 | 5.60 | 323,277 | 0 | 0.00 | 0 | 57,727 | 5.60 | 323,277 |
| 1999 | 32,741 | 7.31 | 239,181 | 0 | 0.00 | 0 | 32,741 | 7.31 | 239,181 |
| 2000 | 29,993 | 6.36 | 190,609 | 0 | 0.00 | 0 | 29,993 | 6.36 | 190,609 |
| 2001 | 38,822 | 6.66 | 258,364 | 0 | 0.00 | 0 | 38,822 | 6.66 | 258,364 |
| 2002 | 42,126 | 5.62 | 236,545 | 0 | 0.00 | 0 | 42,126 | 5.62 | 236,545 |
| Total/Average | 201,409 | 6.20 | 1,247,976 | 0 | 0.00 | 0 | 201,409 | 6.20 | 1,247,976 |
| ton/ha | | 2.32 | | | 0.00 | | | 2.32 | |

| Maize | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|------------|---------------------------------|-----------|---------|---------------|-----------|------------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 242,008 | 23.28 | 5,632,868 | 7,284 | 21.04 | 153,249 | 249,292 | 23.21 | 5,786,117 |
| 1999 | 269,727 | 23.19 | 6,254,715 | 5,542 | 20.68 | 114,620 | 275,269 | 23.14 | 6,369,335 |
| 2000 | 278,855 | 23.24 | 6,479,665 | 4,326 | 21.11 | 91,325 | 283,181 | 23.20 | 6,570,990 |
| 2001 | 264,114 | 23.09 | 6,098,378 | 5,510 | 21.88 | 120,583 | 269,624 | 23.07 | 6,218,961 |
| 2002 | 255,811 | 23.27 | 5,952,214 | 2,200 | 22.09 | 48,587 | 258,011 | 23.26 | 6,000,801 |
| Total/Average | 1,310,515 | 23.21 | 30,417,840 | 24,862 | 21.25 | 528,364 | 1,335,377 | 23.17 | 30,946,204 |
| ton/ha | | 7.74 | | | 7.08 | | | 7.72 | |

| Sesame | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|---------|---------------------------------|-----------|--------|---------------|-----------|---------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 3,940 | 4.87 | 19,203 | 3,889 | 5.10 | 19,834 | 7,829 | 4.99 | 39,037 |
| 1999 | 5,463 | 4.83 | 26,392 | 2,110 | 5.07 | 10,701 | 7,573 | 4.90 | 37,093 |
| 2000 | 6,033 | 5.01 | 30,213 | 2,762 | 4.85 | 13,384 | 8,795 | 4.96 | 43,597 |
| 2001 | 6,198 | 5.11 | 31,663 | 2,340 | 5.24 | 12,265 | 8,538 | 5.14 | 43,928 |
| 2002 | 5,697 | 5.18 | 29,500 | 4,723 | 5.25 | 24,799 | 10,420 | 5.21 | 54,299 |
| Total/Average | 27,331 | 5.01 | 136,971 | 15,824 | 5.12 | 80,983 | 43,155 | 5.05 | 217,954 |
| ton/ha | | 1.43 | | | 1.46 | | | 1.44 | |

| Peanut | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|-----------|---------|---------------------------------|-----------|---------|---------------|-----------|---------|
| | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb | fed | ardeb/fed | Ardeb |
| Year | | | | | | | | | |
| 1998 | 2,979 | 13.23 | 39,421 | 5,502 | 14.39 | 79,199 | 8,481 | 13.99 | 118,620 |
| 1999 | 4,508 | 13.08 | 58,962 | 1,279 | 14.80 | 107,708 | 11,787 | 14.14 | 166,610 |
| 2000 | 4,158 | 13.47 | 56,013 | 3,477 | 14.75 | 51,278 | 7,635 | 14.05 | 107,291 |
| 2001 | 4,959 | 13.52 | 67,046 | 2,036 | 13.75 | 27,985 | 6,995 | 13.59 | 95,031 |
| 2002 | 5,250 | 15.64 | 82,122 | 5,125 | 16.89 | 86,561 | 10,375 | 16.26 | 168,683 |
| Total/Average | 21,854 | 13.89 | 303,564 | 23,419 | 15.06 | 352,731 | 45,273 | 14.50 | 656,295 |
| ton/ha | | 2.48 | | | 2.69 | | | 2.59 | |

| Sun flower | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|---------|--------|---------------------------------|---------|-----|---------------|---------|--------|
| | fed | ton/fed | ton | fed | ton/fed | ton | fed | ton/fed | ton |
| Year | | | | | | | | | |
| 1998 | 3,748 | 0.82 | 3,092 | 4 | 0.50 | 2 | 3,752 | 0.82 | 3,094 |
| 1999 | 5,877 | 0.82 | 4,824 | 0 | 0.00 | 0 | 5,877 | 0.82 | 4,824 |
| 2000 | 2,690 | 0.90 | 2,424 | 86 | 1.00 | 86 | 2,776 | 0.90 | 2,510 |
| 2001 | 7,663 | 0.88 | 6,770 | 92 | 1.00 | 92 | 7,755 | 0.88 | 6,862 |
| 2002 | 4,319 | 0.92 | 3,966 | 251 | 0.95 | 239 | 4,570 | 0.92 | 4,205 |
| Total/Average | 24,297 | 0.87 | 21,076 | 433 | 0.97 | 419 | 24,730 | 0.87 | 21,495 |

| Coriander | Inside befcial cultivated area | | | Outside befcial cultivated area | | | Total/Average | | |
|---------------|--------------------------------|---------|--------|---------------------------------|---------|-----|---------------|---------|--------|
| | fed | ton/fed | ton | fed | ton/fed | ton | fed | ton/fed | ton |
| Year | | | | | | | | | |
| 1998 | 16,569 | 1.01 | 16,737 | 52 | 0.73 | 38 | 16,621 | 1.01 | 16,775 |
| 1999 | 15,791 | 0.95 | 15,064 | 3 | 1.00 | 3 | 15,794 | 0.95 | 15,067 |
| 2000 | 9,529 | 0.94 | 8,922 | 10 | 0.80 | 8 | 9,539 | 0.94 | 8,930 |
| 2001 | 10,059 | 0.94 | 9,432 | 0 | 0.00 | 0 | 10,059 | 0.94 | 9,432 |
| 2002 | 13,748 | 0.75 | 10,303 | 0 | 0.00 | 0 | 13,748 | 0.75 | 10,303 |
| Total/Average | 65,696 | 0.92 | 60,458 | 65 | 0.75 | 49 | 65,761 | 0.92 | 60,507 |

| Others | Total Cultivated Area | | Total Production Yield | | Unit Production Yield | | Remarks |
|------------|-----------------------|--|------------------------|-----|-----------------------|---------|---------|
| | feddan | | unit | | unit / fed | | |
| Beet Sugar | 6,387 | | 154,565 | ton | 24.20 | ton/fed | |
| Vegetable | 20,398 | | 301,074 | ton | 14.76 | ton/fed | Tomato |
| Clover | 119,271 | | 716,819 | ton | 6.01 | ton/fed | |
| Sugar Cane | 33,262 | | 1,597,970 | ton | 48.04 | ton/fed | |

(Minia Governate for Year 2002)

Market Price of Main Crops

| Crops | Unit Price | Remarks |
|------------|--------------------------|---------------------|
| Wheat | LE 107.7/Ardeb | LE 43 5/heap of hay |
| Barley | LE 86/Ardeb | LE 36 2/heap of hay |
| Bean | LE 197/Ardeb | LE 28 2/heap of hay |
| Onion | LE 228 4/Ton | |
| Garlic | LE 650 4/Ton | |
| Beet Sugar | LE 110/Ton | |
| Cotton | LE 350 1/Qeuter (metric) | LE 8 7/heap of hay |
| Soyabean | LE 900/Ton | |
| Maize | LE 85 8/Ardeb | LE 14 4 heap of hay |
| Peanut | LE 145/Ardeb | LE9 4 heap of hay |
| Sesame | LE 406 8/Ardeb | 13 2 heap of hey |
| Sun flower | LE 900/Ton | |
| Sugarcane | LE 95/Ton | |

(Based on the site survey result as of March 2003)

| Crops | Unit Price | Remarks |
|-----------|-------------|---------|
| Potato | LE 700/Ton | |
| Vegetable | LE 700/Ton | |
| Clover | LE 325/Ton | |
| Fenugreek | LE 1500/Ton | |
| Coriander | LE 110/Ton | |

(Referred to the "Project Finding Report for Improvement of Water Management and Operation of the Bahr Yusef Irrigation Canal, Appendix -4, September 2002" ADECA)

6A-12 Chang of Agricultural Production by Sakoula Regulator Collapse

| Gravity irrigation Area (Old Area) | | | Irrigation Water Winter 90% Summer 88% | | | | | | | | | | |
|------------------------------------|---|-----------------------------|--|-------|----------------------------------|--------------------------|-------------------------------------|--------------------------------------|---------|--------|------------------------------|---|-------------|
| Existing | | | | | | | | | | | | | |
| Items | Productivity Rate between Irrigated and Non irrigated | Cropping Area (1) feddan | Unit Production (2) | | Total Production (3) =(1)*(2) | | Ratio to Home Consumption / Selling | | | | Selling Price (8) LE/unit | Gross Income from Selling (9) =(7)*(8) LE | |
| | | | / fed | unit | H/C (4) % | Amount (5) Ardeb, ton | Selling (6) % | Amount (7) =(3)*(6) Ardeb, ton | | | | | |
| Winter Crops | Wheat | 2.14 | 20,000 | 20.25 | Ardeb | 405,000 | Ardeb | 60 | 243,000 | 40 | 162,000 | 107.7 | 17,448,000 |
| | Bean | 1.33 | 7,084 | 6.59 | Ardeb | 46,684 | Ardeb | 35 | 16,339 | 65 | 30,344 | 197.0 | 5,978,000 |
| | Potato | 2.90 | 212 | 9.06 | Ton | 1,921 | Ton | 0 | 0 | 100 | 1,921 | 700.0 | 1,345,000 |
| | Sugar Beet | 32.41 | 126 | 24.20 | Ton | 3,049 | Ton | 0 | 0 | 100 | 3,049 | 110.0 | 336,000 |
| | Vegetables | 3.60 | 1,020 | 14.76 | Ton | 15,055 | Ton | 0 | 0 | 100 | 15,055 | 700.0 | 10,539,000 |
| | Long Berseem/ Clover | 5.74 | 8,762 | 6.01 | Ton | 52,660 | Ton | 90 | 47,394 | 10 | 5,266 | 325.0 | 1,712,000 |
| | Short Berseem/ Clover | 5.74 | 7,682 | 6.01 | Ton | 46,169 | Ton | 90 | 41,552 | 10 | 4,617 | 325.0 | 1,501,000 |
| | Onion | 3.60 | 2,114 | 7.48 | Ton | 15,813 | Ton | 0 | 0 | 100 | 15,813 | 228.4 | 3,612,000 |
| | Fenugreek | 1.73 | 288 | 5.87 | Ton | 1,691 | Ton | 100 | 1,691 | 0 | 0 | 1500.0 | 0 |
| | Garlic | 3.60 | 658 | 9.61 | Ton | 6,323 | Ton | 0 | 0 | 100 | 6,323 | 650.4 | 4,113,000 |
| Coriander | 3.60 | 790 | 0.92 | Ton | 727 | Ton | 0 | 0 | 100 | 727 | 110.0 | 80,000 | |
| Sub total | | 48,736 | | | | | | | | | | | 46,664,000 |
| Summer & Nill crops | Cotton | 1.25 | 12,062 | 6.20 | Cantar | 74,784 | Cantar | 0 | 0 | 100 | 74,784 | 350.1 | 26,183,000 |
| | Summer Maize | 1.73 | 29,114 | 23.21 | Ardeb | 675,736 | Ardeb | 85 | 574,376 | 15 | 101,360 | 85.8 | 8,697,000 |
| | Sesame | 5.06 | 936 | 5.01 | Ardeb | 4,689 | Ardeb | 20 | 938 | 80 | 3,751 | 406.8 | 1,527,000 |
| | Peanut | 1.33 | 602 | 13.89 | Ardeb | 8,362 | Ardeb | 0 | 0 | 100 | 8,362 | 145.0 | 1,213,000 |
| | Summer Vegetable | 3.60 | 3,752 | 14.76 | Ton | 55,380 | Ton | 0 | 0 | 100 | 55,380 | 700.0 | 38,766,000 |
| | Nill Vegetables | 3.60 | 2,270 | 14.75 | Ton | 33,483 | Ton | 0 | 0 | 100 | 33,483 | 700.0 | 23,438,000 |
| | Sub total | | 48,736 | | | | | | | | | | |
| Annual Sugar Cane | 1.63 | 1,264 | 48.04 | Ton | 60,723 | Ton | 0 | 0 | 100 | 60,723 | 95.0 | 5,769,000 | |
| (Winter Cropping) | | 50,000 | | | | | | | | | | | |
| (Summer Cropping) | | 50,000 | | | | | | | | | | | |
| Total | | 100,000 | | | | | | | | | | | 152,257,000 |

* Average of last five years is applied to the existing unit crop yield

* Product for home consumption will be kept at least as the same as the existing and the remaining product will be sent for selling (in the Gravity and Pump Irrigation Areas)

Irrigation Water Winter 48% Summer 81%

| After Collapse | | | | | | | | | | | | | |
|---------------------|---|-----------------------------|---------------------|-------|----------------------------------|--------------------------|-------------------------------------|--------------------------|---------|--------|------------------------------|---|-------------|
| Items | Productivity Rate between Irrigated and Non irrigated | Cropping Area (1) feddan | Unit Production (2) | | Total Production (3) =(1)*(2) | | Ratio for Market / Home Consumption | | | | Selling Price (8) LE/unit | Gross Income from Selling (9) =(7)*(8) LE | |
| | | | / fed | unit | H/C (4) % | Amount (5) Ardeb, ton | Selling (6) % | Amount (7) Ardeb, ton | | | | | |
| Winter Crops | Wheat | 2.14 | 20,000 | 15.46 | Ardeb | 309,287 | Ardeb | 79 | 243,000 | 21 | 66,287 | 107.7 | 7,140,000 |
| | Bean | 1.33 | 7,084 | 5.89 | Ardeb | 41,695 | Ardeb | 39 | 16,339 | 61 | 25,356 | 197.0 | 4,996,000 |
| | Potato | 2.90 | 212 | 6.39 | Ton | 1,355 | Ton | 0 | 0 | 100 | 1,355 | 700.0 | 949,000 |
| | Sugar Beet | 32.41 | 126 | 13.29 | Ton | 1,675 | Ton | 0 | 0 | 100 | 1,675 | 110.0 | 185,000 |
| | Vegetables | 3.60 | 1,020 | 9.93 | Ton | 10,133 | Ton | 0 | 0 | 100 | 10,133 | 700.0 | 7,094,000 |
| | Long Berseem/ Clover | 5.74 | 8,762 | 3.74 | Ton | 32,752 | Ton | 100 | 32,752 | 0 | 0 | 325.0 | -1,000 |
| | Short Berseem/ Clover | 5.74 | 7,682 | 3.74 | Ton | 28,715 | Ton | 100 | 28,715 | 0 | 0 | 325.0 | 0 |
| | Onion | 3.60 | 2,114 | 5.03 | Ton | 10,643 | Ton | 0 | 0 | 100 | 10,643 | 228.4 | 2,431,000 |
| | Fenugreek | 1.73 | 288 | 4.78 | Ton | 1,378 | Ton | 100 | 1,378 | 0 | 0 | 1500.0 | 0 |
| | Garlic | 3.60 | 658 | 6.47 | Ton | 4,256 | Ton | 0 | 0 | 100 | 4,256 | 650.4 | 2,769,000 |
| Coriander | 3.60 | 790 | 0.62 | Ton | 489 | Ton | 0 | 0 | 100 | 489 | 110.0 | 54,000 | |
| Sub total | | 48,736 | | | | | | | | | | | 25,617,000 |
| Summer & Nill crops | Cotton | 1.25 | 12,062 | 6.11 | Cantar | 73,712 | Cantar | 0 | 0 | 100 | 73,712 | 350.1 | 25,807,000 |
| | Summer Maize | 1.73 | 29,114 | 22.49 | Ardeb | 654,712 | Ardeb | 100 | 654,712 | 0 | 0 | 85.8 | 0 |
| | Sesame | 5.06 | 936 | 4.70 | Ardeb | 4,398 | Ardeb | 21 | 938 | 79 | 3,460 | 406.8 | 1,408,000 |
| | Peanut | 1.33 | 602 | 13.64 | Ardeb | 8,212 | Ardeb | 0 | 0 | 100 | 8,212 | 145.0 | 1,191,000 |
| | Summer Vegetable | 3.60 | 3,752 | 13.94 | Ton | 52,314 | Ton | 0 | 0 | 100 | 52,314 | 700.0 | 36,620,000 |
| | Nill Vegetables | 3.60 | 2,270 | 13.93 | Ton | 31,629 | Ton | 0 | 0 | 100 | 31,629 | 700.0 | 22,141,000 |
| | Sub total | | 48,736 | | | | | | | | | | |
| Annual Sugar Cane | 1.63 | 1,264 | 46.68 | Ton | 59,000 | Ton | 0 | 0 | 100 | 59,000 | 95.0 | 5,605,000 | |
| (Winter Cropping) | | 50,000 | | | | | | | | | | | |
| (Summer Cropping) | | 50,000 | | | | | | | | | | | |
| Total | | 100,000 | | | | | | | | | | | 118,389,000 |

Change of Agricultural Product Before and After Collapse of Regulator (Gravity Irrigation Area)

| Items | Before Project (LE) | After Project (LE) | Difference (LE) |
|----------------------------|---------------------|--------------------|-----------------|
| Total Amount of Production | 152,257,000 | 118,389,000 | -33,868,000 |
| (Winter Cropping) | 46,664,000 | 25,617,000 | -21,047,000 |
| (Summer Cropping) | 99,824,000 | 87,167,000 | -12,657,000 |
| (Annual Cropping) | 5,769,000 | 5,605,000 | -164,000 |

Pump Irrigation Area (Reclaimed Area)

| Items | Existing | | | | | | | | | | | | |
|---------------------|--------------------------|-----------|-------------|-------------------------------------|------------------------------|--|-------------------------------------|--------------------------------------|------------------|---------------------------------------|-------------------------------|--|-------------|
| | Cropping Area | | | | Unit Production (5) / fed | Total Production (6) =(4)*(5) unit | Ratio to Home Consumption / Selling | | | | Selling Price (11) LE/unit | Gross Income from Selling (12) =(10)*(11) LE | |
| | Sakoula (1) | Terfa (2) | Kamader (3) | Total (4) =(1)+(2)+(3) feddan | | | H/C (7) % | Amount (8) =(6)*(7) Ardeb, ton | Selling (9) % | Amount (10) =(6)*(9) Ardeb, ton | | | |
| | feddan | feddan | feddan | feddan | | | | | | | | | |
| Winter Crops | Wheat | 3,488 | 5,200 | 0 | 8,688 | 20.25 Ardeb | 175,932 Ardeb | 60 | 105,559 | 40 | 70,373 | 107.7 | 7,580,000 |
| | Barley | 1,000 | 1,500 | 0 | 2,500 | 15.40 Ardeb | 38,500 Ardeb | 35 | 13,475 | 65 | 25,025 | 86.0 | 2,153,000 |
| | Bean | 500 | 1,000 | 0 | 1,500 | 6.59 Ardeb | 9,885 Ardeb | 35 | 3,460 | 65 | 6,425 | 197.0 | 1,266,000 |
| | Sugar Beet | 300 | 400 | 0 | 700 | 24.20 Ton | 16,940 Ton | 0 | 0 | 100 | 16,940 | 110.0 | 1,864,000 |
| | Vegetables | 1,500 | 2,500 | 0 | 4,000 | 14.76 Ton | 59,040 Ton | 0 | 0 | 100 | 59,040 | 700.0 | 41,328,000 |
| | Long Berseem/ Clover | 3,400 | 4,500 | 0 | 7,900 | 6.01 Ton | 47,479 Ton | 90 | 42,731 | 10 | 4,748 | 325.0 | 1,544,000 |
| | Short Berseem/ Clover | 400 | 600 | 0 | 1,000 | 6.01 Ton | 6,010 Ton | 90 | 5,409 | 10 | 601 | 325.0 | 196,000 |
| | Onion | 300 | 800 | 0 | 1,100 | 7.48 Ton | 8,228 Ton | 0 | 0 | 100 | 8,228 | 228.4 | 1,880,000 |
| | Fenugreek | 80 | 120 | 0 | 200 | 5.89 Ton | 1,178 Ton | 100 | 1,178 | 100 | 1,178 | 650.4 | 767,000 |
| | Garlic | 60 | 120 | 0 | 180 | 9.61 Ton | 1,730 Ton | 0 | 0 | 0 | 0 | 1500.0 | 0 |
| | Flowers of Plants | 260 | 940 | 0 | 1,200 | 0.00 Ton | 0 Ton | 0 | 0 | 100 | 0 | 0.0 | 0 |
| | Sub-total | 11,288 | 17,680 | 0 | 28,968 | | | | | | | | |
| Summer & Nill crops | Cotton | 40 | 50 | 0 | 90 | 6.20 Cantar | 558 Cantar | 0 | 0 | 100 | 558 | 350.1 | 196,000 |
| | Nile & Summer Maize | 4,000 | 7,000 | 0 | 11,000 | 23.21 Ardeb | 255,310 Ardeb | 85 | 217,014 | 15 | 38,297 | 85.8 | 3,286,000 |
| | Sesame | 1,500 | 2,000 | 0 | 3,500 | 5.01 Ardeb | 17,535 Ardeb | 20 | 3,507 | 80 | 14,028 | 406.8 | 5,707,000 |
| | Peanut | 2,000 | 2,000 | 0 | 4,000 | 13.89 Ardeb | 55,560 Ardeb | 0 | 0 | 100 | 55,560 | 145.0 | 8,057,000 |
| | Sun-flower | 300 | 500 | 0 | 800 | 0.87 Ton | 696 Ton | 5 | 35 | 95 | 661 | 700.0 | 463,000 |
| | Summer & Nill Vegetable | 1,500 | 4,000 | 0 | 5,500 | 14.76 Ton | 81,180 Ton | 0 | 0 | 100 | 81,180 | 700.0 | 56,826,000 |
| | Sub total | 9,340 | 15,550 | 0 | 24,890 | | | | | | | | |
| Annual | Sugar Cane | 612 | 926 | 0 | 1,538 | 48.04 Ton | 73,886 Ton | 0 | 0 | 100 | 73,886 | 95.0 | 7,020,000 |
| | (Winter Cropping) | 11,900 | 18,606 | 0 | 30,506 | | | | | | | | |
| | (Summer Cropping) | 9,952 | 16,476 | 0 | 26,428 | | | | | | | | |
| | Total | 21,852 | 35,082 | 0 | 56,934 | | | | | | | | 140,133,000 |

* Kamader Pump Irrigation Area is excluded from the beneficial area

* Product of flower of plants is excluded from the calculation due to lack of detailed data

Irrigation Water Winter 33% Summer 85%

| Items | After Collaps | | | | | | | | | | | | |
|---------------------|--------------------------|-----------|-------------|-------------------------------------|------------------------------|--|-------------------------------------|--------------------------------------|------------------|---------------------------------------|-------------------------------|--|------------|
| | Cropping Area | | | | Unit Production (5) / fed | Total Production (6) =(4)*(5) unit | Ratio to Home Consumption / Selling | | | | Selling Price (11) LE/unit | Gross Income from Selling (12) =(10)*(11) LE | |
| | Sakoula (1) | Terfa (2) | Kamader (3) | Total (4) =(1)+(2)+(3) feddan | | | H/C (7) % | Amount (8) =(6)*(7) Ardeb, ton | Selling (9) % | Amount (10) =(6)*(9) Ardeb, ton | | | |
| | feddan | feddan | feddan | feddan | | | | | | | | | |
| Winter Crops | Wheat | 3,488 | 5,200 | 0 | 8,688 | 12.99 Ardeb | 112,858 Ardeb | 94 | 105,559 | 6 | 7,299 | 107.7 | 787,000 |
| | Barley | 1,000 | 1,500 | 0 | 2,500 | 12.83 Ardeb | 32,071 Ardeb | 42 | 13,475 | 58 | 18,596 | 86.0 | 1,600,000 |
| | Bean | 500 | 1,000 | 0 | 1,500 | 3.68 Ardeb | 5,526 Ardeb | 63 | 3,460 | 37 | 2,067 | 197.0 | 408,000 |
| | Sugar Beet | 300 | 400 | 0 | 700 | 8.42 Ton | 5,891 Ton | 0 | 0 | 100 | 5,891 | 110.0 | 649,000 |
| | Vegetables | 1,500 | 2,500 | 0 | 4,000 | 7.59 Ton | 30,343 Ton | 0 | 0 | 100 | 30,343 | 700.0 | 21,241,000 |
| | Long Berseem/ Clover | 3,400 | 4,500 | 0 | 7,900 | 2.67 Ton | 21,092 Ton | 100 | 21,092 | 0 | 0 | 325.0 | 0 |
| | Short Berseem/ Clover | 400 | 600 | 0 | 1,000 | 2.67 Ton | 2,670 Ton | 100 | 2,670 | 0 | 0 | 325.0 | 0 |
| | Onion | 300 | 800 | 0 | 1,100 | 3.84 Ton | 4,229 Ton | 0 | 0 | 100 | 4,229 | 228.4 | 966,000 |
| | Fenugreek | 80 | 120 | 0 | 200 | 4.22 Ton | 843 Ton | 100 | 843 | 0 | 0 | 650.4 | 0 |
| | Garlic | 60 | 120 | 0 | 180 | 4.94 Ton | 889 Ton | 0 | 0 | 100 | 889 | 1500.0 | 1,334,000 |
| | Flowers of Plants | 260 | 940 | 0 | 1,200 | 0.00 Ton | 0 Ton | 0 | 0 | 100 | 0 | 0.0 | 0 |
| | Sub-total | 11,288 | 17,680 | 0 | 28,968 | | | | | | | | |
| Summer & Nill crops | Cotton | 40 | 50 | 0 | 90 | 6.02 Cantar | 542 Cantar | 0 | 0 | 100 | 542 | 350.1 | 190,000 |
| | Nile & Summer Maize | 4,000 | 7,000 | 0 | 11,000 | 21.78 Ardeb | 239,581 Ardeb | 91 | 217,014 | 9 | 22,568 | 85.8 | 1,937,000 |
| | Sesame | 1,500 | 2,000 | 0 | 3,500 | 4.42 Ardeb | 15,481 Ardeb | 23 | 3,507 | 77 | 11,974 | 406.8 | 4,871,000 |
| | Peanut | 2,000 | 2,000 | 0 | 4,000 | 13.39 Ardeb | 53,547 Ardeb | 0 | 0 | 100 | 53,547 | 145.0 | 7,765,000 |
| | Sun-flower | 300 | 500 | 0 | 800 | 0.78 Ton | 623 Ton | 6 | 35 | 94 | 588 | 700.0 | 412,000 |
| | Summer & Nill Vegetable | 1,500 | 4,000 | 0 | 5,500 | 13.20 Ton | 72,620 Ton | 0 | 0 | 100 | 72,620 | 700.0 | 50,835,000 |
| | Sub-total | 9,340 | 15,550 | 0 | 24,890 | | | | | | | | |
| Annual | Sugar Cane | 612 | 926 | 0 | 1,538 | 45.33 Ton | 69,716 Ton | 0 | 0 | 100 | 69,716 | 95.0 | 6,624,000 |
| | (Winter Cropping) | 11,900 | 18,606 | 0 | 30,506 | | | | | | | | |
| | (Summer Cropping) | 9,952 | 16,476 | 0 | 26,428 | | | | | | | | |
| | Total | 21,852 | 35,082 | 0 | 56,934 | | | | | | | | 99,619,000 |

Change of Agricultural Product Before and After Collapse of Regulator (Pump Irrigation Area)

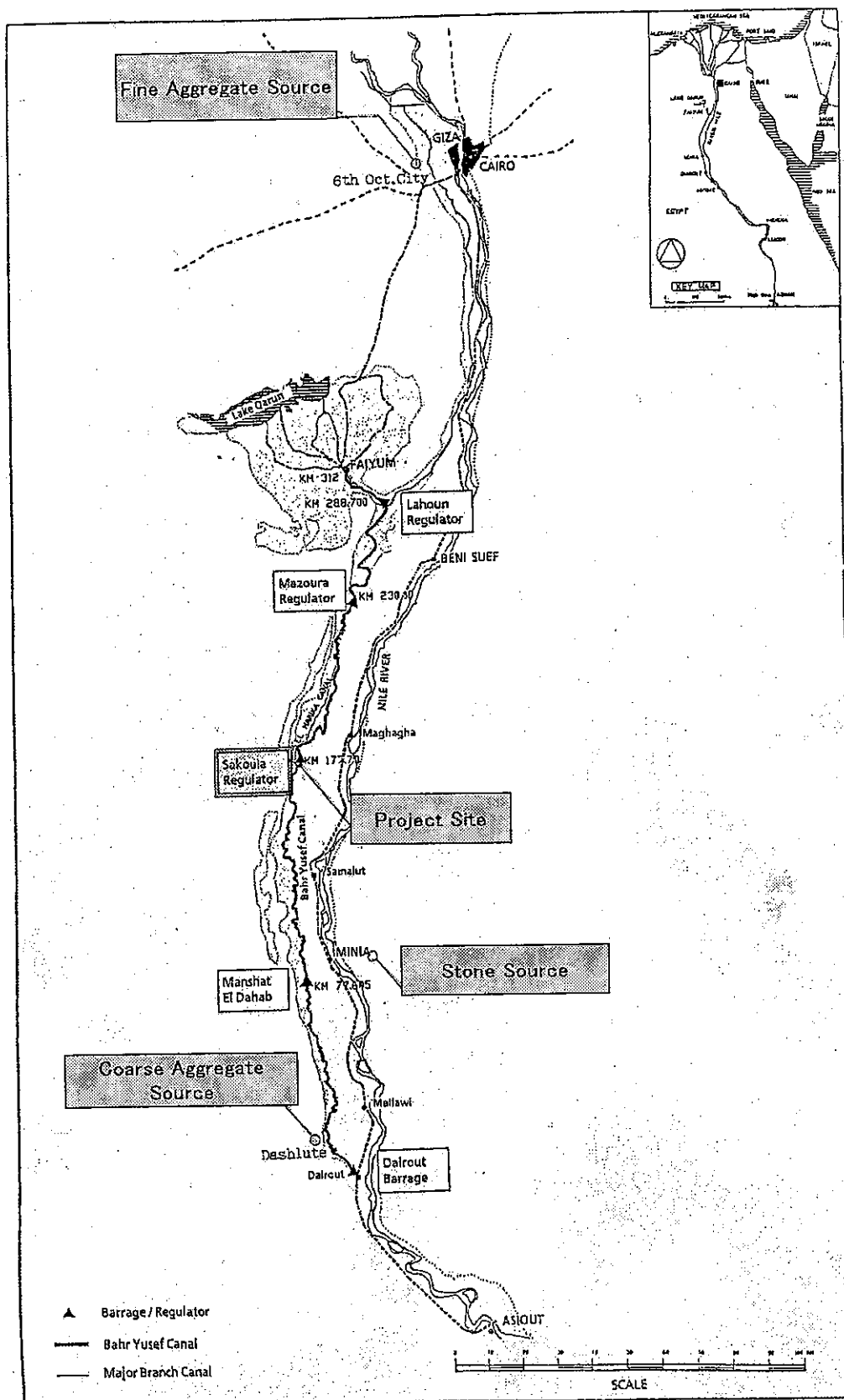
| Items | Before Project (LE) | After Project (LE) | Difference (LE) |
|----------------------------|---------------------|--------------------|-----------------|
| Total Amount of Production | 140,133,000 | 99,619,000 | -40,514,000 |
| (Winter Cropping) | 58,578,000 | 26,985,000 | -31,593,000 |
| (Summer Cropping) | 74,535,000 | 66,010,000 | -8,525,000 |
| (Annual Cropping) | 7,020,000 | 6,624,000 | -396,000 |

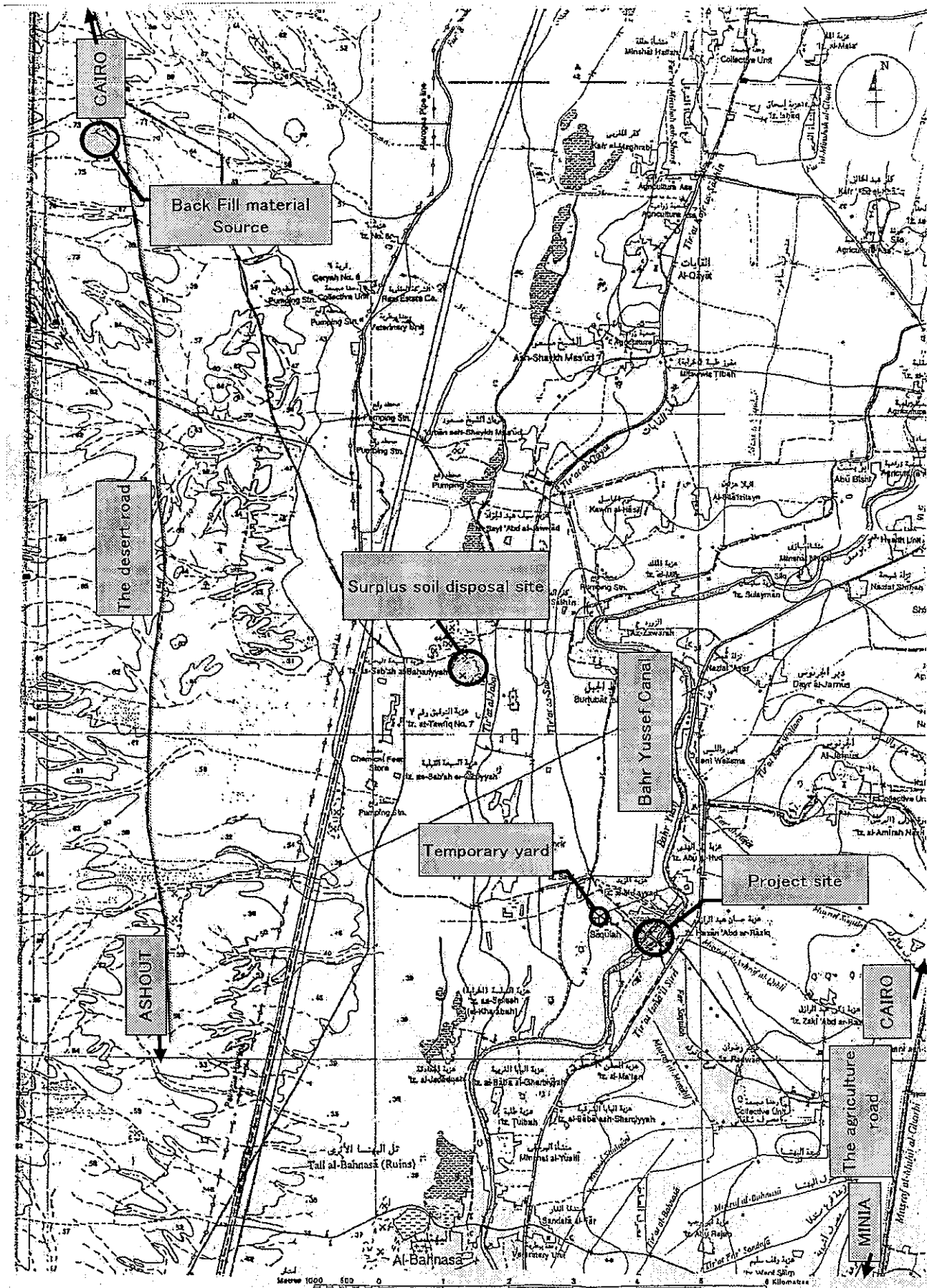
Result of Traffic Research

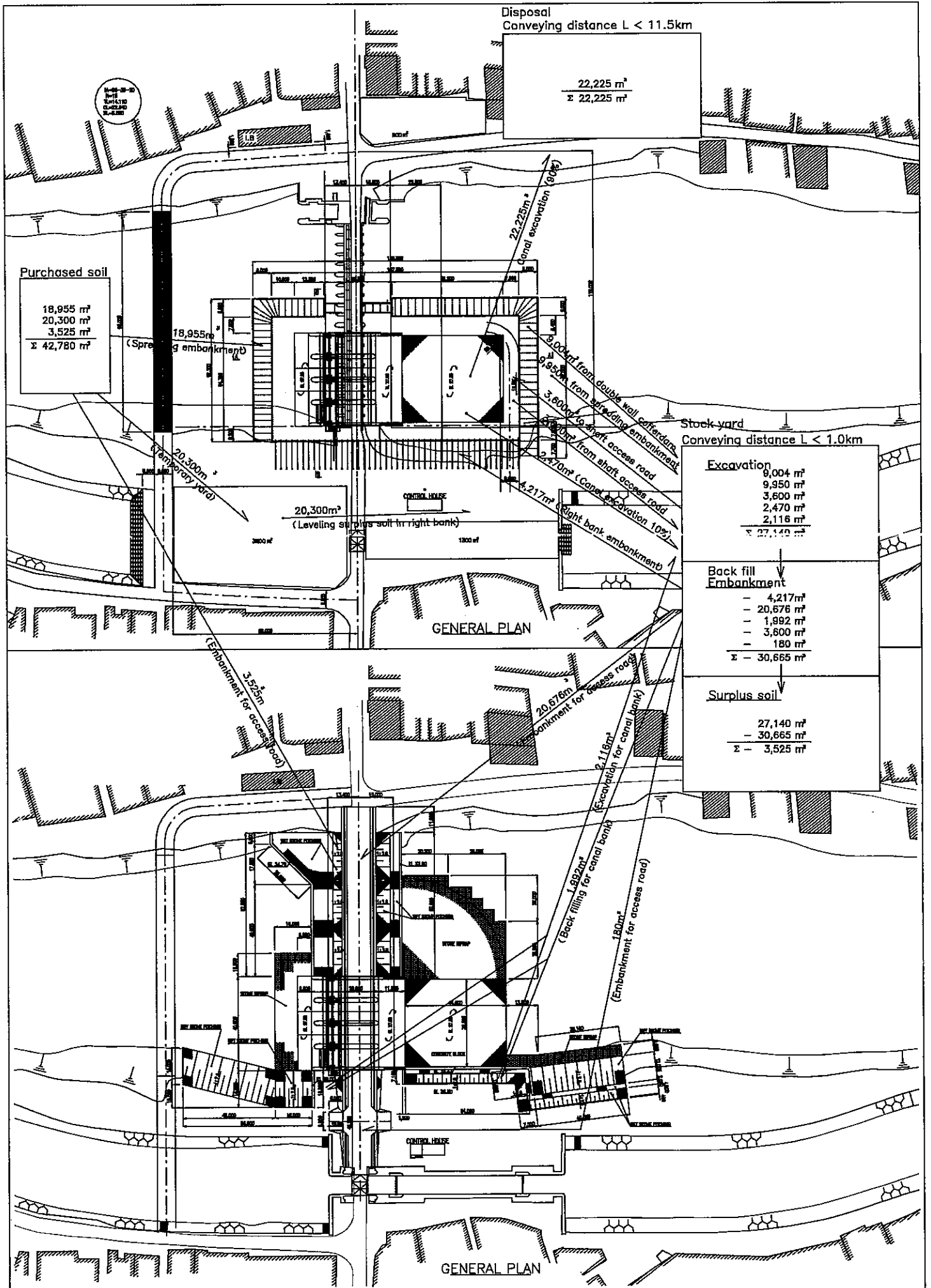
| Item | 24 hours in weekday (cars) | 12 hours (daytime) in holiday (cars) |
|-----------------|-------------------------------|---|
| 1 Truck | 91 | 17 |
| 2 Small truck | 663 | 508 |
| 3 Bus | 18 | 2 |
| 4 Passenger car | 705 | 183 |
| 5 Tractor | 111 | 114 |
| Total (1-5) | 1,588 | 824 |
| 6 Motorbike | 82 | 51 |
| 7 Horse wagon | 270 | 239 |
| 8 Bicycle | 1,340 | 881 |
| 9 Animal | 3,308 | 3,099 |
| Total (6-9) | 5,000 | 4,270 |
| 10 Human | 8,102 | 4,946 |

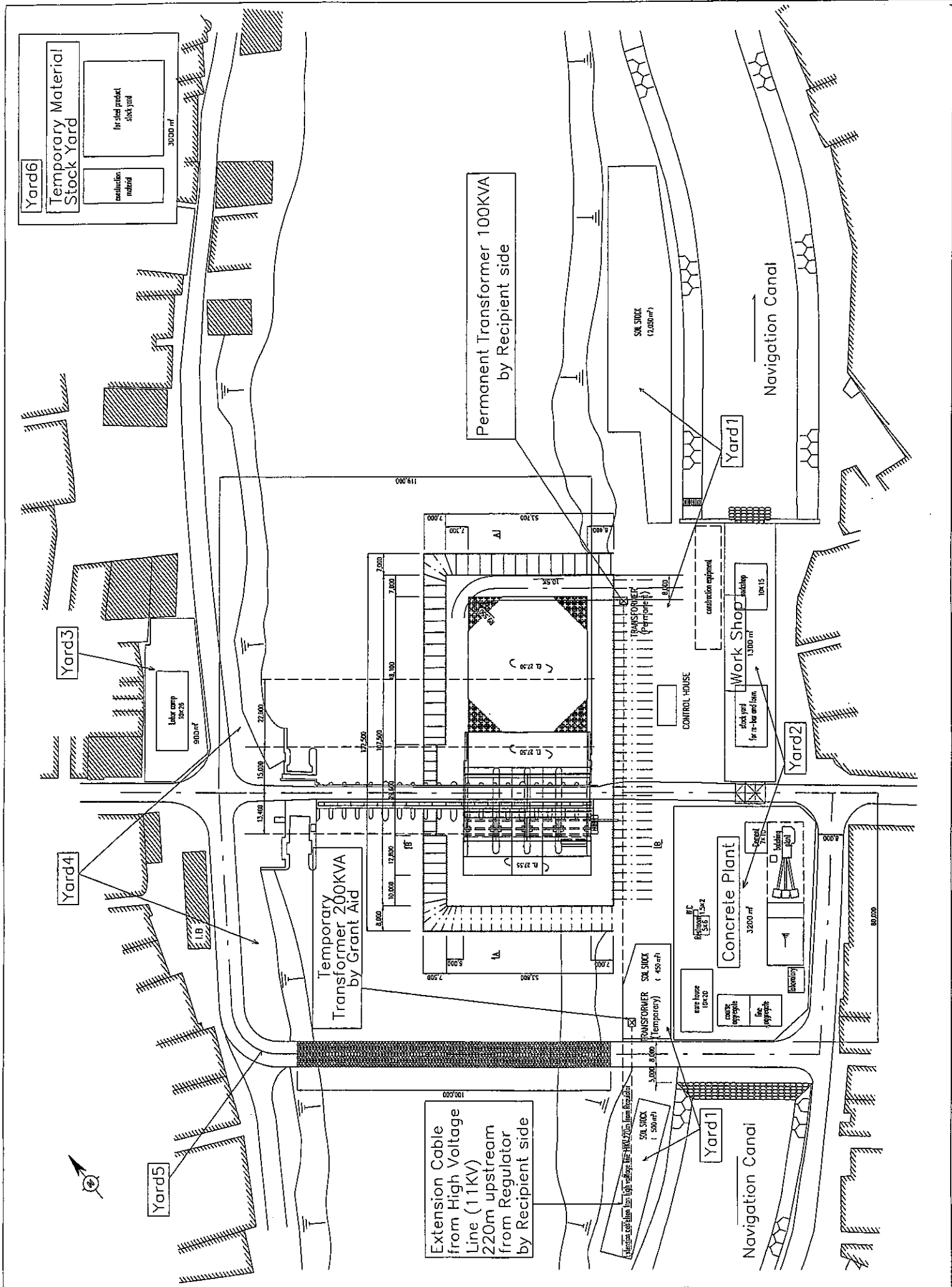
Conversion to Passenger Car and Estimation for Future

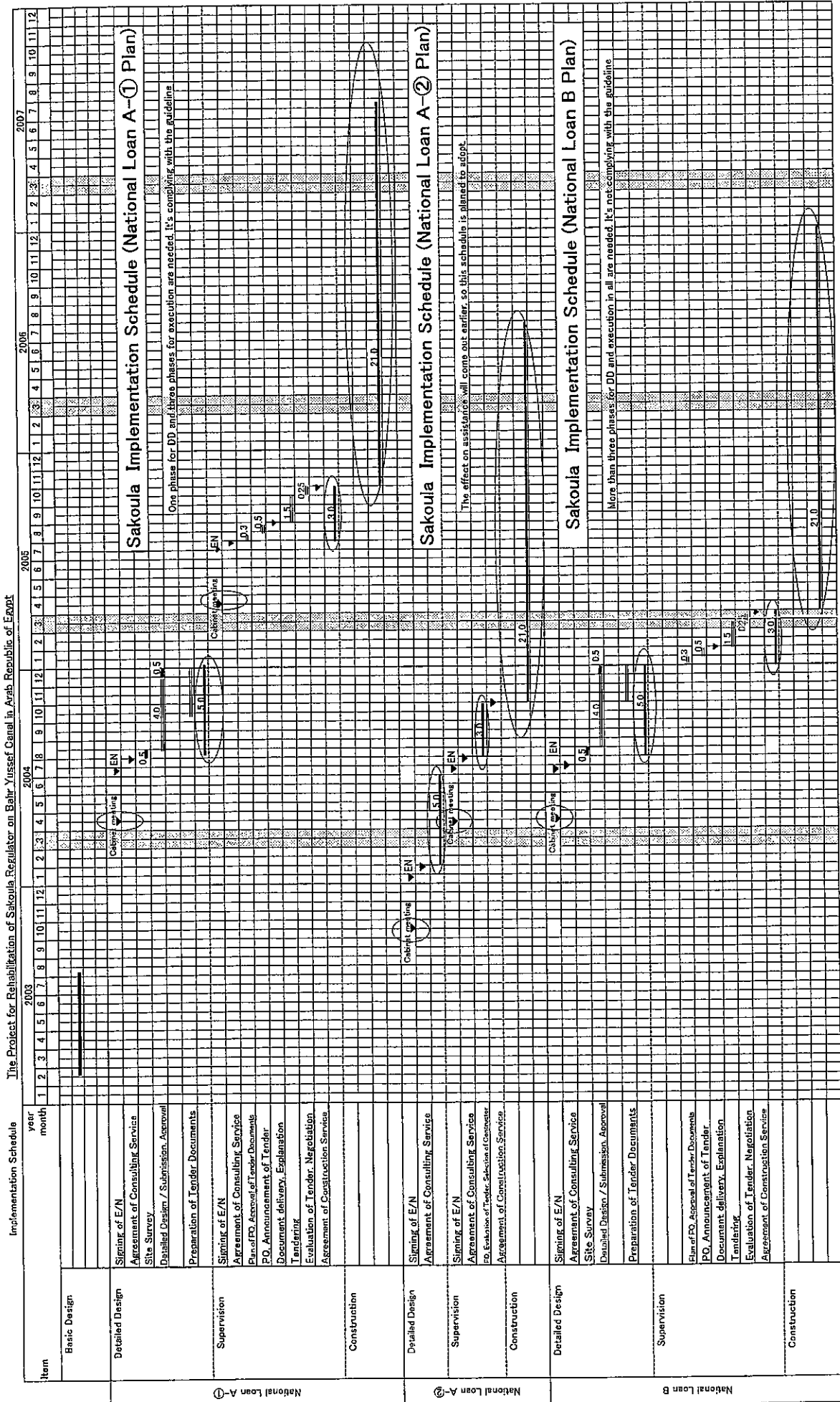
| Item | Present | | | Future | |
|-----------------|-------------------------------|---|---------------------------------------|---------------|----------------|
| | 24 hours in weekday (cars) | Ratio of conversion to passenger car | Conversion to passenger car (cars) | Increase rate | Cars in future |
| 1 Truck | 91 | 1 5 | 137 | 1 2 | 170 |
| 2 Small truck | 663 | 0 8 | 530 | 1 2 | 640 |
| 3 Bus | 18 | 1 9 | 34 | 1 2 | 50 |
| 4 Passenger car | 705 | 1 0 | 705 | 1 2 | 850 |
| 5 Tractor | 111 | 1 9 | 211 | 1 2 | 260 |
| Total (1-5) | 1,588 | | 1,617 | | 2,000 |
| 6 Motorbike | 82 | | | | 82 |
| 7 Horse wagon | 270 | | | | 270 |
| 8 Bicycle | 1,340 | | | | 1,340 |
| 9 Animal | 3,308 | | | | 3,308 |
| Total (6-9) | 5,000 | | | | 5,000 |
| 10 Human | 8,102 | | | | 8,100 |







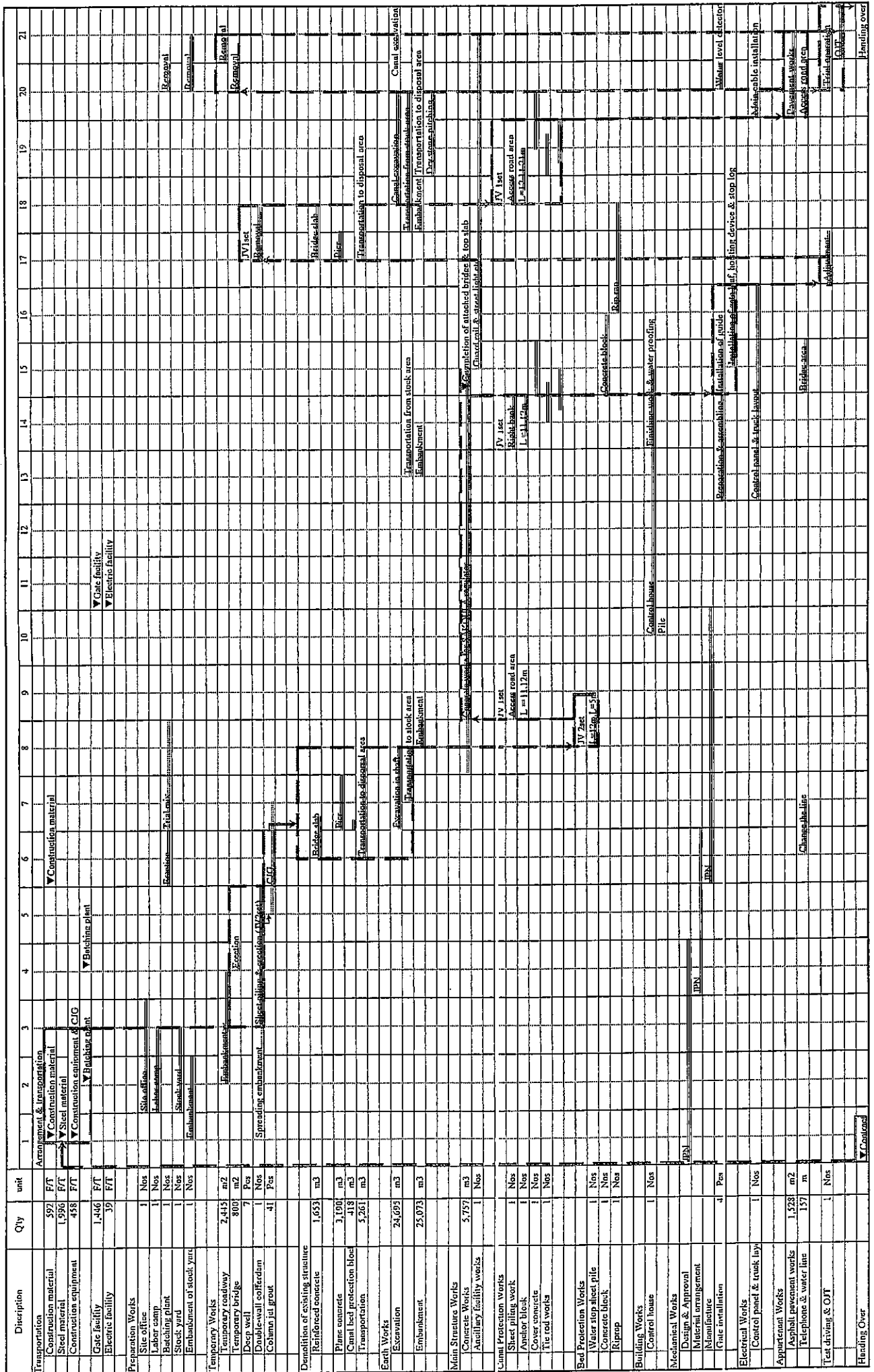




| | Item | To be undertaken by Japan | To be undertaken by Egypt | Notes |
|---|--|---|--|---|
| 1 | Land | Land for construction of regulator | | To secure all land needed |
| | Temporary yard for construction | • To backfill canal for lock and remove them | • To secure land shown in Drawing No 16 • To obtain approval and to secure land needed for construction of temporary bridge and cofferdam To obtain approval for backfilling canal for lock | |
| 2 | Land leveling | Removal of existing regulator | • Removal and disposal | To prepare land for disposal • To obtain approval from the authorities concerned for removal |
| | Removal of existing buildings | • Removal and disposal of buildings within temporary yard (the buildings partially destroyed on the downstream left bank side etc) | • To prepare land for disposal To obtain approval from the authorities concerned for removal | |
| 3 | Gate and Fence | Temporary gates and fences for construction | Installation and removal | |
| | Gates and fences around facilities of regulator | | Construction of gates, fences and parking lots | |
| 4 | Parking lot | Construction of parking lots | Construction and removal of temporary parking lots | Construction of permanent parking lots within the facilities of regulator |
| 5 | Road | Construction of roads | (Within the site) Construction of bridge on new regulator Construction of paved roads on closure dam (including transition part to existing paved roads) | (Outside the site) |
| | Temporary detours and bridge | Construction of detouring road for existing roads and removal on up and down stream left bank side (shown in Drawing No 16) • Construction and removal of temporary bridge over the canal (shown in Drawing No 16, 18) | | |
| 6 | Construction of regulator body, accompanying facilities, and gates | Construction of all facilities shown in Drawings | To prepare land for disposal of soil | |
| 7 | Temporary relocation of existing public utilities etc | Removal, relocation, and restoration of existing utilities of electricity, lighting, telephone, and water | Removal and relocation of electric posts and lines and restoration after rehabilitation of regulator • Removal and relocation of lighting and restoration after rehabilitation of regulator • Removal and relocation of telephone line for the Irrigation Department and restoration after rehabilitation of regulator Removal and relocation of service water pipe and restoration after rehabilitation of regulator | Application to the authorities concerned |

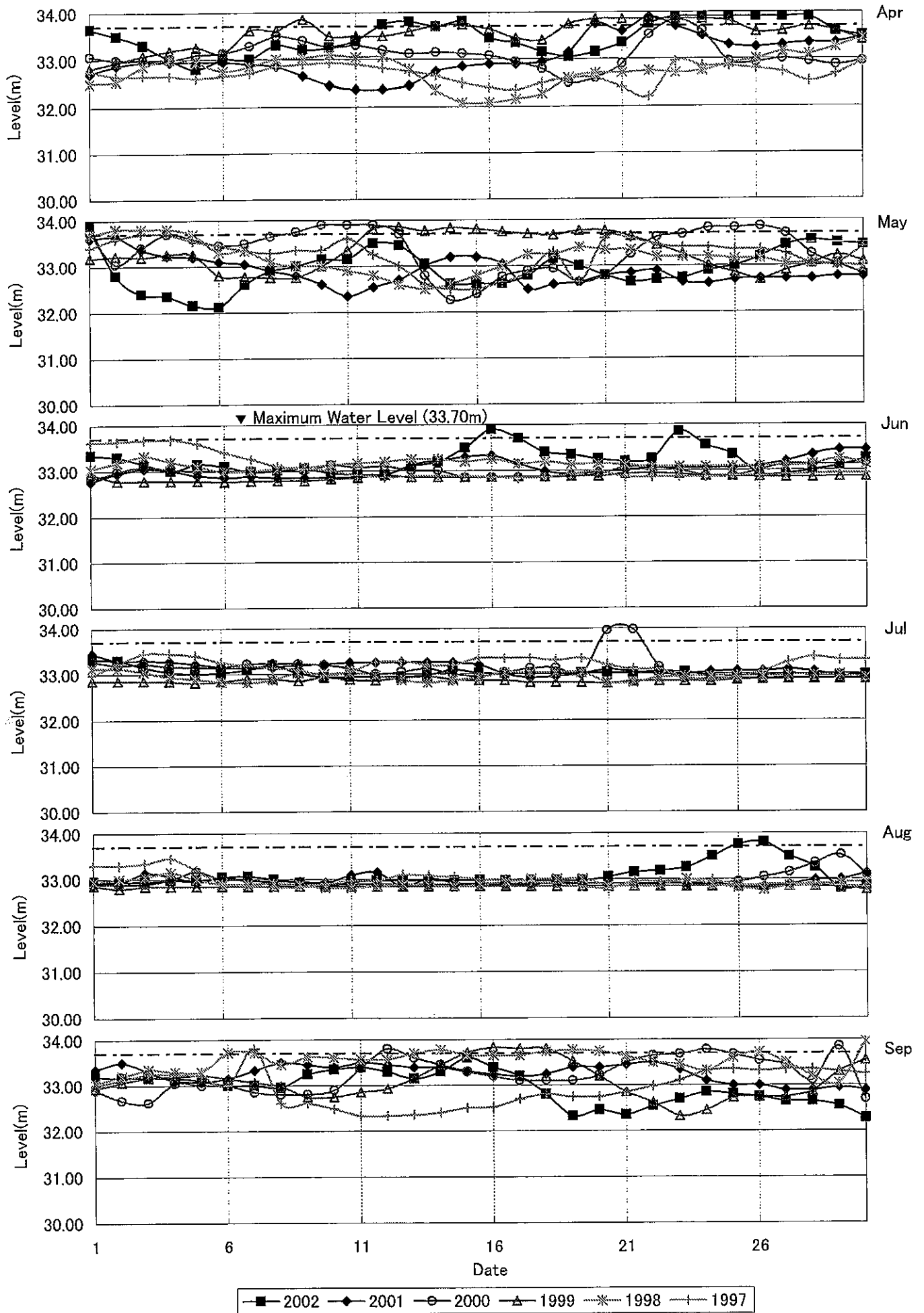
| | Item | To be undertaken by Japan | To be undertaken by Egypt | Notes |
|---|---|---|--|-------|
| | Removal, relocation, and restoration of existing water gauge and telemetry system | Removal and relocation of water gauge to outside of the construction site and restoration after rehabilitation of regulator • Removal and relocation of telemetry system and restoration after rehabilitation of regulator | Application to the authorities concerned | |
| | Repair of the existing gates (8 gates on the left bank side) | | To repair 4 gates which are out of order now among 8 gates before construction start To maintain and operate 8 gates for regulating Bahr Yusef Canal during | |
| Permanent Public utilities etc | Permanent Electric facilities | | New application of power supply to the authorities and connecting line up to the transformer | |
| | | | Installation of Switch gear and transformer | |
| | | Wiring from transformer to facilities in the site | | |
| | Permanent service water facilities | | New application of water supply to the authorities and new line from the main up to the control building | |
| | Permanent drainage facilities | | Main Piping to the site | |
| | | Facilities within the site | | |
| | Permanent town gas facilities | | Not applicable | |
| | | Not applicable | | |
| Permanent telephone facilities | | • Application for new telephone line • Telephone line up to distribution panel in control building | | |
| | Installation of distribution panel and extension of wire from the panel | | | |
| General furniture and project equipment | Not applicable | General furniture | | |
| Temporary utilities | Temporary electric facilities | • Installation of temporary transformer • Wiring to construction facilities Connecting high voltage power line up to temporary transformer | | |
| | Temporary water facilities | Temporary detouring of main and piping from main to work site | | |
| | | Application and installation of temporary well facilities for the construction | | |
| Temporary telephone facilities | To obtain lines from authorities concerned | | | |
| 8 | Opening of bank account and payment arrangement through the bank | | Advising commission of A/P | |
| | | | Payment commission | |
| 9 | Unloading and customs clearance | Transportation cost of import materials and equipment | Marine and air transportation cost from Japan to the port of Egypt | |
| | | Customs clearance | Exemption from taxation and customs clearance | |
| | | Inland transportation | Inland transportation from the port of Egypt to the site | |

CONSTRUCTION SCHEDULE // THE PROJECT FOR REHABILITATION AND IMPROVEMENT OF SAKOULA REGULATOR ON BAHR YUSEF CANAL

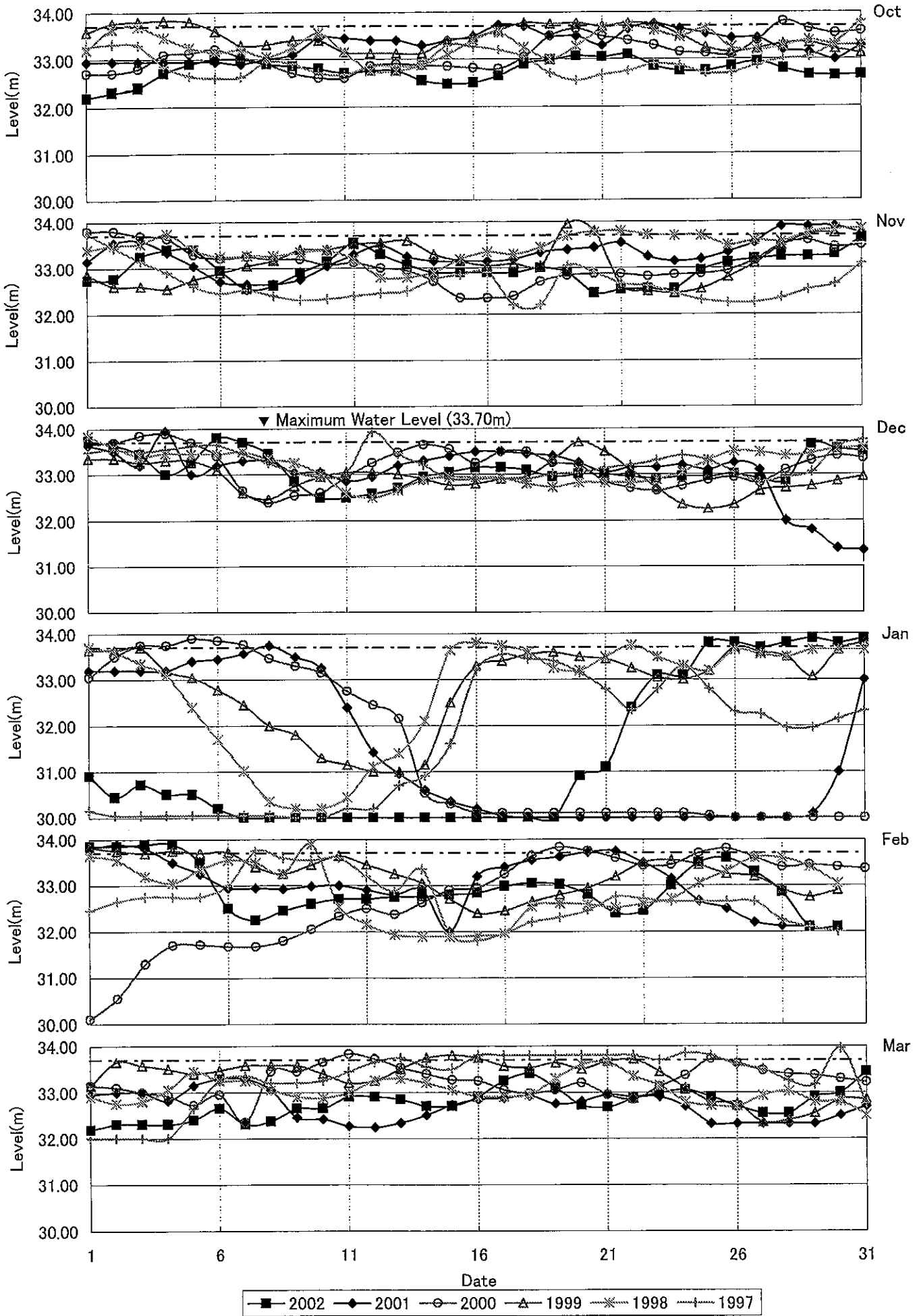


6C-1 Transition of Water Level at Sakoula Regulator (Upper Stream) in 6 Years

Summer



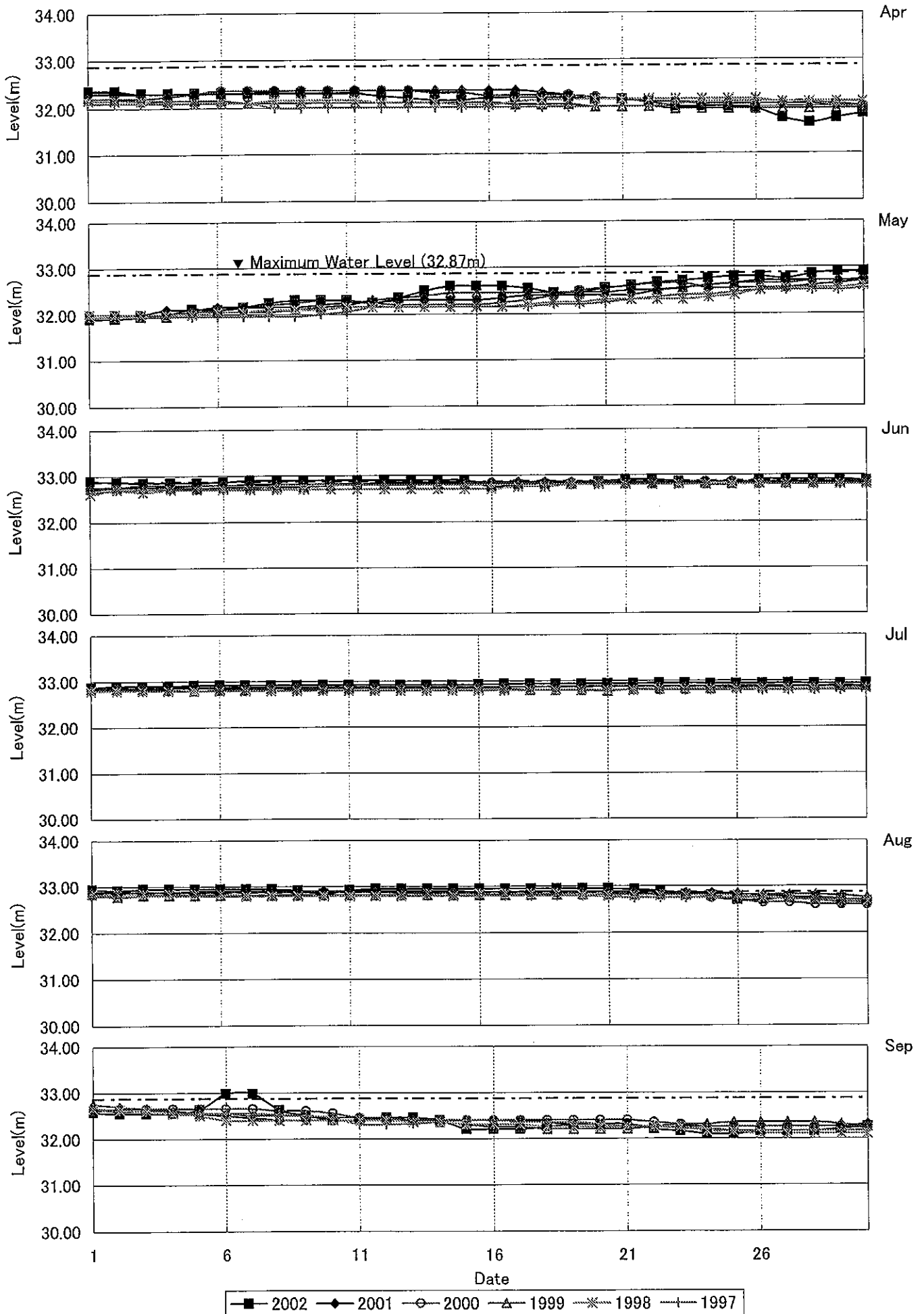
Winter



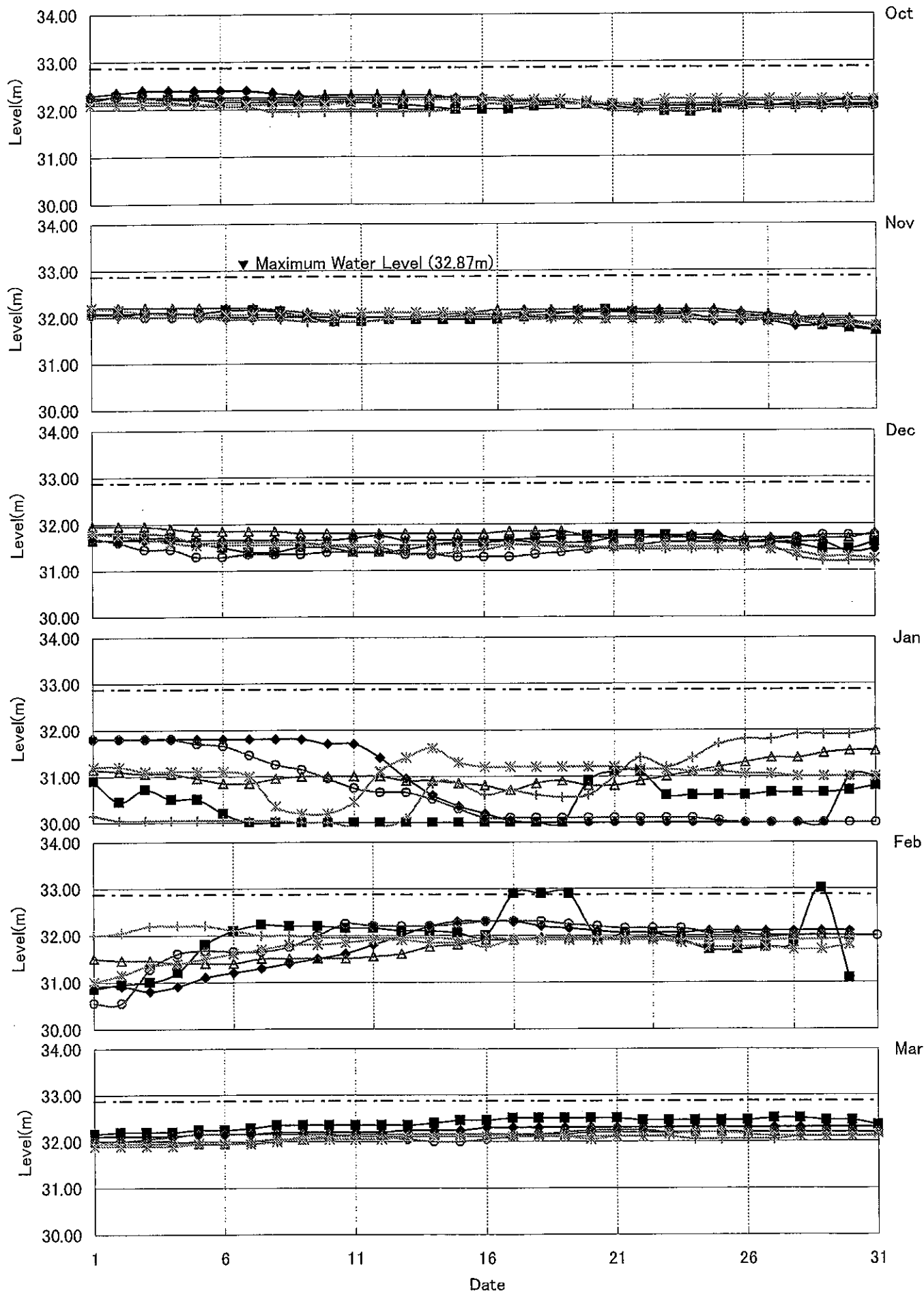
■ 2002 ◆ 2001 ○ 2000 ▲ 1999 * 1998 + 1997

6C-2 Transition of Water Level at Sakoula Regulator (Down Stream) in 6 Years

Summer



Winter



2002
 2001
 2000
 1999
 1998
 1997

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1992

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. |
| 1 | 33.10 | 31.10 | 29.93 | 29.90 | 33.10 | 31.60 | 33.35 | 31.90 | 33.85 | 31.75 | 32.57 | 31.90 | 33.80 | 32.35 | 32.55 | 32.50 | 33.33 | 32.25 | 32.80 | 38.55 | 32.60 | 31.80 | 33.42 | 31.60 |
| 2 | 33.10 | 31.25 | 29.95 | 29.90 | 33.20 | 31.60 | 33.45 | 31.80 | 33.95 | 31.70 | 32.35 | 31.90 | 33.85 | 32.35 | 32.65 | 32.50 | 33.05 | 32.25 | 32.55 | 38.75 | 32.63 | 31.80 | 33.40 | 31.55 |
| 3 | 33.00 | 31.15 | 30.45 | 30.40 | 33.27 | 31.60 | 33.55 | 31.80 | 33.90 | 31.65 | 32.25 | 31.95 | 33.40 | 32.40 | 32.60 | 32.50 | 32.87 | 32.25 | 32.40 | 38.60 | 32.57 | 31.80 | 33.35 | 31.50 |
| 4 | 33.35 | 30.90 | 31.75 | 30.80 | 33.20 | 31.60 | 33.72 | 31.75 | 33.80 | 31.65 | 32.40 | 32.00 | 33.05 | 32.40 | 32.55 | 32.50 | 32.95 | 32.20 | 32.35 | 38.60 | 32.57 | 31.80 | 33.45 | 31.50 |
| 5 | 33.57 | 30.90 | 33.00 | 31.10 | 33.37 | 31.60 | 33.87 | 31.70 | 33.60 | 31.65 | 32.37 | 32.05 | 33.05 | 32.40 | 32.65 | 32.50 | 32.32 | 32.20 | 32.37 | 38.63 | 32.57 | 31.80 | 33.70 | 31.45 |
| 6 | 33.20 | 31.00 | 33.45 | 30.75 | 33.20 | 31.60 | 33.80 | 31.70 | 33.40 | 31.65 | 32.35 | 32.05 | 32.90 | 32.40 | 32.70 | 32.45 | 32.93 | 32.10 | 32.37 | 38.57 | 32.85 | 31.80 | 33.95 | 31.45 |
| 7 | 32.60 | 31.00 | 33.90 | 30.75 | 33.05 | 31.60 | 33.62 | 31.70 | 33.45 | 31.65 | 32.60 | 32.00 | 32.75 | 32.40 | 32.75 | 32.45 | 33.22 | 32.05 | 32.35 | 38.40 | 32.90 | 31.80 | 33.75 | 31.45 |
| 8 | 31.70 | 31.10 | 33.95 | 30.95 | 32.85 | 31.60 | 33.55 | 31.70 | 33.58 | 31.65 | 32.80 | 32.00 | 32.55 | 32.40 | 32.65 | 32.45 | 33.25 | 32.05 | 32.30 | 38.40 | 33.00 | 31.80 | 33.60 | 31.45 |
| 9 | 30.65 | 30.60 | 33.85 | 30.85 | 32.85 | 31.60 | 33.55 | 31.75 | 33.70 | 31.65 | 32.80 | 32.00 | 32.63 | 32.40 | 32.55 | 32.45 | 32.90 | 32.00 | 32.32 | 38.40 | 33.15 | 31.80 | 33.80 | 31.35 |
| 10 | 30.25 | 30.22 | 33.35 | 31.00 | 32.85 | 31.60 | 33.58 | 31.75 | 33.85 | 31.65 | 32.80 | 32.00 | 32.55 | 32.45 | 32.50 | 32.45 | 32.40 | 32.00 | 32.35 | 38.40 | 33.25 | 31.80 | 33.80 | 31.35 |
| 11 | 30.05 | 30.02 | 33.85 | 31.20 | 32.90 | 31.60 | 33.60 | 31.75 | 33.80 | 31.65 | 32.63 | 32.10 | 32.53 | 32.45 | 32.50 | 32.45 | 32.05 | 32.00 | 32.27 | 38.45 | 33.35 | 31.75 | 33.57 | 31.35 |
| 12 | 30.05 | 30.02 | 32.90 | 31.30 | 32.90 | 31.60 | 33.55 | 31.75 | 33.58 | 31.65 | 32.60 | 32.10 | 32.53 | 32.45 | 32.55 | 32.45 | 32.00 | 31.95 | 32.27 | 38.40 | 33.15 | 31.75 | 33.57 | 31.35 |
| 13 | 30.05 | 30.02 | 32.10 | 31.50 | 32.85 | 31.65 | 33.20 | 31.80 | 33.47 | 31.65 | 32.75 | 32.10 | 32.53 | 32.45 | 32.55 | 32.45 | 32.12 | 32.00 | 32.25 | 38.40 | 32.95 | 31.75 | 33.65 | 31.30 |
| 14 | 30.05 | 30.02 | 33.30 | 31.60 | 32.75 | 31.70 | 32.70 | 31.80 | 33.45 | 31.65 | 32.65 | 32.15 | 32.53 | 32.45 | 32.57 | 32.45 | 32.90 | 32.00 | 32.15 | 38.60 | 32.98 | 31.75 | 33.75 | 31.25 |
| 15 | 30.03 | 30.00 | 32.25 | 31.70 | 32.65 | 31.75 | 32.50 | 31.80 | 33.38 | 31.65 | 32.45 | 32.20 | 32.48 | 32.40 | 32.58 | 32.53 | 32.90 | 32.00 | 32.30 | 38.64 | 32.95 | 31.75 | 33.80 | 31.25 |
| 16 | 30.03 | 30.00 | 32.50 | 31.80 | 32.53 | 31.75 | 32.15 | 31.85 | 33.35 | 31.70 | 32.28 | 32.20 | 32.50 | 32.42 | 32.55 | 32.50 | 32.92 | 32.00 | 32.55 | 38.67 | 32.70 | 31.75 | 33.80 | 31.25 |
| 17 | 30.03 | 30.00 | 32.05 | 31.80 | 32.15 | 31.75 | 32.35 | 31.85 | 33.45 | 31.70 | 32.35 | 32.20 | 32.55 | 32.45 | 32.55 | 32.50 | 32.70 | 31.95 | 32.65 | 38.90 | 32.85 | 31.75 | 33.72 | 31.25 |
| 18 | 30.03 | 30.00 | 32.20 | 31.80 | 32.05 | 31.75 | 32.45 | 31.85 | 33.25 | 31.70 | 32.45 | 32.25 | 32.70 | 32.45 | 32.50 | 32.45 | 32.85 | 31.90 | 32.75 | 38.88 | 32.95 | 31.75 | 33.72 | 31.25 |
| 19 | 29.93 | 29.90 | 32.80 | 31.80 | 32.15 | 31.75 | 32.42 | 31.85 | 33.35 | 31.70 | 32.65 | 32.30 | 32.57 | 32.50 | 32.97 | 32.45 | 32.82 | 31.90 | 32.85 | 38.72 | 33.05 | 31.75 | 33.72 | 31.25 |
| 20 | 29.93 | 29.90 | 32.20 | 31.80 | 32.45 | 31.75 | 32.75 | 31.80 | 33.37 | 31.70 | 32.73 | 32.30 | 32.55 | 32.50 | 32.80 | 32.45 | 32.80 | 31.90 | 32.80 | 38.77 | 32.97 | 31.75 | 33.80 | 31.20 |
| 21 | 29.93 | 29.90 | 33.70 | 31.80 | 32.60 | 31.75 | 32.90 | 31.75 | 33.47 | 31.70 | 32.75 | 32.30 | 32.55 | 32.50 | 32.85 | 32.45 | 32.72 | 31.90 | 32.85 | 38.79 | 33.03 | 31.70 | 33.73 | 31.20 |
| 22 | 29.93 | 29.90 | 33.95 | 31.80 | 32.65 | 31.75 | 33.05 | 31.75 | 33.57 | 31.70 | 32.80 | 32.35 | 32.55 | 32.50 | 32.85 | 32.45 | 32.80 | 31.85 | 32.03 | 38.67 | 32.95 | 31.70 | 33.65 | 31.20 |
| 23 | 29.93 | 29.90 | 33.95 | 31.80 | 32.68 | 31.75 | 33.20 | 31.75 | 33.50 | 31.75 | 32.85 | 32.35 | 32.60 | 32.50 | 32.85 | 32.45 | 33.15 | 31.85 | 33.22 | 38.68 | 32.95 | 31.70 | 33.65 | 31.20 |
| 24 | 29.93 | 29.90 | 33.95 | 31.80 | 32.82 | 31.80 | 33.27 | 31.75 | 33.48 | 31.75 | 32.90 | 32.35 | 32.57 | 32.50 | 32.90 | 32.45 | 33.30 | 31.85 | 33.30 | 38.68 | 32.98 | 31.65 | 33.67 | 31.20 |
| 25 | 29.93 | 29.90 | 33.95 | 31.60 | 32.88 | 31.85 | 33.25 | 31.75 | 33.55 | 31.75 | 32.85 | 32.40 | 32.55 | 32.50 | 32.80 | 32.45 | 33.40 | 31.85 | 33.50 | 38.68 | 33.10 | 31.65 | 33.62 | 31.25 |
| 26 | 29.93 | 29.90 | 33.95 | 31.60 | 32.85 | 31.90 | 33.35 | 31.75 | 33.58 | 31.80 | 32.90 | 32.40 | 32.55 | 32.50 | 32.70 | 32.40 | 33.28 | 31.85 | 33.58 | 38.50 | 33.22 | 31.65 | 33.58 | 31.25 |
| 27 | 29.93 | 29.90 | 33.90 | 31.60 | 32.70 | 31.90 | 33.47 | 31.75 | 33.52 | 31.85 | 33.05 | 32.40 | 32.55 | 32.50 | 32.70 | 32.40 | 33.15 | 31.85 | 33.45 | 38.81 | 33.28 | 31.65 | 33.60 | 31.25 |
| 28 | 29.93 | 29.90 | 33.85 | 31.55 | 32.65 | 31.90 | 33.60 | 31.75 | 33.40 | 31.85 | 33.20 | 32.40 | 32.55 | 32.50 | 32.65 | 32.40 | 33.03 | 31.85 | 33.32 | 38.48 | 33.37 | 31.60 | 33.62 | 31.25 |
| 29 | 29.93 | 29.90 | 33.50 | 31.60 | 32.80 | 31.90 | 33.80 | 31.75 | 33.00 | 31.90 | 33.40 | 32.35 | 32.55 | 32.50 | 32.63 | 32.35 | 33.03 | 31.85 | 33.10 | 38.48 | 33.43 | 31.60 | 33.37 | 31.25 |
| 30 | 29.93 | 29.90 | | | 32.97 | 31.90 | 33.87 | 31.75 | 32.85 | 31.90 | 33.80 | 32.35 | 32.55 | 32.50 | 32.77 | 32.85 | 33.97 | 31.85 | 32.85 | 38.50 | 33.55 | 31.60 | 33.07 | 31.30 |
| 31 | 29.93 | 29.90 | | | 33.10 | 31.90 | | | 32.65 | 31.90 | | | 32.55 | 32.50 | 32.15 | 32.30 | | | 32.75 | 38.51 | | | 32.82 | 31.35 |
| Max | 33.57 | 31.25 | 33.95 | 31.80 | 33.37 | 31.90 | 33.87 | 31.90 | 33.95 | 31.90 | 33.80 | 32.40 | 33.85 | 32.50 | 32.97 | 32.53 | 33.97 | 32.25 | 33.58 | 38.90 | 33.55 | 31.80 | 33.95 | 31.60 |
| Min | 29.93 | 29.90 | 29.93 | 29.90 | 32.05 | 31.60 | 32.15 | 31.70 | 32.65 | 31.65 | 32.25 | 31.90 | 32.48 | 32.35 | 32.15 | 32.30 | 32.00 | 31.85 | 32.03 | 38.40 | 32.57 | 31.60 | 32.82 | 31.20 |
| Ave. | 30.77 | 30.26 | 32.91 | 31.31 | 32.81 | 31.72 | 33.25 | 31.77 | 33.49 | 31.72 | 32.71 | 32.18 | 32.71 | 32.45 | 32.65 | 32.45 | 33.33 | 32.25 | 32.68 | 38.60 | 33.00 | 31.73 | 33.60 | 31.32 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1993

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | | |
| 1 | 32.65 | 31.45 | 29.75 | 29.75 | 31.85 | 32.70 | 31.90 | 32.50 | 31.90 | 33.30 | 31.90 | 32.85 | 32.05 | 32.90 | 32.55 | 33.02 | 32.60 | 33.03 | 32.45 | 32.67 | 31.90 | 31.97 | 31.87 | 32.90 | 31.55 | |
| 2 | 32.65 | 31.45 | 29.75 | 29.75 | 31.80 | 32.55 | 31.80 | 32.10 | 31.90 | 33.40 | 31.90 | 32.70 | 32.05 | 32.75 | 32.55 | 32.98 | 32.65 | 33.00 | 32.45 | 32.52 | 31.90 | 32.15 | 31.90 | 33.60 | 31.45 | |
| 3 | 32.62 | 31.50 | 30.00 | 30.00 | 31.80 | 32.30 | 31.80 | 31.95 | 31.90 | 33.50 | 31.90 | 32.75 | 32.05 | 32.70 | 32.55 | 33.00 | 32.65 | 33.00 | 32.40 | 32.45 | 31.90 | 32.60 | 31.90 | 33.95 | 31.65 | |
| 4 | 32.60 | 31.50 | 31.05 | 31.02 | 32.20 | 31.80 | 31.90 | 31.82 | 33.05 | 31.90 | 32.75 | 32.05 | 32.70 | 32.56 | 33.00 | 32.65 | 33.35 | 32.30 | 32.82 | 31.90 | 32.70 | 32.70 | 31.90 | 33.90 | 31.30 | |
| 5 | 32.15 | 31.50 | 33.50 | 30.75 | 32.35 | 31.70 | 31.95 | 31.87 | 32.67 | 31.85 | 32.85 | 32.10 | 32.70 | 32.62 | 33.05 | 32.65 | 33.50 | 32.30 | 32.82 | 31.90 | 33.05 | 31.85 | 31.85 | 33.95 | 31.20 | |
| 6 | 31.30 | 31.25 | 33.95 | 31.25 | 32.45 | 31.70 | 31.93 | 31.55 | 32.55 | 31.85 | 32.90 | 32.15 | 32.77 | 32.60 | 33.17 | 32.65 | 33.53 | 32.30 | 32.78 | 31.90 | 33.20 | 31.85 | 31.85 | 33.95 | 31.30 | |
| 7 | 30.85 | 30.85 | 33.95 | 31.20 | 32.47 | 31.70 | 31.88 | 31.80 | 32.50 | 31.85 | 32.90 | 32.20 | 32.82 | 32.60 | 33.25 | 32.65 | 33.40 | 32.25 | 32.73 | 31.90 | 32.90 | 31.80 | 31.80 | 33.85 | 31.30 | |
| 8 | 30.75 | 30.75 | 33.80 | 31.00 | 32.55 | 31.70 | 31.93 | 31.85 | 33.05 | 31.85 | 32.83 | 32.20 | 32.82 | 32.60 | 33.35 | 32.65 | 32.85 | 32.25 | 32.50 | 31.85 | 32.65 | 31.80 | 31.80 | 33.85 | 31.30 | |
| 9 | 30.50 | 30.50 | 33.65 | 30.90 | 32.70 | 31.70 | 32.33 | 31.85 | 33.32 | 31.80 | 32.77 | 32.25 | 32.82 | 32.60 | 33.05 | 32.65 | 32.65 | 32.15 | 32.55 | 31.80 | 32.68 | 31.75 | 31.75 | 33.80 | 31.00 | |
| 10 | 30.25 | 30.25 | 33.65 | 30.90 | 32.63 | 31.70 | 32.25 | 31.90 | 33.37 | 31.80 | 32.90 | 32.25 | 32.67 | 32.60 | 32.95 | 32.65 | 32.40 | 32.15 | 32.58 | 31.80 | 32.68 | 31.75 | 31.75 | 33.77 | 31.30 | |
| 11 | 30.15 | 30.15 | 33.65 | 31.00 | 32.60 | 31.70 | 32.18 | 31.90 | 33.17 | 31.80 | 32.95 | 32.25 | 32.70 | 32.60 | 32.88 | 32.60 | 32.25 | 32.15 | 32.60 | 31.80 | 32.73 | 31.80 | 31.80 | 33.63 | 31.00 | |
| 12 | 30.05 | 30.05 | 33.60 | 31.10 | 32.40 | 31.70 | 32.30 | 31.90 | 33.05 | 31.80 | 32.88 | 32.30 | 32.78 | 32.60 | 32.87 | 32.55 | 32.50 | 32.10 | 32.60 | 31.80 | 32.73 | 31.80 | 31.80 | 33.72 | 31.30 | |
| 13 | 30.05 | 30.05 | 32.90 | 31.60 | 32.35 | 31.70 | 32.45 | 31.90 | 33.00 | 31.80 | 32.82 | 32.30 | 32.80 | 32.60 | 32.88 | 32.55 | 32.75 | 32.10 | 32.60 | 31.80 | 32.40 | 31.80 | 31.80 | 33.62 | 31.30 | |
| 14 | 30.15 | 30.15 | 32.75 | 31.70 | 32.33 | 31.70 | 32.60 | 31.90 | 33.03 | 31.80 | 33.00 | 32.30 | 32.87 | 32.60 | 33.07 | 32.60 | 32.85 | 32.05 | 32.37 | 31.80 | 32.50 | 31.85 | 31.85 | 33.65 | 31.30 | |
| 15 | 30.15 | 30.15 | 32.25 | 31.70 | 32.42 | 31.70 | 32.53 | 31.90 | 33.03 | 31.80 | 33.00 | 32.40 | 32.87 | 32.60 | 33.12 | 32.60 | 32.60 | 32.05 | 32.37 | 31.80 | 32.17 | 31.85 | 31.85 | 33.75 | 31.30 | |
| 16 | 30.15 | 30.15 | 33.50 | 31.70 | 32.55 | 31.75 | 32.55 | 31.90 | 32.98 | 31.80 | 33.75 | 32.38 | 32.70 | 32.60 | 33.12 | 32.60 | 32.57 | 32.00 | 32.35 | 31.80 | 32.20 | 31.80 | 31.80 | 33.75 | 31.30 | |
| 17 | 29.90 | 29.90 | 33.60 | 31.80 | 32.42 | 31.90 | 32.53 | 31.90 | 32.70 | 31.80 | 32.75 | 32.40 | 32.63 | 32.55 | 33.05 | 32.60 | 32.65 | 32.00 | 32.22 | 31.80 | 32.40 | 31.80 | 31.80 | 33.70 | 31.30 | |
| 18 | 29.90 | 29.90 | 33.45 | 31.85 | 32.50 | 31.90 | 32.54 | 31.90 | 32.60 | 31.80 | 32.65 | 32.40 | 32.68 | 32.60 | 32.90 | 32.60 | 32.55 | 32.00 | 32.00 | 31.85 | 32.75 | 31.80 | 31.80 | 33.72 | 31.30 | |
| 19 | 29.80 | 29.80 | 33.42 | 31.90 | 32.45 | 31.90 | 32.63 | 31.85 | 32.55 | 31.80 | 32.75 | 32.40 | 32.75 | 32.60 | 32.75 | 32.65 | 33.15 | 31.95 | 32.55 | 31.85 | 32.97 | 31.80 | 31.80 | 33.50 | 31.30 | |
| 20 | 29.80 | 29.80 | 33.35 | 31.90 | 32.48 | 31.90 | 32.45 | 31.90 | 32.65 | 31.80 | 32.65 | 32.50 | 32.85 | 32.60 | 32.72 | 32.65 | 33.65 | 31.95 | 32.55 | 31.90 | 33.10 | 31.80 | 31.80 | 33.45 | 31.30 | |
| 21 | 29.80 | 29.80 | 33.30 | 31.90 | 32.55 | 31.90 | 31.98 | 31.90 | 32.95 | 31.80 | 32.80 | 32.55 | 32.80 | 32.65 | 32.72 | 32.65 | 33.75 | 31.95 | 32.60 | 31.90 | 33.20 | 31.80 | 31.80 | 33.55 | 31.30 | |
| 22 | 29.80 | 29.80 | 33.35 | 31.90 | 32.60 | 31.90 | 31.95 | 31.87 | 33.33 | 31.80 | 32.95 | 32.60 | 32.75 | 32.65 | 32.82 | 32.65 | 33.67 | 31.95 | 32.70 | 31.90 | 32.90 | 31.80 | 31.80 | 33.52 | 31.30 | |
| 23 | 29.80 | 29.80 | 33.40 | 31.90 | 32.70 | 31.90 | 31.95 | 31.87 | 33.55 | 31.85 | 33.27 | 32.55 | 32.75 | 32.65 | 32.85 | 32.65 | 33.05 | 31.95 | 32.67 | 31.90 | 32.80 | 31.80 | 31.80 | 33.35 | 31.35 | |
| 24 | 29.70 | 29.70 | 33.60 | 31.90 | 32.70 | 31.90 | 31.95 | 31.87 | 33.37 | 31.90 | 33.50 | 32.55 | 32.77 | 32.60 | 32.90 | 32.55 | 32.85 | 31.95 | 32.60 | 31.90 | 32.65 | 31.80 | 31.80 | 33.50 | 31.35 | |
| 25 | 29.80 | 29.80 | 33.75 | 31.85 | 32.80 | 31.95 | 31.98 | 31.90 | 33.72 | 31.95 | 33.07 | 32.60 | 32.77 | 32.60 | 32.95 | 32.55 | 33.10 | 31.90 | 32.62 | 31.90 | 32.65 | 31.75 | 31.75 | 33.05 | 31.45 | |
| 26 | 29.75 | 29.75 | 33.35 | 31.85 | 32.80 | 31.95 | 32.08 | 31.90 | 33.57 | 31.95 | 32.82 | 32.60 | 32.80 | 32.60 | 32.95 | 32.35 | 33.45 | 31.90 | 32.60 | 31.90 | 32.65 | 33.75 | 33.10 | 31.45 | | |
| 27 | 29.75 | 29.75 | 33.10 | 31.85 | 32.75 | 31.95 | 32.60 | 31.90 | 33.37 | 32.00 | 32.82 | 32.60 | 32.85 | 32.60 | 32.95 | 32.55 | 33.49 | 31.90 | 32.60 | 31.95 | 32.62 | 31.75 | 31.75 | 33.10 | 31.50 | |
| 28 | 29.75 | 29.75 | 32.85 | 31.85 | 32.70 | 31.95 | 32.65 | 31.90 | 33.20 | 32.00 | 32.90 | 32.60 | 32.93 | 32.60 | 32.92 | 32.55 | 33.53 | 31.90 | 32.60 | 31.90 | 32.45 | 31.70 | 31.70 | 33.20 | 31.40 | |
| 29 | 29.75 | 29.75 | | | 32.80 | 31.95 | 32.95 | 31.90 | 33.12 | 32.00 | 33.00 | 32.55 | 33.03 | 32.60 | 33.10 | 32.55 | 33.22 | 31.90 | 32.10 | 31.90 | 32.43 | 31.70 | 31.70 | 33.00 | 31.35 | |
| 30 | 29.75 | 29.75 | | | 32.88 | 31.95 | 33.10 | 31.90 | 33.00 | 32.05 | 33.05 | 32.55 | 33.17 | 32.60 | 33.10 | 32.50 | 32.97 | 31.90 | 32.00 | 31.90 | 32.65 | 31.65 | 31.65 | 32.50 | 31.35 | |
| 31 | 29.75 | 29.75 | | | 32.70 | 31.90 | | | 33.00 | 32.05 | | | 33.17 | 32.60 | 33.03 | 32.50 | | | 31.93 | 31.83 | | | | 32.50 | 31.35 | |
| Max | 32.65 | 31.50 | 33.95 | 31.90 | 32.88 | 31.95 | 33.10 | 31.90 | 33.72 | 32.05 | 33.75 | 32.60 | 33.17 | 32.65 | 33.35 | 32.65 | 33.75 | 32.45 | 32.82 | 31.95 | 33.20 | 33.75 | 33.95 | 31.65 | | |
| Min | 29.70 | 29.70 | 29.75 | 29.75 | 32.20 | 31.70 | 31.88 | 31.55 | 32.50 | 31.80 | 32.65 | 32.05 | 32.63 | 32.55 | 32.72 | 32.50 | 32.25 | 31.90 | 31.93 | 31.80 | 31.97 | 31.65 | 31.65 | 32.50 | 31.00 | |
| Ave | 30.44 | 30.27 | 32.94 | 31.35 | 32.56 | 31.82 | 32.29 | 31.87 | 33.09 | 31.87 | 32.92 | 32.36 | 32.81 | 32.60 | 32.98 | 32.60 | 33.03 | 32.45 | 32.50 | 31.87 | 32.65 | 31.87 | 32.65 | 31.87 | 33.50 | 31.33 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water Levels and Discharges in 1994

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. |
| 1 | 32.47 | 31.50 | 30.00 | 30.00 | 32.25 | 32.15 | 33.02 | 31.95 | 33.45 | 31.85 | 32.22 | 32.15 | 32.92 | 32.65 | 32.62 | 32.57 | 32.42 | 32.37 | 32.82 | 31.90 | 32.42 | 31.95 | 33.40 | 31.55 |
| 2 | 32.47 | 31.60 | 30.00 | 30.00 | 32.15 | 32.05 | 32.70 | 31.95 | 33.45 | 31.85 | 32.20 | 32.13 | 32.98 | 32.65 | 32.65 | 32.60 | 32.50 | 32.45 | 32.72 | 31.90 | 32.65 | 31.95 | 33.90 | 31.55 |
| 3 | 32.53 | 31.60 | 30.00 | 30.00 | 32.05 | 31.97 | 32.65 | 31.95 | 33.60 | 31.85 | 32.24 | 32.17 | 33.10 | 32.65 | 32.60 | 32.52 | 32.47 | 32.75 | 31.90 | 33.50 | 31.95 | 33.90 | 31.55 | |
| 4 | 32.77 | 31.60 | 30.20 | 30.20 | 32.05 | 31.97 | 32.68 | 31.90 | 33.70 | 31.80 | 32.32 | 32.25 | 33.27 | 32.65 | 32.72 | 32.67 | 32.52 | 32.47 | 32.95 | 31.90 | 33.85 | 31.95 | 33.85 | 31.55 |
| 5 | 33.00 | 31.60 | 31.20 | 31.15 | 32.08 | 32.00 | 32.67 | 31.90 | 33.62 | 31.80 | 32.32 | 32.25 | 33.30 | 32.65 | 32.75 | 32.70 | 32.65 | 32.45 | 32.80 | 31.90 | 33.90 | 31.90 | 33.75 | 31.55 |
| 6 | 33.15 | 31.60 | 31.95 | 31.30 | 32.28 | 32.18 | 32.85 | 31.90 | 33.75 | 31.80 | 32.60 | 32.25 | 33.35 | 32.65 | 32.78 | 32.73 | 32.73 | 32.45 | 32.75 | 31.70 | 33.90 | 31.70 | 33.65 | 31.45 |
| 7 | 33.15 | 31.60 | 32.65 | 30.80 | 32.35 | 32.20 | 33.25 | 31.90 | 33.85 | 31.80 | 32.75 | 32.35 | 33.45 | 32.65 | 32.77 | 32.75 | 32.75 | 32.45 | 32.85 | 31.95 | 33.70 | 31.65 | 33.90 | 31.35 |
| 8 | 33.10 | 31.60 | 33.45 | 31.70 | 32.45 | 32.20 | 33.40 | 32.30 | 33.75 | 31.80 | 32.75 | 32.35 | 33.43 | 32.65 | 32.80 | 32.75 | 32.50 | 32.35 | 32.80 | 31.95 | 33.50 | 31.65 | 33.80 | 31.35 |
| 9 | 32.00 | 31.60 | 33.50 | 31.10 | 32.65 | 32.20 | 33.50 | 31.90 | 33.60 | 31.80 | 32.90 | 32.35 | 33.43 | 32.65 | 32.72 | 32.67 | 32.52 | 32.25 | 32.65 | 31.95 | 33.30 | 31.65 | 33.60 | 31.35 |
| 10 | 31.10 | 31.05 | 33.35 | 31.10 | 32.70 | 32.15 | 33.45 | 31.90 | 33.70 | 31.80 | 32.85 | 32.35 | 33.05 | 32.65 | 32.72 | 32.67 | 32.47 | 32.42 | 32.65 | 31.90 | 33.25 | 31.65 | 33.50 | 31.35 |
| 11 | 30.75 | 30.72 | 33.40 | 30.50 | 32.80 | 32.05 | 33.25 | 31.90 | 33.55 | 31.80 | 32.85 | 32.45 | 32.92 | 32.65 | 32.72 | 32.67 | 32.53 | 32.15 | 32.70 | 31.90 | 33.10 | 31.65 | 33.35 | 31.35 |
| 12 | 30.35 | 30.32 | 33.00 | 31.40 | 33.00 | 31.90 | 33.15 | 31.90 | 33.45 | 31.80 | 32.88 | 32.50 | 32.85 | 32.60 | 32.74 | 32.69 | 32.45 | 32.05 | 32.85 | 31.85 | 32.80 | 31.75 | 33.20 | 31.40 |
| 13 | 30.05 | 30.02 | 32.75 | 31.25 | 33.50 | 31.90 | 32.80 | 31.90 | 33.30 | 31.80 | 32.95 | 32.50 | 32.70 | 32.65 | 32.75 | 32.70 | 32.35 | 32.05 | 32.85 | 31.85 | 32.80 | 31.75 | 33.10 | 31.40 |
| 14 | 30.05 | 30.02 | 32.75 | 31.35 | 33.55 | 31.90 | 32.82 | 31.90 | 33.12 | 31.80 | 32.98 | 32.50 | 32.70 | 32.65 | 32.85 | 32.75 | 32.00 | 31.95 | 32.85 | 31.85 | 32.85 | 31.75 | 33.10 | 31.40 |
| 15 | 30.00 | 30.00 | 32.75 | 31.50 | 33.50 | 31.70 | 32.83 | 31.90 | 32.90 | 31.80 | 33.00 | 32.50 | 32.72 | 32.67 | 32.88 | 32.75 | 32.05 | 32.00 | 32.80 | 31.85 | 32.75 | 31.85 | 33.35 | 31.35 |
| 16 | 29.90 | 29.90 | 32.75 | 31.65 | 33.65 | 31.80 | 32.65 | 31.90 | 32.80 | 31.80 | 32.67 | 32.60 | 32.72 | 32.67 | 32.80 | 32.75 | 32.10 | 32.05 | 32.85 | 31.85 | 32.75 | 31.80 | 33.60 | 31.35 |
| 17 | 29.90 | 29.90 | 32.40 | 31.90 | 33.70 | 31.85 | 32.25 | 31.85 | 32.60 | 31.90 | 32.65 | 32.60 | 32.70 | 32.65 | 32.75 | 32.70 | 32.20 | 32.05 | 32.85 | 31.90 | 32.85 | 31.75 | 33.65 | 31.35 |
| 18 | 29.90 | 29.90 | 32.05 | 31.90 | 33.65 | 31.90 | 32.28 | 31.85 | 32.45 | 31.90 | 32.65 | 32.60 | 32.72 | 32.67 | 32.75 | 32.70 | 32.40 | 32.05 | 32.90 | 31.90 | 33.30 | 31.80 | 33.75 | 31.35 |
| 19 | 29.90 | 29.90 | 32.20 | 31.90 | 33.50 | 31.95 | 32.17 | 31.85 | 32.10 | 32.00 | 32.65 | 32.60 | 32.85 | 32.70 | 32.72 | 32.67 | 32.70 | 32.05 | 33.30 | 31.90 | 33.50 | 31.80 | 33.60 | 31.35 |
| 20 | 29.90 | 29.90 | 32.50 | 32.05 | 33.10 | 32.00 | 32.20 | 31.85 | 32.04 | 31.97 | 32.65 | 32.60 | 32.80 | 32.75 | 32.75 | 32.70 | 32.90 | 32.05 | 33.40 | 31.95 | 33.50 | 31.80 | 33.60 | 31.35 |
| 21 | 29.90 | 29.90 | 33.05 | 32.05 | 32.80 | 32.05 | 32.50 | 31.85 | 32.10 | 32.00 | 32.80 | 32.60 | 32.80 | 32.75 | 32.77 | 32.72 | 33.10 | 32.05 | 33.20 | 31.95 | 33.42 | 31.85 | 33.42 | 31.35 |
| 22 | 29.90 | 29.90 | 33.45 | 32.05 | 32.70 | 32.05 | 33.05 | 31.85 | 32.40 | 32.00 | 33.00 | 32.60 | 32.80 | 32.75 | 32.80 | 32.70 | 33.30 | 32.05 | 33.15 | 31.95 | 33.25 | 31.85 | 33.15 | 31.40 |
| 23 | 29.90 | 29.90 | 33.57 | 32.05 | 32.90 | 32.05 | 33.35 | 31.85 | 32.80 | 32.05 | 33.08 | 32.65 | 32.80 | 32.75 | 32.85 | 32.70 | 33.10 | 32.05 | 32.85 | 31.95 | 32.95 | 31.85 | 33.05 | 31.40 |
| 24 | 29.90 | 29.90 | 33.00 | 32.15 | 33.25 | 32.05 | 33.80 | 31.85 | 33.30 | 32.05 | 32.90 | 32.65 | 32.75 | 32.70 | 32.75 | 32.65 | 33.05 | 32.00 | 32.80 | 31.95 | 32.93 | 31.85 | 33.10 | 31.40 |
| 25 | 29.90 | 29.90 | 32.60 | 32.15 | 33.50 | 32.05 | 33.90 | 31.85 | 33.75 | 32.10 | 32.75 | 32.65 | 32.80 | 32.75 | 32.65 | 32.60 | 33.00 | 32.00 | 32.70 | 31.95 | 33.05 | 31.85 | 33.20 | 31.40 |
| 26 | 29.90 | 29.90 | 32.50 | 32.15 | 33.58 | 32.05 | 33.55 | 31.85 | 33.72 | 32.10 | 32.70 | 32.65 | 32.80 | 32.75 | 32.62 | 32.57 | 33.05 | 32.00 | 32.55 | 31.95 | 33.30 | 31.80 | 33.10 | 31.45 |
| 27 | 29.90 | 29.90 | 32.20 | 32.15 | 33.35 | 32.05 | 33.25 | 31.85 | 33.20 | 32.20 | 32.80 | 32.65 | 32.70 | 32.65 | 32.60 | 32.55 | 33.05 | 31.95 | 32.52 | 31.95 | 33.40 | 31.70 | 32.55 | 31.50 |
| 28 | 29.90 | 29.90 | 32.25 | 32.15 | 32.98 | 32.05 | 33.15 | 31.85 | 32.85 | 32.20 | 32.83 | 32.65 | 32.70 | 32.65 | 32.60 | 32.55 | 33.20 | 31.95 | 32.47 | 31.95 | 33.30 | 31.70 | 32.55 | 31.55 |
| 29 | 29.90 | 29.90 | | | 32.85 | 32.05 | 33.25 | 31.85 | 32.70 | 32.15 | 32.77 | 32.65 | 32.70 | 32.65 | 32.55 | 32.50 | 32.90 | 31.95 | 32.37 | 31.95 | 33.25 | 31.70 | 32.35 | 31.55 |
| 30 | 30.00 | 30.00 | | | - | - | 33.40 | 31.85 | 32.70 | 32.10 | 32.85 | 32.65 | 32.72 | 32.67 | 32.43 | 32.38 | 32.82 | 31.90 | 32.37 | 31.95 | 33.38 | 31.60 | 32.35 | 31.55 |
| 31 | 30.00 | 30.00 | | | 32.88 | 32.00 | | | 32.53 | 32.15 | | | 32.65 | 32.60 | 32.42 | 32.37 | | | 32.35 | 31.95 | | | 31.70 | 31.55 |
| Max | 33.15 | 31.60 | 33.57 | 32.15 | 33.70 | 32.20 | 33.90 | 32.30 | 33.85 | 32.20 | 33.08 | 32.65 | 33.45 | 32.75 | 32.88 | 32.75 | 33.30 | 32.47 | 33.40 | 31.95 | 33.90 | 31.95 | 33.90 | 31.55 |
| Min | 29.90 | 29.90 | 30.00 | 30.00 | 32.05 | 31.70 | 32.17 | 31.85 | 32.04 | 31.80 | 32.20 | 32.13 | 32.65 | 32.60 | 32.42 | 32.37 | 32.00 | 31.90 | 32.35 | 31.70 | 32.42 | 31.60 | 31.70 | 31.35 |
| Ave | 30.82 | 30.48 | 32.34 | 31.42 | 32.93 | 32.02 | 32.99 | 31.90 | 33.12 | 31.93 | 32.72 | 32.48 | 32.91 | 32.67 | 32.71 | 32.65 | 32.42 | 32.37 | 32.79 | 31.91 | 33.21 | 31.78 | 33.29 | 31.43 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1995

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | |
| 1 | 31.75 | 31.55 | 33.55 | 30.90 | 33.25 | 31.90 | 33.00 | 31.90 | 33.75 | 31.75 | 32.50 | 32.35 | 32.78 | 32.75 | 33.08 | 32.75 | 32.92 | 32.55 | 32.75 | 32.05 | 33.55 | 32.00 | 33.65 | 31.65 | |
| 2 | 32.20 | 31.35 | 33.35 | 31.15 | 33.10 | 31.90 | 32.90 | 32.00 | 33.65 | 31.75 | 32.65 | 32.35 | 32.88 | 32.75 | 33.07 | 32.75 | 32.90 | 32.55 | 33.00 | 32.05 | 33.53 | 32.00 | 33.75 | 31.65 | |
| 3 | 32.50 | 31.35 | 33.35 | 31.30 | 33.00 | 31.90 | 32.45 | 32.00 | 33.53 | 31.75 | 32.85 | 32.40 | 32.90 | 32.75 | 33.00 | 32.75 | 32.83 | 32.50 | 33.20 | 32.05 | 33.20 | 32.00 | 33.65 | 31.65 | |
| 4 | 32.25 | 31.35 | 33.45 | 31.45 | 32.95 | 31.90 | 32.15 | 32.00 | 33.57 | 31.75 | 32.85 | 32.50 | 32.05 | 32.75 | 33.00 | 32.75 | 32.65 | 32.50 | 32.93 | 32.05 | 32.50 | 32.00 | 33.40 | 31.60 | |
| 5 | 31.40 | 31.20 | 33.65 | 31.45 | 33.00 | 31.90 | 32.07 | 32.00 | 33.70 | 31.75 | 33.00 | 32.50 | 33.25 | 32.75 | 33.05 | 32.75 | 32.53 | 32.50 | 32.50 | 32.05 | 32.45 | 32.00 | 33.10 | 31.55 | |
| 6 | 30.65 | 30.60 | 33.90 | 31.50 | 33.00 | 31.90 | 32.15 | 32.00 | 33.80 | 31.75 | 33.05 | 32.55 | 33.40 | 32.75 | 32.80 | 32.75 | 32.57 | 32.50 | 32.37 | 32.00 | 32.55 | 32.00 | 32.80 | 31.55 | |
| 7 | 30.45 | 30.40 | 33.65 | 31.50 | 32.90 | 31.95 | 32.50 | 32.00 | 33.82 | 31.75 | 32.85 | 32.60 | 33.05 | 32.75 | 32.76 | 32.73 | 32.57 | 32.45 | 32.20 | 32.00 | 32.40 | 31.90 | 32.75 | 31.40 | |
| 8 | 30.23 | 30.20 | 33.40 | 31.55 | 32.95 | 31.95 | 32.80 | 32.05 | 33.70 | 31.80 | 32.83 | 32.60 | 32.97 | 32.75 | 32.76 | 32.73 | 32.52 | 32.40 | 32.20 | 32.00 | 32.35 | 31.85 | 32.75 | 31.40 | |
| 9 | 30.11 | 30.10 | 33.25 | 31.65 | 32.80 | 31.95 | 32.85 | 32.05 | 33.20 | 31.80 | 32.88 | 32.60 | 32.90 | 32.75 | 32.76 | 32.73 | 32.43 | 32.40 | 32.15 | 31.95 | 32.25 | 31.85 | 32.75 | 31.40 | |
| 10 | 30.07 | 30.05 | 33.30 | 31.80 | 32.70 | 32.09 | 32.85 | 32.05 | 33.00 | 31.80 | 32.88 | 32.60 | 32.85 | 32.75 | 32.76 | 32.73 | 32.35 | 32.30 | 32.25 | 31.95 | 32.85 | 31.80 | 32.55 | 31.35 | |
| 11 | 30.02 | 30.00 | 33.30 | 31.80 | 32.70 | 32.10 | 32.88 | 32.05 | 33.10 | 31.80 | 33.00 | 32.55 | 32.76 | 32.71 | 32.78 | 32.75 | 32.15 | 32.12 | 31.95 | 31.90 | 32.00 | 31.85 | 32.45 | 31.35 | |
| 12 | 29.95 | 29.95 | 33.05 | 31.90 | 32.85 | 32.10 | 32.95 | 32.00 | 33.25 | 31.85 | 33.02 | 32.65 | 32.80 | 32.75 | 32.75 | 32.72 | 32.13 | 32.10 | 31.92 | 31.87 | 32.15 | 31.85 | 32.45 | 31.35 | |
| 13 | 29.90 | 29.90 | 32.85 | 31.90 | 32.90 | 32.15 | 32.90 | 32.00 | 33.20 | 31.85 | 33.05 | 32.65 | 32.95 | 32.75 | 32.76 | 32.73 | 32.10 | 32.07 | 31.90 | 31.85 | 32.55 | 31.85 | 32.37 | 31.35 | |
| 14 | 29.90 | 29.90 | 32.95 | 31.90 | 33.00 | 32.15 | 32.65 | 32.00 | 33.80 | 31.85 | 33.02 | 32.70 | 32.98 | 32.75 | 33.05 | 32.75 | 32.15 | 32.12 | 31.92 | 31.87 | 32.90 | 31.90 | 32.55 | 31.35 | |
| 15 | 29.90 | 29.90 | 33.15 | 31.90 | 32.75 | 32.10 | 32.45 | 31.95 | 32.50 | 31.85 | 33.00 | 32.70 | 32.98 | 32.75 | 32.95 | 32.75 | 32.30 | 32.15 | 31.97 | 31.92 | 33.55 | 31.90 | 33.50 | 31.35 | |
| 16 | 29.90 | 29.90 | 33.10 | 32.00 | 32.55 | 32.15 | 32.37 | 31.95 | 32.15 | 31.85 | 32.90 | 32.70 | 33.00 | 32.75 | 32.95 | 32.75 | 32.52 | 32.15 | 32.20 | 31.95 | 33.73 | 31.90 | 34.00 | 31.40 | |
| 17 | 29.90 | 29.90 | 33.20 | 32.00 | 32.70 | 32.15 | 32.25 | 31.95 | 32.00 | 31.85 | 32.80 | 32.70 | 33.25 | 32.75 | 33.00 | 32.75 | 32.53 | 32.10 | 32.50 | 32.00 | 33.73 | 31.90 | 33.60 | 31.40 | |
| 18 | 29.90 | 29.90 | 33.45 | 32.00 | 32.85 | 32.15 | 32.20 | 31.95 | 32.25 | 31.85 | 32.95 | 32.70 | 33.40 | 32.75 | 33.02 | 32.75 | 32.62 | 32.10 | 32.65 | 32.00 | 33.65 | 31.90 | 33.42 | 31.40 | |
| 19 | 29.90 | 29.90 | 33.55 | 32.00 | 33.05 | 32.15 | 32.65 | 31.95 | 32.85 | 32.00 | 33.02 | 32.70 | 33.55 | 32.75 | 33.10 | 32.75 | 32.75 | 32.10 | 32.68 | 32.00 | 33.45 | 31.90 | 33.45 | 31.40 | |
| 20 | 30.50 | 30.45 | 33.25 | 32.00 | 33.75 | 32.05 | 33.00 | 31.95 | 33.08 | 32.00 | 33.20 | 32.70 | 33.67 | 32.75 | 33.10 | 32.75 | 32.75 | 32.05 | 32.60 | 32.00 | 33.40 | 31.90 | 33.65 | 31.35 | |
| 21 | 31.20 | 31.05 | 33.25 | 32.00 | 33.90 | 32.15 | 33.25 | 31.95 | 33.10 | 32.00 | 33.25 | 32.70 | 33.72 | 32.75 | 32.95 | 32.75 | 32.80 | 32.05 | 32.70 | 32.00 | 33.15 | 31.90 | 33.70 | 31.35 | |
| 22 | 32.35 | 31.05 | 33.25 | 32.00 | 33.90 | 32.15 | 33.65 | 31.95 | 33.03 | 32.05 | 33.03 | 32.70 | 33.35 | 32.75 | 32.85 | 32.75 | 32.83 | 32.05 | 32.85 | 32.00 | 32.85 | 31.90 | 33.65 | 31.35 | |
| 23 | 33.55 | 30.75 | 33.20 | 32.00 | 33.90 | 32.15 | 33.80 | 31.90 | 32.60 | 32.10 | 32.93 | 32.70 | 33.30 | 32.75 | 32.88 | 32.75 | 32.88 | 32.05 | 32.90 | 32.00 | 32.55 | 31.90 | 33.40 | 31.40 | |
| 24 | 33.65 | 30.65 | 33.30 | 31.80 | 33.90 | 32.00 | 33.90 | 31.70 | 32.75 | 32.05 | 32.93 | 32.70 | 33.05 | 32.75 | 32.88 | 32.75 | 33.05 | 32.05 | 32.93 | 32.00 | 32.30 | 31.90 | 33.05 | 31.40 | |
| 25 | 33.65 | 30.65 | 33.50 | 31.80 | 33.85 | 32.00 | 33.85 | 31.75 | 32.70 | 32.10 | 32.93 | 32.70 | 33.00 | 32.75 | 32.88 | 32.75 | 33.22 | 32.10 | 32.70 | 32.05 | 32.00 | 31.80 | 33.15 | 31.40 | |
| 26 | 33.65 | 30.65 | 33.45 | 31.80 | 33.90 | 32.00 | 33.90 | 31.75 | 32.75 | 32.10 | 32.93 | 32.70 | 33.00 | 32.75 | 32.95 | 32.75 | 32.90 | 32.15 | 32.22 | 32.05 | 32.00 | 31.80 | 32.80 | 31.45 | |
| 27 | 33.65 | 30.65 | 33.60 | 31.80 | 33.90 | 31.95 | 33.85 | 31.75 | 32.75 | 32.25 | 32.80 | 32.70 | 33.05 | 32.75 | 33.20 | 32.70 | 32.65 | 32.10 | 32.08 | 32.05 | 32.20 | 31.70 | 32.30 | 31.55 | |
| 28 | 33.65 | 30.65 | 33.55 | 31.90 | 33.90 | 31.85 | 33.80 | 31.75 | 32.90 | 32.30 | 32.80 | 32.75 | 33.10 | 32.75 | 33.22 | 32.70 | 32.55 | 32.10 | 32.12 | 32.05 | 32.55 | 31.65 | 31.60 | 31.55 | |
| 29 | 33.95 | 30.65 | | | 33.85 | 31.85 | 33.83 | 31.75 | 32.70 | 32.35 | 32.78 | 32.75 | 33.10 | 32.75 | 33.07 | 32.70 | 32.45 | 32.10 | 32.40 | 32.05 | 32.90 | 31.65 | 30.68 | 30.65 | |
| 30 | 33.70 | 30.70 | | | 33.90 | 31.85 | 33.90 | 31.75 | 32.55 | 32.35 | 32.78 | 32.75 | 33.10 | 32.75 | 33.10 | 32.90 | 32.65 | 32.52 | 32.05 | 32.65 | 32.05 | 33.40 | 31.65 | 31.70 | 31.55 |
| 31 | 33.70 | 30.70 | | | 33.45 | 31.90 | | | 32.47 | 32.35 | | | 33.10 | 32.75 | 32.82 | 32.60 | | | 33.15 | 32.05 | | | 30.32 | 30.40 | |
| Max | 33.95 | 31.55 | 33.90 | 32.00 | 33.90 | 32.15 | 33.90 | 32.05 | 33.82 | 32.35 | 33.25 | 32.75 | 33.72 | 32.75 | 33.22 | 32.75 | 33.22 | 32.55 | 33.20 | 32.05 | 33.73 | 32.00 | 34.00 | 31.65 | |
| Min | 29.90 | 29.90 | 32.85 | 30.90 | 32.55 | 31.85 | 32.07 | 31.70 | 32.00 | 31.75 | 32.50 | 32.35 | 32.05 | 32.71 | 32.75 | 32.60 | 32.10 | 32.05 | 31.90 | 31.85 | 32.00 | 31.65 | 30.32 | 30.40 | |
| Ave. | 31.55 | 30.52 | 33.35 | 31.74 | 33.26 | 32.01 | 32.99 | 31.93 | 33.04 | 31.95 | 32.92 | 32.63 | 33.07 | 33.39 | 32.94 | 32.73 | 32.92 | 32.55 | 32.47 | 32.00 | 32.82 | 31.87 | 32.87 | 31.39 | |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1996

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. |
| 1 | 30.10 | 30.10 | 33.60 | 31.40 | 32.45 | 28.70 | 32.50 | 31.95 | 33.40 | 31.75 | 32.57 | 32.52 | 33.27 | 32.70 | 32.95 | 32.80 | 32.70 | 32.60 | 32.23 | 32.20 | 32.85 | 32.05 | 33.55 | 31.75 |
| 2 | 30.05 | 30.05 | 33.72 | 31.50 | 32.45 | 28.70 | 32.50 | 32.00 | 33.53 | 31.85 | 32.62 | 32.57 | 33.35 | 32.70 | 32.83 | 32.80 | 32.65 | 32.55 | 32.25 | 32.15 | 32.80 | 32.05 | 33.20 | 31.75 |
| 3 | 30.05 | 30.05 | 33.72 | 31.50 | 32.45 | 28.80 | 32.45 | 32.05 | 32.30 | 31.85 | 32.65 | 32.55 | 33.10 | 32.70 | 32.83 | 32.80 | 32.72 | 32.50 | 32.35 | 32.10 | 32.75 | 32.05 | 33.00 | 31.60 |
| 4 | 30.00 | 30.00 | 32.65 | 31.80 | 32.30 | 28.75 | 32.15 | 32.10 | 31.95 | 31.90 | 32.75 | 32.55 | 32.85 | 32.75 | 32.80 | 32.77 | 32.67 | 32.50 | 32.30 | 32.10 | 32.65 | 32.05 | 32.80 | 31.60 |
| 5 | 29.95 | 29.95 | 32.50 | 31.90 | 32.20 | 28.75 | 32.12 | 32.07 | 31.95 | 31.90 | 32.90 | 32.60 | 32.80 | 32.75 | 32.80 | 32.77 | 32.70 | 32.45 | 32.25 | 32.10 | 32.72 | 32.00 | 32.63 | 31.55 |
| 6 | 29.90 | 29.90 | 30.40 | 31.90 | 32.23 | 28.75 | 32.20 | 32.10 | 31.90 | 31.85 | 32.93 | 32.65 | 32.78 | 32.75 | 32.80 | 32.77 | 32.78 | 32.45 | 32.20 | 32.10 | 32.75 | 31.95 | 32.85 | 31.50 |
| 7 | 29.95 | 29.95 | 32.55 | 31.80 | 32.32 | 28.65 | 32.50 | 32.00 | 31.90 | 31.85 | 33.00 | 32.65 | 32.77 | 32.74 | 32.80 | 32.77 | 32.70 | 32.45 | 32.10 | 32.07 | 33.07 | 31.85 | 33.10 | 31.45 |
| 8 | 29.90 | 29.90 | 32.55 | 32.00 | 32.50 | 28.70 | 32.50 | 32.00 | 32.15 | 31.90 | 32.95 | 32.70 | 32.78 | 32.75 | 32.82 | 32.80 | 32.53 | 32.45 | 32.08 | 32.07 | 33.15 | 31.85 | 33.27 | 31.50 |
| 9 | 29.90 | 29.90 | 32.40 | 32.00 | 32.65 | 28.70 | 32.60 | 32.00 | 32.75 | 31.85 | 32.90 | 32.70 | 32.78 | 32.75 | 32.82 | 32.80 | 32.48 | 32.45 | 32.03 | 32.00 | 33.10 | 31.85 | 32.95 | 31.55 |
| 10 | 29.90 | 29.90 | 32.40 | 32.00 | 33.00 | 29.05 | 32.73 | 32.00 | 32.90 | 32.00 | 32.78 | 32.70 | 32.80 | 32.75 | 32.82 | 32.80 | 32.42 | 32.10 | 32.10 | 32.00 | 32.92 | 31.90 | 32.55 | 31.55 |
| 11 | 29.90 | 29.90 | 32.35 | 32.00 | 32.95 | 28.90 | 32.65 | 32.00 | 32.90 | 32.00 | 32.90 | 32.70 | 32.78 | 32.75 | 32.77 | 32.75 | 32.42 | 32.40 | 32.10 | 32.07 | 32.85 | 31.90 | 32.55 | 31.60 |
| 12 | 29.90 | 29.90 | 32.38 | 32.00 | 32.70 | 28.60 | 32.60 | 32.00 | 32.88 | 32.05 | 32.80 | 32.70 | 32.78 | 32.75 | 32.78 | 32.76 | 32.45 | 32.40 | 32.35 | 32.10 | 32.95 | 31.90 | 32.40 | 31.65 |
| 13 | 29.90 | 29.90 | 32.55 | 32.00 | 32.68 | 28.70 | 32.65 | 32.10 | 32.75 | 32.20 | 32.83 | 32.70 | 32.78 | 32.75 | 32.82 | 32.80 | 32.58 | 32.40 | 32.40 | 32.10 | 32.93 | 31.95 | 32.85 | 31.65 |
| 14 | 29.90 | 29.90 | 32.75 | 32.00 | 32.65 | 29.00 | 32.63 | 32.20 | 32.45 | 32.20 | 33.00 | 32.70 | 32.85 | 32.75 | 32.82 | 32.80 | 32.65 | 32.35 | 32.40 | 32.10 | 32.95 | 31.95 | 32.90 | 31.65 |
| 15 | 29.90 | 29.90 | 33.10 | 32.00 | 32.75 | 29.10 | 32.45 | 32.20 | 32.55 | 32.20 | 33.50 | 32.70 | 33.00 | 32.75 | 32.89 | 32.80 | 32.90 | 32.35 | 32.52 | 32.10 | 32.75 | 31.95 | 32.60 | 31.65 |
| 16 | 30.30 | 30.28 | 33.40 | 31.95 | 33.00 | 29.53 | 32.22 | 32.17 | 33.00 | 32.20 | 33.25 | 32.70 | 33.10 | 32.75 | 32.84 | 32.80 | 32.80 | 32.30 | 32.47 | 32.05 | 32.50 | 31.95 | 32.50 | 31.60 |
| 17 | 30.75 | 30.72 | 33.45 | 31.95 | 33.10 | 29.97 | 32.27 | 32.15 | 33.00 | 32.20 | 33.10 | 32.70 | 33.08 | 32.75 | 32.82 | 32.80 | 32.70 | 32.25 | 32.45 | 32.05 | 32.25 | 31.95 | 32.38 | 31.55 |
| 18 | 30.98 | 30.95 | 33.45 | 31.95 | 33.50 | 29.60 | 32.70 | 32.15 | 32.85 | 32.20 | 33.08 | 32.70 | 32.95 | 32.75 | 32.77 | 32.75 | 32.68 | 32.25 | 32.47 | 32.05 | 32.25 | 31.95 | 32.30 | 31.55 |
| 19 | 31.30 | 31.00 | 33.25 | 31.95 | 32.70 | 29.35 | 32.73 | 32.15 | 32.50 | 32.20 | 33.15 | 32.70 | 32.85 | 32.75 | 32.77 | 32.75 | 32.70 | 32.20 | 32.53 | 32.05 | 32.28 | 31.95 | 32.40 | 31.55 |
| 20 | 32.30 | 30.75 | 33.10 | 31.95 | 32.95 | 29.10 | 32.83 | 32.10 | 32.48 | 32.20 | 33.30 | 32.70 | 32.85 | 32.75 | 32.80 | 32.75 | 32.70 | 32.20 | 32.65 | 32.05 | 32.27 | 31.95 | 32.50 | 31.50 |
| 21 | 33.02 | 30.50 | 33.05 | 31.90 | 32.85 | 29.45 | 32.90 | 32.05 | 32.53 | 32.20 | 33.33 | 32.70 | 32.85 | 32.75 | 32.80 | 32.75 | 32.80 | 32.20 | 32.73 | 32.05 | 32.15 | 31.95 | 32.20 | 31.50 |
| 22 | 33.45 | 30.75 | 32.95 | 31.85 | 33.10 | 29.60 | 33.10 | 32.05 | 32.60 | 32.20 | 33.25 | 32.70 | 32.82 | 32.80 | 32.90 | 32.75 | 32.78 | 32.21 | 32.57 | 32.05 | 32.25 | 31.90 | 32.10 | 31.50 |
| 23 | 33.45 | 30.60 | 32.80 | 31.80 | 33.75 | 29.50 | 33.20 | 32.05 | 32.70 | 32.20 | 33.38 | 32.70 | 32.83 | 32.80 | 33.10 | 32.75 | 32.75 | 32.25 | 32.48 | 32.10 | 32.30 | 31.90 | 32.40 | 31.50 |
| 24 | 33.45 | 30.60 | 32.85 | 31.80 | 33.17 | 29.50 | 33.48 | 31.90 | 32.63 | 32.20 | 33.33 | 32.70 | 32.83 | 32.80 | 33.23 | 32.75 | 32.90 | 32.25 | 32.55 | 32.10 | 32.35 | 31.90 | 32.50 | 31.55 |
| 25 | 33.60 | 30.60 | 32.55 | 31.80 | 32.80 | 29.45 | 32.90 | 31.80 | 32.60 | 32.20 | 33.30 | 32.70 | 32.87 | 32.80 | 33.25 | 32.75 | 32.98 | 32.30 | 32.60 | 32.10 | 32.45 | 31.90 | 32.35 | 31.55 |
| 26 | 33.75 | 30.75 | 32.35 | 31.80 | 32.45 | 29.45 | 33.60 | 31.85 | 32.17 | 32.10 | 33.90 | 32.70 | 32.83 | 32.80 | 33.23 | 32.75 | 32.98 | 32.30 | 32.95 | 32.05 | 32.55 | 31.85 | 32.35 | 31.50 |
| 27 | 33.75 | 30.75 | 32.27 | 31.80 | 32.15 | 29.40 | 33.60 | 31.85 | 32.23 | 32.18 | 33.28 | 32.70 | 32.83 | 32.80 | 33.15 | 32.75 | 32.95 | 32.30 | 33.35 | 32.05 | 32.33 | 31.75 | 32.30 | 31.50 |
| 28 | 33.70 | 30.70 | 32.10 | 31.90 | 32.10 | 29.20 | 33.63 | 31.85 | 32.32 | 32.27 | 33.10 | 32.70 | 32.90 | 32.80 | 33.10 | 32.75 | 32.75 | 32.30 | 33.55 | 32.05 | 33.25 | 31.75 | 32.10 | 31.35 |
| 29 | 33.60 | 30.90 | 32.30 | 31.90 | 32.05 | 28.90 | 33.75 | 31.70 | 32.35 | 32.27 | 33.00 | 32.70 | 33.10 | 32.80 | 33.15 | 32.75 | 32.50 | 32.30 | 33.60 | 32.05 | 33.77 | 31.75 | 32.35 | 31.50 |
| 30 | 33.35 | 31.05 | | | | 31.97 | 28.90 | 33.70 | 31.70 | 32.38 | 33.00 | 32.70 | 33.25 | 32.80 | 33.10 | 32.70 | 32.30 | 32.25 | 33.45 | 32.05 | 33.75 | 31.75 | 32.35 | 31.50 |
| 31 | 33.30 | 31.25 | | | | 32.10 | 28.85 | | | 32.46 | 32.41 | | 33.38 | 32.80 | 32.90 | 32.70 | | | 33.15 | 32.05 | | 32.35 | 31.50 | |
| Max | 33.75 | 31.25 | 33.72 | 32.00 | 33.75 | 29.97 | 33.75 | 32.20 | 33.53 | 32.41 | 33.50 | 32.70 | 33.38 | 32.80 | 33.25 | 32.80 | 32.98 | 32.60 | 33.60 | 32.20 | 33.77 | 32.05 | 33.55 | 31.75 |
| Min | 29.90 | 29.90 | 30.40 | 31.40 | 31.97 | 28.60 | 32.12 | 31.70 | 31.90 | 31.75 | 32.57 | 32.52 | 32.77 | 32.70 | 32.77 | 32.70 | 32.30 | 32.10 | 32.03 | 32.00 | 32.15 | 31.75 | 32.10 | 31.35 |
| Ave. | 31.40 | 30.37 | 32.73 | 31.88 | 32.64 | 29.08 | 32.79 | 32.01 | 32.55 | 32.09 | 33.04 | 32.67 | 32.93 | 32.76 | 32.91 | 32.77 | 32.70 | 32.60 | 32.56 | 32.07 | 32.73 | 31.91 | 32.60 | 31.55 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water Levels and Discharges in 1997

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | |
| 1 | 30.15 | 30.15 | 32.45 | 32.00 | 32.00 | 31.95 | 32.75 | 32.10 | 33.40 | 31.95 | 33.63 | 32.65 | 32.98 | 32.80 | 33.30 | 32.80 | 33.00 | 32.67 | 33.27 | 32.15 | 33.75 | 32.00 | 33.50 | 31.80 | |
| 2 | 30.05 | 30.05 | 32.65 | 32.05 | 32.00 | 31.95 | 32.65 | 32.10 | 33.60 | 31.95 | 33.65 | 32.70 | 33.23 | 32.80 | 33.30 | 32.80 | 33.12 | 32.62 | 33.33 | 32.15 | 33.45 | 32.00 | 33.55 | 31.80 | |
| 3 | 30.05 | 30.05 | 32.75 | 32.20 | 32.00 | 31.95 | 32.65 | 32.10 | 33.70 | 31.95 | 33.67 | 32.70 | 33.45 | 32.80 | 33.35 | 32.80 | 33.25 | 32.60 | 33.30 | 32.15 | 33.15 | 32.00 | 33.50 | 31.80 | |
| 4 | 30.05 | 30.05 | 32.75 | 32.20 | 32.00 | 31.95 | 32.65 | 32.10 | 33.70 | 31.95 | 33.68 | 32.70 | 33.45 | 32.80 | 33.45 | 32.80 | 33.25 | 32.57 | 32.85 | 32.15 | 32.90 | 32.00 | 33.55 | 31.75 | |
| 5 | 30.05 | 30.05 | 32.75 | 32.20 | 32.65 | 31.95 | 32.60 | 32.10 | 33.55 | 31.95 | 33.60 | 32.70 | 33.40 | 32.80 | 33.20 | 32.80 | 33.20 | 32.55 | 32.65 | 32.10 | 32.60 | 32.00 | 33.63 | 31.60 | |
| 6 | 30.05 | 30.05 | 33.00 | 32.10 | 33.25 | 31.95 | 32.65 | 32.10 | 33.45 | 31.95 | 33.40 | 32.70 | 33.25 | 32.80 | 32.90 | 32.80 | 33.00 | 32.55 | 32.60 | 32.05 | 32.45 | 31.95 | 33.65 | 31.60 | |
| 7 | 30.05 | 30.05 | 33.75 | 32.00 | 33.35 | 31.95 | 32.70 | 32.10 | 33.35 | 31.95 | 33.25 | 32.70 | 33.20 | 32.80 | 32.87 | 32.80 | 33.80 | 32.55 | 32.62 | 32.05 | 32.53 | 31.95 | 33.45 | 31.60 | |
| 8 | 30.05 | 30.05 | 33.60 | 32.00 | 33.20 | 32.00 | 32.85 | 32.00 | 33.28 | 31.95 | 33.10 | 32.80 | 33.13 | 32.80 | 32.83 | 32.80 | 32.60 | 32.52 | 32.95 | 31.95 | 32.40 | 31.95 | 33.25 | 31.60 | |
| 9 | 30.00 | 30.00 | 33.55 | 31.95 | 33.20 | 32.10 | 32.90 | 32.00 | 33.35 | 31.95 | 33.05 | 32.80 | 33.10 | 32.80 | 32.83 | 32.80 | 32.60 | 32.50 | 32.90 | 31.95 | 32.30 | 31.90 | 33.05 | 31.60 | |
| 10 | 30.00 | 30.00 | 33.60 | 31.95 | 33.25 | 32.10 | 32.93 | 32.00 | 33.35 | 32.00 | 33.00 | 32.80 | 32.97 | 32.80 | 32.90 | 32.80 | 32.48 | 32.45 | 32.70 | 31.95 | 32.33 | 31.90 | 32.95 | 31.55 | |
| 11 | 30.20 | 29.90 | 33.20 | 31.95 | 33.45 | 32.10 | 32.90 | 32.00 | 33.60 | 32.05 | 32.90 | 32.80 | 33.05 | 32.80 | 32.97 | 32.80 | 32.33 | 33.30 | 32.67 | 31.95 | 32.40 | 31.90 | 33.02 | 31.50 | |
| 12 | 30.20 | 29.90 | 32.87 | 31.95 | 33.65 | 32.10 | 32.82 | 32.00 | 33.25 | 32.15 | 32.85 | 32.80 | 33.25 | 32.80 | 32.97 | 32.80 | 32.33 | 32.30 | 32.85 | 31.95 | 32.45 | 31.95 | 33.92 | 31.50 | |
| 13 | 30.70 | 30.10 | 33.35 | 31.95 | 33.75 | 32.10 | 32.75 | 32.00 | 33.00 | 32.15 | 32.88 | 32.80 | 33.28 | 32.80 | 33.10 | 32.80 | 32.35 | 32.32 | 32.85 | 31.95 | 32.50 | 32.00 | 33.45 | 31.35 | |
| 14 | 30.90 | 30.85 | 31.95 | 31.90 | 33.55 | 32.10 | 32.65 | 32.00 | 32.60 | 32.15 | 32.88 | 32.80 | 33.20 | 32.80 | 33.08 | 32.80 | 32.40 | 32.37 | 32.88 | 31.95 | 32.75 | 32.00 | 33.20 | 31.35 | |
| 15 | 31.60 | 30.85 | 31.80 | 31.75 | 33.50 | 32.10 | 32.50 | 32.00 | 32.50 | 32.15 | 32.88 | 32.80 | 33.20 | 32.80 | 33.05 | 32.80 | 32.50 | 32.40 | 32.30 | 32.00 | 32.85 | 32.00 | 32.90 | 31.40 | |
| 16 | 33.20 | 30.60 | 31.97 | 31.92 | 33.80 | 32.10 | 32.40 | 32.00 | 32.50 | 32.15 | 32.85 | 32.80 | 33.35 | 32.80 | 33.00 | 32.80 | 32.52 | 32.40 | 32.27 | 32.10 | 32.90 | 32.00 | 32.90 | 31.45 | |
| 17 | 33.55 | 30.70 | 32.20 | 31.90 | 33.80 | 32.10 | 32.35 | 32.00 | 32.65 | 32.15 | 32.83 | 32.80 | 33.35 | 32.80 | 32.97 | 32.80 | 32.70 | 32.35 | 33.20 | 32.10 | 32.20 | 31.95 | 32.90 | 31.55 | |
| 18 | 33.45 | 30.60 | 32.30 | 31.95 | 33.80 | 32.10 | 32.50 | 32.00 | 32.85 | 32.15 | 32.85 | 32.80 | 33.35 | 32.80 | 32.95 | 32.80 | 32.80 | 32.35 | 33.05 | 32.10 | 32.20 | 31.95 | 32.90 | 31.55 | |
| 19 | 33.40 | 30.55 | 32.45 | 31.95 | 33.80 | 32.10 | 32.60 | 32.00 | 33.30 | 32.20 | 32.92 | 32.80 | 33.30 | 32.80 | 32.90 | 32.80 | 32.75 | 32.35 | 32.70 | 32.10 | 33.05 | 31.95 | 33.00 | 31.50 | |
| 20 | 33.15 | 30.60 | 32.75 | 31.95 | 33.80 | 32.10 | 32.60 | 32.00 | 32.65 | 32.20 | 32.98 | 32.80 | 33.35 | 32.80 | 32.83 | 32.80 | 32.75 | 32.30 | 32.55 | 32.10 | 32.90 | 31.95 | 33.03 | 31.50 | |
| 21 | 32.80 | 31.00 | 32.70 | 31.90 | 33.80 | 32.10 | 32.40 | 32.00 | 33.60 | 32.25 | 32.85 | 32.80 | 33.20 | 32.80 | 32.80 | 32.77 | 32.85 | 32.25 | 32.67 | 31.95 | 32.67 | 31.95 | 33.13 | 31.45 | |
| 22 | 32.35 | 31.40 | 32.65 | 31.90 | 33.80 | 32.10 | 32.20 | 32.00 | 33.60 | 32.30 | 32.85 | 32.80 | 33.10 | 32.80 | 32.95 | 32.75 | 32.97 | 32.25 | 32.75 | 31.95 | 32.60 | 31.95 | 33.20 | 31.45 | |
| 23 | 32.80 | 31.20 | 32.65 | 31.90 | 33.70 | 32.10 | 32.95 | 32.05 | 33.45 | 32.35 | 32.85 | 32.80 | 33.10 | 32.80 | 32.95 | 32.75 | 33.10 | 32.20 | 32.90 | 31.95 | 32.45 | 31.95 | 33.30 | 31.45 | |
| 24 | 33.30 | 31.40 | 32.65 | 31.90 | 33.85 | 32.05 | 32.85 | 32.10 | 33.40 | 32.40 | 32.85 | 32.80 | 32.92 | 32.80 | 32.98 | 32.75 | 33.32 | 32.20 | 32.85 | 31.95 | 32.30 | 31.95 | 33.40 | 31.45 | |
| 25 | 32.80 | 31.70 | 32.65 | 31.90 | 33.80 | 32.05 | 32.85 | 32.10 | 33.40 | 32.40 | 32.87 | 32.80 | 32.85 | 32.80 | 32.97 | 32.75 | 33.35 | 32.15 | 32.70 | 32.00 | 32.25 | 31.95 | 33.30 | 31.45 | |
| 26 | 32.30 | 31.80 | 32.25 | 31.90 | 33.60 | 32.05 | 32.80 | 32.10 | 33.35 | 32.45 | 32.87 | 32.80 | 32.93 | 32.80 | 32.85 | 32.75 | 33.32 | 32.15 | 32.70 | 32.00 | 32.25 | 31.95 | 33.05 | 31.45 | |
| 27 | 32.25 | 31.80 | 32.10 | 31.90 | 33.50 | 32.05 | 32.72 | 32.10 | 33.35 | 32.50 | 32.90 | 32.80 | 33.05 | 32.80 | 32.88 | 32.75 | 33.35 | 32.15 | 32.88 | 32.00 | 32.35 | 31.95 | 32.83 | 31.50 | |
| 28 | 31.95 | 31.90 | 32.00 | 31.95 | 33.25 | 32.10 | 32.53 | 32.10 | 33.25 | 32.50 | 32.92 | 32.80 | 33.25 | 32.80 | 32.88 | 32.72 | 33.35 | 32.15 | 33.00 | 32.00 | 32.53 | 31.90 | 32.93 | 31.30 | |
| 29 | 31.95 | 31.90 | | | 33.17 | 32.10 | 32.68 | 32.00 | 33.05 | 32.50 | 32.93 | 32.80 | 33.37 | 32.80 | 32.90 | 32.70 | 33.30 | 32.15 | 33.05 | 32.00 | 32.65 | 31.85 | 33.05 | 31.20 | |
| 30 | 32.15 | 31.90 | | | 33.95 | 32.10 | 32.95 | 32.00 | 33.05 | 32.50 | 32.93 | 32.80 | 33.30 | 32.80 | 32.85 | 32.70 | 33.25 | 32.15 | 33.35 | 32.00 | 33.10 | 31.85 | 33.60 | 31.20 | |
| 31 | 32.32 | 32.00 | | | 32.75 | 32.10 | | | 33.40 | 32.55 | | | 33.30 | 32.80 | 32.82 | 32.70 | | | 33.80 | 32.00 | | | 33.75 | 31.20 | |
| Max | 33.55 | 32.00 | 33.75 | 32.20 | 33.95 | 32.10 | 32.95 | 32.10 | 33.70 | 32.55 | 33.68 | 32.80 | 33.45 | 32.80 | 33.45 | 32.80 | 33.80 | 33.30 | 33.80 | 32.15 | 33.75 | 32.00 | 33.92 | 31.80 | |
| Min | 30.00 | 29.90 | 31.80 | 31.75 | 32.00 | 31.95 | 32.20 | 32.00 | 32.50 | 31.95 | 32.83 | 32.65 | 32.85 | 32.80 | 32.70 | 32.33 | 32.15 | 32.27 | 31.95 | 32.27 | 31.95 | 32.20 | 31.85 | 32.83 | 31.20 |
| Ave. | 31.54 | 30.75 | 32.69 | 31.97 | 33.32 | 32.06 | 32.68 | 32.04 | 33.24 | 32.19 | 33.06 | 32.78 | 33.20 | 32.80 | 32.99 | 32.78 | 33.00 | 32.67 | 32.88 | 32.02 | 32.64 | 31.95 | 33.25 | 31.50 | |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1998

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. |
| 1 | 33.70 | 31.20 | 33.65 | 31.00 | 32.90 | 31.90 | 30.40 | 32.15 | 33.68 | 32.00 | 33.05 | 32.60 | 33.12 | 32.80 | 32.95 | 32.83 | 33.05 | 32.65 | 33.20 | 32.10 | 33.40 | 32.20 | 33.85 | 31.80 |
| 2 | 33.60 | 31.20 | 33.55 | 31.15 | 32.75 | 31.90 | 32.55 | 32.15 | 33.80 | 32.00 | 33.18 | 32.70 | 33.12 | 32.80 | 33.00 | 32.84 | 33.20 | 32.62 | 33.65 | 32.10 | 33.50 | 32.15 | 33.60 | 31.75 |
| 3 | 33.35 | 31.10 | 33.20 | 31.35 | 32.80 | 31.90 | 32.85 | 32.15 | 33.80 | 32.00 | 33.33 | 32.65 | 33.05 | 32.80 | 33.05 | 32.84 | 33.35 | 32.60 | 33.70 | 32.10 | 33.53 | 32.10 | 33.40 | 31.70 |
| 4 | 33.10 | 31.10 | 33.05 | 31.40 | 33.05 | 31.90 | 33.00 | 32.10 | 33.80 | 32.00 | 33.20 | 32.70 | 32.95 | 32.80 | 33.15 | 32.84 | 33.30 | 32.55 | 33.47 | 32.10 | 33.75 | 32.05 | 33.47 | 31.60 |
| 5 | 32.40 | 31.10 | 33.35 | 31.50 | 33.45 | 31.95 | 32.93 | 32.10 | 33.70 | 32.00 | 33.10 | 32.70 | 32.90 | 32.80 | 33.00 | 32.84 | 33.30 | 32.50 | 33.25 | 32.10 | 33.40 | 32.05 | 33.45 | 31.55 |
| 6 | 31.70 | 31.10 | 33.55 | 31.60 | 33.25 | 31.95 | 32.75 | 32.10 | 33.30 | 32.05 | 32.98 | 32.70 | 32.83 | 32.80 | 33.90 | 32.84 | 33.72 | 32.40 | 33.15 | 32.10 | 33.25 | 32.05 | 33.45 | 31.55 |
| 7 | 31.02 | 31.00 | 33.50 | 31.70 | 33.25 | 31.95 | 32.85 | 32.10 | 33.34 | 32.05 | 33.00 | 32.70 | 32.82 | 32.80 | 32.90 | 32.80 | 33.72 | 32.40 | 33.20 | 32.10 | 33.27 | 32.05 | 33.50 | 31.55 |
| 8 | 30.35 | 30.35 | 33.25 | 31.80 | 33.05 | 32.00 | 33.00 | 32.15 | 33.10 | 32.10 | 33.05 | 32.70 | 32.88 | 32.80 | 32.92 | 32.80 | 33.45 | 32.40 | 33.05 | 32.10 | 33.27 | 32.05 | 33.35 | 31.55 |
| 9 | 30.20 | 30.20 | 33.90 | 31.80 | 32.90 | 32.05 | 33.03 | 32.15 | 33.00 | 32.10 | 33.08 | 32.70 | 32.03 | 32.80 | 32.88 | 32.80 | 33.62 | 32.40 | 33.25 | 32.10 | 33.35 | 32.05 | 33.25 | 31.55 |
| 10 | 30.20 | 30.20 | 32.55 | 31.85 | 32.88 | 32.05 | 33.10 | 32.15 | 33.00 | 32.10 | 33.12 | 32.70 | 33.00 | 32.80 | 32.82 | 32.80 | 33.60 | 32.40 | 33.55 | 32.10 | 33.38 | 32.05 | 33.00 | 31.55 |
| 11 | 30.45 | 30.45 | 32.15 | 31.90 | 33.00 | 32.05 | 33.05 | 32.15 | 32.90 | 32.15 | 33.17 | 32.70 | 33.03 | 32.80 | 32.82 | 32.80 | 33.57 | 32.40 | 33.15 | 32.15 | 33.20 | 32.10 | 32.60 | 31.55 |
| 12 | 31.10 | 31.10 | 31.93 | 31.90 | 33.25 | 32.05 | 33.05 | 32.10 | 32.80 | 32.15 | 33.20 | 32.70 | 32.97 | 32.80 | 32.85 | 32.80 | 33.57 | 32.40 | 32.75 | 32.20 | 32.80 | 32.10 | 32.50 | 31.55 |
| 13 | 31.40 | 31.40 | 31.88 | 31.85 | 33.30 | 32.10 | 32.80 | 32.10 | 32.60 | 32.15 | 33.25 | 32.70 | 32.87 | 32.80 | 32.88 | 32.80 | 33.70 | 32.35 | 32.75 | 32.20 | 32.80 | 32.10 | 32.67 | 31.55 |
| 14 | 32.10 | 31.60 | 31.88 | 31.85 | 33.20 | 32.10 | 32.35 | 32.10 | 32.50 | 32.15 | 33.25 | 32.70 | 32.82 | 32.80 | 32.87 | 32.84 | 33.78 | 32.35 | 32.87 | 32.20 | 32.90 | 32.10 | 32.88 | 31.55 |
| 15 | 33.65 | 31.30 | 31.90 | 31.97 | 33.05 | 32.10 | 32.08 | 32.05 | 32.60 | 32.15 | 33.20 | 32.70 | 32.86 | 32.80 | 32.84 | 32.80 | 33.65 | 32.30 | 33.10 | 32.20 | 33.20 | 32.10 | 32.95 | 31.55 |
| 16 | 33.80 | 31.20 | 31.97 | 31.90 | 32.90 | 32.10 | 32.08 | 32.05 | 32.80 | 32.15 | 33.25 | 32.70 | 32.92 | 32.80 | 32.88 | 32.84 | 33.65 | 32.30 | 33.40 | 32.20 | 33.35 | 32.05 | 32.93 | 31.55 |
| 17 | 33.75 | 31.20 | 32.55 | 31.90 | 32.90 | 32.10 | 32.15 | 32.12 | 33.00 | 32.15 | 33.15 | 32.75 | 33.03 | 32.80 | 32.95 | 32.84 | 33.65 | 32.30 | 33.57 | 32.20 | 33.30 | 32.05 | 32.93 | 31.55 |
| 18 | 33.60 | 31.20 | 32.60 | 31.90 | 32.95 | 32.10 | 32.27 | 32.15 | 33.25 | 32.20 | 33.20 | 32.75 | 33.03 | 32.80 | 33.00 | 32.84 | 33.75 | 32.25 | 33.25 | 32.20 | 33.45 | 32.00 | 32.80 | 31.55 |
| 19 | 33.25 | 31.20 | 32.58 | 31.90 | 33.30 | 32.10 | 32.60 | 32.15 | 33.25 | 32.25 | 33.13 | 32.80 | 33.03 | 32.80 | 33.00 | 32.84 | 33.77 | 32.25 | 33.00 | 32.20 | 33.70 | 31.95 | 32.72 | 31.55 |
| 20 | 33.20 | 31.20 | 32.52 | 31.90 | 33.60 | 32.05 | 32.70 | 32.15 | 33.40 | 32.25 | 33.15 | 32.80 | 33.03 | 32.80 | 33.00 | 32.82 | 33.75 | 32.25 | 33.27 | 32.15 | 33.78 | 31.95 | 32.82 | 31.50 |
| 21 | 33.50 | 31.20 | 32.60 | 31.90 | 33.65 | 32.10 | 32.70 | 32.15 | 33.35 | 32.30 | 33.12 | 32.80 | 32.82 | 32.80 | 32.85 | 32.80 | 33.63 | 32.25 | 33.65 | 32.10 | 33.80 | 31.95 | 32.82 | 31.50 |
| 22 | 33.75 | 31.15 | 32.70 | 31.85 | 33.35 | 32.10 | 32.75 | 32.15 | 33.35 | 32.30 | 33.08 | 32.80 | 32.82 | 32.80 | 32.85 | 32.80 | 33.50 | 32.25 | 33.70 | 32.10 | 33.72 | 31.95 | 32.82 | 31.50 |
| 23 | 33.50 | 31.15 | 33.05 | 31.75 | 33.15 | 32.15 | 32.70 | 32.15 | 33.20 | 32.30 | 33.08 | 32.80 | 32.92 | 32.82 | 32.87 | 32.80 | 33.45 | 32.25 | 33.62 | 32.20 | 33.70 | 31.95 | 32.88 | 31.50 |
| 24 | 33.30 | 31.10 | 33.32 | 31.75 | 32.80 | 32.20 | 32.75 | 32.15 | 33.20 | 32.30 | 33.08 | 32.80 | 32.95 | 32.82 | 33.00 | 32.80 | 33.32 | 32.15 | 33.48 | 32.20 | 33.70 | 31.95 | 33.05 | 31.50 |
| 25 | 33.20 | 31.10 | 33.60 | 31.75 | 32.72 | 32.20 | 32.90 | 32.15 | 33.20 | 32.35 | 33.08 | 32.80 | 32.95 | 32.82 | 32.88 | 32.80 | 33.60 | 32.15 | 33.65 | 32.20 | 33.50 | 31.95 | 33.30 | 31.50 |
| 26 | 33.65 | 31.05 | 33.60 | 31.70 | 32.70 | 32.15 | 33.00 | 32.15 | 33.15 | 32.40 | 33.10 | 32.80 | 32.96 | 32.82 | 32.82 | 32.80 | 33.73 | 32.10 | 33.25 | 32.20 | 33.60 | 31.90 | 33.50 | 31.50 |
| 27 | 33.55 | 31.05 | 33.40 | 31.70 | 32.93 | 32.10 | 33.15 | 32.10 | 33.15 | 32.50 | 33.10 | 32.80 | 32.94 | 32.82 | 32.77 | 32.75 | 33.50 | 32.10 | 33.20 | 32.20 | 33.57 | 31.90 | 33.48 | 31.45 |
| 28 | 33.50 | 31.00 | 33.05 | 31.80 | 33.03 | 32.10 | 33.10 | 32.10 | 33.05 | 32.55 | 33.13 | 32.80 | 32.97 | 32.82 | 32.85 | 32.72 | 33.20 | 32.10 | 33.27 | 32.20 | 33.75 | 31.85 | 33.40 | 31.40 |
| 29 | 33.65 | 31.00 | | | 32.80 | 32.10 | 33.25 | 32.10 | 33.05 | 32.55 | 33.25 | 32.80 | 32.97 | 32.82 | 32.85 | 32.70 | 33.05 | 32.10 | 33.40 | 32.20 | 33.83 | 31.85 | 33.45 | 31.30 |
| 30 | 33.65 | 31.00 | | | 32.80 | 32.10 | 33.45 | 32.10 | 33.02 | 32.55 | 33.13 | 32.80 | 32.97 | 32.83 | 32.93 | 32.67 | 33.95 | 32.10 | 33.30 | 32.20 | 33.85 | 31.80 | 33.55 | 31.30 |
| 31 | 33.65 | 31.00 | | | 32.50 | 32.15 | | | 32.97 | 32.60 | | 32.92 | 32.83 | 32.93 | 32.67 | | | | 33.30 | 32.20 | | | 33.58 | 31.25 |
| Max | 33.80 | 31.60 | 33.90 | 31.97 | 33.65 | 32.20 | 33.45 | 32.15 | 33.80 | 32.60 | 33.33 | 32.80 | 33.12 | 32.83 | 33.90 | 32.84 | 33.95 | 32.65 | 33.70 | 32.20 | 33.85 | 32.20 | 33.85 | 31.80 |
| Min | 30.20 | 30.20 | 31.88 | 31.00 | 32.50 | 31.90 | 30.40 | 32.05 | 32.50 | 32.00 | 32.98 | 32.60 | 32.03 | 32.80 | 32.77 | 32.67 | 33.05 | 32.10 | 32.75 | 32.10 | 32.80 | 31.80 | 32.50 | 31.25 |
| Ave. | 32.74 | 31.04 | 32.89 | 31.73 | 33.04 | 32.06 | 32.71 | 32.12 | 33.17 | 32.22 | 33.14 | 32.74 | 32.92 | 32.81 | 32.94 | 32.80 | 33.05 | 32.65 | 33.30 | 32.16 | 33.45 | 32.01 | 33.16 | 31.53 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 1999

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S |
| 1 | 33.65 | 31.15 | 33.83 | 31.50 | 33.15 | 32.00 | 32.82 | 32.20 | 33.18 | 31.95 | 32.95 | 32.75 | 32.85 | 32.83 | 32.86 | 32.84 | 32.93 | 32.75 | 33.58 | 32.25 | 32.85 | 32.20 | 33.35 | 31.95 |
| 2 | 33.65 | 31.10 | 33.75 | 31.45 | 33.65 | 32.00 | 32.95 | 32.20 | 33.22 | 31.95 | 32.78 | 32.75 | 32.85 | 32.83 | 32.80 | 32.78 | 32.07 | 32.70 | 33.77 | 32.25 | 32.60 | 32.20 | 33.35 | 31.95 |
| 3 | 33.70 | 32.05 | 33.70 | 31.45 | 33.58 | 32.00 | 33.08 | 32.15 | 33.20 | 31.95 | 32.78 | 32.75 | 32.85 | 32.83 | 32.84 | 32.82 | 33.17 | 32.65 | 33.80 | 32.25 | 32.60 | 32.20 | 33.25 | 31.95 |
| 4 | 33.20 | 31.05 | 33.75 | 31.40 | 33.50 | 32.00 | 33.18 | 32.15 | 33.25 | 31.95 | 32.78 | 32.75 | 32.84 | 32.82 | 32.84 | 32.82 | 33.20 | 32.60 | 33.83 | 32.25 | 32.55 | 32.20 | 33.30 | 31.90 |
| 5 | 33.05 | 30.95 | 33.70 | 31.40 | 33.40 | 31.95 | 33.25 | 32.15 | 33.25 | 32.05 | 32.78 | 32.73 | 32.82 | 32.80 | 32.84 | 32.82 | 33.23 | 32.55 | 33.80 | 32.25 | 32.75 | 32.20 | 33.30 | 31.85 |
| 6 | 32.78 | 30.85 | 33.72 | 31.40 | 33.48 | 31.95 | 33.13 | 32.15 | 32.80 | 32.05 | 32.76 | 32.75 | 32.84 | 32.82 | 32.84 | 32.82 | 33.15 | 32.55 | 33.60 | 32.25 | 32.90 | 32.20 | 33.10 | 31.85 |
| 7 | 32.45 | 30.85 | 33.40 | 31.50 | 33.58 | 32.00 | 33.62 | 32.10 | 32.00 | 32.05 | 32.78 | 32.75 | 32.90 | 32.82 | 32.84 | 32.82 | 33.07 | 32.50 | 33.30 | 32.25 | 33.05 | 32.20 | 32.60 | 31.85 |
| 8 | 32.00 | 30.95 | 33.25 | 31.50 | 33.58 | 32.05 | 33.62 | 32.90 | 32.75 | 32.05 | 32.78 | 32.75 | 32.90 | 32.84 | 32.84 | 32.82 | 32.98 | 32.50 | 33.32 | 32.25 | 33.17 | 32.15 | 32.47 | 31.85 |
| 9 | 31.80 | 31.00 | 33.45 | 31.50 | 33.58 | 32.05 | 33.85 | 32.10 | 32.75 | 32.10 | 32.78 | 32.75 | 32.85 | 32.83 | 32.84 | 32.82 | 32.75 | 32.50 | 33.40 | 32.25 | 33.40 | 32.10 | 32.75 | 31.80 |
| 10 | 31.30 | 31.00 | 33.65 | 31.50 | 33.40 | 32.10 | 33.50 | 32.10 | 33.00 | 32.15 | 32.82 | 32.79 | 32.93 | 32.84 | 32.84 | 32.82 | 32.75 | 32.45 | 33.40 | 32.30 | 33.40 | 32.05 | 32.95 | 31.80 |
| 11 | 31.15 | 31.00 | 33.45 | 31.55 | 33.20 | 32.15 | 33.50 | 32.10 | 33.35 | 32.20 | 32.84 | 32.82 | 32.88 | 32.84 | 32.84 | 32.82 | 32.85 | 32.45 | 33.15 | 32.30 | 33.52 | 32.00 | 33.05 | 31.80 |
| 12 | 31.00 | 31.00 | 33.25 | 31.60 | 33.25 | 32.15 | 33.50 | 32.10 | 33.80 | 32.30 | 32.90 | 32.82 | 32.86 | 32.84 | 32.84 | 32.82 | 32.92 | 32.45 | 33.12 | 32.30 | 33.55 | 32.00 | 33.05 | 31.80 |
| 13 | 31.00 | 30.90 | 33.05 | 31.75 | 33.50 | 32.15 | 33.60 | 32.10 | 33.85 | 32.35 | 32.85 | 32.82 | 32.92 | 32.84 | 32.84 | 32.82 | 33.15 | 32.40 | 33.12 | 32.30 | 33.60 | 32.00 | 33.00 | 31.80 |
| 14 | 31.15 | 30.90 | 32.70 | 31.80 | 33.75 | 32.15 | 33.72 | 32.10 | 33.77 | 32.40 | 32.85 | 32.82 | 32.95 | 32.84 | 32.84 | 32.82 | 33.45 | 32.35 | 33.12 | 32.30 | 33.30 | 32.05 | 32.90 | 31.80 |
| 15 | 32.50 | 30.85 | 32.40 | 31.90 | 33.80 | 32.15 | 33.74 | 32.10 | 33.83 | 32.45 | 32.85 | 32.82 | 32.88 | 32.84 | 32.84 | 32.82 | 33.72 | 32.30 | 33.40 | 32.25 | 33.15 | 32.10 | 32.77 | 31.80 |
| 16 | 33.30 | 30.80 | 32.45 | 31.90 | 33.75 | 32.15 | 33.65 | 32.10 | 33.80 | 32.45 | 32.85 | 32.82 | 32.86 | 32.84 | 32.84 | 32.82 | 33.83 | 32.25 | 33.47 | 32.25 | 33.05 | 32.15 | 32.80 | 31.80 |
| 17 | 33.40 | 30.70 | 32.65 | 31.95 | 33.57 | 32.15 | 33.45 | 32.05 | 33.75 | 32.45 | 32.86 | 32.82 | 32.86 | 32.84 | 32.84 | 32.82 | 33.80 | 32.25 | 33.62 | 32.20 | 33.10 | 32.15 | 32.90 | 31.85 |
| 18 | 33.55 | 30.85 | 32.80 | 31.95 | 33.53 | 32.15 | 33.40 | 32.05 | 33.70 | 32.45 | 32.86 | 32.83 | 32.82 | 32.80 | 32.84 | 32.82 | 33.80 | 32.20 | 33.78 | 32.15 | 33.05 | 32.15 | 32.95 | 31.85 |
| 19 | 33.60 | 30.90 | 32.95 | 31.95 | 33.63 | 32.15 | 33.75 | 32.05 | 33.67 | 32.45 | 32.87 | 32.84 | 32.82 | 32.80 | 32.84 | 32.82 | 33.53 | 32.20 | 33.75 | 32.10 | 33.95 | 32.15 | 33.30 | 31.85 |
| 20 | 33.50 | 30.80 | 33.20 | 31.95 | 33.50 | 32.20 | 33.85 | 32.00 | 33.77 | 32.45 | 32.87 | 32.84 | 32.82 | 32.80 | 32.84 | 32.82 | 33.20 | 32.20 | 33.77 | 32.10 | 33.80 | 32.15 | 33.70 | 31.75 |
| 21 | 33.45 | 30.80 | 33.50 | 31.95 | 33.67 | 32.20 | 33.85 | 32.00 | 33.77 | 32.45 | 32.93 | 32.82 | 32.80 | 32.78 | 32.84 | 32.82 | 32.85 | 32.20 | 33.70 | 32.10 | 32.63 | 32.15 | 33.50 | 31.70 |
| 22 | 33.25 | 30.90 | 33.55 | 31.95 | 33.72 | 32.20 | 33.85 | 32.00 | 33.65 | 32.50 | 32.94 | 32.82 | 32.84 | 32.82 | 32.84 | 32.82 | 32.62 | 32.25 | 33.77 | 32.10 | 32.50 | 32.15 | 33.10 | 31.70 |
| 23 | 33.05 | 31.00 | 33.45 | 31.95 | 33.45 | 32.20 | 33.85 | 31.95 | 33.45 | 32.50 | 32.92 | 32.82 | 32.84 | 32.82 | 32.84 | 32.82 | 32.32 | 32.30 | 33.73 | 32.10 | 32.45 | 32.15 | 32.70 | 31.70 |
| 24 | 33.00 | 31.10 | 33.25 | 31.95 | 33.10 | 32.20 | 33.85 | 31.10 | 33.25 | 32.55 | 32.87 | 32.84 | 32.84 | 32.82 | 32.84 | 32.82 | 32.45 | 32.30 | 33.52 | 32.10 | 32.55 | 32.15 | 32.35 | 31.70 |
| 25 | 33.20 | 31.20 | 33.20 | 31.95 | 32.80 | 32.20 | 33.80 | 31.95 | 33.02 | 32.60 | 32.87 | 32.84 | 32.84 | 32.82 | 32.84 | 32.82 | 32.73 | 32.35 | 33.25 | 32.10 | 32.80 | 32.10 | 32.25 | 31.70 |
| 26 | 33.70 | 31.30 | 32.92 | 32.00 | 32.75 | 32.20 | 33.58 | 31.95 | 32.85 | 32.65 | 32.85 | 32.82 | 32.87 | 32.85 | 32.84 | 32.82 | 32.75 | 32.35 | 33.15 | 32.15 | 33.10 | 32.05 | 32.35 | 31.70 |
| 27 | 33.60 | 31.40 | 32.75 | 32.00 | 32.35 | 32.20 | 33.60 | 31.95 | 32.70 | 32.65 | 32.84 | 32.82 | 32.88 | 32.86 | 32.84 | 32.82 | 32.75 | 32.35 | 33.23 | 32.15 | 33.48 | 32.00 | 32.65 | 31.70 |
| 28 | 33.50 | 31.40 | 32.90 | 32.00 | 32.40 | 32.20 | 33.70 | 31.95 | 32.90 | 32.65 | 33.84 | 32.82 | 32.89 | 32.87 | 32.84 | 32.82 | 32.87 | 32.35 | 33.33 | 32.15 | 33.73 | 31.95 | 32.70 | 31.70 |
| 29 | 33.07 | 31.50 | | | 32.55 | 32.20 | 33.60 | 31.95 | 33.05 | 32.70 | 32.85 | 32.83 | 32.89 | 32.87 | 32.84 | 32.82 | 33.30 | 32.30 | 33.35 | 32.15 | 33.75 | 32.95 | 32.75 | 31.70 |
| 30 | 33.65 | 31.55 | | | 32.85 | 32.20 | 33.40 | 31.95 | 33.23 | 32.70 | 32.85 | 32.83 | 32.89 | 32.87 | 32.82 | 32.80 | 33.55 | 32.25 | 33.22 | 32.15 | | | 32.85 | 31.70 |
| 31 | 33.80 | 31.55 | | | 32.85 | 32.20 | | | 33.10 | 32.70 | | | 32.89 | 32.87 | 32.77 | 32.75 | | | 33.12 | 32.15 | | | 32.95 | 31.80 |
| Max | 33.80 | 32.05 | 33.83 | 32.00 | 33.80 | 32.20 | 33.85 | 32.90 | 33.85 | 32.70 | 33.84 | 32.84 | 32.95 | 32.87 | 32.86 | 32.84 | 33.83 | 32.75 | 33.83 | 32.30 | 33.95 | 32.95 | 33.70 | 31.95 |
| Min | 31.00 | 30.70 | 32.40 | 31.40 | 32.35 | 31.95 | 32.82 | 31.10 | 32.00 | 31.95 | 32.85 | 32.73 | 32.80 | 32.78 | 32.77 | 32.75 | 32.07 | 32.20 | 33.12 | 32.10 | 32.45 | 31.95 | 32.25 | 31.70 |
| Ave | 32.87 | 31.08 | 33.24 | 31.74 | 33.32 | 32.12 | 33.54 | 32.06 | 33.28 | 32.35 | 31.55 | 32.80 | 32.86 | 32.83 | 32.84 | 32.82 | 32.93 | 32.75 | 33.47 | 32.20 | 33.11 | 32.15 | 32.94 | 31.80 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 2000

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S | US | D.S |
| 1 | 33.05 | 31.80 | 30.10 | 30.55 | 33.15 | 32.00 | 33.07 | 32.20 | 33.75 | 32.00 | 32.82 | 32.70 | 33.28 | 32.85 | 32.89 | 32.87 | 32.90 | 32.60 | 32.70 | 32.25 | 33.80 | 32.05 | 33.67 | 31.70 |
| 2 | 33.50 | 31.80 | 30.55 | 30.55 | 33.10 | 32.00 | 32.98 | 32.20 | 33.05 | 32.00 | 32.98 | 32.75 | 33.20 | 32.85 | 32.89 | 32.87 | 32.67 | 32.65 | 32.70 | 32.25 | 33.80 | 32.05 | 33.70 | 31.60 |
| 3 | 33.75 | 31.80 | 31.30 | 31.27 | 33.00 | 32.05 | 32.98 | 32.20 | 33.40 | 32.00 | 33.10 | 32.80 | 33.23 | 32.85 | 32.90 | 32.88 | 32.62 | 32.65 | 32.80 | 32.25 | 33.70 | 32.00 | 33.85 | 31.45 |
| 4 | 33.75 | 31.80 | 31.70 | 31.60 | 32.92 | 32.10 | 32.98 | 32.25 | 33.70 | 32.00 | 33.03 | 32.80 | 33.17 | 32.85 | 33.00 | 32.88 | 33.05 | 32.65 | 32.10 | 32.20 | 33.65 | 32.00 | 33.90 | 31.45 |
| 5 | 33.90 | 31.70 | 31.72 | 31.67 | 32.73 | 32.15 | 33.10 | 32.30 | 33.60 | 32.05 | 33.00 | 32.80 | 33.15 | 32.85 | 33.17 | 32.88 | 33.00 | 32.65 | 33.13 | 32.20 | 33.30 | 32.00 | 33.70 | 31.30 |
| 6 | 33.85 | 31.65 | 31.68 | 31.65 | 32.95 | 32.15 | 33.13 | 32.35 | 33.45 | 32.10 | 33.00 | 32.80 | 33.15 | 32.85 | 33.00 | 32.88 | 33.00 | 32.65 | 33.22 | 32.20 | 33.22 | 32.00 | 33.40 | 31.30 |
| 7 | 33.77 | 31.45 | 31.68 | 31.65 | 32.35 | 32.15 | 33.28 | 32.35 | 33.50 | 32.15 | 33.00 | 32.80 | 33.23 | 32.85 | 33.00 | 32.88 | 32.85 | 32.65 | 33.05 | 32.20 | 33.25 | 32.00 | 32.65 | 31.35 |
| 8 | 33.47 | 31.25 | 31.80 | 31.75 | 33.45 | 32.15 | 33.50 | 32.35 | 33.65 | 32.20 | 33.00 | 32.80 | 33.23 | 32.85 | 32.90 | 32.88 | 32.80 | 32.60 | 32.90 | 32.20 | 33.20 | 32.00 | 32.40 | 31.35 |
| 9 | 33.30 | 31.15 | 32.05 | 32.00 | 33.45 | 32.15 | 33.40 | 32.35 | 33.75 | 32.25 | 33.00 | 32.80 | 33.23 | 32.85 | 32.90 | 32.88 | 32.80 | 32.60 | 32.70 | 32.20 | 33.20 | 32.00 | 32.55 | 31.35 |
| 10 | 33.15 | 30.95 | 32.33 | 32.25 | 33.65 | 32.15 | 33.25 | 32.35 | 33.90 | 32.30 | 33.12 | 32.80 | 33.20 | 32.85 | 32.90 | 32.88 | 32.90 | 32.55 | 32.60 | 32.20 | 33.07 | 32.00 | 32.60 | 31.40 |
| 11 | 32.75 | 30.75 | 32.50 | 32.20 | 33.83 | 32.10 | 33.30 | 32.35 | 33.90 | 32.30 | 33.08 | 32.80 | 33.12 | 32.85 | 32.89 | 32.87 | 33.38 | 32.45 | 32.60 | 32.20 | 33.12 | 32.00 | 32.95 | 31.40 |
| 12 | 32.45 | 30.65 | 32.37 | 32.20 | 33.73 | 32.10 | 33.20 | 32.35 | 33.90 | 32.25 | 33.10 | 32.80 | 33.00 | 32.85 | 32.89 | 32.87 | 33.80 | 32.40 | 32.85 | 32.20 | 33.00 | 32.00 | 33.25 | 31.40 |
| 13 | 32.15 | 30.65 | 32.62 | 32.20 | 33.53 | 32.05 | 33.12 | 32.35 | 33.70 | 32.20 | 33.00 | 32.80 | 33.05 | 32.85 | 32.88 | 32.86 | 33.60 | 32.40 | 32.90 | 32.20 | 32.95 | 32.00 | 33.48 | 31.35 |
| 14 | 30.53 | 30.50 | 32.90 | 32.25 | 33.40 | 32.00 | 33.15 | 32.30 | 32.80 | 32.20 | 33.00 | 32.80 | 33.12 | 32.87 | 32.88 | 33.45 | 32.40 | 32.40 | 32.87 | 32.20 | 32.70 | 32.00 | 33.65 | 31.35 |
| 15 | 30.30 | 30.30 | 32.95 | 32.30 | 33.27 | 32.00 | 33.12 | 32.30 | 32.27 | 32.20 | 32.85 | 32.83 | 33.00 | 32.87 | 32.88 | 33.30 | 32.40 | 32.40 | 32.85 | 32.20 | 32.35 | 32.05 | 33.55 | 31.30 |
| 16 | 30.10 | 31.10 | 33.25 | 32.30 | 33.25 | 32.05 | 33.08 | 32.25 | 32.40 | 32.20 | 32.85 | 32.83 | 32.97 | 32.87 | 32.88 | 33.20 | 32.40 | 32.40 | 32.82 | 32.20 | 32.35 | 32.05 | 33.25 | 31.30 |
| 17 | 30.10 | 31.10 | 33.65 | 32.30 | 33.05 | 32.10 | 32.95 | 32.25 | 32.77 | 32.25 | 32.85 | 32.83 | 33.03 | 32.87 | 32.88 | 33.10 | 32.40 | 32.40 | 32.80 | 32.15 | 32.40 | 32.10 | 33.50 | 33.10 |
| 18 | 30.10 | 31.10 | 33.83 | 32.25 | 32.98 | 32.15 | 32.80 | 32.25 | 32.90 | 32.30 | 32.85 | 32.83 | 33.12 | 32.87 | 32.88 | 33.10 | 32.40 | 32.40 | 33.05 | 32.15 | 32.70 | 32.10 | 33.50 | 31.35 |
| 19 | 30.10 | 31.10 | 33.75 | 32.20 | 33.05 | 32.20 | 32.50 | 32.25 | 32.95 | 32.40 | 32.87 | 32.83 | 33.13 | 32.87 | 32.93 | 33.10 | 32.40 | 32.40 | 33.50 | 32.10 | 32.83 | 32.10 | 33.25 | 31.40 |
| 20 | 30.10 | 31.10 | 33.60 | 32.15 | 33.20 | 32.25 | 32.60 | 32.20 | 32.65 | 32.50 | 32.92 | 32.85 | 33.00 | 32.87 | 32.90 | 33.22 | 32.40 | 32.40 | 33.65 | 32.10 | 32.87 | 32.10 | 33.20 | 31.45 |
| 21 | 30.10 | 31.10 | 33.43 | 32.15 | 32.95 | 32.25 | 32.90 | 32.15 | 32.80 | 32.55 | 33.07 | 32.85 | 33.95 | 32.88 | 32.90 | 33.50 | 32.40 | 32.40 | 33.50 | 32.10 | 32.87 | 32.10 | 32.85 | 31.50 |
| 22 | 30.10 | 31.10 | 33.45 | 32.15 | 32.85 | 32.25 | 33.52 | 32.10 | 32.25 | 32.60 | 33.07 | 32.85 | 33.97 | 32.88 | 32.90 | 33.65 | 32.35 | 32.35 | 33.40 | 32.10 | 32.82 | 32.10 | 32.70 | 31.55 |
| 23 | 30.10 | 31.10 | 33.70 | 32.05 | 33.13 | 32.20 | 33.83 | 32.80 | 33.63 | 32.65 | 33.00 | 32.85 | 33.15 | 32.87 | 32.85 | 33.68 | 32.30 | 32.30 | 33.30 | 32.10 | 32.85 | 32.10 | 32.65 | 31.60 |
| 24 | 30.10 | 31.10 | 33.80 | 32.05 | 33.37 | 32.20 | 33.60 | 32.05 | 33.68 | 32.65 | 32.87 | 32.85 | 32.89 | 32.87 | 32.85 | 33.78 | 32.25 | 32.25 | 33.15 | 32.10 | 32.87 | 32.10 | 32.75 | 31.60 |
| 25 | 30.05 | 30.05 | 33.62 | 32.00 | 33.73 | 32.20 | 32.95 | 32.05 | 33.82 | 32.55 | 32.87 | 32.85 | 32.89 | 32.87 | 32.90 | 33.68 | 32.25 | 32.25 | 33.12 | 32.10 | 32.95 | 32.05 | 32.87 | 31.60 |
| 26 | 30.00 | 30.00 | 33.40 | 32.00 | 33.63 | 32.20 | 32.93 | 32.05 | 33.82 | 32.55 | 33.00 | 32.85 | 32.89 | 32.87 | 32.95 | 33.55 | 32.25 | 32.25 | 33.10 | 32.10 | 33.17 | 32.00 | 32.93 | 31.60 |
| 27 | 30.00 | 30.00 | 33.45 | 32.00 | 33.48 | 32.20 | 33.00 | 32.05 | 33.85 | 32.55 | 33.13 | 32.85 | 32.89 | 32.87 | 33.05 | 33.45 | 32.25 | 32.25 | 33.40 | 32.05 | 33.50 | 31.95 | 32.82 | 31.65 |
| 28 | 30.00 | 30.00 | 33.40 | 32.00 | 33.40 | 32.20 | 32.95 | 32.05 | 33.70 | 32.55 | 33.12 | 32.85 | 32.89 | 32.87 | 33.15 | 33.10 | 32.25 | 32.25 | 33.80 | 32.70 | 33.60 | 31.90 | 33.10 | 31.70 |
| 29 | 30.00 | 30.00 | 33.37 | 32.00 | 33.37 | 32.20 | 32.87 | 32.05 | 33.25 | 32.60 | 33.12 | 32.85 | 32.89 | 32.87 | 33.35 | 33.35 | 32.25 | 32.25 | 33.65 | 32.05 | 33.45 | 31.90 | 33.30 | 31.75 |
| 30 | 30.00 | 30.00 | | | 33.30 | 32.20 | 32.95 | 32.00 | 33.03 | 32.65 | 33.15 | 32.85 | 33.89 | 32.87 | 33.52 | 32.60 | 32.70 | 32.25 | 33.55 | 32.05 | 33.50 | 31.80 | 33.40 | 31.75 |
| 31 | 30.00 | 30.00 | | | 33.22 | 32.20 | | | 32.82 | 32.70 | | | 32.89 | 32.87 | 33.10 | 32.60 | | | 33.60 | 32.05 | | | 33.35 | 31.75 |
| Max | 33.90 | 31.80 | 33.83 | 32.30 | 33.83 | 32.25 | 33.83 | 32.80 | 33.90 | 32.70 | 33.15 | 32.85 | 33.97 | 32.88 | 33.52 | 32.88 | 33.85 | 32.65 | 33.80 | 32.70 | 33.80 | 32.10 | 33.90 | 33.10 |
| Min | 30.00 | 30.00 | 30.10 | 30.55 | 32.35 | 32.00 | 32.50 | 32.00 | 32.25 | 32.00 | 32.82 | 32.70 | 23.89 | 32.85 | 32.85 | 32.60 | 32.62 | 32.25 | 32.10 | 32.05 | 32.35 | 31.80 | 32.40 | 31.30 |
| Ave | 31.44 | 30.91 | 32.69 | 31.92 | 33.24 | 32.14 | 33.10 | 32.24 | 33.31 | 32.34 | 32.99 | 32.82 | 32.83 | 32.86 | 32.97 | 32.82 | 32.90 | 32.60 | 33.08 | 32.17 | 33.10 | 32.02 | 33.18 | 31.54 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 2001

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S | U.S | D.S |
| 1 | 33.20 | 31.80 | 33.80 | 30.90 | 32.95 | 32.10 | 32.70 | 32.30 | 33.60 | 32.00 | 32.77 | 32.75 | 33.45 | 32.85 | 32.94 | 32.88 | 33.35 | 32.65 | 32.95 | 32.30 | 33.15 | 32.10 | 33.65 | 31.65 |
| 2 | 33.20 | 31.80 | 33.90 | 30.90 | 33.00 | 32.10 | 32.87 | 32.30 | 33.65 | 32.00 | 32.95 | 32.75 | 33.30 | 32.85 | 32.92 | 32.88 | 33.50 | 32.60 | 32.95 | 32.35 | 33.55 | 32.05 | 33.50 | 31.65 |
| 3 | 33.20 | 31.80 | 33.80 | 30.80 | 33.00 | 32.10 | 32.95 | 32.30 | 33.37 | 32.00 | 33.05 | 32.75 | 33.30 | 32.85 | 32.13 | 32.88 | 33.30 | 32.60 | 32.95 | 32.40 | 33.60 | 32.10 | 33.20 | 31.65 |
| 4 | 33.20 | 31.80 | 33.50 | 30.90 | 32.82 | 32.10 | 32.95 | 32.30 | 33.23 | 32.50 | 33.00 | 32.77 | 33.28 | 32.87 | 33.07 | 32.88 | 33.10 | 32.60 | 32.95 | 32.40 | 33.35 | 32.10 | 33.95 | 31.65 |
| 5 | 33.40 | 31.80 | 33.25 | 31.10 | 33.15 | 32.15 | 32.95 | 32.30 | 33.20 | 32.10 | 33.90 | 32.80 | 33.23 | 32.87 | 32.95 | 32.90 | 33.08 | 32.55 | 32.95 | 32.40 | 33.05 | 32.05 | 33.00 | 31.65 |
| 6 | 33.45 | 31.80 | 32.95 | 31.20 | 33.30 | 32.15 | 32.95 | 32.30 | 33.10 | 32.15 | 32.85 | 32.80 | 33.15 | 32.87 | 33.05 | 32.90 | 33.15 | 32.50 | 32.95 | 32.40 | 32.70 | 32.05 | 33.20 | 31.65 |
| 7 | 33.57 | 31.80 | 32.95 | 31.30 | 33.30 | 32.15 | 32.90 | 32.30 | 33.05 | 32.15 | 32.88 | 32.82 | 33.13 | 32.87 | 32.97 | 32.90 | 33.33 | 32.45 | 32.90 | 32.40 | 32.65 | 32.05 | 33.30 | 31.65 |
| 8 | 33.75 | 31.80 | 32.93 | 31.40 | 33.05 | 32.20 | 32.85 | 32.35 | 32.90 | 32.15 | 32.84 | 32.82 | 33.15 | 32.87 | 32.96 | 32.90 | 33.50 | 32.40 | 33.00 | 32.35 | 32.65 | 32.05 | 33.30 | 31.65 |
| 9 | 33.50 | 31.80 | 32.98 | 31.50 | 32.45 | 32.20 | 32.65 | 32.35 | 32.80 | 32.15 | 32.84 | 32.82 | 33.20 | 32.87 | 32.96 | 32.90 | 33.45 | 32.40 | 33.10 | 32.30 | 32.75 | 32.00 | 33.05 | 31.65 |
| 10 | 33.25 | 31.70 | 33.00 | 31.60 | 32.42 | 32.20 | 32.45 | 32.35 | 32.60 | 32.20 | 32.84 | 32.82 | 33.22 | 32.87 | 32.93 | 32.90 | 33.40 | 32.40 | 33.45 | 32.25 | 33.05 | 32.00 | 33.05 | 31.65 |
| 11 | 32.40 | 31.70 | 32.90 | 31.80 | 32.27 | 32.20 | 32.37 | 32.35 | 32.35 | 32.25 | 32.87 | 32.82 | 33.25 | 32.87 | 33.10 | 32.90 | 33.50 | 32.40 | 33.45 | 32.25 | 33.30 | 32.00 | 32.85 | 31.70 |
| 12 | 31.42 | 31.40 | 32.80 | 32.00 | 32.24 | 32.20 | 32.37 | 32.35 | 32.55 | 32.25 | 32.90 | 32.85 | 33.25 | 32.87 | 33.15 | 32.90 | 33.45 | 32.40 | 33.40 | 32.25 | 33.50 | 32.00 | 32.95 | 31.75 |
| 13 | 30.95 | 30.95 | 32.90 | 32.20 | 32.33 | 32.25 | 32.45 | 32.35 | 32.70 | 32.30 | 33.12 | 32.85 | 33.25 | 32.87 | 33.83 | 32.90 | 33.40 | 32.40 | 33.40 | 32.25 | 33.25 | 32.00 | 33.20 | 31.65 |
| 14 | 30.60 | 30.60 | 32.00 | 32.30 | 32.50 | 32.25 | 32.75 | 32.35 | 33.00 | 32.30 | 33.23 | 32.85 | 33.25 | 32.87 | 33.02 | 32.90 | 33.40 | 32.40 | 33.30 | 32.25 | 33.15 | 32.00 | 33.30 | 31.65 |
| 15 | 30.35 | 30.35 | 33.20 | 32.30 | 32.73 | 32.25 | 32.85 | 32.35 | 33.20 | 32.30 | 33.30 | 32.85 | 33.25 | 32.87 | 32.92 | 32.90 | 33.30 | 32.40 | 33.40 | 32.25 | 33.15 | 32.00 | 33.40 | 31.65 |
| 16 | 30.20 | 30.20 | 33.40 | 32.30 | 32.85 | 32.30 | 32.90 | 32.35 | 33.20 | 32.30 | 33.33 | 32.85 | 33.20 | 32.87 | 32.90 | 32.88 | 33.25 | 32.40 | 33.50 | 32.25 | 33.15 | 32.00 | 33.50 | 31.65 |
| 17 | 30.05 | 30.05 | 33.55 | 32.20 | 32.88 | 32.30 | 32.90 | 32.35 | 33.05 | 32.35 | 33.15 | 32.85 | 33.00 | 32.87 | 32.90 | 32.88 | 33.20 | 32.40 | 33.73 | 32.20 | 33.20 | 32.00 | 33.50 | 31.65 |
| 18 | 30.00 | 30.00 | 33.63 | 32.15 | 32.92 | 32.30 | 32.95 | 32.30 | 32.50 | 32.40 | 32.98 | 32.85 | 32.92 | 32.87 | 32.90 | 32.88 | 33.25 | 32.35 | 33.70 | 32.15 | 33.35 | 32.00 | 33.45 | 31.60 |
| 19 | 30.00 | 30.00 | 33.72 | 32.10 | 32.75 | 32.30 | 33.15 | 32.25 | 32.60 | 32.40 | 32.92 | 32.85 | 32.95 | 32.87 | 32.90 | 32.88 | 33.40 | 32.30 | 33.50 | 32.15 | 33.40 | 32.00 | 33.40 | 31.60 |
| 20 | 30.00 | 30.00 | 33.75 | 32.05 | 32.80 | 32.30 | 33.75 | 32.20 | 32.65 | 32.40 | 32.97 | 32.85 | 33.00 | 32.88 | 32.90 | 32.88 | 33.40 | 32.30 | 33.50 | 32.10 | 33.45 | 31.95 | 33.25 | 31.60 |
| 21 | 30.00 | 30.00 | 33.50 | 32.05 | 32.95 | 32.30 | 33.60 | 32.15 | 32.80 | 32.40 | 33.00 | 32.85 | 33.10 | 32.88 | 32.90 | 32.88 | 33.45 | 32.25 | 33.30 | 32.10 | 33.55 | 31.95 | 33.05 | 31.70 |
| 22 | 30.00 | 30.00 | 33.15 | 32.05 | 32.90 | 32.30 | 33.90 | 32.10 | 32.85 | 32.40 | 33.05 | 32.85 | 33.05 | 32.88 | 32.90 | 32.88 | 33.50 | 32.25 | 33.65 | 32.05 | 33.25 | 31.95 | 33.15 | 31.70 |
| 23 | 30.00 | 30.00 | 32.67 | 32.10 | 32.90 | 32.30 | 33.70 | 32.10 | 32.90 | 32.50 | 33.05 | 32.85 | 33.00 | 32.88 | 32.90 | 32.88 | 33.35 | 32.25 | 33.75 | 32.05 | 33.15 | 31.95 | 33.15 | 31.75 |
| 24 | 30.00 | 30.00 | 32.50 | 32.10 | 32.70 | 32.30 | 33.50 | 32.05 | 32.65 | 32.55 | 33.05 | 32.85 | 33.00 | 32.88 | 32.90 | 32.85 | 33.10 | 32.25 | 33.65 | 32.05 | 33.20 | 31.90 | 33.20 | 31.75 |
| 25 | 30.00 | 30.00 | 32.20 | 32.10 | 32.32 | 32.30 | 33.30 | 32.05 | 32.62 | 32.60 | 33.05 | 32.85 | 33.05 | 32.88 | 32.90 | 32.85 | 33.00 | 32.25 | 33.55 | 32.05 | 33.35 | 31.90 | 33.10 | 31.75 |
| 26 | 30.00 | 30.00 | 32.12 | 32.10 | 32.32 | 32.30 | 33.25 | 32.05 | 32.70 | 32.65 | 33.10 | 32.85 | 33.07 | 32.88 | 32.85 | 32.83 | 33.00 | 32.25 | 33.45 | 32.05 | 33.35 | 31.90 | 33.25 | 31.60 |
| 27 | 30.00 | 30.00 | 32.12 | 32.10 | 32.32 | 32.30 | 33.30 | 32.05 | 32.72 | 32.70 | 33.20 | 32.85 | 33.06 | 32.88 | 32.82 | 32.80 | 32.90 | 32.25 | 33.45 | 32.05 | 33.90 | 31.80 | 33.10 | 31.60 |
| 28 | 30.00 | 30.00 | 22.60 | 32.10 | 32.32 | 32.30 | 33.35 | 32.05 | 32.72 | 32.70 | 33.35 | 32.85 | 33.10 | 32.88 | 32.88 | 32.77 | 32.90 | 32.25 | 33.20 | 32.10 | 33.90 | 31.80 | 32.00 | 31.60 |
| 29 | 30.10 | 30.00 | | | 32.32 | 32.30 | 33.35 | 32.00 | 32.72 | 32.70 | 33.45 | 32.85 | 33.05 | 32.88 | 32.98 | 32.70 | 32.95 | 32.25 | 33.15 | 32.10 | 33.90 | 31.80 | 31.80 | 31.60 |
| 30 | 31.00 | 31.00 | | | 32.50 | 32.30 | 33.48 | 32.00 | 32.77 | 32.70 | 33.45 | 32.85 | 32.95 | 32.90 | 33.00 | 32.65 | 32.90 | 32.30 | 33.00 | 32.20 | 33.75 | 31.70 | 31.40 | 31.40 |
| 31 | 33.00 | 31.00 | | | 32.70 | 32.30 | | | 32.77 | 32.73 | | | 32.95 | 32.88 | 33.12 | 32.65 | | | 33.29 | 32.20 | | | 31.35 | 31.45 |
| Max | 33.75 | 31.80 | 33.90 | 32.30 | 33.30 | 32.30 | 33.90 | 32.35 | 33.65 | 32.73 | 33.90 | 32.85 | 33.45 | 32.90 | 33.83 | 32.90 | 33.50 | 32.65 | 33.75 | 32.40 | 33.90 | 32.10 | 33.95 | 31.75 |
| Min | 30.00 | 30.00 | 22.60 | 30.80 | 32.24 | 32.10 | 32.37 | 32.00 | 32.35 | 32.00 | 32.77 | 32.75 | 32.92 | 32.85 | 32.13 | 32.65 | 32.90 | 32.25 | 32.90 | 32.05 | 32.65 | 31.70 | 31.35 | 31.40 |
| Ave | 31.41 | 30.81 | 32.71 | 31.78 | 32.71 | 32.24 | 33.05 | 32.23 | 32.89 | 32.36 | 33.08 | 32.83 | 33.13 | 32.87 | 32.95 | 32.86 | 33.35 | 32.65 | 33.31 | 32.21 | 33.29 | 31.97 | 33.05 | 31.64 |

Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal Water levels and Discharges in 2002

| Date | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. | U.S. | D.S. |
| 1 | 30.90 | 30.90 | 33.85 | 30.85 | 32.18 | 32.18 | 33.65 | 32.35 | 33.90 | 31.90 | 33.35 | 32.90 | 33.32 | 32.87 | 32.96 | 32.94 | 33.20 | 32.58 | 32.20 | 32.18 | 32.73 | 32.08 | 33.75 | 31.65 |
| 2 | 30.45 | 30.45 | 33.85 | 30.95 | 32.30 | 32.30 | 33.50 | 32.35 | 32.80 | 31.90 | 33.30 | 32.87 | 33.30 | 32.90 | 32.94 | 32.92 | 33.17 | 32.55 | 32.30 | 32.28 | 32.77 | 32.08 | 33.65 | 31.65 |
| 3 | 30.72 | 30.72 | 33.90 | 31.00 | 32.30 | 32.20 | 33.30 | 32.30 | 32.40 | 31.95 | 33.15 | 32.85 | 33.15 | 32.90 | 32.96 | 32.95 | 33.17 | 32.55 | 32.40 | 32.25 | 33.25 | 32.08 | 33.45 | 31.70 |
| 4 | 30.50 | 30.50 | 33.90 | 31.20 | 32.30 | 32.20 | 33.00 | 32.30 | 32.35 | 32.00 | 33.00 | 32.85 | 33.05 | 32.90 | 32.97 | 32.95 | 33.17 | 32.55 | 32.70 | 32.22 | 33.40 | 32.08 | 33.00 | 31.70 |
| 5 | 30.50 | 30.50 | 33.50 | 31.80 | 32.40 | 32.25 | 32.80 | 32.30 | 32.15 | 32.12 | 33.15 | 32.85 | 33.00 | 32.92 | 32.97 | 32.95 | 33.10 | 32.63 | 32.90 | 32.22 | 33.40 | 32.08 | 33.25 | 31.60 |
| 6 | 30.20 | 30.20 | 32.50 | 32.10 | 32.65 | 32.25 | 33.00 | 32.30 | 32.12 | 32.10 | 33.10 | 32.87 | 33.03 | 32.92 | 33.05 | 32.95 | 33.00 | 32.98 | 33.00 | 32.15 | 32.95 | 32.15 | 33.80 | 31.50 |
| 7 | 30.00 | 30.00 | 32.25 | 32.23 | 32.30 | 32.28 | 33.00 | 32.30 | 32.60 | 32.15 | 32.98 | 32.90 | 33.10 | 32.92 | 33.07 | 32.95 | 33.00 | 32.98 | 33.00 | 32.15 | 32.55 | 32.15 | 33.70 | 31.40 |
| 8 | 30.00 | 30.00 | 32.45 | 32.20 | 32.37 | 32.35 | 33.30 | 32.30 | 32.90 | 32.25 | 33.00 | 32.90 | 33.20 | 32.92 | 33.00 | 32.95 | 33.95 | 32.95 | 32.90 | 32.15 | 32.62 | 32.12 | 33.45 | 31.40 |
| 9 | 30.00 | 30.00 | 32.60 | 32.20 | 32.65 | 32.35 | 33.20 | 32.30 | 33.00 | 32.30 | 33.05 | 32.90 | 33.02 | 32.92 | 32.94 | 32.92 | 33.25 | 32.50 | 32.85 | 32.15 | 32.90 | 32.00 | 32.85 | 31.50 |
| 10 | 30.00 | 30.00 | 32.70 | 32.15 | 32.65 | 32.35 | 33.25 | 32.30 | 33.15 | 32.30 | 32.95 | 32.90 | 32.94 | 32.92 | 32.86 | 32.84 | 33.35 | 32.40 | 32.80 | 32.15 | 33.15 | 31.90 | 32.50 | 31.50 |
| 11 | 30.00 | 30.00 | 32.70 | 32.15 | 32.90 | 32.35 | 33.40 | 32.30 | 33.15 | 32.30 | 32.92 | 32.90 | 32.94 | 32.92 | 32.94 | 32.92 | 33.40 | 32.40 | 32.70 | 32.15 | 33.55 | 31.90 | 32.50 | 31.40 |
| 12 | 30.00 | 30.00 | 32.75 | 32.10 | 32.90 | 32.35 | 33.75 | 32.25 | 33.50 | 32.25 | 32.92 | 32.90 | 32.94 | 32.92 | 32.97 | 32.95 | 33.30 | 32.45 | 32.75 | 32.13 | 33.30 | 31.95 | 32.58 | 31.40 |
| 13 | 30.00 | 30.00 | 32.75 | 32.10 | 32.85 | 32.35 | 33.80 | 32.20 | 33.45 | 32.35 | 33.10 | 32.90 | 32.94 | 32.92 | 32.97 | 32.95 | 33.15 | 32.45 | 32.75 | 32.10 | 33.08 | 31.95 | 32.70 | 31.45 |
| 14 | 30.00 | 30.00 | 32.80 | 32.05 | 32.70 | 32.40 | 33.70 | 32.15 | 33.05 | 32.50 | 33.20 | 32.90 | 32.97 | 32.92 | 32.97 | 32.95 | 33.30 | 32.40 | 32.55 | 32.05 | 32.90 | 31.95 | 32.95 | 31.55 |
| 15 | 30.00 | 30.00 | 32.83 | 32.00 | 32.70 | 32.45 | 33.80 | 32.15 | 32.62 | 32.60 | 33.50 | 32.90 | 33.10 | 32.92 | 32.97 | 32.95 | 33.60 | 32.20 | 32.47 | 32.00 | 32.90 | 31.95 | 33.05 | 31.60 |
| 16 | 30.00 | 30.00 | 32.98 | 32.90 | 32.90 | 32.45 | 33.45 | 32.20 | 32.62 | 32.60 | 33.90 | 32.75 | 33.02 | 32.93 | 32.98 | 32.95 | 33.40 | 32.20 | 32.50 | 32.00 | 32.90 | 31.95 | 33.15 | 31.60 |
| 17 | 30.00 | 30.00 | 33.05 | 32.90 | 33.25 | 32.50 | 33.35 | 32.20 | 32.62 | 32.60 | 33.70 | 32.80 | 33.00 | 32.94 | 32.97 | 32.95 | 33.20 | 32.20 | 32.65 | 32.00 | 32.90 | 32.00 | 32.15 | 31.65 |
| 18 | 30.00 | 30.00 | 33.02 | 32.90 | 33.40 | 32.50 | 33.15 | 32.20 | 32.80 | 32.55 | 33.40 | 32.80 | 33.00 | 32.94 | 32.97 | 32.95 | 32.80 | 32.25 | 32.90 | 32.05 | 33.00 | 32.05 | 33.10 | 31.70 |
| 19 | 30.00 | 30.00 | 32.80 | 31.95 | 33.10 | 32.50 | 33.05 | 32.20 | 33.15 | 32.45 | 33.35 | 32.80 | 33.00 | 32.94 | 32.97 | 32.95 | 32.32 | 32.30 | 32.98 | 32.10 | 32.90 | 32.12 | 32.95 | 31.75 |
| 20 | 30.90 | 30.90 | 32.40 | 32.05 | 32.72 | 32.50 | 33.15 | 32.15 | 33.00 | 32.45 | 33.25 | 32.85 | 33.02 | 32.94 | 32.97 | 32.95 | 32.45 | 32.30 | 33.07 | 32.10 | 32.45 | 32.15 | 33.00 | 31.75 |
| 21 | 31.10 | 31.10 | 32.45 | 32.05 | 32.68 | 32.50 | 33.35 | 32.15 | 32.80 | 32.55 | 33.20 | 32.90 | 33.03 | 32.94 | 33.05 | 32.95 | 32.35 | 32.30 | 33.05 | 32.05 | 32.53 | 32.10 | 33.00 | 31.75 |
| 22 | 32.40 | 31.10 | 33.00 | 31.90 | 32.87 | 32.45 | 33.75 | 32.10 | 32.65 | 32.60 | 33.25 | 32.90 | 33.02 | 32.94 | 33.15 | 32.93 | 32.55 | 32.20 | 33.10 | 32.00 | 32.55 | 32.05 | 32.95 | 31.75 |
| 23 | 33.10 | 30.60 | 33.50 | 31.70 | 32.98 | 32.45 | 33.90 | 32.00 | 32.70 | 32.67 | 33.85 | 32.85 | 33.05 | 32.95 | 33.18 | 32.90 | 32.70 | 32.15 | 32.85 | 31.95 | 32.55 | 32.05 | 32.90 | 31.75 |
| 24 | 33.10 | 30.60 | 33.60 | 31.70 | 33.05 | 32.45 | 33.90 | 32.00 | 32.73 | 32.70 | 33.55 | 32.80 | 33.04 | 32.95 | 33.25 | 32.82 | 32.85 | 32.10 | 32.75 | 31.93 | 32.95 | 31.95 | 32.95 | 31.70 |
| 25 | 33.80 | 30.60 | 33.30 | 31.75 | 32.90 | 32.45 | 33.90 | 32.00 | 32.90 | 32.75 | 33.35 | 32.80 | 32.96 | 32.94 | 33.50 | 32.80 | 32.80 | 32.10 | 32.75 | 32.00 | 33.12 | 31.95 | 32.95 | 31.65 |
| 26 | 33.80 | 30.60 | 32.85 | 31.85 | 32.70 | 32.45 | 33.90 | 31.95 | 33.00 | 32.80 | 32.92 | 32.90 | 32.96 | 32.94 | 33.75 | 32.70 | 32.75 | 32.15 | 32.85 | 32.05 | 33.20 | 31.95 | 33.00 | 31.60 |
| 27 | 33.70 | 30.65 | 32.10 | 33.00 | 32.55 | 32.50 | 33.90 | 31.75 | 33.20 | 32.80 | 32.92 | 32.90 | 32.96 | 32.94 | 33.80 | 32.70 | 32.65 | 32.15 | 32.95 | 32.05 | 33.25 | 31.90 | 32.90 | 31.60 |
| 28 | 33.80 | 30.65 | 32.10 | 31.08 | 32.55 | 32.50 | 33.90 | 31.65 | 33.45 | 32.75 | 33.00 | 32.90 | 33.00 | 32.95 | 33.50 | 32.75 | 32.65 | 32.15 | 32.80 | 32.05 | 33.25 | 31.80 | 32.85 | 31.55 |
| 29 | 33.90 | 30.65 | | | 32.90 | 32.45 | 33.60 | 31.75 | 33.55 | 32.85 | 33.10 | 32.90 | 32.96 | 32.94 | 33.25 | 32.75 | 32.35 | 32.20 | 32.67 | 32.05 | 33.30 | 31.75 | 33.65 | 31.45 |
| 30 | 33.80 | 30.70 | | | 33.00 | 32.45 | 33.50 | 31.85 | 33.50 | 32.90 | 33.25 | 32.87 | 32.96 | 32.94 | 32.80 | 32.72 | 32.27 | 32.25 | 32.65 | 32.08 | 33.65 | 31.70 | 33.55 | 31.45 |
| 31 | 33.90 | 30.80 | | | 33.45 | 32.35 | | | 33.45 | 32.90 | | | 32.97 | 32.95 | 32.85 | 32.67 | | 32.67 | 32.08 | | | | 33.50 | 31.60 |
| Max | 33.90 | 31.10 | 33.90 | 33.00 | 33.45 | 32.50 | 33.90 | 32.35 | 33.90 | 32.90 | 33.90 | 32.90 | 33.32 | 32.95 | 33.80 | 32.95 | 33.60 | 32.98 | 33.10 | 32.28 | 33.65 | 32.15 | 33.80 | 31.75 |
| Min | 30.00 | 30.00 | 32.10 | 30.85 | 32.18 | 32.16 | 32.80 | 31.65 | 32.12 | 31.90 | 32.92 | 32.75 | 32.94 | 32.87 | 32.80 | 32.67 | 32.27 | 32.10 | 32.20 | 31.93 | 32.45 | 31.70 | 32.15 | 31.40 |
| Ave. | 31.31 | 30.39 | 32.95 | 31.96 | 32.75 | 32.39 | 33.47 | 32.14 | 32.94 | 32.45 | 33.22 | 32.87 | 33.03 | 32.93 | 33.08 | 32.89 | 32.94 | 32.37 | 32.76 | 32.09 | 33.00 | 32.00 | 33.09 | 31.59 |

Rehabilitation and Improvement of Sakouls Regulator on Baher Yusef Canal
Specification and Service Area of Pump Stations

| No. | Station | Location | Purpose | Suction From | Delivery To | Service area (Feddian) | Year of starting operation | Levels (m) | | | Units | |
|-----|------------------|----------|---------|-----------------------|------------------|------------------------|----------------------------|------------|-------|-------|--------|----------|
| | | | | | | | | Suction | Exit | Head | Number | Position |
| 1 | Dier El Sankouna | B | D | El Sankoura drain | Bahr Yusef | 53000 | 1981 | 31.60 | 34.50 | 2.90 | 4 | 45° |
| 2 | Beni Mazar | B | D | Beni Mazar drain | Bahr Yusef | 53000 | 1984 | 31.00 | 34.00 | 3.00 | 4 | 45° |
| 3 | Manshid El Dahb | S | D | Manshid El Dahb drain | El Moheat | 21000 | 1986 | 33.87 | 35.07 | 1.20 | 3 | 45° |
| 4 | Terfa 1 (old) | S | I | Bahr Yusef | Terfa | 14649 | 1968 | 34.50 | 36.70 | 2.20 | 6 | Vertical |
| 5 | Terfa 2 (old) | S | I | Terfa | Terfa | 14649 | 1968 | 36.80 | 45.80 | 9.00 | 6 | Vertical |
| 6 | Terfa 3A (old) | S | I | Terfa | Branch (5) & (6) | 11048 | 1968 | 45.74 | 86.45 | 40.71 | 5 | Vertical |
| 7 | Terfa 3B (old) | S | I | Terfa | Branch (4) | 1944 | 1968 | 45.74 | 50.50 | 4.76 | 2 | Vertical |
| 8 | Terfa 4 (old) | S | I | Branch (5) | Branch (7) | 1133 | 1968 | 55.38 | 60.30 | 4.92 | 3 | Vertical |
| 9 | Terfa 1 (new) | S | I | Bahr Yusef | Main Terfa | | 1988 | 34.40 | 36.55 | 2.15 | 4 | Vertical |
| 10 | Terfa 2 (new) | S | I | Main Terfa | Main Terfa | Old stations | 1988 | 36.00 | 45.85 | 9.85 | 4 | Vertical |
| 11 | Terfa 3A (new) | S | I | Main Terfa | Branch (5) & (6) | area | 1988 | 45.60 | 56.40 | 10.80 | 3 | Vertical |
| 12 | Terfa 3B (new) | S | I | Main Terfa | Branch (4) | | 1988 | 45.60 | 56.40 | 10.80 | 2 | Vertical |
| 13 | Kamader 5 (old) | S | I | Manshid El Dahb | Kamader | 8727 | 1968 | 36.70 | 38.30 | 1.60 | 4 | Vertical |
| 14 | Kamader 6 (old) | S | I | Kamader | Kamader | 8727 | 1968 | 37.94 | 53.50 | 15.56 | 5 | Vertical |
| 15 | Kamader 7A (old) | S | I | Kamader | Branch (8) | 4878 | 1968 | 53.53 | 65.00 | 11.47 | 3 | Vertical |
| 16 | Kamader 7B (old) | S | I | Kamader | Branch (9) | 703 | 1969 | 53.53 | 65.00 | 11.47 | 2 | Vertical |
| 17 | Kamader 6 (new) | S | I | Kamader | Kamader | | 1988 | 38.02 | 54.00 | 15.98 | 6 | Vertical |
| 18 | Kamader 7A (new) | S | I | Kamader | Branch (8) | Old stations | 1988 | 53.65 | 65.25 | 11.60 | 3 | Vertical |
| 19 | Kamader 7B (new) | S | I | Kamader | Branch (9) | area | 1988 | 53.65 | 65.25 | 11.60 | 2 | Vertical |
| 20 | Abo Raheb | M | D | Abo Raheb drain | El Moheat drain | 67000 | 1984 | 28.90 | 31.00 | 2.10 | 4 | 45° |
| 21 | Sakoula | | D | Sakoula | Bahr Yusef | 400000 | 1978 | 27.50 | 29.50 | 2.00 | 4 | |
| 22 | Sakoula 4 (old) | M | I | Bahr Yusef | Sakoula | 15696 | | | | | 4 | |
| 23 | Sakoula 5A (old) | M | I | Sakoula | Branch 7 & 8 | 1216 | | | | | 2 | Vertical |
| 24 | Sakoula 5B (old) | M | I | Sakoula | Branch 7 & 8 | 11984 | | | | | 6 | Vertical |
| 25 | Sakoula 6A (old) | M | I | Branch 8 | Branch 9 & 10 | 5734 | | | | | 4 | Vertical |
| 26 | Sakoula 6B (old) | M | I | Branch 8 | Branch 9 & 11 | 3700 | | | | | 4 | Vertical |
| 27 | Sakoula 4 (new) | M | I | | | | 1987 | 31.55 | 33.85 | 2.30 | 4 | Vertical |
| 28 | Sakoula 5 (new) | M | I | | | 13200 | 1987 | 32.99 | 44.25 | 11.26 | 4 | Vertical |
| 29 | Sakoula 6 (new) | M | I | | | 9934 | 1987 | 43.89 | 53.65 | 9.76 | 4 | Vertical |

B Beni Mazar D . Drange
S . Samaloot I Irrigation
M Magaga

Rehabilitation and Improvement of Sakouls Regulator on Baher Yusef Canal
Specification and Service Area of Pump Stations

| No. | Station | Pumps | | | Motors | | | | Transformers | | |
|-----|-------------------|---------------------------------|-------------------|--------------|----------|-----------------|-----------------|--------------|--------------|----------|--------------------------------|
| | | Discharge (m ³ /sec) | Rotation per min. | Manufacturer | Power KW | Rotation / min. | Insulation type | Manufacturer | No. | Power KW | Manufacturer |
| 1 | Dier El Sankouria | 3.50 | 213 | Czech | 150 | 992 | 380 | Czech | 2 | 1000 | Czech |
| 2 | Bem Mazar | 3.00 | 405 | Austria | 170 | 1490 | 380 | Austria | 2 | 1000 | Austria |
| 3 | Manshid El Dahb | 1.63 | 230 | Austria | 30 | 1465 | 380 | Austria | 1 | 200 | Austria |
| 4 | Terfa 1 (old) | 1.46 | 585 | Italy | 73.60 | 585 | 380 | Italy | 1 | 1500 | Italy |
| 5 | Terfa 2 (old) | 1.47 | 735 | Italy | 243 | 740 | 380 | Italy | 1 | 1600 | Italy |
| 6 | Terfa 3A (old) | 1.35 | 735 | Italy | 247 | 740 | 380 | Italy | 1 | 1600 | Italy |
| 7 | Terfa 3B (old) | 0.50 | 980 | Italy | 46.30 | 980 | 380 | Italy | 1 | 1500 | Italy |
| 8 | Terfa 4 (old) | 0.36 | 980 | Italy | 36.70 | 980 | 380 | Italy | 1 | 1000 | Hungary |
| 9 | Terfa 1 (new) | 1.90 | 485 | Italy | 145 | 485 | 380 | Hungary | 1 | 2000 | Hungary |
| 10 | Terfa 2 (new) | 1.90 | 735 | Hungary | 360 | 740 | 6000 | Hungary | 1 | 2000 | Hungary |
| 11 | Terfa 3A (new) | 2.10 | 585 | Hungary | 360 | 561 | 6000 | Hungary | 1 | 2000 | Hungary |
| 12 | Terfa 3B (new) | 1.20 | 735 | Hungary | 180 | 732 | 6000 | Hungary | 1 | 2000 | Conneted with Station 3 (new) |
| 13 | Kamader 5 (old) | 1.34 | 585 | Germany | 70(H.P) | 585 | 380 | Italy | 1 | 250 | Italy |
| 14 | Kamader 6 (old) | 1.00 | 980 | Germany | 330(H.P) | 980 | 380 | Italy | 1 | 1500 | Italy |
| 15 | Kamader 7A (old) | 1.00 | 980 | Germany | 260(H.P) | 980 | 380 | Italy | 1 | 1100 | Italy |
| 16 | Kamader 7B (old) | 0.72 | 980 | Germany | 220(H.P) | 980 | 380 | Italy | 1 | 500 | Conneted with Station 7(A) |
| 17 | Kamader 6 (new) | 1.75 | 735 | Hungary | 460 | 740 | 6000 | Hungary | 1 | 2000 | Italy |
| 18 | Kamader 7A (new) | 1.00 | 980 | Hungary | 230 | 980 | 6000 | Hungary | 1 | 2000 | Italy |
| 19 | Kamader 7B (new) | 0.85 | 970 | Hungary | 230 | 980 | 6000 | Hungary | 1 | 2000 | Conneted with Station 7(A) new |
| 20 | Abo Raheb | 4.20 | 248 | Austria | 116 | 1490 | 380 | Austria | 2 | 1000 | Austria |
| 21 | Sakoula | 4.50 | | Czech | 200 | | | Czech | 1 | | |
| 22 | Sakoula 4 (old) | 1.22 | 585 | Germany | 66 | | 380 | AEG | 1 | 300 | Italy |
| 23 | Sakoula 5A (old) | 0.36 | 1450 | Germany | 44 | | 380 | AEG | 1 | 1250 | Italy |
| 24 | Sakoula 5B (old) | 0.92 | 980 | Germany | 162.00 | | 380 | AEG | 1 | 550 | Conneted with Station 5A |
| 25 | Sakoula 6A (old) | 0.59 | 970 | Germany | 103 | | 380 | AEG | 1 | 550 | Italy |
| 26 | Sakoula 6B (old) | 0.47 | 970 | Hungary | | | 380 | AEG | 1 | 100 | Conneted with Station 6A |
| 27 | Sakoula 4 (new) | 1.80 | 485 | Hungary | 145.00 | 485 | 380 | Hungary | 1 | 2000 | Hungary |
| 28 | Sakoula 5 (new) | 1.50 | 735 | Hungary | 295 | 7350 | 6000 | Hungary | 1 | 1000 | Hungary |
| 29 | Sakoula 6 (new) | 1.50 | 970 | Hungary | 100 | 980 | 380 | Hungary | 1 | 1000 | Hungary |

6D-2 Management Record and Running Cost of Terfa Pump Station

Old Terfa Station 1

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|-----------|----------|---------------|--------|--------|------|-------------|----------------|------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2 263 | 11,993,900 | 133,265 55 | 128 170 | 2,776 9 | 14,534 58 | 31 0 | | | | | |
| August | 2,497 | 13,234 100 | 147,045 55 | 1,516 | 2 776 9 | 17 185 77 | 31 5 | | | | | |
| September | 2,541 | 13,467 300 | 149,636 66 | 15,785 | 2 776 9 | 17,900 19 | 40 5 | | | | | |
| October | 2 375 | 12 087,500 | 13,986 11 | 147,840 | 2,776 9 | 16,765 06 | 11 5 | | | | | |
| November | 2,096 | 11,108 800 | 123 431 10 | 143,710 | 2,776 9 | 16,296 71 | 31 5 | | | | | |
| December | 1,878 | 9,953 400 | 110 593 33 | 134,610 | 2 776 9 | 15 264 37 | 22 5 | | | | | |
| January | 735 | 3,895 500 | 43,283 33 | 59,640 | 2 776 9 | 6 763 18 | 9 0 | | | | | 9,549 076 |
| February | 2,472 | 13,101,600 | 145,573 30 | 160,790 | 2,776 9 | 182,233 59 | 22 5 | | | | | 9,862 576 |
| March | 2,625 | 13 912 500 | 154 583 33 | 183,820 | 2,776 9 | 20,845 18 | 22 5 | | | | | 23,644 580 |
| April | 2,362 | 12,518 600 | 139,095 55 | 160,020 | 2 776 9 | 18 146 27 | 27 0 | | | | | 20,954 618 |
| May | 1,900 | 10,070,000 | 119,888 88 | 116 270 | 2 776 9 | 13 185 01 | 33 8 | | | | | 15,995 660 |
| June | 2,143 | 11,357 900 | 126 198 88 | 129,080 | 2,776 9 | 14,637 69 | 285 0 | | | | | 17,699 570 |
| Total | 25,887 | 136,701,100 | 1,406,581 57 | 1 381,251 | 33,322 8 | 353,757 59 | 568 25 | 0 00 | 0 00 | | | 97,706 080 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|-----------|----------|---------------|-----|--------|--------|-------------|----------------|------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2 441 | 12 937,300 | 143 747 77 | 133 | | | | | | | | 22 553 64 |
| August | 2,743 | 14,537 900 | 161,532 22 | 174 160 | 2,776 9 | 27 00 | | | | | | 21,853 41 |
| September | 2 658 | 14 087,400 | 156 526 66 | 167 930 | 2,776 9 | 33 75 | | | | | | 23 556 81 |
| October | 2,800 | 14,840,000 | 164,888 88 | 182,210 | 2 776 9 | 31 50 | | | 85 80 | | | 22 479 56 |
| November | 2,190 | 11 607,000 | 128 966 66 | 171,430 | 2 776 9 | 31 50 | | | 231 00 | | | 17,247 62 |
| December | 1,906 | 10,101 800 | 112,242 22 | 127,330 | 2,776 9 | 31 50 | | | | | | 17 308 92 |
| January | 413 | 2 188,900 | 24,321 10 | 28,560 | 2 776 9 | 9 00 | | | 61 30 | | | 23,840 97 |
| February | 2,509 | 13,297,700 | 147,752 22 | 183,610 | 2 776 9 | 31 50 | | | 211 20 | | | 24 556 13 |
| March | 2,752 | 14 585 600 | 16 062 22 | 189,420 | 2,776 9 | 31 50 | | | 262 50 | | | 23 478 63 |
| April | 2 535 | 13 435,500 | 149,283 33 | 182 280 | 2 776 9 | 31 50 | | | | | | 19,211 62 |
| May | 2,079 | 11 018 700 | 122 430 60 | 144,550 | 2 776 9 | 31 50 | | | 11 25 | | | 21 616 83 |
| June | 2,597 | 13,764,100 | 152,934 24 | 165,760 | 2 776 9 | 31 50 | | | | | | 0 0 |
| Total | 27 623 | 146 401 900 | 1 480,688 12 | 1,717 373 | 30,545 9 | 321 75 | | 0 0 | 863 05 | 0 0 | | 237 704 14 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|---------|-----------|-----------|---------------|--------|--------|--------|-------------|----------------|----------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2,726 | 14,447 800 | 160 531 | 170,730 | 1 893 51 | 19 360 87 | 31 50 | | 6 75 | 182 85 | | 21,475 5 |
| August | 2,830 | 4,995,000 | 166 026 | 171,990 | 1,893 51 | 19,503 66 | 31 50 | | | 52 50 | | 21,481 2 |
| September | 2,846 | 15,083,800 | 167 598 | 200 270 | 1 893 51 | 2,271 61 | 40 46 | | | | | 24 644 6 |
| October | 2 828 | 14 988 400 | 166,538 | 196,490 | 1,893 51 | 22,281 96 | 40 46 | | 210 00 | | | 24,425 9 |
| November | 2 600 | 13,780 000 | 153,111 | 197 750 | 1,893 51 | 22 424 82 | 40 46 | | 10 00 | | | 24,368 8 |
| December | 2 157 | 11 432 100 | 127,023 | 140,070 | 1 893 51 | 15,883 93 | 40 46 | | 7 00 | | | 17 825 4 |
| January | | | | | | | | | | | | |
| February | | | | | | | | | | | | |
| March | | | | | | | | | | | | |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| Total | 15 987 | 74 727 100 | 940 827 | 1 077 300 | 11 361 06 | 101 727 | 224 84 | 0 | 233 75 | 235 | | 134,221 |

New Terfa Station 1

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|-----------|-----------|---------------|-------|--------|--------|-------------|----------------|-----------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 1,458 | 9,972,720 | 13,186 51 | 118,800 | 2 128 69 | 13,471 92 | 115 0 | | | | | |
| August | 1 433 | 9,801,720 | 129,600 51 | 139,200 | 2,128 69 | 5 785 28 | 115 0 | | | | | |
| September | 1,424 | 9,740,160 | 128,786 55 | 136,800 | 2,128 69 | 15,513 12 | 138 0 | | 8 70 | | | |
| October | 1 406 | 9 617,040 | 127,158 63 | 142,800 | 2 128 69 | 16,193 52 | 138 0 | | 40 50 | | | |
| November | 1,348 | 9,220 320 | 121 913 11 | 130 600 | 2 128 69 | 46 811 04 | 138 0 | | 13 40 | | | |
| December | 854 | 5,841 360 | 77,235 75 | 90 000 | 2,128 69 | 10,206 50 | 115 0 | | | | | |
| January | 430 | 2,941,200 | 38 889 19 | 49,200 | 2 128 69 | 5 579 28 | 46 0 | | | | | |
| February | 1,081 | 7,394,040 | 977,765 60 | 105 600 | 2,128 69 | 11 975 01 | 75 0 | | 34 00 | | | 16,403 92 |
| March | 1 507 | 10 307,880 | 136,293 08 | 107,200 | 2 128 69 | 17,826 48 | 115 0 | | | | | 20,092 67 |
| April | 1,436 | 9,822 240 | 129,871 83 | 126,000 | 2,128 69 | 14,288 40 | 138 0 | | 59 10 | | | 16 641 19 |
| May | 1,478 | 10,150,560 | 133,670 31 | 145 200 | 2 128 69 | 16,465 68 | 161 0 | | 18 25 | | | 18 807 37 |
| June | 1,388 | 9,493,920 | 125 530 71 | 128,400 | 2 128 69 | 14 560 56 | 16 0 | | 82 00 | | | 16,954 25 |
| Total | 15 243 | 104 303,160 | 2 139,901 78 | 1 419,800 | 25,544 28 | 188 676 79 | | 0 00 | 255 95 | | | 88,899 40 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-----------|-----------|----------|---------------|------|---------|---------|-------------|----------------|----------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 1 488 | 10 177,920 | 134,574 7 | 127,200 | 2,128 69 | | | | | | | |
| August | 1 446 | 9 890,640 | 130,776 2 | 98,400 | 2,128 69 | 11 158 56 | 29 3 | 230 0 | 5 5 | | | 13 552 0 |
| September | 1,435 | 9,815,400 | 129 781 4 | 90 000 | 2,128 69 | 10 206 0 | 33 8 | 184 0 | 12 0 | | | 12 564 4 |
| October | 1,466 | 10 027 440 | 132,585 0 | 94 800 | 2 128 69 | 10,750 3 | 31 5 | 184 0 | | | | 13 094 5 |
| November | 1,434 | 9,808 560 | 129 691 0 | 109,200 | 2,128 69 | 12,383 3 | 31 5 | 184 0 | | | | 14,727 5 |
| December | 938 | 6 415 920 | 87 832 7 | 56 400 | 2 128 69 | 6 395 8 | 15 8 | 72 0 | | | | 8,612 2 |
| January | 257 | 175 788 | 23,243 0 | 20 400 | 2 128 69 | 2,313 4 | 9 0 | 46 0 | 1,419 8 | | | |
| February | 1 331 | 9 104,040 | 120,375 6 | 94,800 | 2,128 69 | 10,750 3 | 31 5 | 138 0 | | | | |
| March | 1,519 | 10 389 960 | 137 378 4 | 99 600 | 2 128 69 | 11,294 6 | 31 5 | 138 0 | | | | |
| April | 1 619 | 11 073,960 | 147 422 4 | 115 200 | 2 128 69 | 13,033 7 | 31 5 | 138 0 | | | | |
| May | 1 405 | 9 610 200 | 127 068 9 | 94 800 | 2,128 69 | 10,750 32 | 31 5 | 161 0 | 107 8 | | | |
| June | 1 443 | 9 870,120 | 130,504 9 | 331 200 | 2 128 69 | 37,558 1 | 31 5 | 161 0 | | | | |
| Total | 15,781 | 106 359 948 | 1,431 234 | 1 332,000 | 25 544 3 | 136,594 3 | 308 | 1,636 0 | 1,545 | 0 0 | | 62 551 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|---------|-----------|---------------|-------|--------|-------|-------------|----------------|----------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 1,467 | 1,034,280 | 132,675 48 | 92,400 | 2,238 88 | 10,478 16 | 161 0 | | | | | 12 909 5 |
| August | 1,486 | 10,164 240 | 134 393 83 | 84,000 | 2,238 88 | 9 525 60 | 161 0 | | 75 0 | 181 40 | | 12,213 4 |
| September | 1 498 | 10,246 320 | 135,479 11 | 72,000 | 2,238 88 | 8,164 80 | 161 0 | | | | | 10 605 1 |
| October | 1 468 | 10 041,120 | 1,327,659 10 | 78,000 | 2 238 88 | 8 845 20 | 184 0 | | | | | 11 308 5 |
| November | 1 386 | 9 480 240 | 125,349 84 | 60 000 | 2,238 88 | 68 40 | 184 0 | | 271 4 | | | 9,538 7 |
| December | 969 | 6,627,960 | 87 636 36 | 36,000 | 2 238 88 | 4,082 40 | 184 0 | | 7 5 | | | 6,553 2 |
| January | | | | | | | | | | | | |
| February | | | | | | | | | | | | |
| March | | | | | | | | | | | | |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| Total | 8 274 | 47 594 160 | 1,943,193 72 | 422 400 | 13,433 28 | 41,164 56 | 1,035 | 0 | 354 | 181 | | 63,129 |

Old Terfa Station 2

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|-----------|---------------|--------|--------|---------|-------------|----------------|------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2 354 | 12,476,200 | 554 497 8 | 247 200 | 3,916 23 | 28,032 48 | 33 75 | | 128 0 | | | |
| August | 2,361 | 12,513 300 | 558 502 2 | 291,600 | 3 916 23 | 33,067 44 | 33 75 | | 46 5 | | | |
| September | 2,396 | 12,698,800 | 564,391 1 | 446,400 | 3 916 23 | 5 621 67 | 40 50 | | 139 3 | | | |
| October | 2,091 | 11,082,300 | 492 546 7 | 390 000 | 3 916 23 | 44,226 00 | 33 75 | | 79 2 | | | |
| November | 2,094 | 11 098,200 | 493 253 3 | 381 900 | 3,916 23 | 43,307 46 | 33 75 | | | | | |
| December | 1,568 | 8,310,400 | 319 351 1 | 304,800 | 3,916 23 | 34 224 12 | 22 50 | | 189 8 | | | |
| January | 723 | 3 831,900 | 170 306 7 | 153 300 | 1 916 23 | 17 384 22 | 54 25 | | 243 0 | | | |
| February | 2,244 | 11,893,200 | 528,586 6 | 419 700 | 1 916 23 | 47,593 98 | 22 50 | | 2 916 8 | 34,721 85 | | 13 007 15 |
| March | 2,779 | 14,728,700 | 654 608 9 | 562,200 | 1 916 23 | 63 753 48 | 22 50 | | 29 0 | | | 41,671 60 |
| April | 2,364 | 12,529,200 | 556,853 3 | 468 300 | 1 916 23 | 53,105 22 | 27 00 | | 76 0 | | | 39,086 75 |
| May | 2,332 | 12 359,200 | 549 315 6 | 458,700 | 1,916 23 | 52,016 58 | 33 75 | | 40 0 | | | 386 030 60 |
| June | 2,598 | 13 769,400 | 611,973 3 | 513,300 | 1,916 23 | 58 208 22 | 29 25 | | 109 8 | | | 38,640 50 |
| Total | 25 904 | 137,290 800 | 6 054,186 5 | 4 637,400 | 34,994 76 | 480 540 87 | 387 25 | | 3 997 4 | 34 721 85 | | 518 436 60 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|----------|---------------|-------|--------|-------|-------------|----------------|-----------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2 605 | 13,806,500 | 613,622 2 | 475 200 | | | | | | | | |
| August | 2,829 | 14 993,700 | 666,386 7 | 596,100 | 1 916 3 | 67,597 7 | 27 0 | | | | | 69,540 8 |
| September | 2 764 | 14 649,200 | 651 075 6 | 526,800 | 1,916 3 | 59 739 1 | 36 0 | | | | | 61 691 2 |
| October | 2 855 | 15,131 500 | 672,511 1 | 536,100 | 1,916 3 | 60,793 7 | 31 5 | | 16 8 | | | 62 758 1 |
| November | 2 483 | 13,159,900 | 584 884 4 | 498,600 | 1 916 3 | 56 541 2 | 31 5 | | 231 0 | | | 58 719 8 |
| December | 1,857 | 9,842 100 | 437,426 7 | 389 700 | 1,916 3 | 44,192 0 | 31 5 | | 80 8 | | | 46,220 3 |
| January | 496 | 2,628 800 | 116,835 6 | 72,000 | 1,916 3 | 8 164 8 | 11 3 | | 86 9 | | | 10 178 9 |
| February | 2,495 | 13,223,500 | 587 711 1 | 511,500 | 1 916 3 | 58,004 1 | 31 5 | | | | | 59 951 6 |
| March | 2 866 | 15 189,800 | 675 102 2 | 549 000 | 1,916 3 | 62 256 6 | 31,5 | | 108 5 | | | 64 312 6 |
| April | 2,715 | 14,389,500 | 639,533 3 | 533 400 | 1,916 3 | 60,487 6 | 31 5 | | 20 5 | | | 62 455 6 |
| May | 2,071 | 10 976,300 | 487 835 5 | 400,200 | 1 916 3 | 45 382 6 | 31 5 | | | | | 47,330 1 |
| June | 2,616 | 13 864,800 | 616 213 3 | 522 300 | 1,916 3 | 59 228 8 | 31 5 | | 7 5 | | | 61 183 9 |
| Total | 28 652 | 151,855,600 | 6 749,137 7 | 5,610 900 | 21,079 3 | 582,388 3 | 326 3 | | 552 0 | | | 604 342 8 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|-----------|-----------|---------------|-------|--------|-----------|-------------|----------------|------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses | |
| | | | (HP) | (kwh) | | | | | | | | |
| July | 2,908 | 15,412,400 | 684,995 54 | 579,000 | 1,724 67 | 65 658 6 | 31 50 | | 113 462 5 | | | 121,784 27 |
| August | 2,912 | 15,433 600 | 685,937 77 | 588 000 | 1,724 67 | 66,679 2 | 31 50 | | 4,292 3 | | | 72 727 67 |
| September | 2 740 | 14,522,000 | 645 422 22 | 548,100 | 1,724 67 | 62,154 5 | 40 46 | | 182 0 | | | 14 101 17 |
| October | 2,802 | 14 850,600 | 660 026 66 | 531 300 | 1 724 67 | 60,249 4 | 40 46 | | 89 4 | | | 62,103 95 |
| November | 2,540 | 13,462 000 | 598,311 10 | 533,100 | 1,724 67 | 60,453 5 | 40 46 | | | | | 62 218 67 |
| December | 2 130 | 11,289,000 | 501 733 33 | 378 300 | 1 724 67 | 42,899 2 | 40 46 | | 109 530 0 | | | 54 194 35 |
| January | | | | | | | | | | | | |
| February | | | | | | | | | | | | |
| March | | | | | | | | | | | | |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| Total | 16 032 | 84 969,600 | 3,776 426 62 | 3 157,800 | 10,348 02 | 358 094 5 | 224 8 | | 227,556 2 | | | 387,130 08 |

New Terfa Station 2

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|---------|---------------|--------|---------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 2 146 | 14,678,640 | 630,637 8 | 477 600 | 2 550 6 | 5,459 84 | 33 75 | 115 0 | | 5 0 | |
| August | 2,139 | 14 630 760 | 628 580 8 | 559,200 | 2,550 6 | 63 413 28 | 33 75 | 115 0 | | | |
| September | 2,118 | 14,487 120 | 622,409 6 | 506,400 | 2,550 6 | 57 425 46 | 40 75 | 138 0 | | 18 0 | |
| October | 2,082 | 14,240 880 | 611 830 4 | 501,600 | 2,550 6 | 5 688 44 | 33 75 | 138 0 | | 60 0 | |
| November | 1 737 | 11,874 240 | 510,152 5 | 412,800 | 2,550 6 | 46 811 52 | 33 75 | 138 0 | | 176 4 | |
| December | 1,315 | 8,994 600 | 386,434 7 | 316,800 | 2 550 6 | 35,925 12 | 22 50 | 115 0 | | | |
| January | 609 | 4,165,560 | 178,964 8 | 156 000 | 2,550 6 | 17 690 40 | 54 25 | 46 0 | | 420 0 | 2 070 7 |
| February | 1 354 | 9,261,360 | 397,895 4 | 300,000 | 2,550 6 | 34,020 00 | 22 50 | 115 0 | | 266 0 | 39 367 6 |
| March | 1,820 | 12 448,800 | 534,837 3 | 424,800 | 2 550 6 | 48,172 34 | 22 50 | 115 0 | | 50 7 | 33,460 7 |
| April | 1,977 | 13,522,680 | 580 974 4 | 475,200 | 2,550 6 | 53,887 68 | 27 00 | 138 0 | | 750 0 | 57,352 7 |
| May | 1 464 | 10,013 760 | 430,220 8 | 345,600 | 2,550 6 | 39,191 40 | 33 75 | 161 0 | | 186 0 | 42,121 9 |
| June | 1,411 | 9,651,245 | 414 645 9 | 338,400 | 2 550 6 | 38,374 50 | 29 25 | 161 0 | | 30 278 7 | 71 393 6 |
| Total | 20 172 | 137 969,645 | 5 927,584 4 | 4,814 400 | 30,607 | 446,059 98 | 387 50 | 1 495 0 | | 32 210 8 | 245,767 1 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|----------|---------------|--------|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 2 040 | 13,953 600 | 599,488 0 | 482,400 | | | | | | | |
| August | 2 143 | 14,658,120 | 629 756 3 | 470 400 | 2 550 6 | 53,343 4 | 29 25 | 230 | | 275 0 | 56 427 67 |
| September | 2,048 | 14,008,320 | 601 838 9 | 432,000 | 2 550 6 | 48 988 8 | 33 75 | 184 | | 286 3 | 52,642 91 |
| October | 2,165 | 14,808,600 | 636,221 3 | 472,800 | 2,550 6 | 53 615 5 | 31 50 | 184 | | 57 2 | 56 438 28 |
| November | 1 529 | 16 458,360 | 449 322 1 | 360,000 | 2 550 6 | 40 824 0 | 31 50 | 240 | | | 43,645 56 |
| December | 1,041 | 7,120,440 | 305 915 2 | 247,200 | 2,550 6 | 28,032 5 | 22 50 | 78 | | | 30,683 04 |
| January | 222 | 1 518,480 | 65,238 4 | 55,200 | 2,550 6 | 6,259 7 | 11 25 | 46 | | 3 0 | |
| February | 1,400 | 9,576 000 | 411,413 3 | 316 800 | 2 550 6 | 35,925 1 | 31 50 | 138 | | | |
| March | 1 646 | 11,258,640 | 483,704 5 | 376,800 | 2,550 6 | 42 729 1 | 31 50 | 138 | | | |
| April | 1,970 | 13,474,800 | 578,917 3 | 482 400 | 2 550 6 | 54 704 2 | 31 50 | 184 | | 20 0 | |
| May | 1,907 | 13 043,880 | 560 403 7 | 448,800 | 2 550 6 | 50,893 9 | 31 50 | 207 | | 295 5 | |
| June | 2 047 | 14 001 480 | 601,545 6 | 482 400 | 2 550 6 | 54,704 2 | 31 50 | 207 | | 200 0 | |
| Total | 20,158 | 143,880 720 | 5 923,764 7 | 4 627 200 | 28,056 6 | 470,020 3 | 317 25 | 1 836 | | 1 137 0 | 239 837 46 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-----------|-----------|----------|---------------|---------|--------|---------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1,772 | 12,120,480 | 58 073 7 | 408 000 | 1 556 11 | 46 267 20 | 1,588 1 | 207 | 9 8 | | 49,628 2 |
| August | 2 164 | 14 801,760 | 635 927 5 | 523,200 | 1,556 11 | 59,330 88 | 31 5 | 207 | 1 376 3 | | 62 501 8 |
| September | 2,086 | 14,268,240 | 613 005 9 | 504 000 | 1,556 11 | 57 153 60 | 40 5 | 207 | 113 0 | | 57,514 1 |
| October | 1,745 | 11,935,800 | 512,797 3 | 405,600 | 1 556 11 | 45 995 04 | 40 5 | 230 | 7 0 | | 47,828 6 |
| November | 1,579 | 10,800,360 | 464 015 5 | 420,000 | 1 556 11 | 4 762 80 | 40 5 | 230 | | | 49,454 6 |
| December | 1 169 | 7,995,960 | 343,530 1 | 184,800 | 1,556 11 | 20,956 32 | 40 5 | 230 | 11 0 | | 22 793 9 |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 10 515 | 71 922 600 | 2,627 350 | 2,445,600 | 9,336 66 | 234,465 8 | 1 781 4 | 1,311 | 1,517 1 | | 289,721 08 |

Old Terfa Station 3

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|------------|---------|----------|---------------|--------|--------|----------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1 723 | 8,373,780 | 409,384 80 | | 2,213 5 | 36 004 50 | 33 8 | | 128 00 | | |
| August | | | | | 2 213 5 | 39,973 50 | 33 8 | | 46 50 | | |
| September | | | | | 2,213 5 | 37 733 85 | 40 5 | | 139 30 | | |
| October | | | | | 2,213 5 | 35 239 05 | 33 8 | | 79 20 | | |
| November | | | | | 2,213 5 | 32,999 40 | 33 8 | | | | |
| December | | | | | 2,213 5 | 24 862 95 | 22 5 | | 189 80 | | |
| January | | | | | 2 213 5 | 11 453 40 | 97 3 | | 243 00 | | |
| February | | | | | 2,213 5 | 29,569 05 | 22 5 | | 2,916 80 | 34 721 85 | 13,007 15 |
| March | | | | | 2 213 5 | 3 946 50 | 22 5 | | 29 00 | | 41,671 60 |
| April | | | | | 2 213 5 | 36,769 95 | 27 0 | | 76 00 | | 39 086 75 |
| May | 1,604 | 7,795,440 | 381 110 40 | 320 250 | 2,213 5 | 36 316 32 | 33 8 | | 40 00 | | 386 030 60 |
| June | | | | | 2 213 5 | 36 288 00 | 29 3 | | 109 75 | | 38,640 50 |
| Total | 3 327 | 16,169 220 | 790 495 20 | 320 250 | 26 562 0 | 361 156 47 | 430 25 | 0 00 | 3 997 35 | 34,721 85 | 518,436 60 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-----------|---------|-----------|---------------|-------|--------|-----------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | | | | | | | | | | | |
| August | | | | | 2,213 50 | 42 411 60 | 27 0 | | 35 0 | | 44 687 10 |
| September | 1,714 | 8,330 040 | 407 246 4 | 330,500 | 2,213 50 | 37,478 70 | 36 0 | | 49 0 | | 39 777 20 |
| October | | | | | 2,213 50 | 37 875 60 | 31 5 | | 9 0 | | 40,129 60 |
| November | 1 475 | 7 168 500 | 350 460 0 | 288,500 | 2,213 50 | 32 715 90 | 31 5 | | 231 0 | | 35 191 90 |
| December | | | | | 2 213 50 | 24,636 15 | 15 8 | | 6 222 80 | | 33 088 20 |
| January | | | | | 2,213 50 | 5,613 30 | 9 0 | | 18 1 | | 7,853 90 |
| February | | | | | 2,213 50 | 34 133 40 | 31 5 | | | | 36,378 40 |
| March | | | | | 2 213 50 | 36 769 95 | 31 5 | | 111 0 | | 39 125 95 |
| April | | | | | 2 213 50 | 41,532 75 | 31 5 | | 19 0 | | 43 796 75 |
| May | | | | | 2 213 50 | 37 705 50 | 31 5 | | 21 807 8 | | 61,758 30 |
| June | | | | | 2 213 50 | 40,001 85 | 31 5 | | 12,967 9 | | 55 214 70 |
| Total | 3 189 | 15 498 540 | 757,706 | 619,000 | 24,348 50 | 370,874 70 | 308 3 | 0 00 | 41,470 55 | | 437,002 00 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-----------|-----------|----------|---------------|--------|--------|---------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | | | | | 2 036 07 | 41,929 7 | 31 50 | | | | 43,997 220 |
| August | 1,810 | 8,796,600 | 480 056 0 | 393 750 | 2,036 07 | 44 651 3 | 31 50 | | 1 045 0 | | 47,796 820 |
| September | 1 811 | 8,801,460 | 430,293 6 | 369,750 | 2,036 07 | 41 929 7 | 40 46 | | 41 6 | | 44 047 780 |
| October | 1 741 | 8 461 260 | 413,661 6 | 342 500 | 2 036 07 | 38,839 1 | 40 46 | | 22 9 | | 40 938 930 |
| November | 1,563 | 7,596,180 | 371,368 8 | 346,250 | 2,036 07 | 39 264 8 | 40 46 | | 15 8 | | 41,357 080 |
| December | | | | | 2 036 07 | 27,329 4 | 40 46 | | 10 0 | | 29,415 930 |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 6 925 | 33 655,500 | 1,695 380 | 1,452,250 | 12 216 | 233,944 | 224 84 | 0 | 1 135 | 0 | 247 553 760 |

Old Terfa Station 3A

2000/2001

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-------------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | | | | | | | | | | | |
| August | 1 696 | 8,242 560 | 402,969 6 | 352 500 0 | | | | | | | |
| September | 1 702 | 8,271,720 | 404 395 2 | 332,750 0 | | | | | | | |
| October | 1 552 | 7 542 720 | 368,755 2 | 310 750 0 | | | | | | | |
| November | 1 547 | 7 518 420 | 367,567 2 | 291 000 0 | | | | | | | |
| December | 1,148 | 5,579,280 | 272,764 8 | 219 250 0 | | | | | | | |
| January | 453 | 2,201,580 | 107,632 8 | 10,100 0 | | | | | | | |
| February | 1,428 | 9,640,080 | 339,292 8 | 260 750 0 | | | | | | | |
| March | 1 641 | 7 975,260 | 389 901 6 | 347,500 0 | | | | | | | |
| April | 1 745 | 7,994,700 | 390,852 0 | 324,250 0 | | | | | | | |
| May | | | | | | | | | | | |
| June | 1,558 | 7,571 880 | 370,180 8 | 320 000 0 | | | | | | | |
| Total | 14,470 | 72,538,200 | 3,414,312 0 | 2 768,850 0 | | | | | | | |

2001/2002

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1 771 | 8 607 030 | 420 789 6 | 325,250 | | | | | | | |
| August | 1,767 | 8,587 620 | 419,839 2 | 374,000 | | | | | | | |
| September | 1 768 | 8,592,480 | 420 076 8 | 334 000 | | | | | | | |
| October | | | | | | | | | | | |
| November | | | | | | | | | | | |
| December | 975 | 4 738,500 | 231,660 0 | 217,250 | | | | | | | |
| January | 304 | 1 477,440 | 72 230 4 | 49 500 | | | | | | | |
| February | 1,481 | 7,197 660 | 351,885 6 | 301 000 | | | | | | | |
| March | 1 689 | 8,208,540 | 401,306 4 | 324,250 | | | | | | | |
| April | 1 769 | 8,597,340 | 420,314 4 | 366 250 | | | | | | | |
| May | 1,690 | 8 213 400 | 401,544 0 | 332 500 | | | | | | | |
| June | 1 749 | 8,500,140 | 415,562 4 | 352,750 | | | | | | | |
| Total | 14,963 | 72,720,150 | 3 555,208 8 | 2,976,750 | | | | | | | |

2002/2003

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-----------|---------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1 867 | 9 073,620 | 443,599 2 | 369,750 | | | | | | | |
| August | | | | | | | | | | | |
| September | | | | | | | | | | | |
| October | | | | | | | | | | | |
| November | | | | | | | | | | | |
| December | 1,235 | 6,002 100 | 293 436 0 | 241,000 | | | | | | | |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 3,102 | 15,075,720 | 737,035 2 | 610 750 | | | | | | | |

New Tefar Station 3A

2000/2001

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1 450 | 10,962,000 | 144,942 0 | 522,000 | | | | | | | |
| August | 1,442 | 10,901 520 | 518,831 6 | 477,000 | | | | | | | |
| September | 1 383 | 80,455 480 | 497,603 4 | 678,000 | | | | | | | |
| October | 1 327 | 10 032 120 | 477,454 6 | 333,000 | | | | | | | |
| November | 1,054 | 1,968 240 | 379 730 9 | 360,000 | | | | | | | |
| December | 803 | 6,070,680 | 288,919 4 | 921 000 | | | | | | | |
| January | 423 | 3,197,880 | 152 195 4 | 171 000 | | | | | | | |
| February | 1,067 | 8,066,520 | 383 906 6 | 174,000 | | | | | | | |
| March | 1,362 | 10 296,720 | 490 047 6 | 192 000 | | | | | | | |
| April | 1,327 | 10,032 120 | 47,744 6 | 444 000 | | | | | | | |
| May | 1,050 | 7,938,000 | 377,790 0 | 408,000 | | | | | | | |
| June | 1 295 | 9,790 200 | 465,941 0 | 495,000 | | | | | | | |
| Total | 13 983 | 169 711,480 | 4,225 107 1 | 5,175,000 | | | | | | | |

2001/2002

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|--------------|-----------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1,368 | 10,342 080 | 492 206 4 | 53,100 | | | | | | | |
| August | 1 389 | 10,500 840 | 499,762 2 | 54,600 | | | | | | | |
| September | 1,406 | 10 629,360 | 505 878 8 | 50 100 | | | | | | | |
| October | 1,413 | 10,682 280 | 508 397 4 | 522 000 | | | | | | | |
| November | 1,182 | 8 935,920 | 425 283 6 | 471,000 | | | | | | | |
| December | 805 | 6,085 800 | 289,639 0 | 351 000 | | | | | | | |
| January | 226 | 1 708,560 | 81 314 8 | 75 000 | | | | | | | |
| February | 1,160 | 8 769,600 | 417,368 0 | 330,000 | | | | | | | |
| March | 1 428 | 10,795,680 | 513,794 4 | 351 000 | | | | | | | |
| April | 1,381 | 10 440,360 | 496,883 8 | 354,000 | | | | | | | |
| May | 1,221 | 9 630,760 | 439 315 8 | 30,000 | | | | | | | |
| June | 1,393 | 1,053,108 | 501,201 4 | 366,000 | | | | | | | |
| Total | 14 372 | 99 574,348 | 5 171,045 60 | 3 007,800 | | | | | | | |

2002/2003

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-------------|-----------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 1,436 | 10 856 160 | 516,672 8 | 351 000 | | | | | | | |
| August | 1 461 | 11,045,160 | 525,667 8 | 375,000 | | | | | | | |
| September | 1,416 | 10 704,960 | 509 476 8 | 372,000 | | | | | | | |
| October | 1,432 | 10,825 920 | 515,233 6 | 351 000 | | | | | | | |
| November | 1 289 | 9,744,840 | 463,782 2 | 354 000 | | | | | | | |
| December | 969 | 7,325,640 | 348,646 2 | 243 000 | | | | | | | |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 8,003 | 60 502 680 | 2 879,479 4 | 2,046,000 | | | | | | | |

New Terfa Station 3B

2000/2001

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-----------|-------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 364 | 1,572,480 | 41,799.84 | | | | | | | | |
| August | 331 | 1,249,992 | 39,919.36 | | | | | | | | |
| September | 280 | 1,209,600 | 32,076.80 | | | | | | | | |
| October | 332 | 1,434,240 | 38,033.42 | | | | | | | | |
| November | 376 | 1,624,320 | 43,074.56 | | | | | | | | |
| December | 186 | 803,520 | 21,308.16 | | | | | | | | |
| January | 73 | 315,360 | 8,362.88 | | | | | | | | |
| February | 264 | 1,140,480 | 30,243.84 | | | | | | | | |
| March | 351 | 1,516,320 | 40,210.56 | | | | | | | | |
| April | 344 | 1,486,080 | 39,408.64 | | | | | | | | |
| May | 349 | 1,507,680 | 39,981.44 | | | | | | | | |
| June | 285 | 1,231,200 | 32,649.60 | | | | | | | | |
| Total | 3,535 | 13,966,272 | 407,069.1 | | | | | | | | |

2001/2002

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|-----------|-------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 307 | 1,326,240 | 35,169.9 | | | | | | | | |
| August | 362 | 1,563,840 | 41,470.7 | | | | | | | | |
| September | 347 | 1,499,040 | 39,752.3 | | | | | | | | |
| October | 323 | 1,395,360 | 37,002.9 | | | | | | | | |
| November | 358 | 1,546,560 | 41,012.5 | | | | | | | | |
| December | 217 | 937,440 | 24,859.5 | | | | | | | | |
| January | 35 | 151,200 | 4,009.6 | | | | | | | | |
| February | 288 | 1,244,160 | 32,993.3 | | | | | | | | |
| March | 347 | 1,494,720 | 39,637.8 | | | | | | | | |
| April | 304 | 1,313,280 | 34,826.2 | | | | | | | | |
| May | 299 | 1,291,680 | 34,253.4 | | | | | | | | |
| June | 356 | 1,537,920 | 40,783.4 | | | | | | | | |
| Total | 3,543 | 15,301,440 | 405,771.5 | | | | | | | | |

2002/2003

| Month | Operating Data | | | | Expenses Data | | | | | | |
|-----------|----------------|---------------------------------|------------|-------|---------------|-------|-----|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 316 | 1,365,120 | 36,200.96 | | | | | | | | |
| August | 291 | 1,257,120 | 33,336.96 | | | | | | | | |
| September | 337 | 1,455,840 | 38,606.72 | | | | | | | | |
| October | 304 | 1,313,280 | 34,826.24 | | | | | | | | |
| November | 158 | 682,560 | 18,100.48 | | | | | | | | |
| December | 299 | 1,291,680 | 34,253.44 | | | | | | | | |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 1,705 | 7,365,600 | 195,324.80 | | | | | | | | |

Old Terfa Station 4

2000/2001

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-----------|---------|----------|---------------|-------|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 642 | 839,094 | 20 200 4 | 17 250 | 211 22 | 1,956 15 | 13 5 | 36 8 | | | |
| August | 742 | 969,794 | 23,346 9 | 16,600 | 211 22 | 1,882 44 | 13 5 | 46 0 | | | |
| September | 767 | 1 002,469 | 24 133 5 | 18 700 | 211 22 | 2 120 58 | 15 8 | 46 0 | | | |
| October | 648 | 846,936 | 20,389 2 | 18 950 | 211 22 | 2,148 93 | 13 5 | 46 0 | | | |
| November | 588 | 768 516 | 18 501 3 | 15 450 | 211 22 | 1 752 03 | 12 5 | 46 0 | | | |
| December | 475 | 620 825 | 14,945 8 | 15 000 | 211 22 | 1,701 00 | 11 3 | 27 6 | | 24 80 | |
| January | 176 | 230 032 | 5,537 8 | 5 250 | 211 22 | 595 35 | 4 5 | 13 8 | | 280 00 | 3,004 87 |
| February | 480 | 758,060 | 18,249 5 | 12 500 | 211 22 | 1,417 50 | 11 3 | 27 6 | | 1 147 97 | 4 715 54 |
| March | 666 | 870,462 | 20,955 6 | 8 700 | 211 22 | 986 58 | 11 3 | 26 6 | | 45 25 | 31 819 00 |
| April | 631 | 824,717 | 19 854 3 | 18,600 | 211 22 | 2,109 24 | 11 3 | 46 0 | | | 4,277 71 |
| May | 623 | 814 261 | 19,602 6 | 13,250 | 211 22 | 1,502 55 | 11 3 | 59 8 | | | 3 684 82 |
| June | 685 | 895,295 | 21 553 4 | 16,000 | 211 22 | 1,814 40 | 9 0 | 46 0 | | 111 20 | 4,091 82 |
| Total | 7,123 | 9,440 461 | 227,270 2 | 176,250 | 2,534 64 | 19,986 75 | 138 5 | 468 2 | | 1 609 22 | 51,593 76 |

2001/2002

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|------------|---------|-----------|---------------|--------|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1,000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 751 | 981,557 | 23 630 1 | 19 350 | 2 111 22 | | | | | | |
| August | 668 | 893 076 | 21,018 5 | 18,200 | 2,111 22 | 2,097 9 | 11 25 | 92 0 | | 1 25 | 4 313 62 |
| September | 755 | 986 785 | 23,755 9 | 15,500 | 2,111 22 | 1,757 7 | 15 75 | 69 0 | | | 3 953 62 |
| October | 813 | 1 062 591 | 25,580 9 | 20 050 | 2,111 22 | 2 273 7 | 11 25 | 69 0 | | 9 50 | 4,474 64 |
| November | 586 | 765,902 | 18 438 4 | 16,750 | 2 111 22 | 1,899 5 | 11 25 | 69 0 | | | 4,090 92 |
| December | 490 | 640 430 | 15,417 8 | 12,300 | 2,111 22 | 1,394 8 | 11 25 | 30 0 | | | 3,547 29 |
| January | 107 | 139,849 | 3,367 0 | 1,500 | 2,111 22 | 170 1 | 4 50 | 23 0 | | | 2,308 82 |
| February | 710 | 927,970 | 22,340 8 | 12 500 | 2 111 22 | 1 417 5 | 11 25 | 46 0 | | | 3 085 97 |
| March | 624 | 815 568 | 19,634 0 | 18 150 | 2 111 22 | 2,058 2 | 11 50 | 46 0 | | | 7,226 93 |
| April | 721 | 942,347 | 22 686 1 | 17 500 | 2,111 22 | 1,984 5 | 11 50 | 46 0 | | | 4 153 55 |
| May | 678 | 886,146 | 21,333 1 | 18,100 | 2,111 22 | 2,052 5 | 11 50 | 46 0 | | 5 0 | 4 226 26 |
| June | 683 | 879 611 | 21,175 8 | 18 650 | 2,111 22 | 211 491 0 | 11 50 | 46 0 | | | 4 283 63 |
| Total | 7,586 | 9 921 832 | 238,378 44 | 188 550 | 25 334 64 | 228 597 4 | 122 50 | 582 0 | | 15 75 | 45 665 25 |

2002/2003

| Month | Operating Data | | | | | Expenses Data | | | | | |
|-----------|----------------|---------------------------------|-----------|---------|----------|---------------|------|--------|------|-------------|----------------|
| | Working Hours | Discharge × 1 000m ³ | Power | | Wages | Power | Oil | Grease | Fuel | Maintenance | Other Expenses |
| | | | (HP) | (kwh) | | | | | | | |
| July | 655 | 856,085 | 20 609 5 | 15,950 | 1 343 75 | 1 808 7 | 11 5 | 46 0 | | | 3,210 0 |
| August | 852 | 1,048,214 | 25 234 8 | 16,550 | 1 343 75 | 1 876 8 | 11 5 | 46 0 | | | 3 278 0 |
| September | 688 | 899,216 | 21 647 8 | 22,000 | 1 343 75 | 2 494 8 | 14 5 | 69 0 | | | 3 922 0 |
| October | 815 | 1,065,205 | 25 643 8 | 10,000 | 1 343 75 | 1 134 0 | 14 5 | 69 0 | | | 2,561 2 |
| November | 703 | 918,821 | 22 119 8 | 26,250 | 1 343 75 | 2 976 8 | 14 5 | 69 0 | | | 4,404 0 |
| December | 527 | 688 789 | 16,582 0 | 11,400 | 1,343 75 | 1 292 8 | 14 5 | 69 0 | 10 5 | | 2 730 5 |
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Total | 4,240 | 5 476,330 | 131 837 6 | 102,150 | 8 062 50 | 11 583 8 | 81 | 368 | 11 | 0 | 20 106 |

Last 5-year's Expenditure by the Project of ID

(Unit: Thousand LE)

| Financial Year | Financial Expenditure on Finance Sources | | | | | | Total |
|--|--|---------------|----------------|-----------------|----------------|----------------|----------------|
| | Local Portion | | | Foreign Portion | | | |
| | National Bank | Self Finannce | Local Total | Grant Aids | External loans | Foreign Total | |
| 1 Naga Hamady Regulator and its Electrical Station | | | | | | | |
| 1997/98 | 41 | | 41 | 4,156 | | 4,156 | 4,197 |
| 1998/99 | 1,079 | | 1,079 | 1,427 | 1,385 | 2,812 | 3,891 |
| 1999/00 | 2,025 | | 2,025 | 1,356 | 2,991 | 4,347 | 6,372 |
| 2000/01 | 14,517 | | 14,517 | 1,162 | 3,832 | 4,994 | 19,511 |
| 2001/02 | 15,593 | | 15,593 | 1,360 | 15,594 | 16,954 | 32,547 |
| Total | 33,255 | 0 | 33,255 | 9,461 | 23,802 | 33,263 | 66,518 |
| 2 Improvement of Irrigation Systems in different Areas | | | | | | | |
| 1997/98 | 25,791 | 24 | 25,815 | 2,052 | 13,920 | 15,972 | 41,787 |
| 1998/99 | 20,964 | 4,089 | 25,053 | 9,186 | 11,852 | 21,038 | 46,091 |
| 1999/00 | 37,072 | 337 | 37,409 | 5,116 | 32,076 | 37,192 | 74,601 |
| 2000/01 | 47,667 | 43 | 47,710 | 31,390 | 54,400 | 85,790 | 133,500 |
| 2001/02 | 73,966 | | 73,966 | 48,178 | 74,801 | 122,979 | 196,945 |
| Total | 205,460 | 4,493 | 209,953 | 95,922 | 187,049 | 282,971 | 492,924 |
| 3 Protection and Improvement of River Nile Canal | | | | | | | |
| 1997/98 | 5,731 | 312 | 6,043 | | | 0 | 6,043 |
| 1998/99 | 9,637 | | 9,637 | | | 0 | 9,637 |
| 1999/00 | 5,852 | | 5,852 | | | 0 | 5,852 |
| 2000/01 | 6,839 | 826 | 7,665 | | | 0 | 7,665 |
| 2001/02 | 11,658 | | 11,658 | | | 0 | 11,658 |
| Total | 39,717 | 1,138 | 40,855 | 0 | 0 | 0 | 40,855 |
| 4 Overcoming Irrigation Difficulties in West Delta Area | | | | | | | |
| 1997/98 | | | 0 | | | 0 | 0 |
| 1998/99 | | | 0 | | | 0 | 0 |
| 1999/00 | | | 0 | | | 0 | 0 |
| 2000/01 | | | 0 | | | 0 | 0 |
| 2001/02 | 501 | | 501 | | | 0 | 501 |
| Total | 501 | 0 | 501 | 0 | 0 | 0 | 501 |
| 5 Esna New Lock | | | | | | | |
| 1997/98 | | | 0 | | | 0 | 0 |
| 1998/99 | | | 0 | | | 0 | 0 |
| 1999/00 | | | 0 | | | 0 | 0 |
| 2000/01 | | | 0 | | | 0 | 0 |
| 2001/02 | 500 | | 500 | | | 0 | 500 |
| Total | 500 | 0 | 500 | 0 | 0 | 0 | 500 |
| 6 National Structure for Expansion in Upper Egypt | | | | | | | |
| 1997/98 | 1,752 | | 1,752 | | | 0 | 1,752 |
| 1998/99 | 16,302 | | 16,302 | | | 0 | 16,302 |
| 1999/00 | 9,254 | | 9,254 | | | 0 | 9,254 |
| 2000/01 | 5,803 | 101 | 5,904 | | | 0 | 5,904 |
| 2001/02 | 3,030 | | 3,030 | | | 0 | 3,030 |
| Total | 36,141 | 101 | 36,242 | 0 | 0 | 0 | 36,242 |
| 7 National Structure for Expansion in Middle Egypt | | | | | | | |
| 1997/98 | 429 | | 429 | | | 0 | 429 |
| 1998/99 | 562 | | 562 | | | 0 | 562 |
| 1999/00 | 971 | | 971 | | | 0 | 971 |
| 2000/01 | 757 | 66 | 823 | | | 0 | 823 |
| 2001/02 | 795 | | 795 | | | 0 | 795 |
| Total | 3,514 | 66 | 3,580 | 0 | 0 | 0 | 3,580 |

(Unit:Thousand LE)

| Financial Year | Financial Expenditure on Finance Sources | | | | | | Total |
|--|--|--------------|----------------|-----------------|----------------|---------------|----------------|
| | Local Portion | | | Foreign Portion | | | |
| | National Bank | Self Finance | Local Total | Grant Aids | External loans | Foreign Total | |
| 8 Reusing Drainage Water in Irrigation | | | | | | | |
| 1997/98 | 561 | | 561 | | | 0 | 561 |
| 1998/99 | 150 | | 150 | | | 0 | 150 |
| 1999/00 | 100 | | 100 | | | 0 | 100 |
| 2000/01 | 100 | | 100 | | | 0 | 100 |
| 2001/02 | 2,445 | | 2,445 | | | 0 | 2,445 |
| Total | 3,356 | 0 | 3,356 | 0 | 0 | 0 | 3,356 |
| 9 Resisting Water Grass | | | | | | | |
| 1997/98 | 3,252 | 822 | 4,074 | | | 0 | 4,074 |
| 1998/99 | | 6,956 | 6,956 | | | 0 | 6,956 |
| 1999/00 | 4,270 | | 4,270 | | | 0 | 4,270 |
| 2000/01 | 4,021 | | 4,021 | | | 0 | 4,021 |
| 2001/02 | 2,788 | | 2,788 | | | 0 | 2,788 |
| Total | 14,331 | 7,778 | 22,109 | 0 | 0 | 0 | 22,109 |
| 10 Getting use of and Prevention from flood | | | | | | | |
| 1997/98 | 44,583 | 137 | 44,720 | | | 0 | 44,720 |
| 1998/99 | 31,250 | 441 | 31,691 | | | 0 | 31,691 |
| 1999/00 | 27,930 | | 27,930 | | | 0 | 27,930 |
| 2000/01 | 19,197 | 75 | 19,272 | | | 0 | 19,272 |
| 2001/02 | 17,916 | | 17,916 | | | 0 | 17,916 |
| Total | 140,876 | 653 | 141,529 | 0 | 0 | 0 | 141,529 |
| 11 Reusing Agriculture Drainage water in Irrigation | | | | | | | |
| 1997/98 | 6,160 | 568 | 6,728 | | | 0 | 6,728 |
| 1998/99 | 16,628 | 4,881 | 21,509 | | | 0 | 21,509 |
| 1999/00 | 15,722 | 288 | 16,010 | | | 0 | 16,010 |
| 2000/01 | 5,639 | 1,000 | 6,639 | | | 0 | 6,639 |
| 2001/02 | 6,208 | | 6,208 | | | 0 | 6,208 |
| Total | 50,357 | 6,737 | 57,094 | 0 | 0 | 0 | 57,094 |
| 12 Supporting Nile Barrages | | | | | | | |
| 1997/98 | 4,138 | | 4,138 | | | 0 | 4,138 |
| 1998/99 | 8,792 | 33 | 8,825 | | | 0 | 8,825 |
| 1999/00 | 29,727 | | 29,727 | | | 0 | 29,727 |
| 2000/01 | 24,238 | | 24,238 | | | 0 | 24,238 |
| 2001/02 | 17,586 | | 17,586 | | | 0 | 17,586 |
| Total | 84,481 | 33 | 84,514 | 0 | 0 | 0 | 84,514 |
| 13 Using winter Water Dam | | | | | | | |
| 1997/98 | | | 0 | | | 0 | 0 |
| 1998/99 | | | 0 | | | 0 | 0 |
| 1999/00 | 45 | | 45 | | | 0 | 45 |
| 2000/01 | | | 0 | | | 0 | 0 |
| 2001/02 | | | 0 | | | 0 | 0 |
| Total | 45 | 0 | 45 | 0 | 0 | 0 | 45 |
| 14 El-Saf Canal | | | | | | | |
| 1997/98 | 620 | | 620 | | | 0 | 620 |
| 1998/99 | 1,572 | 772 | 2,344 | | | 0 | 2,344 |
| 1999/00 | 4,073 | 2,015 | 6,088 | | | 0 | 6,088 |
| 2000/01 | 20,000 | | 20,000 | | | 0 | 20,000 |
| 2001/02 | 17,695 | | 17,695 | | | 0 | 17,695 |
| Total | 43,960 | 2,787 | 46,747 | 0 | 0 | 0 | 46,747 |
| 15 Improvement and Protection of Rasheed Branch | | | | | | | |
| 1997/98 | 342 | | 342 | | | 0 | 342 |
| 1998/99 | 140 | | 140 | | | 0 | 140 |
| 1999/00 | 250 | | 250 | | | 0 | 250 |
| 2000/01 | 100 | | 100 | | | 0 | 100 |
| 2001/02 | 1,600 | | 1,600 | | | 0 | 1,600 |
| Total | 2,432 | 0 | 2,432 | 0 | 0 | 0 | 2,432 |

(Unit: Thousand LE)

| Financial Year | Financial Expenditure on Finance Sources | | | | | | Total |
|---|--|---------------|------------------|-----------------|----------------|----------------|------------------|
| | Local Portion | | | Foreign Portion | | | |
| | National Bank | Self Finance | Local Total | Grant Aids | External loans | Foreign Total | |
| 16 Total of Irrigation Department | | | | | | | |
| 1997/98 | 284,770 | 7,908 | 292,678 | 56,233 | 13,920 | 70,153 | 362,831 |
| 1998/99 | 271,478 | 26,501 | 297,979 | 88,621 | 40,377 | 128,998 | 426,977 |
| 1999/00 | 327,203 | 10,253 | 337,456 | 8,817 | 35,067 | 43,884 | 381,340 |
| 2000/01 | 246,344 | 9,175 | 255,519 | 67,241 | 58,232 | 125,473 | 380,992 |
| 2001/02 | 312,335 | | 312,335 | 80,482 | 90,395 | 170,877 | 483,212 |
| Total | 1,442,130 | 53,837 | 1,495,967 | 301,394 | 237,991 | 539,385 | 2,035,352 |
| 17 Development of Water Resources at Sinai | | | | | | | |
| 1997/98 | 9,922 | 333 | 10,255 | | | 0 | 10,255 |
| 1998/99 | 12,764 | 874 | 13,638 | | | 0 | 13,638 |
| 1999/00 | 13,436 | 806 | 14,242 | | | 0 | 14,242 |
| 2000/01 | 11,548 | 899 | 12,447 | | | 0 | 12,447 |
| 2001/02 | 11,550 | | 11,550 | | | 0 | 11,550 |
| Total | 59,220 | 2,912 | 62,132 | 0 | 0 | 0 | 62,132 |
| 18 Underground Wells for Irrigation | | | | | | | |
| 1997/98 | 18,808 | 3,968 | 22,776 | | | 0 | 22,776 |
| 1998/99 | 19,793 | 6,876 | 26,669 | 3,800 | | 3,800 | 30,469 |
| 1999/00 | 30,088 | 4,955 | 35,043 | | | 0 | 35,043 |
| 2000/01 | 17,475 | 4,430 | 21,905 | | | 0 | 21,905 |
| 2001/02 | 25,508 | | 25,508 | | | 0 | 25,508 |
| Total | 111,672 | 20,229 | 131,901 | 3,800 | 0 | 3,800 | 135,701 |
| 19 El-Nasr Canal and El-Hamam and El-Bously | | | | | | | |
| 1997/98 | 8,223 | 41 | 8,264 | 13,000 | | 13,000 | 21,264 |
| 1998/99 | 10,551 | 55 | 10,606 | 13,000 | | 13,000 | 23,606 |
| 1999/00 | 3,636 | 2 | 3,638 | | | 0 | 3,638 |
| 2000/01 | 4,653 | 150 | 4,803 | | | 0 | 4,803 |
| 2001/02 | 5,558 | | 5,558 | | | 0 | 5,558 |
| Total | 32,621 | 248 | 32,869 | 26,000 | 0 | 26,000 | 58,869 |
| 20 Feeding Bahr El- Wahbi from El-Omom Drainage | | | | | | | |
| 1997/98 | 547 | | 547 | | | 0 | 547 |
| 1998/99 | 98 | | 98 | | | 0 | 98 |
| 1999/00 | 5 | | 5 | | | 0 | 5 |
| 2000/01 | 1,500 | | 1,500 | | | 0 | 1,500 |
| 2001/02 | 500 | | 500 | | | 0 | 500 |
| Total | 2,650 | 0 | 2,650 | 0 | 0 | 0 | 2,650 |
| 21 El-Salam Canal - First Stage | | | | | | | |
| 1997/98 | 53,776 | 71 | 53,847 | | | 0 | 53,847 |
| 1998/99 | 25,512 | 160 | 25,672 | | | 0 | 25,672 |
| 1999/00 | 25,120 | | 25,120 | | | 0 | 25,120 |
| 2000/01 | 17,238 | | 17,238 | | | 0 | 17,238 |
| 2001/02 | 46,689 | | 46,689 | | | 0 | 46,689 |
| Total | 168,335 | 231 | 168,566 | 0 | 0 | 0 | 168,566 |
| 22 Expansion of El-Riah El-Nassery and El-Noubaria Canal | | | | | | | |
| 1997/98 | 16,611 | 108 | 16,719 | | | 0 | 16,719 |
| 1998/99 | 6,764 | 1,003 | 7,767 | | | 0 | 7,767 |
| 1999/00 | 5,952 | 376 | 6,328 | | | 0 | 6,328 |
| 2000/01 | 2,066 | 531 | 2,597 | | | 0 | 2,597 |
| 2001/02 | 2,064 | | 2,064 | | | 0 | 2,064 |
| Total | 33,457 | 2,018 | 35,475 | 0 | 0 | 0 | 35,475 |
| 23 Feeding El-Noubaria Canal from El-Omom | | | | | | | |
| 1997/98 | 3,369 | | 3,369 | | | 0 | 3,369 |
| 1998/99 | 1,567 | | 1,567 | | | 0 | 1,567 |
| 1999/00 | 1,093 | 46 | 1,139 | | | 0 | 1,139 |
| 2000/01 | 1,938 | | 1,938 | | | 0 | 1,938 |
| 2001/02 | 500 | | 500 | | | 0 | 500 |
| Total | 8,467 | 46 | 8,513 | 0 | 0 | 0 | 8,513 |

(Unit: Thousand LE)

| Financial Year | Financial Expenditure on Finance Sources | | | | | | Total |
|---|--|--------------|-------------|-----------------|----------------|---------------|---------|
| | Local Portion | | | Foreign Portion | | | |
| | National Bank | Self Finance | Local Total | Grant Aids | External loans | Foreign Total | |
| 24 El-Esmailia Canal and its branches | | | | | | | |
| 1997/98 | 18,100 | | 18,100 | 37,000 | | 37,000 | 55,100 |
| 1998/99 | 20,402 | | 20,402 | 56,573 | | 56,573 | 76,975 |
| 1999/00 | 40,311 | | 40,311 | 771 | | 771 | 41,082 |
| 2000/01 | 20,048 | | 20,048 | 6,397 | | 6,397 | 26,445 |
| 2001/02 | 12,988 | | 12,988 | 897 | | 897 | 13,885 |
| Total | 111,849 | 0 | 111,849 | 101,638 | 0 | 101,638 | 213,487 |
| 25 Rationlisation and Administration of Irrigation Systems | | | | | | | |
| 1997/98 | 35,049 | 48 | 35,097 | 25 | | 25 | 35,122 |
| 1998/99 | 38,050 | | 38,050 | 4,565 | | 4,565 | 42,615 |
| 1999/00 | 51,571 | 1,433 | 53,004 | 1,574 | | 1,574 | 54,578 |
| 2000/01 | 4,393 | 161 | 4,554 | 16,193 | | 16,193 | 20,747 |
| 2001/02 | 22,495 | | 22,495 | 18,605 | | 18,605 | 41,100 |
| Total | 151,558 | 1,642 | 153,200 | 40,962 | 0 | 40,962 | 194,162 |
| 26 Improvement and Rehabilitation of Irrigation Utilities | | | | | | | |
| 1997/98 | 19,541 | 1,048 | 20,589 | | | 0 | 20,589 |
| 1998/99 | 23,571 | | 23,571 | | | 0 | 23,571 |
| 1999/00 | 17,149 | | 17,149 | | | 0 | 17,149 |
| 2000/01 | 15,346 | 893 | 16,239 | 7,750 | | 7,750 | 23,989 |
| 2001/02 | 8,778 | | 8,778 | 7,750 | | 7,750 | 16,528 |
| Total | 84,385 | 1,941 | 86,326 | 15,500 | 0 | 15,500 | 101,826 |
| 27 Assuit Barrages | | | | | | | |
| 1997/98 | 200 | | 200 | | | 0 | 200 |
| 1998/99 | | | 0 | | | 0 | 0 |
| 1999/00 | 29 | | 29 | | | 0 | 29 |
| 2000/01 | | | 0 | 4,349 | | 4,349 | 4,349 |
| 2001/02 | 708 | | 708 | 5,051 | | 5,051 | 5,759 |
| Total | 937 | 0 | 937 | 9,400 | 0 | 9,400 | 10,337 |
| 28 Barrage and Lock of Damitta Dam | | | | | | | |
| 1997/98 | | | 0 | | | 0 | 0 |
| 1998/99 | 4,778 | | 4,778 | | | 0 | 4,778 |
| 1999/00 | 28 | | 28 | | | 0 | 28 |
| 2000/01 | | | 0 | | | 0 | 0 |
| 2001/02 | | | 0 | | | 0 | 0 |
| Total | 4,806 | 0 | 4,806 | 0 | 0 | 0 | 4,806 |
| 29 Nagea Hamady Lock | | | | | | | |
| 1997/98 | 860 | | 860 | | | 0 | 860 |
| 1998/99 | | | 0 | | | 0 | 0 |
| 1999/00 | | | 0 | | | 0 | 0 |
| 2000/01 | | | 0 | | | 0 | 0 |
| 2001/02 | | | 0 | | | 0 | 0 |
| Total | 860 | 0 | 860 | 0 | 0 | 0 | 860 |
| 30 Esna Barrages | | | | | | | |
| 1997/98 | 6,361 | 428 | 6,789 | | | 0 | 6,789 |
| 1998/99 | 552 | 361 | 913 | 70 | 27,140 | 27,210 | 28,123 |
| 1999/00 | 1,494 | | 1,494 | | | 0 | 1,494 |
| 2000/01 | 1,261 | | 1,261 | | | 0 | 1,261 |
| 2001/02 | 2,716 | | 2,716 | | | 0 | 2,716 |
| Total | 12,384 | 789 | 13,173 | 70 | 27,140 | 27,210 | 40,383 |

| NUMBER | REFERENCE |
|------------|--|
| Dwg. No. 4 | CROSS SECTION (Sec. 1) |
| Dwg. No. 4 | CROSS SECTION (Sec. 2) |
| Dwg. No. 4 | CROSS SECTION (Sec. 3) |
| Dwg. No. 3 | LONGITUDINAL PROFILE (Sec. LONGITUDINAL) |

NOTES:

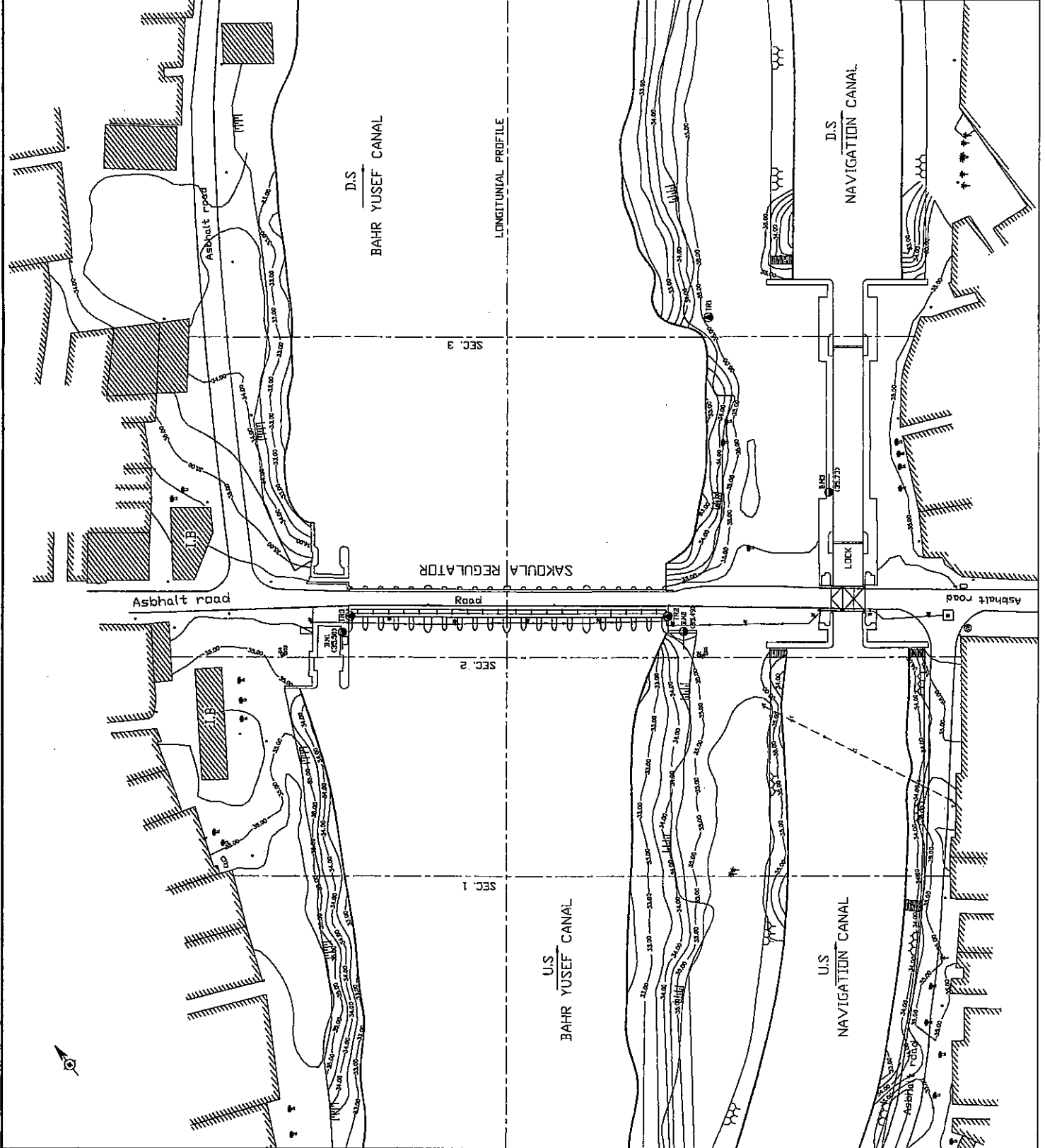
- 1- ALL SURVEYING WERE TIED WITH MAIN TRAVERSE POINT TRI WITH LOCAL COORDINATES (1000,1000)
- 2- ALL LEVELS AND BENCH MARKS WERE TIED WITH THE NATIONAL BENCH MARK AT THE SAKOULA REGULATOR
- 3- ALL DISTANCES AND LEVELS ARE IN METERS

| STATION NO. | COORDINATES | | HEIGHT(m) |
|-------------|-------------|-------------|-----------|
| | EASTING(m) | NORTHING(m) | |
| TRI | 1000.00 | 1000.00 | 35.59 |
| TRE | 959.55 | 941.68 | 38.07 |
| TR3 | 870.48 | 956.91 | 38.04 |
| B.M1 | 866.07 | 994.23 | 35.50 |
| B.M2 | 940.98 | 935.71 | 35.50 |
| BK3 | 995.50 | 941.33 | 35.73 |
| G1 | 941.41 | 927.13 | 35.23 |
| G2 | 940.18 | 927.08 | 35.15 |
| G3 | 850.08 | 993.36 | 35.86 |
| G4 | 849.21 | 999.57 | 35.89 |

LEGEND

- Traverse Station
- Bench Mark
- ROAD
- ▒ Building
- Electric line
- Water pipeline
- Telephone line
- Sewage mainline
- Spot level
- Vegetation area
- Tree
- Palm
- Pole Electric
- Bore Hole
- slope
- Pitching

scale 1 : 1000



| | |
|--|------------|
| ARAB REPUBLIC OF EGYPT | |
| MINISTRY OF PUBLIC WORKS AND WATER RESOURCES | |
| IRRIGATION IMPROVEMENT SECTOR | |
| THE PROJECT FOR REHABILITATION AND IMPROVEMENT | |
| SAKOULA REGULATOR ON BAHR YUSEF CANAL | |
| DETAILED PLAN | |
| Date | March 2003 |
| Dwg. No. | 2 |
| SANYU CONSULTANTS INC. | |
| JAPAN INTERNATIONAL COOPERATION AGENCY | |

| NUMBER | REFERENCE |
|--------------|--|
| Dwg. No. 1-2 | CROSS SECTION (Sec. 1) |
| Dwg. No. 1-2 | CROSS SECTION (Sec. 2) |
| Dwg. No. 1-2 | CROSS SECTION (Sec. 3) |
| Dwg. No. 1-2 | LONGITUDINAL PROFILE (Sec. LONGITUDINAL) |

NOTES:

- 1- ALL SURVEYING WERE TIED WITH MAIN TRAVERSE POINT TRI WITH LOCAL COORDINATES (1000,1000)
- 2- ALL LEVELS AND BENCH MARKS WERE TIED WITH THE NATIONAL BENCH MARK AT THE SAKOULA REGULATOR
- 3- ALL DISTANCES AND LEVELS ARE IN METERS

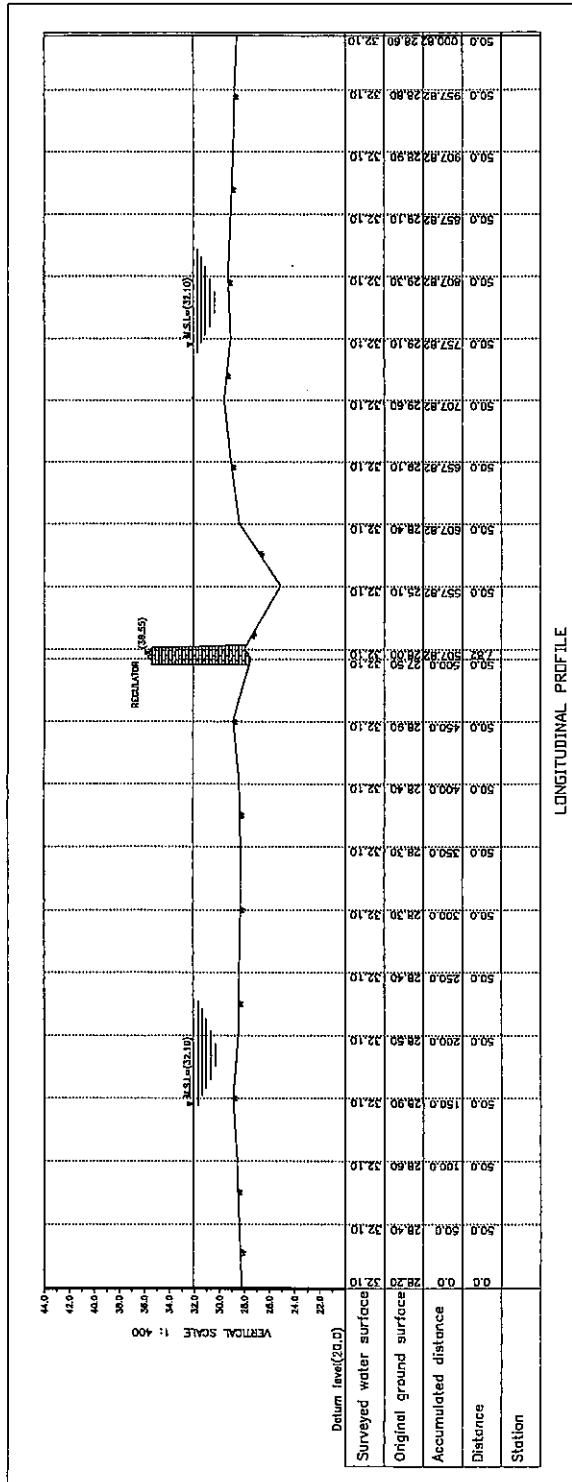
| STATION NO | COORDINATES | | HEIGHT(m) |
|------------|-------------|-------------|-----------|
| | EASTING(m) | NORTHING(m) | |
| TR1 | 1000.00 | 1000.00 | 35.59 |
| TR2 | 939.55 | 941.66 | 38.07 |
| TR3 | 870.48 | 996.31 | 38.04 |
| BM1 | 866.07 | 994.23 | 35.50 |
| BM2 | 940.38 | 935.71 | 35.50 |
| BM3 | 995.50 | 941.33 | 35.73 |
| G1 | 941.41 | 927.13 | 35.23 |
| G2 | 940.18 | 927.08 | 35.15 |
| G3 | 850.08 | 999.36 | 35.26 |
| G4 | 849.21 | 999.57 | 35.29 |

LEGEND

- Traverse Station
- Bench Mark
- ROAD
- Building
- Electric line
- Water pipeline
- Telephone line
- Seepage manhole
- Spot level
- Vegetation area
- Tree
- Palm
- Pole Electric
- Bore Hole
- slope
- Pitching

scale 1 : 4000

| | |
|--|------------|
| ARAB REPUBLIC OF EGYPT | |
| MINISTRY OF PUBLIC WORKS AND WATER RESOURCES | |
| IRRIGATION IMPROVEMENT SECTOR | |
| THE PROJECT FOR REHABILITATION AND IMPROVEMENT | |
| SAKOULA REGULATOR ON BAHR YUSEF CANAL | |
| LONGITUDINAL PROFILE | |
| Date | March 2003 |
| Dwg. No. | 3 |
| SANYU CONSULTANTS INC. | |
| JAPAN INTERNATIONAL COOPERATION AGENCY | |



| NUMBER | REFERENCE |
|--------------|--|
| Dwg. No. 1-2 | CROSS SECTION DETAILS (Sec. 1) |
| Dwg. No. 1-2 | CROSS SECTION DETAILS (Sec. 2) |
| Dwg. No. 1-2 | CROSS SECTION DETAILS (Sec. 3) |
| Dwg. No. 1-2 | LONGITUDINAL PROFILE (Sec. LONGITUDINAL) |

NOTES:

- 1- ALL SURVEYING WERE TIED WITH MAIN TRAVERSE POINT
TR1 WITH LOCAL COORDINATES (1:1000,1000)
- 2- ALL LEVELS AND BENCH MARKS WERE TIED WITH THE
NATIONAL BENCH MARK AT THE SAKOULA REGULATOR
- 3- ALL DISTANCES AND LEVELS ARE IN METERS

| STATION NO. | COORDINATES | | HEIGHT (m) |
|-------------|-------------|--------------|------------|
| | EASTING (m) | NORTHING (m) | |
| TR1 | 1000.00 | 941.60 | 35.59 |
| TR2 | 929.55 | 941.60 | 36.07 |
| TR3 | 870.48 | 996.31 | 35.00 |
| BH1 | 866.07 | 994.29 | 35.50 |
| BH2 | 940.38 | 935.71 | 35.50 |
| BH3 | 995.50 | 941.39 | 35.73 |
| G1 | 941.41 | 927.13 | 35.23 |
| G2 | 940.18 | 927.08 | 35.15 |
| G3 | 850.08 | 999.36 | 35.26 |
| G4 | 849.21 | 999.57 | 35.29 |

LEGEND

- Traverse Station -----
- Bench Mark ----- BM
- ROAD -----
- Building -----
- Electric line -----
- Water pipeline -----
- Telephone line -----
- Sewage mainline -----
- Spot level -----
- Vegetation areas -----
- Tree -----
- Palm -----
- Pole Electric -----
- Bare Hole -----
- slope -----
- Pitching -----

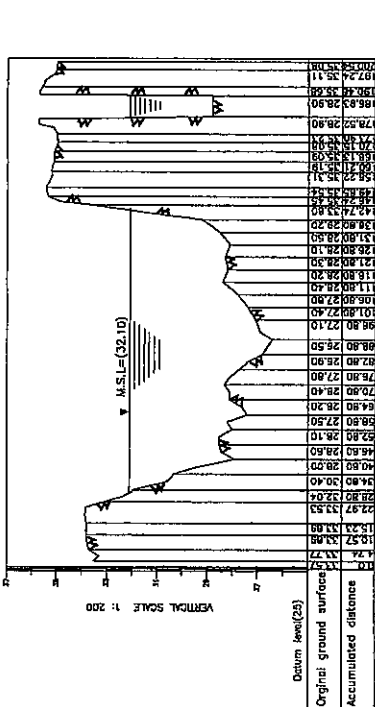
scale 1 : 1000

ARAB REPUBLIC OF EGYPT
 MINISTRY OF PUBLIC WORKS AND WATER RESOURCES
 IRRIGATION IMPROVEMENT SECTOR
 THE PROJECT FOR REHABILITATION AND IMPROVEMENT
 SAKOULA REGULATOR ON BAHR Y. USEF CANAL

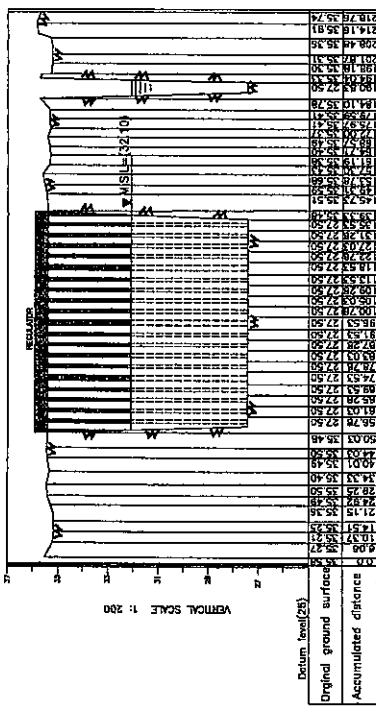
CROSS SECTIONS

| | | | |
|------|------------|----------|---|
| Date | March 2003 | Dwg. No. | 4 |
|------|------------|----------|---|

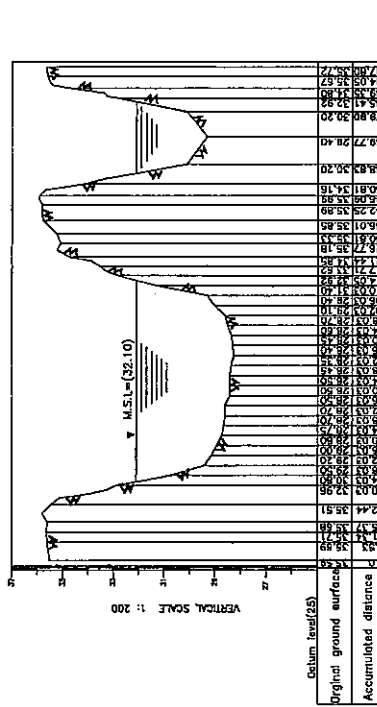
SANTU CONSULTANTS INC.
 JAPAN INTERNATIONAL COOPERATION AGENCY



CROSS SECTION (SEC - 3)



CROSS SECTION (SEC - 2)



CROSS SECTION (SEC - 1)

| NUMBER | REFERENCE |
|------------|--|
| Dwg. No. 4 | CROSS SECTION DETAILS(SEC. 1) |
| Dwg. No. 4 | CROSS SECTION DETAILS(SEC. 2) |
| Dwg. No. 4 | CROSS SECTION DETAILS(SEC. 3) |
| Dwg. No. 3 | LONGITUDINAL PROFILE (Sec. LONGITUDINAL) |

NOTES:

- 1- ALL SURVEYING WERE TIED WITH MAIN TRAVERSE POINT TR1 WITH LOCAL COORDINATES (1000,1000)
- 2- ALL LEVELS AND BENCH MARKS WERE TIED WITH THE NATIONAL BENCH MARK AT THE SAKOULA REGULATOR
- 3- ALL DISTANCES AND LEVELS ARE IN METERS

| STATION NO. | COORDINATES | | HEIGHT(m) |
|-------------|-------------|-------------|-----------|
| | EXISTING(m) | NORTHING(m) | |
| TR1 | 1000.00 | 1000.00 | 35.59 |
| TR2 | 939.55 | 941.68 | 38.07 |
| TR3 | 870.48 | 996.31 | 38.04 |
| B.M1 | 866.07 | 994.23 | 35.50 |
| B.M2 | 840.28 | 935.71 | 35.50 |
| B.M3 | 995.50 | 941.33 | 35.73 |
| G1 | 941.41 | 927.13 | 35.23 |
| G2 | 940.18 | 927.08 | 35.15 |
| G3 | 830.08 | 959.36 | 35.26 |
| G4 | 845.21 | 999.57 | 35.29 |

LEGEND

- Traverse Station
- Bench Mark
- ROAD
- Building
- Electric line
- Water pipeline
- Telephone line
- Sewage mainline
- Spot level
- Vegetation area
- Tree
- Palm
- Pole Electric
- Bore Hole
- slope
- Pitching

scale 1 : 400

ARAB REPUBLIC OF EGYPT
 MINISTRY OF PUBLIC WORKS AND WATER RESOURCES
 IRRIGATION IMPROVEMENT SECTOR
 THE PROJECT FOR REHABILITATION AND IMPROVEMENT
 SAKOULA REGULATOR ON BAHR YUSEF CANAL

SAKOULA REGULATOR SKETCH

Date March 2003 Dwg. No. 5

SANYU CONSULTANTS INC.
 JAPAN INTERNATIONAL COOPERATION AGENCY

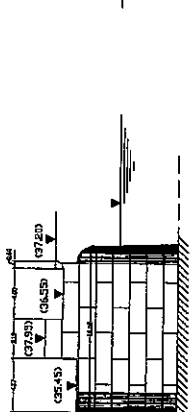
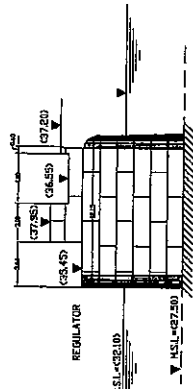
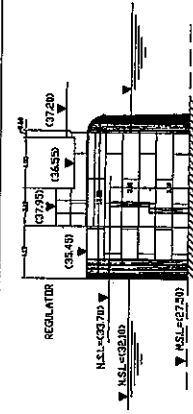
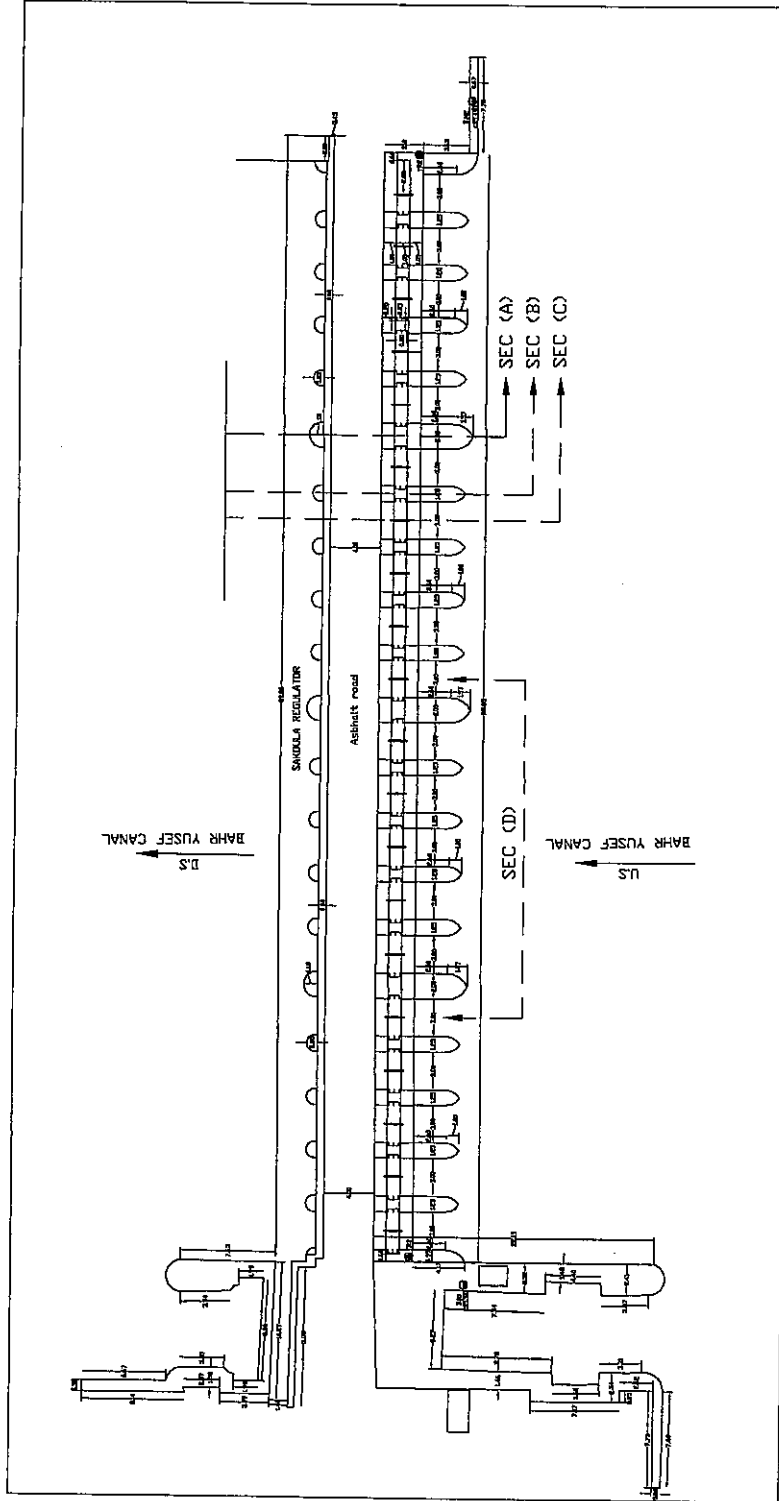
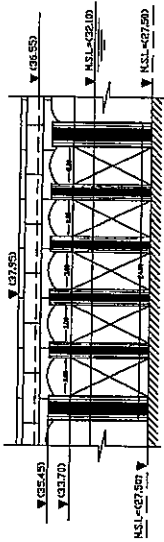
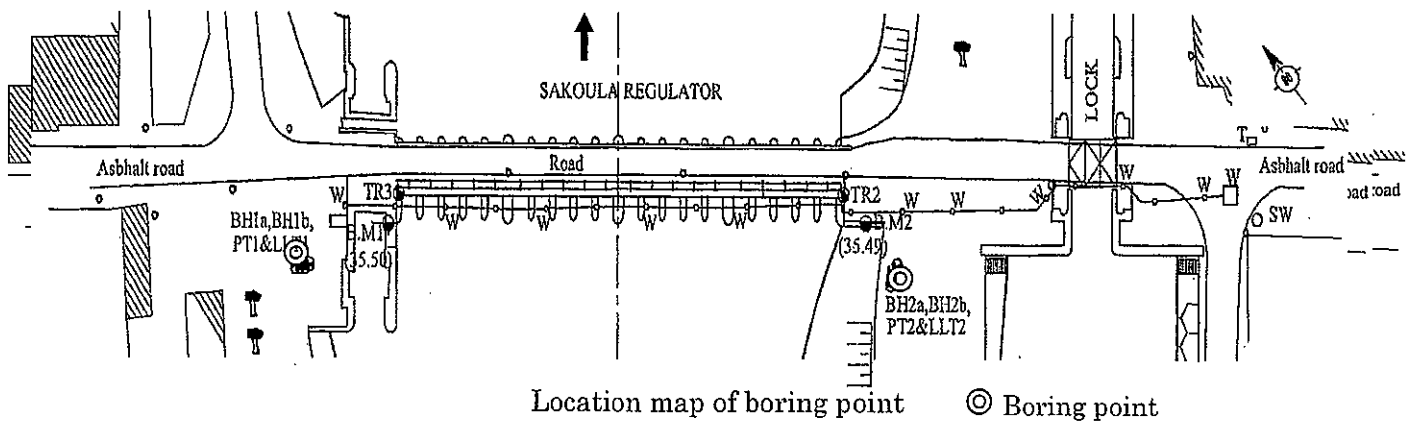
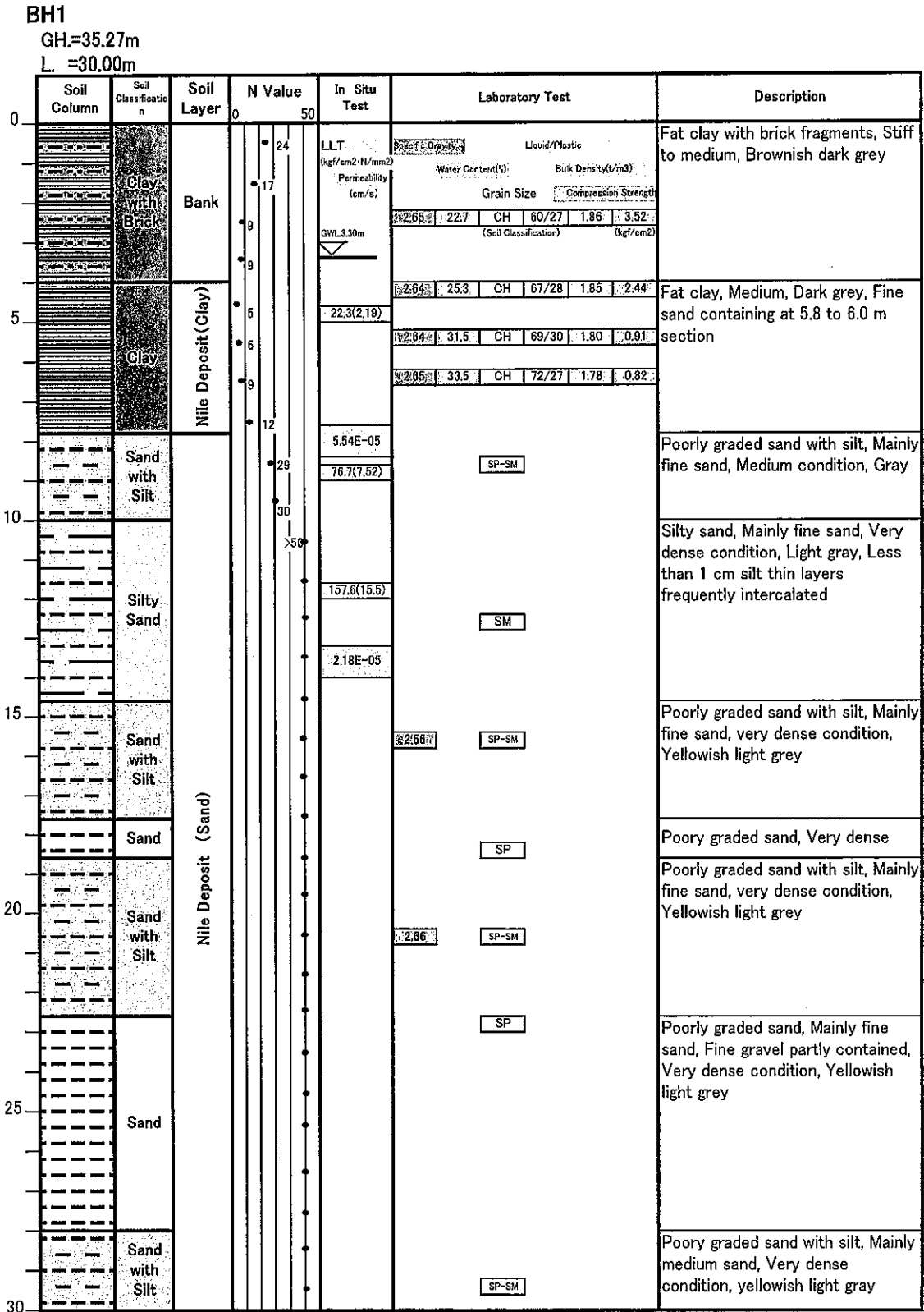


Table of investigation item and quantity

| Item | Contents | Quantity | Remarks |
|---------------------------|-------------------|-----------|--|
| Boring BH1 | Diameter 75mm | 30m | |
| Boring BH2 | Diameter 75mm | 30m | |
| Standard penetration test | 2 holes/1m each | 60 times | ASTM D 1586 |
| Sampling | Core boring | 8 samples | Thin wall tube sampling is difficult to be conduct due to stiff clay |
| Permeability teat | Falling head | 4 times | |
| Pressure meter test | Lateral load test | 6 times | |
| Laboratory soil test | | | |
| Specific gravity test | | 12samples | ASTM D 854 |
| Moisture content test | | 8samples | ASTM D 2216 |
| Particle size test | | 20samples | ASTM D 422 |
| Atterberg limits test | | 8 samples | ASTM D 4318 |
| Unit weight test | | 8 samples | |
| Uniaxial compressive test | | 8 samples | ASTM D 2166 |
| Borrow area test | | | |
| Density test | Sand cone method | 3 places | ASTM D 1556 |
| Sampling | | 3 places | |
| Moisture content test | | 8 samples | ASTM D 2216 |
| Particle size test | | 8 samples | ASTM D 422 |
| Compaction test | | 8 samples | ASTM D 698 |



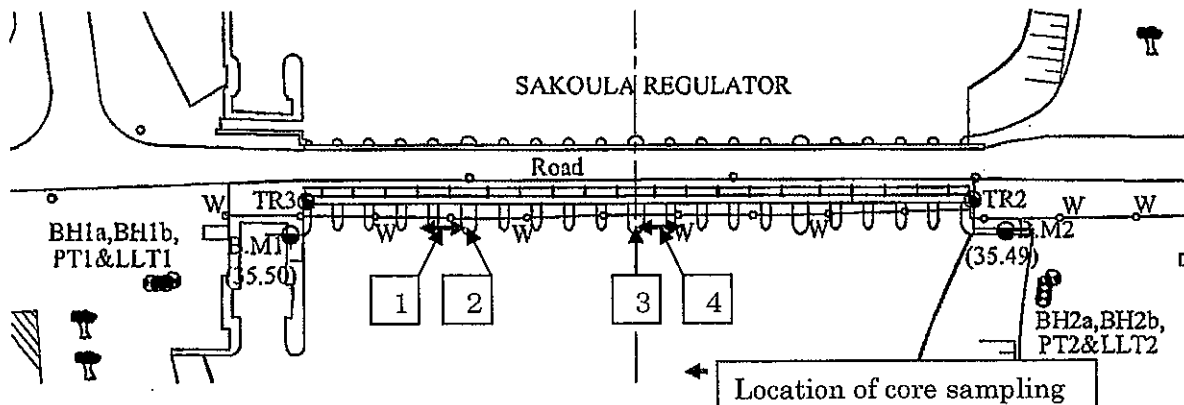


BH2
 GH=35.23m
 L.=30.00m

| Soil Column | Soil Classification | Soil Layer | N Value | In Situ Test | Laboratory Test | Description |
|-----------------|---------------------|---------------------|---------|-------------------------------|-------------------------|--|
| Clay with Brick | Bank | Bank | 14 | LLT | Specific Gravity: 2.66 | Fat clay with brick fragments, Stiff to medium, Brownish dark grey |
| | | | 20 | Permeability (cm/s): 2.66E-04 | Water Content (%): 26.2 | |
| Clay | Nile Deposit (Clay) | Nile Deposit (Clay) | 13 | GWL 2.80m | Grain Size: 69/28 | Fat clay, Medium, Dark grey, Fine sand containing partly |
| | | | 19 | Permeability (cm/s): 2.66E-04 | Water Content (%): 32.1 | |
| Sand with Silt | Nile Deposit (Sand) | Nile Deposit (Sand) | 7 | 27.2(2.67) | Grain Size: 68/29 | Poorly graded sand with silt, Mainly fine sand, very dense condition, Yellowish light grey |
| | | | 21 | Permeability (cm/s): 1.57E-04 | Water Content (%): 28.4 | |
| Sand | Nile Deposit (Sand) | Nile Deposit (Sand) | 26 | 75.2(7.37) | Grain Size: 70/29 | Poorly graded sand, Mainly fine sand, Fine gravel partly contained, Very dense condition, Yellowish light grey |
| | | | >50 | Permeability (cm/s): 2.07E-05 | Water Content (%): 30.6 | |
| Sand with Silt | Nile Deposit (Sand) | Nile Deposit (Sand) | 15 | 2.86 | Grain Size: 68/29 | Poorly graded sand with silt, Mainly fine sand, very dense condition, Yellowish light grey |
| | | | 20 | Permeability (cm/s): 2.07E-05 | Water Content (%): 28.6 | |
| Sand | Nile Deposit (Sand) | Nile Deposit (Sand) | 25 | 176.7(17.3) | Grain Size: 68/29 | Poorly graded sand, Mainly fine sand, Fine gravel partly contained, Very dense condition, Yellowish light grey |
| | | | 30 | Permeability (cm/s): 2.07E-05 | Water Content (%): 28.6 | |

Uniaxial compressive test result of cores on side of Sakoula regulator piers

| Core No. | Sampling location | Test location | Core condition | Compressive strength | |
|----------|---|--|---|------------------------|----------------------|
| | | | | (kgf/cm ²) | (N/mm ²) |
| 1 | No.4 pier upstream right side 1.50m below top of the pier | 10 ~ 24cm from surface (Surface) | Joint portion (Brick and filling portion) | 29.2 | 2.86 |
| | | 55~68cm (Middle) | Joint portion (Brick and filling portion) | 12.0 | 1.18 |
| 2 | No.5 pier upstream left side 153m below top of the pier | 5~17cm (Surface) | Joint portion (Brick and filling portion) | 13.8 | 1.35 |
| | | 65~79cm (Inside) | Joint portion (Brick and filling portion) | 19.1 | 1.87 |
| 3 | No.10 pier upstream right side 1.51m below top of the pier | 5~17cm (Surface) | Joint portion (Brick and filling portion) | 25.0 | 2.45 |
| | | 60~74cm (Inside) | Filling portion by brick clay (homogeneity) | 41.1 | 4.03 |
| 4 | No.11 pier upstream right side 1.52m below top of the pier | 10~23cm (Surface) | Joint portion (Brick and filling portion) | 18.2 | 1.78 |
| | | 61~75cm (Inside) | Filling portion by brick clay (homogeneity) | 48.5 | 4.75 |



Location of core sampling on side of Sakoula regulator pier