

## ANNEXE N° 02 :Les Résultats De La Simulation De La Charge Sédimentaire

| N° | Section<br>(m) | Fonction De Transport                |           |           |           |              | Fonction De Transport                |           |          |           |          | Fonction De Transport                |           |          |           |          |
|----|----------------|--------------------------------------|-----------|-----------|-----------|--------------|--------------------------------------|-----------|----------|-----------|----------|--------------------------------------|-----------|----------|-----------|----------|
|    |                | MPM-Toffaleti                        |           |           |           |              | Wilcock -Crowe                       |           |          |           |          | Toffaleti                            |           |          |           |          |
|    |                | Fonction De Vitesse De Sédimentation |           |           |           |              | Fonction De Vitesse De Sédimentation |           |          |           |          | Fonction De Vitesse De Sédimentation |           |          |           |          |
|    |                | Ruby                                 | Toffaleti | Van Rijn  | Report 12 | Dietrich     | Ruby                                 | Toffaleti | Van Rijn | Report 12 | Dietrich | Ruby                                 | Toffaleti | Van Rijn | Report 12 | Dietrich |
| 1  | 56067.75       | 35965.13                             | 34865     | 34508.293 | 34865     | 3523<br>8.28 | 187997.9                             | 18867.23  | 18877.39 | 18868.8   | 18859.67 | 25360.76                             | 25051.86  | 24355.67 | 27160.85  | 25588.43 |
| 2  | 55439.52       | 35965.13                             | 34865     | 34508.29  | 34865     | 3523<br>8.28 | 187997.9                             | 18867.23  | 18877.39 | 18868.8   | 18859.67 | 25360.76                             | 25051.86  | 24355.67 | 27160.85  | 25588.43 |
| 3  | 54978.47       | 37244.88                             | 36220.83  | 36027.93  | 36220.83  | 3673<br>8.81 | 192085.6                             | 46734.98  | 46758.05 | 46752.36  | 46667.86 | 27915.98                             | 26420.67  | 25522.21 | 31411.46  | 27876.03 |
| 4  | 54536.95       | 41079.84                             | 41008.58  | 40183.94  | 41008.58  | 4038<br>3.17 | 161216.5                             | 105707.9  | 105745.6 | 105726.2  | 105645.4 | 28029.8                              | 26618.43  | 25981.5  | 31872.13  | 28034.3  |
| 5  | 54167.95       | 40566.86                             | 39773.15  | 39132.35  | 39773.15  | 3908<br>2.18 | 144600.8                             | 66546.7   | 66508.54 | 66545.63  | 66564.21 | 32817.93                             | 33803.32  | 30619.59 | 36802.83  | 33192.04 |
| 6  | 53633.26       | 39438.34                             | 40417.38  | 39716.47  | 40417.38  | 3979<br>7.25 | 92230.13                             | 18924.92  | 19250.03 | 19101.86  | 18775.26 | 31716.57                             | 33594.48  | 29732.2  | 35626.68  | 32313.11 |
| 7  | 52885.58       | 34528.44                             | 32419.19  | 32810.15  | 32419.19  | 3239<br>2.13 | 32289.4                              | 141709.7  | 143844   | 140999.3  | 142779.6 | 19477.57                             | 18082.15  | 18335.02 | 19089.24  | 19444.58 |
| 8  | 52513.34       | 41208.14                             | 39055.95  | 38921.45  | 39055.95  | 3953<br>1.16 | 93238                                | 84140.07  | 84064.53 | 84157.97  | 84013.09 | 27877.9                              | 30388.59  | 29550.92 | 30789.09  | 31148.74 |
| 9  | 52052.84       | 38487.15                             | 36908.29  | 36982.75  | 36908.29  | 3758<br>7.65 | 8957.496                             | 3312.153  | 3311.009 | 3311.239  | 3322.757 | 18537.5                              | 16791.71  | 15636.03 | 19818.46  | 17741.26 |
| 10 | 51313.45       | 42054.05                             | 39369.59  | 40350.73  | 39369.59  | 4229<br>6.85 | 83628.81                             | 103031    | 103903.6 | 103118.4  | 102187.9 | 21481.69                             | 19531.66  | 18958.61 | 22844.9   | 19481.54 |
| 11 | 50823.7        | 42566.65                             | 39471.31  | 40497.51  | 39471.31  | 4252<br>0.53 | 53061.45                             | 44732.88  | 44606.36 | 44758.94  | 45095.39 | 22331.95                             | 19594.47  | 19045.59 | 23369.22  | 20435.82 |
| 12 | 50010.57       | 43014.38                             | 40630.43  | 41534.6   | 40630.43  | 4359<br>0.52 | 88466.45                             | 84297.4   | 84667.53 | 84309.21  | 83527.27 | 26152.2                              | 26198.98  | 25500.69 | 27689.15  | 24256.26 |
| 13 | 49298.68       | 41585.74                             | 39559.16  | 40351.82  | 39559.16  | 4219<br>9.06 | 28156.22                             | 17061.96  | 17047.06 | 17029.86  | 17190.09 | 23294.31                             | 21637.02  | 20224.21 | 24293.43  | 22315.23 |
| 14 | 49007.43       | 41666.46                             | 39890.14  | 40624.96  | 39890.14  | 4265<br>0.53 | 60375.46                             | 89671.77  | 90031.77 | 89385.06  | 89219.56 | 23285.03                             | 21540.5   | 20481.31 | 24342.81  | 22183.39 |
| 15 | 47889.7        | 32976.03                             | 32144.43  | 32190.23  | 32144.43  | 3348<br>6.42 | 3480.616                             | 939.412   | 938.289  | 940.406   | 944.225  | 11867.35                             | 10885.47  | 10362.48 | 12458.73  | 12380.84 |
| 16 | 46378.31       | 37814.45                             | 40001.5   | 36812.3   | 40001.5   | 3587<br>7.76 | 57507.4                              | 48614.99  | 47973.18 | 47790.17  | 48699.62 | 16390.4                              | 15337.61  | 14154.13 | 17560.33  | 17984.98 |
| 17 | 45697.23       | 41192.59                             | 42285.61  | 42699.51  | 42285.61  | 3959<br>1.11 | 154614.3                             | 57677.33  | 57952.56 | 58083.77  | 57516.23 | 31039.07                             | 29302.63  | 26085.53 | 31210.71  | 32242.23 |
| 18 | 44879.76       | 47136.13                             | 49189.87  | 48280.66  | 49189.87  | 5474<br>7.88 | 179311                               | 159165.1  | 160157.3 | 160586.5  | 159148.8 | 30794.26                             | 29629.21  | 33493.7  | 39564.67  | 31920.77 |
| 19 | 43967.46       | 41763.63                             | 41771.72  | 43494.32  | 41771.72  | 4605<br>0.95 | 33310.28                             | 20027.98  | 19848.56 | 19905.86  | 19944.36 | 25206.31                             | 24688.75  | 26635.1  | 33978.15  | 27945.95 |
| 20 | 42110.5        | 42946.73                             | 43470.65  | 44703.62  | 43470.65  | 4714<br>0.56 | 135952.6                             | 143839.2  | 143925.4 | 144164.5  | 144037.3 | 28497.35                             | 28798.65  | 30123.52 | 38628.09  | 31771.79 |

## ANNEXE N° 02

|    |          |          |          |          |          |              |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 21 | 41525.07 | 42703.47 | 42979.85 | 44388.11 | 42979.85 | 4691<br>4.13 | 20805.35 | 4705.532 | 4719.761 | 4696.402 | 4705.71  | 29099.93 | 28729.83 | 29537.76 | 38388.36 | 31896.87 |
| 22 | 40530.85 | 43451.65 | 42934.48 | 46505.32 | 42934.48 | 4923<br>9.27 | 148683.8 | 123459.7 | 122591.2 | 123155.1 | 123402   | 31330.73 | 31075.36 | 32947.38 | 40809.97 | 32472.83 |
| 23 | 39490.27 | 43508.99 | 42933.92 | 46517.26 | 42933.92 | 4927<br>7.01 | 81772.38 | 27181.91 | 27133.64 | 27007.02 | 26944.78 | 31588.47 | 31344.67 | 33346.44 | 41005.36 | 32753.65 |
| 24 | 38580.26 | 45968.72 | 44813.34 | 48824.07 | 44813.34 | 5189<br>8.48 | 110327.3 | 77478.21 | 77012.52 | 76989.73 | 77279.41 | 31619.84 | 31385.64 | 33372    | 41231.26 | 32784.49 |
| 25 | 37908.83 | 42974.55 | 40114.57 | 45142.77 | 40114.57 | 4735<br>6.13 | 19168.37 | 27552.36 | 27547.29 | 27584.44 | 27666.82 | 29366.18 | 28184.8  | 28950.08 | 33215.18 | 29974.02 |
| 26 | 36905.78 | 4729.691 | 5101.518 | 5817.055 | 5101.518 | 7789.<br>181 | 7000.705 | 230.213  | 229.002  | 229.017  | 229.254  | 3428.883 | 3323.025 | 3463.634 | 3468.818 | 3436.26  |
| 27 | 36402.73 | 10208.05 | 10023.26 | 8596.579 | 10023.26 | 1303<br>1.35 | 61634.29 | 115385.2 | 115641   | 115485.1 | 115845.9 | 14832.97 | 5128.548 | 7999.741 | 7739.75  | 9724.447 |
| 28 | 35781.64 | 13904.28 | 13039.58 | 11824.44 | 13039.58 | 1611<br>7.03 | 13309.92 | 16054.06 | 16052.73 | 16054.6  | 16051.52 | 22559.75 | 16853.21 | 19753.4  | 18982.37 | 19265.59 |
| 29 | 35288.25 | 4937.213 | 6721.288 | 7014.634 | 6721.288 | 9140.<br>586 | 3923.108 | 1292.836 | 1241.811 | 1322.185 | 1206.775 | 4852.617 | 3883.531 | 3778.817 | 4105.757 | 4738.658 |
| 30 | 34866.48 | 14949.68 | 17104.88 | 17301.54 | 17104.88 | 1946<br>5.74 | 86360.37 | 124926.3 | 124879.6 | 124957.8 | 124851.9 | 22797.6  | 20852.9  | 21382.85 | 21456.96 | 22401.25 |
| 31 | 33818.77 | 749.787  | 831.99   | 859.445  | 831.99   | 917.4<br>83  | 865.083  | 319.784  | 316.913  | 310.413  | 320.746  | 2555.177 | 2460.529 | 2480.391 | 2525.276 | 2602.149 |
| 32 | 33204.75 | 15173.83 | 14268.34 | 11578.26 | 14268.34 | 1330<br>7.1  | 111110.6 | 164429.3 | 163820.3 | 161672.7 | 164834.2 | 26585.88 | 31499.51 | 25571.16 | 23137.13 | 27011.44 |
| 33 | 32893.27 | 9349.093 | 9976.931 | 7838.678 | 9976.931 | 1174<br>7.97 | 11868.53 | 4062.878 | 4117.352 | 4095.261 | 4058.522 | 18515.47 | 21219.74 | 17232.62 | 17229.85 | 19369.57 |
| 34 | 32548.16 | 16318.19 | 12770.26 | 9068.024 | 12770.26 | 1497<br>2.01 | 23915.76 | 24806.99 | 24861.4  | 24752.71 | 24790.17 | 19381.24 | 22234.57 | 18289.43 | 20405.66 | 19707.88 |
| 35 | 32053.06 | 16690.11 | 15646.53 | 10755.71 | 15646.53 | 1615<br>0.01 | 67067.33 | 65309.5  | 63735.93 | 65174.1  | 66707.2  | 26911.06 | 25140.04 | 20905.9  | 22058.06 | 23438.57 |
| 36 | 31595.71 | 37350.04 | 36475.45 | 31269.56 | 36475.45 | 3694<br>6.6  | 98138.98 | 131622.9 | 131535.4 | 131908.2 | 131806.5 | 70750.67 | 68970.45 | 64399.11 | 65815.97 | 66654.77 |
| 37 | 31015.45 | 5994.868 | 5649.291 | 6702.077 | 5649.291 | 6788.<br>707 | 1507.619 | 493.859  | 496.703  | 494.868  | 492.152  | 5430.757 | 5168.019 | 5049.103 | 5431.082 | 5845.279 |
| 38 | 30524.67 | 7885.139 | 7720.135 | 8428.68  | 7720.135 | 9031.<br>166 | 98931.74 | 155781.4 | 155740.2 | 155783.2 | 155826.7 | 5922.992 | 6448.456 | 7794.947 | 8458.882 | 6325.282 |
| 39 | 30158.11 | 1450.607 | 1520.91  | 1913.455 | 1520.91  | 2137.<br>642 | 1704.079 | 265.126  | 264.827  | 265.428  | 263.825  | 1447.741 | 1486.795 | 1561.776 | 1735.28  | 1510.86  |
| 40 | 29903.21 | 4292.801 | 2298.766 | 5930.435 | 2298.766 | 5821.<br>795 | 26325.9  | 40089.04 | 38712.95 | 40100.52 | 39652.1  | 5176.873 | 6318.106 | 4779.713 | 4859.344 | 4870.508 |
| 41 | 29671.33 | 4298.921 | 2910.951 | 5937.32  | 2910.951 | 6134.<br>749 | 14256.37 | 17984.03 | 17972    | 17979.21 | 18061.79 | 5025.707 | 6174.784 | 4738.209 | 4773.468 | 4736.552 |
| 42 | 29279.25 | 4286.459 | 2800.952 | 5944.129 | 2800.952 | 6097.<br>606 | 20309.43 | 12853.7  | 9149.213 | 13426.49 | 11501.33 | 4397.201 | 4750.375 | 3740.662 | 4513.941 | 4566.542 |
| 43 | 28971.44 | 6564.545 | 5100.323 | 8584.686 | 5100.323 | 8604.<br>541 | 16608.39 | 3907.993 | 4246.61  | 3958.982 | 3700.935 | 10062.57 | 9494.084 | 8724.119 | 10395.26 | 10748.23 |
| 44 | 28474.15 | 31749.23 | 25519.06 | 32943.38 | 25519.06 | 3112<br>2.23 | 45498.28 | 46237.93 | 46595.39 | 46282.53 | 46049.64 | 37865.98 | 61720.55 | 58903.85 | 48978.09 | 41065.56 |
| 45 | 28151.53 | 28163.57 | 22396.35 | 27098.6  | 22396.35 | 2657<br>8.22 | 27686.74 | 18896.37 | 18871.22 | 18928.67 | 18793.53 | 30348.8  | 38930.47 | 35734.96 | 34063.44 | 31752.58 |

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|    |          |          |          |          |          |              |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 46 | 27256.2  | 27282.11 | 21234.85 | 26198.39 | 21234.85 | 2506<br>1.47 | 22125.96 | 3768.367 | 3754.547 | 3807.629 | 3638.926 | 21445.19 | 27088.25 | 22941.49 | 24350.06 | 20899.13 |
| 47 | 26883.08 | 28380.68 | 23084.29 | 28161.33 | 23084.29 | 2658<br>4.87 | 78488.92 | 94838.63 | 94963.06 | 94872.11 | 94733.88 | 21562.93 | 24220.56 | 22220.68 | 23438.07 | 21385.99 |
| 48 | 26571.48 | 22312.73 | 16584.29 | 18926.5  | 16584.29 | 1775<br>6.51 | 1351.038 | 297.057  | 294.132  | 296.845  | 294.824  | 4171.608 | 4166.693 | 3879.062 | 4251.048 | 4264.73  |
| 49 | 26024.98 | 28040.82 | 20833.81 | 26165.6  | 20833.81 | 2631<br>0.22 | 73250.56 | 88898.27 | 86425.56 | 88903.06 | 86164.78 | 15533.02 | 9229.272 | 10962.99 | 8732.438 | 16371.43 |
| 50 | 25314.49 | 28593.19 | 22027.56 | 24978.17 | 22027.56 | 2510<br>8.58 | 84189.99 | 119673.5 | 119831.6 | 119664.8 | 119470.8 | 14777.7  | 9405.944 | 11104.47 | 8885.836 | 16346.52 |
| 51 | 24925.71 | 17011.73 | 14935.27 | 16740.49 | 14935.27 | 1649<br>1.57 | 5775.162 | 249.85   | 250.537  | 249.896  | 210.41   | 3085.563 | 2761.879 | 2533.283 | 2909.289 | 3588.776 |
| 52 | 24582.43 | 11463.56 | 11866.12 | 11502.52 | 11866.12 | 1127<br>2.53 | 23070.31 | 27585.43 | 27578.83 | 27582.95 | 27574.12 | 2476.417 | 2405.361 | 2119.395 | 2321.017 | 2539.761 |
| 53 | 24172.99 | 22451.79 | 22800.96 | 22955.26 | 22800.96 | 2257<br>5.41 | 41914.04 | 57157.59 | 58014.12 | 57158.2  | 57221.15 | 30311.4  | 29676.77 | 29688.95 | 28507.8  | 30484.3  |
| 54 | 23819.59 | 15725.73 | 14822.65 | 15636.81 | 14822.65 | 1545<br>8.44 | 10754.86 | 7492.556 | 7550.387 | 7498.749 | 7285.231 | 5544.233 | 5974.95  | 5249.424 | 6280.699 | 7704.244 |
| 55 | 23275.86 | 15461.48 | 14745.78 | 15413.68 | 14745.78 | 1537<br>3.53 | 34804.28 | 48805.16 | 48875.36 | 48822.61 | 48660.4  | 5198.401 | 5849.681 | 5111.37  | 5995.446 | 7467.977 |
| 56 | 22793.44 | 15116.06 | 14331.71 | 15010.11 | 14331.71 | 1498<br>4.86 | 1605.109 | 136.711  | 139.158  | 136.709  | 137.762  | 4414.246 | 4936.802 | 4149.005 | 5336.168 | 6281.51  |
| 57 | 22251.19 | 23990.05 | 20506.35 | 21098.23 | 20506.35 | 1873<br>6.79 | 75842.65 | 37312.19 | 36668.56 | 37252.22 | 36979.03 | 10292.78 | 12132.33 | 9260.332 | 10340.68 | 11799.72 |
| 58 | 21940.3  | 30782.17 | 31413.68 | 27552.06 | 31413.68 | 2908<br>0.79 | 104625.7 | 77889.52 | 77245.88 | 77829.54 | 77556.36 | 22547.82 | 22806.42 | 31109.94 | 29120.7  | 30194.89 |
| 59 | 20654.88 | 33426.24 | 33937.3  | 30072.12 | 33937.3  | 3136<br>0.51 | 161770.1 | 166328.6 | 165625.8 | 166267.2 | 165990.4 | 32176.77 | 30360.77 | 35660.54 | 35434.17 | 38349.67 |
| 60 | 19220.01 | 22266.54 | 26487.69 | 23582.95 | 26487.69 | 2717<br>0.85 | 3174.742 | 683.394  | 679.273  | 684.062  | 676.217  | 7388.723 | 7123.352 | 6783.78  | 8796.132 | 8612.439 |
| 61 | 18745.44 | 27913.12 | 30844.66 | 28865.99 | 30844.66 | 3298<br>8.27 | 96067.5  | 134508.3 | 134483.6 | 134450.4 | 134774.5 | 7360.076 | 7125.143 | 8475.501 | 10416.93 | 8545.687 |
| 62 | 18417.6  | 25550.36 | 29630.12 | 27538.4  | 29630.12 | 3072<br>7.48 | 34542.39 | 32719.67 | 32715.7  | 32720.13 | 32660.85 | 16804.17 | 11366.05 | 10887.64 | 13649.93 | 13205.95 |
| 63 | 18095.08 | 23669.63 | 25525.86 | 25551.54 | 25525.86 | 2662<br>2.44 | 50201.1  | 40923.36 | 40786.57 | 40924.66 | 40754.66 | 9834.638 | 9677.143 | 10139.88 | 12442.3  | 9727.367 |
| 64 | 17789.05 | 23628.99 | 25792.31 | 25813.02 | 25792.31 | 2670<br>5.99 | 17152.26 | 3783.34  | 3806.85  | 3783.702 | 3763.012 | 13216.02 | 12469.71 | 12018.92 | 14759.32 | 13152.42 |
| 65 | 17484.98 | 26054.98 | 28276.06 | 28368.46 | 28276.06 | 2898<br>7.47 | 37074.35 | 21779.09 | 21741.36 | 21807.02 | 21680.44 | 13167.21 | 12457.56 | 15045.25 | 17759.71 | 13151.35 |
| 66 | 17061.9  | 22743.24 | 25438.14 | 25057.72 | 25438.14 | 2654<br>7.04 | 40608.47 | 11471.53 | 11457.79 | 11511.49 | 11331.01 | 18152.56 | 16189.46 | 17490.54 | 20866.33 | 16185.86 |
| 67 | 16805.54 | 29556.22 | 33262.75 | 32622.22 | 33262.75 | 3391<br>3.31 | 57105.72 | 35541.64 | 35454.6  | 35577.92 | 35427.91 | 18176.97 | 15575.14 | 17516.65 | 20934.09 | 16223.77 |
| 68 | 16296.38 | 25003.66 | 28653.16 | 27859.82 | 28653.16 | 2851<br>8.13 | 8581.803 | 3785.823 | 3809.552 | 3790.23  | 3785.079 | 17189.11 | 14936.83 | 17074.14 | 19900.27 | 15967.01 |
| 69 | 15864.34 | 36039.48 | 37633.95 | 38839.03 | 37633.95 | 3757<br>9.71 | 61184.16 | 78772.69 | 78933.01 | 78775.43 | 78997.85 | 35785.5  | 36644.06 | 40702.93 | 40203.09 | 35881.91 |
| 70 | 15555    | 34220.83 | 36028.31 | 37062.72 | 36028.31 | 3591<br>0.42 | 6719.658 | 2259.431 | 2236.717 | 2257.475 | 2213.525 | 29098.37 | 25614.22 | 29518.28 | 34043.11 | 30133.25 |

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|    |                |                 |                 |                 |                 |                      |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|----|----------------|-----------------|-----------------|-----------------|-----------------|----------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 71 | 14653.2        | 40586.7         | 40295.72        | 41407.02        | 40295.72        | 3817<br>0.75         | 51461.07       | 76523.31        | 75053.41        | 75800.22        | 73682.06        | 29138.35        | 25775.91        | 29706.38        | 34205.66        | 30260.86        |
| 72 | 14357.17       | 39335.12        | 38999.21        | 40096.51        | 38999.21        | 3687<br>8.47         | 29184.15       | 20802.49        | 21152.23        | 20889.94        | 21459.88        | 28718.99        | 26145.96        | 29672.06        | 34301.81        | 30053.62        |
| 73 | <b>14025.2</b> | <b>42061.56</b> | <b>43039.04</b> | <b>43314.71</b> | <b>43039.04</b> | <b>3927<br/>2.84</b> | <b>67907.5</b> | <b>70930.86</b> | <b>71255.63</b> | <b>72609.11</b> | <b>71752.88</b> | <b>31406.05</b> | <b>30970.36</b> | <b>31952.72</b> | <b>38312.31</b> | <b>32829.63</b> |
| 74 | 13434.78       | 42056.07        | 43096.68        | 43351.03        | 43096.68        | 3927<br>7.22         | 59244.71       | 72951.23        | 74195.38        | 72771.59        | 77063.04        | 31557.81        | 31111.05        | 31932.37        | 38403.95        | 33619.2         |
| 75 | 13135.98       | 36526.31        | 36681.57        | 37877.83        | 36681.57        | 3474<br>5.6          | 20839.38       | 5161.72         | 4872.503        | 5808.473        | 3718.693        | 18591.51        | 21252.88        | 17310.61        | 21413.52        | 20425.36        |
| 76 | 12864.4        | 12387.12        | 13516.6         | 15622.45        | 13516.6         | 1567<br>4.41         | 3630.948       | 44.542          | 45.649          | 45.912          | 41.412          | 3346.443        | 3829.503        | 2874.639        | 3709.84         | 3739.867        |
| 77 | 12465.06       | 16928.38        | 17710.69        | 20154.49        | 17710.69        | 2018<br>3.08         | 49205.62       | 30816.44        | 30833.08        | 31017.12        | 30097.17        | 15263.48        | 14907.03        | 13106.74        | 16098.02        | 16599.29        |
| 78 | 12239.6        | 22016.84        | 22278.01        | 24217.25        | 22278.01        | 2454<br>5.56         | 37786.47       | 60825.25        | 60750           | 60908.48        | 60864.28        | 27453.2         | 20245.72        | 21838.56        | 23090.7         | 28312.42        |
| 79 | 11559.35       | 20896.2         | 20245.15        | 21624.5         | 20245.15        | 2299<br>9.72         | 12182.6        | 2619.113        | 2615.079        | 2618.31         | 2657.444        | 20821.38        | 18580.86        | 17990.76        | 18229.92        | 21294.68        |
| 80 | 11256.99       | 25319.82        | 24616.41        | 23564.93        | 24616.41        | 2548<br>5.94         | 43351.19       | 49872.47        | 49834.45        | 49842.19        | 49846.9         | 22024.9         | 20928.97        | 20162.39        | 22245.58        | 21801.17        |
| 81 | 11082.63       | 25569.94        | 24727.07        | 23584.06        | 24727.07        | 2526<br>1.1          | 16456.93       | 11292.56        | 11183.01        | 11487.03        | 11312.74        | 27428.07        | 27496.31        | 24937.3         | 28769.25        | 27597.87        |
| 82 | 10746.31       | 24751.02        | 23979.88        | 23632.04        | 23979.88        | 2533<br>2.84         | 50267.16       | 56519.27        | 55490           | 59331.72        | 57190.68        | 12960.65        | 13063.77        | 10342.28        | 10782.04        | 13214.58        |
| 83 | 10274.44       | 29059.4         | 31141.98        | 27962.74        | 31141.98        | 2970<br>5.91         | 51387.39       | 33278.47        | 34710.88        | 33448.53        | 33954.41        | 16519.44        | 20199.98        | 13808.73        | 17190.13        | 17259.83        |
| 84 | 9687.12        | 34427.47        | 38935.42        | 33759.42        | 38935.42        | 3730<br>7.08         | 52916.26       | 138403.5        | 136564.8        | 136475.7        | 137284.3        | 37148.47        | 40659.51        | 37201.63        | 40407.28        | 36139.18        |
| 85 | 8616.22        | 22128.16        | 21784.09        | 22202.42        | 21784.09        | 2229<br>2.24         | 44965.06       | 10864.66        | 11795.44        | 11409.74        | 11041.54        | 14544.26        | 15603.88        | 12829.41        | 14815.98        | 14121.95        |
| 86 | 7950.1         | 19865           | 19908.14        | 20130.99        | 19908.14        | 2012<br>7.73         | 16088.41       | 24960.68        | 24308.35        | 24547.53        | 24843.3         | 11874.54        | 12120.66        | 11220.48        | 12107.46        | 11132.44        |
| 87 | 7359.2         | 16703.94        | 16485.29        | 17390.87        | 16485.29        | 1680<br>1.51         | 11141.16       | 5295.684        | 5365.757        | 5347.495        | 5315.18         | 7772.414        | 7443.654        | 7225.587        | 7822.707        | 7535.233        |
| 88 | 6715.8         | 15750.26        | 15688.52        | 16800.43        | 15688.52        | 1604<br>3.68         | 11437.55       | 13616.8         | 13607.43        | 13567.58        | 13706.29        | 7422.6          | 7113.963        | 6910.064        | 7555.765        | 7368.876        |
| 89 | 5790.66        | 15609.72        | 15341.81        | 16246.17        | 15341.81        | 1566<br>5.8          | 23461.18       | 46465.81        | 46550.67        | 46425.06        | 46434.35        | 7730.786        | 7538.966        | 7539.561        | 8358.291        | 8020.973        |
| 90 | 5158.86        | 13631.28        | 13514.22        | 14427.91        | 13514.22        | 1369<br>2.93         | 308.038        | 25.215          | 25.262          | 25.21           | 25.197          | 4164.591        | 4129.225        | 4154.153        | 4015.449        | 4097.366        |
| 91 | 3721.71        | 3624.512        | 3705.823        | 3637.126        | 3705.823        | 4005.<br>893         | 331.258        | 55.608          | 55.842          | 55.636          | 55.417          | 1948.89         | 2025.302        | 2017.633        | 1878.576        | 1939.967        |
| 92 | 2143.31        | 4139.524        | 4505.817        | 4548.675        | 4505.817        | 4991.<br>601         | 26711.83       | 78446.7         | 78440.73        | 78446.02        | 78450.02        | 2192.245        | 2275.598        | 2258.204        | 2073.332        | 2152.219        |
| 93 | 1650.12        | 74.165          | 73.334          | 80.509          | 73.334          | 76.17<br>5           | 144.134        | 520.616         | 520.591         | 520.614         | 520.628         | 9.303           | 8.795           | 7.92            | 8.618           | 9.443           |
| 94 | 933.04         | 0.008           | 0.008           | 0.008           | 0.008           | 0.009                | 0.92           | 0.153           | 0.153           | 0.153           | 0.153           | 0.001           | 0.001           | 0.001           | 0.001           | 0.001           |
| 95 | 0              | 12.727          | 12.373          | 12.197          | 12.373          | 11.76<br>4           | 1.78           | 0               | 0               | 0               | 0               | 27.887          | 30.872          | 31.902          | 27.365          | 27.378          |

**ANNEXE N° 02**

| N° | Section (m) | Fonction De Transport                |                  |                 |                  |                 | Fonction De Transport                |                  |                 |                  |                 | Fonction De Transport                |                  |                 |                  |                 |
|----|-------------|--------------------------------------|------------------|-----------------|------------------|-----------------|--------------------------------------|------------------|-----------------|------------------|-----------------|--------------------------------------|------------------|-----------------|------------------|-----------------|
|    |             | <i>Ackers - White</i>                |                  |                 |                  |                 | <i>Yang</i>                          |                  |                 |                  |                 | <i>Laursen (copeland)</i>            |                  |                 |                  |                 |
|    |             | Fonction De Vitesse De Sédimentation |                  |                 |                  |                 | Fonction De Vitesse De Sédimentation |                  |                 |                  |                 | Fonction De Vitesse De Sédimentation |                  |                 |                  |                 |
|    |             | <i>Ruby</i>                          | <i>Toffaleti</i> | <i>Van Rijn</i> | <i>Report 12</i> | <i>Dietrich</i> | <i>Ruby</i>                          | <i>Toffaleti</i> | <i>Van Rijn</i> | <i>Report 12</i> | <i>Dietrich</i> | <i>Ruby</i>                          | <i>Toffaleti</i> | <i>Van Rijn</i> | <i>Report 12</i> | <i>Dietrich</i> |
| 1  | 56067.75    | 6797.845                             | 7458.118         | 5267.992        | 6268.008         | 6009.094        | 210813.3                             | 48589.64         | 154048.3        | 258031           | 185265.2        | 46675.48                             | 51742.08         | 53021.93        | 46675.48         | 74548.98        |
| 2  | 55439.52    | 6797.845                             | 7458.118         | 5267.992        | 6268.008         | 6009.094        | 210813.3                             | 48589.64         | 154048.3        | 258031           | 185265.2        | 46675.48                             | 51742.08         | 53021.93        | 46675.48         | 74548.98        |
| 3  | 54978.47    | 7912.438                             | 8667.206         | 7175.683        | 7357.155         | 7252.127        | 320504.8                             | 62975.65         | 237165.3        | 367508.3         | 257783.1        | 62857.68                             | 64769            | 62332.8         | 62857.68         | 87930.37        |
| 4  | 54536.95    | 12387.08                             | 14863.85         | 13205.32        | 12797.52         | 12979.14        | 439370.1                             | 71389.76         | 368534.8        | 478880.3         | 383786.8        | 74558.71                             | 72832.59         | 66919.11        | 74558.71         | 98945.44        |
| 5  | 54167.95    | 17457.02                             | 20046.36         | 18838.82        | 18885.6          | 19149.9         | 372243.2                             | 75138.31         | 336377.1        | 415773.3         | 369842.8        | 74606.26                             | 74466.43         | 73814.05        | 74606.26         | 98047.35        |
| 6  | 53633.26    | 16080.89                             | 18621.46         | 17408.94        | 20432.2          | 21064.75        | 199874.9                             | 30268.53         | 118476.9        | 199316.7         | 126601.8        | 33991.59                             | 27697.96         | 24310.87        | 33991.59         | 40531.33        |
| 7  | 52885.58    | 29841.94                             | 29589.11         | 26829.77        | 29469.36         | 31718.45        | 214193.2                             | 8603.672         | 173346.1        | 258027.8         | 190441.2        | 9226.802                             | 8864.371         | 12091.8         | 9226.802         | 14225.17        |
| 8  | 52513.34    | 29834.3                              | 30835.47         | 29915.94        | 32303.18         | 34042.11        | 270615.2                             | 19016.65         | 219895.6        | 296579.6         | 230981.7        | 17935.98                             | 20632.73         | 19713.77        | 17935.98         | 24891.36        |
| 9  | 52052.84    | 25483.22                             | 25037.92         | 27719.17        | 27878.95         | 27510.84        | 98733.62                             | 17880.02         | 95257.03        | 118914.1         | 108548.6        | 16755.44                             | 19346.42         | 17960.24        | 16755.44         | 25464.42        |
| 10 | 51313.45    | 48966.54                             | 40960.08         | 48725.84        | 46036            | 41417.29        | 290073                               | 41071.45         | 249767.2        | 303592.1         | 256095.8        | 41152.64                             | 43249.04         | 41266.24        | 41152.64         | 50971.83        |
| 11 | 50823.7     | 53316.07                             | 50234.89         | 57318.22        | 55159.66         | 47498.17        | 288166.3                             | 49573.06         | 270439.4        | 309932.1         | 287309.1        | 56559.77                             | 55596.11         | 51647.54        | 56559.77         | 61004.08        |
| 12 | 50010.57    | 35026.91                             | 34678.47         | 37764.62        | 36210.87         | 35177.5         | 160857.6                             | 19597.89         | 136295.1        | 173452.8         | 151612.2        | 22945.37                             | 27731.02         | 22623.96        | 22945.37         | 41458.65        |
| 13 | 49298.68    | 30655.9                              | 31172.56         | 34647.31        | 33091.45         | 28695.88        | 139129.5                             | 12023.62         | 125834.1        | 152919.7         | 145427.2        | 12989.98                             | 12005.3          | 11973.93        | 12989.98         | 15836.18        |
| 14 | 49007.43    | 31408.74                             | 31962.18         | 35034.01        | 33764            | 29150.73        | 169622.6                             | 5290.569         | 153703.3        | 184956.2         | 171518.2        | 4507.834                             | 4529.301         | 4661.256        | 4507.834         | 7634.559        |
| 15 | 47889.7     | 11860.46                             | 11953.52         | 12897.31        | 12569.87         | 12556.43        | 61667.83                             | 522.276          | 59080.22        | 70064.63         | 68080.72        | 490.756                              | 480.063          | 470.98          | 490.756          | 832.967         |
| 16 | 46378.31    | 24293.91                             | 24095.8          | 25150.71        | 24910.18         | 24877.92        | 124958.4                             | 18367.25         | 117212.9        | 152596           | 121913.6        | 15117.75                             | 15568.47         | 15477.52        | 15117.75         | 18249.06        |
| 17 | 45697.23    | 48958.4                              | 47855.74         | 47481.52        | 46798.01         | 46587.08        | 223043.1                             | 85650.67         | 203911.4        | 248185.5         | 217857.8        | 92851.04                             | 91234.59         | 92774.22        | 92851.04         | 93927.85        |
| 18 | 44879.76    | 60188.18                             | 53880.67         | 60156.77        | 51561.75         | 54744.04        | 408871.6                             | 102849.4         | 395216.4        | 445336.4         | 416985.3        | 100435.3                             | 101931.8         | 100861.6        | 100435.3         | 103206          |

## ANNEXE N° 02

|    |          |          |          |          |          |              |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 19 | 43967.46 | 62053.23 | 54017.06 | 61896.37 | 53472.85 | 5682<br>6.7  | 272313.2 | 75460.23 | 259632.7 | 290480.6 | 279467.9 | 78806.23 | 76683.96 | 75311.27 | 78806.23 | 91363.98 |
| 20 | 42110.5  | 65139.2  | 56892.18 | 65233.93 | 56501.27 | 6021<br>2.96 | 302206.7 | 72200.12 | 282734.3 | 337016.4 | 313594.2 | 72526.9  | 72239.2  | 71214.03 | 72526.9  | 88502.43 |
| 21 | 41525.07 | 64226.05 | 55922.98 | 65161.16 | 55985.7  | 6033<br>9.6  | 181941   | 72780.7  | 176512.4 | 204404.1 | 202745.9 | 73874.19 | 72897.86 | 72186.17 | 73874.19 | 89910.01 |
| 22 | 40530.85 | 73232.5  | 66744.64 | 87483.4  | 74401.38 | 7924<br>8.67 | 317431.3 | 73196.62 | 288172.7 | 355048   | 328382.3 | 74455.29 | 73333.13 | 72661.04 | 74455.29 | 92557.86 |
| 23 | 39490.27 | 68108.68 | 60046.77 | 86788.77 | 69608.95 | 7040<br>6.73 | 230130.2 | 55577.11 | 226472.4 | 267855.6 | 256868.8 | 56063.05 | 55492.77 | 55002.54 | 56063.05 | 76230.48 |
| 24 | 38580.26 | 58226.7  | 60630.73 | 63582.66 | 51950.46 | 5232<br>9.16 | 327635.3 | 37358.22 | 302467.3 | 388555   | 349945.9 | 37972.46 | 37036.93 | 36407.65 | 37972.46 | 52402.72 |
| 25 | 37908.83 | 20883.59 | 19475.19 | 14378.41 | 15346.37 | 1421<br>3.93 | 195897.8 | 1515.803 | 186318.9 | 215180.9 | 211611   | 1637.683 | 1639.085 | 1556.761 | 1637.683 | 2950.171 |
| 26 | 36905.78 | 4805.737 | 3910.746 | 9.052    | 9.874    | 8.979        | 14638.18 | 3.54     | 12756.69 | 18272.02 | 13042.83 | 3.123    | 3.737    | 3.499    | 3.123    | 5.535    |
| 27 | 36402.73 | 28350.36 | 27458.89 | 25925.69 | 26463.95 | 3182<br>8.16 | 134970   | 38499.11 | 120189.7 | 141165.4 | 119045.4 | 36685.88 | 35819.98 | 38384.4  | 36685.88 | 35888.08 |
| 28 | 35781.64 | 13656.75 | 13378.44 | 14016.15 | 13849.73 | 1506<br>8.69 | 83963.45 | 18554.89 | 83537.61 | 87579.73 | 84446.41 | 17790.59 | 17732.08 | 18717.35 | 17790.59 | 19286.34 |
| 29 | 35288.25 | 3068.966 | 3104.684 | 3736.76  | 3699.036 | 3364.<br>027 | 9993.103 | 4049.902 | 9231.414 | 11904.44 | 9460.087 | 3961.629 | 3919.475 | 4056.888 | 3961.629 | 5515.542 |
| 30 | 34866.48 | 9568.333 | 9561.061 | 10329.2  | 10267.48 | 1050<br>7.12 | 262683.9 | 10307.96 | 238288.6 | 265098   | 231967.4 | 10429.99 | 10270.56 | 10392.1  | 10429.99 | 12449.43 |
| 31 | 33818.77 | 518.119  | 380.336  | 482.335  | 471.441  | 231.5<br>1   | 676.69   | 155.747  | 678.505  | 776.754  | 747.13   | 190.283  | 143.605  | 156.186  | 190.283  | 161.921  |
| 32 | 33204.75 | 44725.3  | 53554.14 | 43653.87 | 39963.06 | 4509<br>2.25 | 247705   | 70399.28 | 230081   | 253354   | 224810.2 | 69785.11 | 70034.31 | 70812.91 | 69785.11 | 77285.77 |
| 33 | 32893.27 | 39922.92 | 47508.28 | 41437.34 | 34627.06 | 3955<br>5.83 | 42648.34 | 55361.87 | 45694.93 | 50214.61 | 51372.73 | 55623.95 | 56944.95 | 56921.18 | 55623.95 | 71930.59 |
| 34 | 32548.16 | 48010.06 | 57231.26 | 51881    | 51258.49 | 4697<br>4.01 | 152545.4 | 69717.62 | 152171   | 164458.3 | 156661.7 | 67834.51 | 68538.01 | 70798.41 | 67834.51 | 96724.59 |
| 35 | 32053.06 | 56342.94 | 71126.29 | 67075.69 | 62271.68 | 5629<br>7.48 | 108878.5 | 65874.8  | 119353.5 | 142496   | 132412.6 | 64920.66 | 65405.16 | 66412.79 | 64920.66 | 94963.46 |
| 36 | 31595.71 | 58041.38 | 72386.69 | 68520.02 | 64376.73 | 5797<br>2.88 | 402041   | 65233.82 | 376249.3 | 401566.9 | 364146.9 | 64468.67 | 63752.41 | 66112.68 | 64468.67 | 73600.71 |
| 37 | 31015.45 | 6903.179 | 6388.039 | 7998.631 | 6642.892 | 6718.<br>175 | 4116.676 | 2177.495 | 4777.332 | 4804.123 | 4728.956 | 2374.498 | 2259.053 | 2357.353 | 2374.498 | 3618.042 |
| 38 | 30524.67 | 9484.861 | 9572.042 | 10469.53 | 9602.87  | 9432.<br>578 | 165167   | 4459.431 | 142185.1 | 168111.3 | 138524.9 | 4304.041 | 4517.695 | 4153.307 | 4304.041 | 6782.848 |
| 39 | 30158.11 | 60.476   | 54.477   | 72.537   | 59.164   | 65.31<br>5   | 4673.917 | 18.426   | 4683.47  | 5700.959 | 4900.281 | 17.89    | 20.978   | 14.418   | 17.89    | 32.192   |
| 40 | 29903.21 | 5513.721 | 5795.831 | 5524.717 | 5561.664 | 5642.<br>458 | 26569.13 | 7679.069 | 21107.61 | 26835.86 | 20965.08 | 8000.945 | 6279.093 | 7903.503 | 8000.945 | 9047.686 |
| 41 | 29671.33 | 5644.092 | 5752.298 | 5646.334 | 5679.77  | 5761.<br>401 | 80679.06 | 7164.353 | 80026.92 | 84433.85 | 80607.68 | 6766.467 | 5596.535 | 7308.826 | 6766.467 | 7943.43  |
| 42 | 29279.25 | 2711.918 | 2716.507 | 2713.113 | 2726.583 | 2836.<br>584 | 7574.637 | 2226.917 | 7188.788 | 8864.492 | 7699.672 | 2150.455 | 1887.032 | 2051.253 | 2150.455 | 4036.401 |
| 43 | 28971.44 | 11904.24 | 11722.95 | 11853.88 | 11961.61 | 1260<br>3.2  | 36856.16 | 12010.73 | 31730.65 | 50121.8  | 40212.96 | 11117.15 | 11216.8  | 11522.68 | 11117.15 | 16331.24 |
| 44 | 28474.15 | 62096.84 | 52092.72 | 55650.25 | 68196.79 | 7248         | 330630.5 | 92108.41 | 344682.3 | 357913.6 | 360376.1 | 88650.69 | 91644.26 | 80278.53 | 88650.69 | 98155.81 |

**ANNEXE N° 02**

|    |          |          |          |          |          |              |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|    |          |          |          |          |          | 2.57         |          |          |          |          |          |          |          |          |          |          |
| 45 | 28151.53 | 56139.01 | 50659.91 | 49096.95 | 66410.91 | 6595<br>0.48 | 109066.2 | 38621.85 | 108692   | 112054.1 | 117533.1 | 40244.61 | 38809.28 | 41418.82 | 40244.61 | 51411.19 |
| 46 | 27256.2  | 25446.94 | 24083.52 | 19824.65 | 25187    | 2460<br>4.42 | 56021.04 | 31027.95 | 53057.4  | 66020.65 | 53116.58 | 26239.29 | 27036.5  | 24859.86 | 26239.29 | 37569.37 |
| 47 | 26883.08 | 29271.06 | 27303.75 | 22834.47 | 29260.7  | 2846<br>4.02 | 162873.4 | 11180.33 | 148641.5 | 172497.8 | 151289.3 | 11020.42 | 11483.34 | 12269.41 | 11020.42 | 17335.16 |
| 48 | 26571.48 | 1695.007 | 1723.441 | 1595.715 | 1645.289 | 1624.<br>851 | 8962.569 | 792.003  | 7392.446 | 8644.057 | 7886.392 | 766.781  | 768.946  | 936.243  | 766.781  | 1370.288 |
| 49 | 26024.98 | 13073.54 | 13121.69 | 12985.58 | 13152.43 | 1306<br>8.57 | 66683.88 | 15626.12 | 52405.98 | 86460.26 | 67945.68 | 15419.73 | 14745.77 | 15312.41 | 15419.73 | 14063.27 |
| 50 | 25314.49 | 13146.18 | 13194.24 | 13058.41 | 13222.9  | 1314<br>0.8  | 189097.6 | 5850.055 | 159442.3 | 201901.2 | 164629.4 | 5241.197 | 3694.265 | 5282.594 | 5241.197 | 8682.087 |
| 51 | 24925.71 | 2193.295 | 1830.902 | 2376.553 | 1702.623 | 1721.<br>385 | 12907.35 | 356.51   | 11129.89 | 14669.76 | 13615.68 | 235.046  | 55.956   | 224.066  | 235.046  | 926.385  |
| 52 | 24582.43 | 10346.42 | 9493.776 | 11050.82 | 9329.791 | 9206.<br>84  | 56406.92 | 14276.99 | 32366.98 | 67036.35 | 35759.37 | 11980.57 | 8621.104 | 12118.66 | 11980.57 | 14837.46 |
| 53 | 24172.99 | 37350.38 | 39338.11 | 32499.65 | 32998.66 | 3983<br>0.92 | 176709   | 43342.54 | 159484.5 | 183930.1 | 161069.2 | 44738.75 | 41975.29 | 47912.81 | 44738.75 | 46929.57 |
| 54 | 23819.59 | 17548.57 | 14293.07 | 18151.78 | 12715.57 | 1759<br>7.91 | 22078.73 | 10239.66 | 21090.19 | 24012.83 | 24669.15 | 9887.378 | 9426.021 | 9225.48  | 9887.378 | 13402.28 |
| 55 | 23275.86 | 17436.99 | 14393.43 | 16382.41 | 12813.04 | 1770<br>3.21 | 73449.21 | 10902.99 | 65011.23 | 76458.65 | 64081.01 | 10588.11 | 12119.39 | 13337.49 | 10588.11 | 17508.08 |
| 56 | 22793.44 | 14517.55 | 12246.14 | 14238.85 | 11223    | 1438<br>6.91 | 14283.36 | 11234.98 | 13608.72 | 15282.9  | 15816.17 | 10528.92 | 12115.46 | 13399.84 | 10528.92 | 17905.73 |
| 57 | 22251.19 | 35074.73 | 32378.67 | 33789.15 | 30244.89 | 3462<br>4.88 | 119724.8 | 108629   | 102376.3 | 133217.2 | 96455.63 | 99263.1  | 102797.2 | 122368.3 | 99263.1  | 120631   |
| 58 | 21940.3  | 80576.93 | 78154.81 | 75846.95 | 63582.07 | 7639<br>5.27 | 302390.8 | 160584.7 | 296166.8 | 305115.5 | 280588.5 | 150537.5 | 156224.2 | 172636.6 | 150537.5 | 145357   |
| 59 | 20654.88 | 80093.95 | 77890.16 | 75317.84 | 63512.69 | 7603<br>7.35 | 425143.9 | 95973.87 | 408772.8 | 429325.3 | 392351.8 | 90407.5  | 98018.64 | 98063.27 | 90407.5  | 110080.5 |
| 60 | 19220.01 | 43109.15 | 41587.15 | 40173.1  | 35547.83 | 4067<br>6.67 | 12994.68 | 23217.62 | 14175.35 | 13793.87 | 16657.38 | 23020.45 | 24388.44 | 24559.21 | 23020.45 | 31580.99 |
| 61 | 18745.44 | 79903.98 | 76280.01 | 72157.94 | 69822.99 | 8603<br>8.18 | 283982.8 | 66753.39 | 272157.8 | 290503.9 | 271566   | 67228.55 | 68223.32 | 68729.18 | 67228.55 | 73522.31 |
| 62 | 18417.6  | 72014.01 | 73041.38 | 68881.7  | 66563.13 | 7619<br>0.37 | 102696.6 | 26959.22 | 109560.4 | 111903.9 | 122184.4 | 28180.89 | 27502.59 | 27943.26 | 28180.89 | 37555.91 |
| 63 | 18095.08 | 53506.1  | 52726    | 49691.68 | 47835.93 | 5603<br>9.39 | 119701.7 | 29498.51 | 112793.7 | 123877.5 | 112395.2 | 29833.5  | 29978.53 | 29875.46 | 29833.5  | 30597.43 |
| 64 | 17789.05 | 46870.44 | 48360.83 | 46614.44 | 44004.57 | 4599<br>1.72 | 31293.75 | 9034.4   | 31609.95 | 33452.16 | 37707.3  | 9265.607 | 9322.382 | 9067.867 | 9265.607 | 12497.68 |
| 65 | 17484.98 | 61616.97 | 63064.42 | 60538.78 | 58705.16 | 6095<br>7.63 | 86256.9  | 26813.43 | 84867.73 | 89689.52 | 90128.58 | 26769.5  | 27029.77 | 26751.38 | 26769.5  | 30477    |
| 66 | 17061.9  | 60149.95 | 62524.7  | 59415.01 | 57306.22 | 5962<br>6.82 | 63549.34 | 25720.12 | 62440.11 | 67247.76 | 69914.97 | 25733.58 | 26159.79 | 25843.76 | 25733.58 | 29696.33 |
| 67 | 16805.54 | 74076.09 | 78293.76 | 73820.03 | 71855.45 | 7388<br>7.82 | 145135   | 45190.37 | 144423   | 148023.9 | 150908   | 47575.08 | 47513.14 | 46905.67 | 47575.08 | 51574.45 |
| 68 | 16296.38 | 64143.56 | 70523.13 | 66436.23 | 64624.44 | 6536<br>3.43 | 43338.26 | 24014.18 | 44993.08 | 45954.28 | 50199.71 | 24149.76 | 22868.9  | 23171.56 | 24149.76 | 27110.87 |
| 69 | 15864.34 | 98582.13 | 98370.68 | 91466.14 | 89144.41 | 9599         | 280389   | 66836.91 | 276605.3 | 283966.6 | 285222.6 | 66835.98 | 68402.06 | 68356.07 | 66835.98 | 73815.88 |

**ANNEXE N° 02**

|    |                |                 |                 |                 |                 |                      |                 |                 |                 |                |                 |                 |                 |                |                 |                 |
|----|----------------|-----------------|-----------------|-----------------|-----------------|----------------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|    |                |                 |                 |                 |                 | 4.27                 |                 |                 |                 |                |                 |                 |                 |                |                 |                 |
| 70 | 15555          | 70879.66        | 77039.17        | 75467.88        | 69032.35        | 7544<br>9.06         | 45644.38        | 42547.46        | 48124.6         | 47413.26       | 48315.34        | 42736.34        | 45603.65        | 42170.7        | 42736.34        | 54047.18        |
| 71 | 14653.2        | 83664.52        | 82724.52        | 80836.86        | 84607.22        | 8534<br>1.34         | 260694.5        | 82880.31        | 255865.7        | 257300.7       | 267306.9        | 82275.7         | 82990.23        | 82667.4        | 82275.7         | 98270.66        |
| 72 | 14357.17       | 83951.06        | 90895.87        | 88184.08        | 82739.93        | 8766<br>6.78         | 116984          | 58053.87        | 122538.8        | 117300.4       | 122628.1        | 59130.58        | 59825.1         | 60203.46       | 59130.58        | 77392.3         |
| 73 | <b>14025.2</b> | <b>67050.77</b> | <b>51117.57</b> | <b>54940.43</b> | <b>56618.55</b> | <b>6696<br/>3.28</b> | <b>62540.82</b> | <b>52770.53</b> | <b>53349.11</b> | <b>54967.9</b> | <b>49850.53</b> | <b>54261.34</b> | <b>53738.23</b> | <b>55028.5</b> | <b>54261.34</b> | <b>69245.08</b> |
| 74 | 13434.78       | 69575.63        | 66224.31        | 70877.81        | 72642.03        | 7158<br>9.23         | 224186.6        | 47699.61        | 207722.7        | 234859.7       | 206493.1        | 48872.95        | 46993.03        | 49420.37       | 48872.95        | 66720.91        |
| 75 | 13135.98       | 1491.552        | 708.168         | 484.638         | 702.08          | 1089.<br>205         | 13856.33        | 3748.265        | 16558.74        | 15479.5        | 15216.35        | 4113.629        | 3509.667        | 3872.842       | 4113.629        | 5623.774        |
| 76 | 12864.4        | 110.414         | 57.593          | 33.493          | 50.083          | 102.1<br>99          | 11082.17        | 538.624         | 13325.96        | 12300.56       | 11705.61        | 552.059         | 379.909         | 514.066        | 552.059         | 859.495         |
| 77 | 12465.06       | 16678.03        | 17592.12        | 18119.79        | 15601.39        | 1725<br>4.83         | 47653.05        | 54719.95        | 45163.36        | 51287.76       | 52047.95        | 58251.57        | 49244.86        | 55437.25       | 58251.57        | 56257.83        |
| 78 | 12239.6        | 19416.77        | 21729.32        | 21113.95        | 22960.19        | 1996<br>7.06         | 186084.7        | 42253.2         | 177218.7        | 190521.4       | 176721.2        | 44261.59        | 43627.97        | 41835.91       | 44261.59        | 47375.6         |
| 79 | 11559.35       | 18376.12        | 21383.4         | 20169.52        | 21940.44        | 1905<br>1.22         | 33209.39        | 47235.96        | 35856.64        | 38621.14       | 39718.66        | 52948.6         | 46217.79        | 48927.08       | 52948.6         | 50920.47        |
| 80 | 11256.99       | 32861.2         | 41167.92        | 37626.65        | 40033.27        | 3786<br>7.21         | 191790          | 62186.59        | 163897.8        | 203105.1       | 161592.7        | 64198.32        | 62425.95        | 59023.88       | 64198.32        | 66390.57        |
| 81 | 11082.63       | 26724.72        | 35909.73        | 29440.92        | 34214.31        | 3023<br>8.81         | 78762.73        | 46610.35        | 77480.51        | 86307.55       | 78831.38        | 47215.91        | 47170.06        | 40793.34       | 47215.91        | 52061.1         |
| 82 | 10746.31       | 20612.33        | 32810.7         | 26746.52        | 30524.48        | 2495<br>0.45         | 124503.4        | 48000.91        | 58227.06        | 202670.3       | 56770.36        | 47845.23        | 51509.31        | 37648.44       | 47845.23        | 51691.83        |
| 83 | 10274.44       | 50772.75        | 64221.38        | 57570.85        | 62508.32        | 5863<br>2.65         | 279637.2        | 96996.11        | 228559.2        | 291142.7       | 230512.8        | 96292.66        | 98853.61        | 87106.16       | 96292.66        | 100040.8        |
| 84 | 9687.12        | 38559.75        | 46689.52        | 42276.65        | 45497.58        | 4121<br>4.63         | 153125.8        | 42202.38        | 158303.9        | 173480.9       | 160871          | 42151.68        | 43278.47        | 42842.13       | 42151.68        | 56405.46        |
| 85 | 8616.22        | 32745.45        | 38809.36        | 38051.47        | 39681.06        | 3875<br>8.15         | 122078          | 23681           | 110672.8        | 141574         | 117426.1        | 24242.87        | 25023.31        | 24012.25       | 24242.87        | 35305.86        |
| 86 | 7950.1         | 18669.53        | 19979.03        | 20188.15        | 20131.54        | 2003<br>4.24         | 59828.15        | 3025.95         | 61577.88        | 68643.06       | 64383.51        | 2964.31         | 3086.967        | 3159.557       | 2964.31         | 4945.72         |
| 87 | 7359.2         | 10933.84        | 10994.44        | 11442.75        | 10962.16        | 1137<br>0.57         | 41855.17        | 654.156         | 42131.75        | 47773.89       | 43874.54        | 649.12          | 659.304         | 710.394        | 649.12          | 1128.823        |
| 88 | 6715.8         | 10280.83        | 10215.05        | 10444.49        | 10175.55        | 1027<br>4.35         | 48108.03        | 4841.946        | 47571.44        | 54363.88       | 49266.91        | 4818.065        | 4837.143        | 4829.609       | 4818.065        | 6364.832        |
| 89 | 5790.66        | 10060.14        | 9903.08         | 10146.01        | 9951.604        | 9966.<br>395         | 65572.95        | 4209.696        | 63297.2         | 72311.37       | 64845.32        | 4210.348        | 4233.879        | 4202.997       | 4210.348        | 5782.275        |
| 90 | 5158.86        | 25.094          | 22.591          | 24.062          | 22.047          | 23.76<br>3           | 10083.61        | 43.298          | 10041.29        | 10925          | 9389.625        | 43.83           | 44.224          | 47.256         | 43.83           | 59.77           |
| 91 | 3721.71        | 37.785          | 33.356          | 34.941          | 32.696          | 32.39<br>1           | 6541.063        | 77.651          | 6491.741        | 7259.353       | 6330.855        | 83.525          | 79.606          | 80.553         | 83.525          | 92.674          |
| 92 | 2143.31        | 4382.547        | 4342.207        | 4290.446        | 4288.508        | 4373.<br>778         | 55058.1         | 6793.111        | 49733.93        | 57042.25       | 48546.98        | 6794.001        | 6790.722        | 6795.708       | 6794.001        | 6954.747        |
| 93 | 1650.12        | 21.861          | 21.438          | 20.909          | 20.907          | 21.77<br>6           | 174.796         | 1.988           | 174.182         | 201.049        | 183.131         | 2.108           | 2.036           | 2.023          | 2.108           | 2.643           |
| 94 | 933.04         | 0               | 0               | 0               | 0               | 0                    | 0.153           | 0               | 0.153           | 0.149          | 0.149           | 0               | 0               | 0              | 0               | 0               |



ANNEXE N° 02

|    |   |   |   |   |   |   |       |   |       |       |      |   |   |   |   |   |
|----|---|---|---|---|---|---|-------|---|-------|-------|------|---|---|---|---|---|
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0.122 | 0 | 0.123 | 0.131 | 0.13 | 0 | 0 | 0 | 0 | 0 |
|----|---|---|---|---|---|---|-------|---|-------|-------|------|---|---|---|---|---|

| N° | Section<br>(m) | Fonction De Transport                |           |          |           |          | Fonction De Transport                |           |          |           |          |
|----|----------------|--------------------------------------|-----------|----------|-----------|----------|--------------------------------------|-----------|----------|-----------|----------|
|    |                | Engelund Hansen                      |           |          |           |          | Myer Petre Muller                    |           |          |           |          |
|    |                | Fonction De Vitesse De Sédimentation |           |          |           |          | Fonction De Vitesse De Sédimentation |           |          |           |          |
|    |                | Ruby                                 | Toffaleti | Van Rijn | Report 12 | Dietrich | Ruby                                 | Toffaleti | Van Rijn | Report 12 | Dietrich |
| 1  | 56067.75       | 187997.9                             | 191111    | 187881.6 | 187535    | 185876.8 | 5566.094                             | 5566.093  | 5564.601 | 5566.094  | 5566.094 |
| 2  | 55439.52       | 187997.9                             | 191111    | 187881.6 | 187535    | 185876.8 | 5566.094                             | 5566.093  | 5564.601 | 5566.094  | 5566.094 |
| 3  | 54978.47       | 192085.6                             | 196946.1  | 189882.6 | 189738.2  | 185867.4 | 13971.22                             | 13971.12  | 13972.5  | 13971.22  | 13971.22 |
| 4  | 54536.95       | 161216.5                             | 165276.1  | 159518.3 | 159812    | 153728.9 | 22927.52                             | 22927.29  | 22892.6  | 22927.53  | 22927.52 |
| 5  | 54167.95       | 144600.8                             | 146910.8  | 143924.2 | 145035.5  | 143391.5 | 24213.08                             | 24212.74  | 24223.61 | 24213.45  | 24213.08 |
| 6  | 53633.26       | 92230.13                             | 91759.52  | 95903.09 | 90354.47  | 92910.88 | 18770.6                              | 18785.94  | 18811.83 | 18799.96  | 18770.6  |
| 7  | 52885.58       | 32289.4                              | 34101.12  | 31536.74 | 32380.21  | 28812    | 7603.515                             | 7603.206  | 7602.623 | 7602.979  | 7603.515 |
| 8  | 52513.34       | 93238                                | 93446.05  | 91165.99 | 94002.2   | 90621.04 | 18569.31                             | 18567.14  | 18569    | 18568.49  | 18569.31 |
| 9  | 52052.84       | 8957.496                             | 8932.692  | 9137.508 | 9007.602  | 8778.725 | 7264.823                             | 7259.062  | 7266.615 | 7264.317  | 7264.823 |
| 10 | 51313.45       | 83628.81                             | 81912.09  | 81357.71 | 81936.82  | 82087    | 12901.78                             | 12897.93  | 12903.77 | 12901.26  | 12901.78 |
| 11 | 50823.7        | 53061.45                             | 50030.58  | 53159.9  | 51864.2   | 51127.45 | 22684.42                             | 22682.35  | 22685.34 | 22683.98  | 22684.42 |
| 12 | 50010.57       | 88466.45                             | 83457.42  | 89160.5  | 86820.42  | 87413.26 | 18961.21                             | 18955.96  | 18964.08 | 18960.76  | 18961.21 |
| 13 | 49298.68       | 28156.22                             | 27846.02  | 28053.67 | 27820.98  | 27378.93 | 9859.808                             | 9859.842  | 9859.713 | 9859.847  | 9859.808 |
| 14 | 49007.43       | 60375.46                             | 59362.04  | 60983.91 | 59741.94  | 60254.11 | 9068.261                             | 9067.104  | 9068.125 | 9068.463  | 9068.261 |
| 15 | 47889.7        | 3480.616                             | 3427.777  | 3454.958 | 3472.616  | 3393.1   | 2552.986                             | 2549.016  | 2554.745 | 2552.854  | 2552.986 |
| 16 | 46378.31       | 57507.4                              | 57590.77  | 57553.93 | 57638.67  | 58647.78 | 14287.44                             | 14291.1   | 14290.71 | 14286.24  | 14287.44 |
| 17 | 45697.23       | 154614.3                             | 153044.7  | 152067.5 | 151946.9  | 153875.8 | 52584.38                             | 52578.1   | 52382.8  | 52515.87  | 52584.38 |
| 18 | 44879.76       | 179311                               | 180453.3  | 181011.6 | 180389.9  | 177980.2 | 49779.61                             | 49764.64  | 49770.55 | 49778.12  | 49779.61 |
| 19 | 43967.46       | 33310.28                             | 32827.99  | 32524.82 | 32753.82  | 30474.25 | 21024.67                             | 21026.49  | 21025.53 | 21023.57  | 21024.67 |
| 20 | 42110.5        | 135952.6                             | 135508.8  | 135886.9 | 137846.7  | 134840.8 | 17175.41                             | 17173.68  | 17177    | 17175.3   | 17175.41 |
| 21 | 41525.07       | 20805.35                             | 20777.09  | 20643.48 | 20372.6   | 20487.4  | 15391.98                             | 15391.8   | 15392.02 | 15392.01  | 15391.98 |
| 22 | 40530.85       | 148683.8                             | 145785.7  | 149343.4 | 150353.1  | 146270.9 | 20391.4                              | 20392.76  | 20392.7  | 20391.56  | 20391.4  |
| 23 | 39490.27       | 81772.38                             | 76886.53  | 86527.5  | 83265.96  | 82173.76 | 17565.36                             | 17562.96  | 17567.39 | 17565.16  | 17565.36 |
| 24 | 38580.26       | 110327.3                             | 109333    | 118201.7 | 119589.9  | 113400.1 | 25250.73                             | 25251.18  | 25251.92 | 25250.69  | 25250.73 |

## ANNEXE N° 02

|    |          |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 25 | 37908.83 | 19168.37 | 18975.7  | 20110.32 | 19841.28 | 19556    | 10587.03 | 10579.56 | 10591.88 | 10586.34 | 10587.03 |
| 26 | 36905.78 | 7000.705 | 6934.438 | 8127.82  | 7932.281 | 7405.022 | 268.089  | 257.163  | 274.155  | 267.156  | 268.089  |
| 27 | 36402.73 | 61634.29 | 61522.46 | 62540.4  | 62421.98 | 61713.48 | 15779.73 | 15789.55 | 15768.54 | 15780.31 | 15779.73 |
| 28 | 35781.64 | 13309.92 | 13309.03 | 13317.93 | 13301.26 | 13311.99 | 19393.51 | 19381.3  | 19380.45 | 19392.19 | 19393.51 |
| 29 | 35288.25 | 3923.108 | 3896.85  | 3834.702 | 3710.764 | 3796.641 | 5240.083 | 5230.758 | 5244.048 | 5239.263 | 5240.083 |
| 30 | 34866.48 | 86360.37 | 86334.02 | 86267.32 | 86159.65 | 86232.31 | 26662.35 | 26653.47 | 26654.29 | 26662.79 | 26662.35 |
| 31 | 33818.77 | 865.083  | 859.544  | 846.193  | 848.515  | 859.193  | 535.188  | 534.844  | 535.114  | 535.284  | 535.188  |
| 32 | 33204.75 | 111110.6 | 110963.8 | 108529.5 | 109560   | 110700.7 | 39009.24 | 38836.5  | 38743.48 | 38965.96 | 39009.24 |
| 33 | 32893.27 | 11868.53 | 12132.74 | 12055.34 | 12143.66 | 12119.35 | 17021.41 | 16942.71 | 16894.76 | 16925.86 | 17021.41 |
| 34 | 32548.16 | 23915.76 | 24193.6  | 24013.81 | 24090.27 | 24176.05 | 22264.01 | 22109.83 | 22123.18 | 22236.9  | 22264.01 |
| 35 | 32053.06 | 67067.33 | 67836.41 | 67332.83 | 67047.79 | 67357.62 | 53130.32 | 52677.22 | 51883.83 | 52794.11 | 53130.32 |
| 36 | 31595.71 | 98138.98 | 96481.73 | 98659.68 | 95651.14 | 98465.3  | 62785.56 | 62748.03 | 62822.01 | 62751.89 | 62785.56 |
| 37 | 31015.45 | 1507.619 | 1502.329 | 1501.189 | 1487.719 | 1511.422 | 9722.066 | 9681.557 | 9742.509 | 9704.555 | 9722.066 |
| 38 | 30524.67 | 98931.74 | 98926.48 | 98975.2  | 98902.87 | 98934.67 | 8610.13  | 8587.089 | 8633.065 | 8609.735 | 8610.13  |
| 39 | 30158.11 | 1704.079 | 1706.404 | 1704.241 | 1705.01  | 1705.379 | 432.236  | 424.721  | 500.42   | 459.7    | 432.236  |
| 40 | 29903.21 | 26325.9  | 26903.57 | 27312.89 | 26281.4  | 26728.06 | 3893.978 | 3901.655 | 3905.128 | 3935.691 | 3893.978 |
| 41 | 29671.33 | 14256.37 | 14080.13 | 14358.27 | 14251.52 | 14320.89 | 5374.621 | 5230.829 | 5052.475 | 5035.77  | 5374.621 |
| 42 | 29279.25 | 20309.43 | 21229.61 | 22145.01 | 20243.25 | 21426.12 | 1506.202 | 1485.344 | 1534.795 | 1507.469 | 1506.202 |
| 43 | 28971.44 | 16608.39 | 16345.21 | 17839.52 | 16829.76 | 16216.03 | 4688.26  | 4680.191 | 4686.521 | 4682.589 | 4688.26  |
| 44 | 28474.15 | 45498.28 | 45240.21 | 46740.78 | 45740.4  | 45122.26 | 38484.87 | 38806.3  | 38514.32 | 38520.68 | 38484.87 |
| 45 | 28151.53 | 27686.74 | 27497.65 | 28710.71 | 27857.18 | 27393.79 | 23530.94 | 23562.27 | 23632.96 | 23583.36 | 23530.94 |
| 46 | 27256.2  | 22125.96 | 21935.44 | 23769.96 | 22343.23 | 21870.07 | 8144.552 | 8114.886 | 8155.695 | 8128.569 | 8144.552 |
| 47 | 26883.08 | 78488.92 | 78292.65 | 80240.43 | 78725.68 | 78256.84 | 8681.943 | 8955.818 | 8697.672 | 8694.039 | 8681.943 |
| 48 | 26571.48 | 1351.038 | 1355.12  | 1350.927 | 1351.645 | 1346.114 | 1659.292 | 1628.206 | 1675.216 | 1650.721 | 1659.292 |
| 49 | 26024.98 | 73250.56 | 73338.9  | 74776.98 | 67714.95 | 75271.93 | 10740.39 | 10723.93 | 10773.89 | 10741.9  | 10740.39 |
| 50 | 25314.49 | 84189.99 | 82420.29 | 82206.76 | 88093.19 | 83690.14 | 8378.847 | 8360.203 | 8388.313 | 8374.299 | 8378.847 |
| 51 | 24925.71 | 5775.162 | 5484.484 | 5274.94  | 3765.356 | 5805.888 | 619.169  | 615.006  | 664.625  | 640.561  | 619.169  |
| 52 | 24582.43 | 23070.31 | 22778.15 | 22494.79 | 20934.41 | 23032.97 | 13764.11 | 13757.96 | 13772.97 | 13755.42 | 13764.11 |
| 53 | 24172.99 | 41914.04 | 41610.15 | 40932.19 | 39356.66 | 41461.23 | 77179.17 | 76721.09 | 76296.91 | 75761.91 | 77179.17 |
| 54 | 23819.59 | 10754.86 | 10428.88 | 13488.59 | 12182.77 | 13842.26 | 8305.896 | 8269.855 | 8340.977 | 8306.804 | 8305.896 |
| 55 | 23275.86 | 34804.28 | 34450.88 | 34439.31 | 33012.74 | 34813.49 | 2254.608 | 2218.329 | 2283.897 | 2240.55  | 2254.608 |
| 56 | 22793.44 | 1605.109 | 1587.734 | 1688.025 | 1634.886 | 1694.324 | 1906.086 | 1878.301 | 1925.465 | 1903.879 | 1906.086 |
| 57 | 22251.19 | 75842.65 | 75855.12 | 75938.38 | 75853.27 | 75957.58 | 9612.867 | 11045.58 | 9494.09  | 9611.802 | 9612.867 |
| 58 | 21940.3  | 104625.7 | 104638.2 | 104721.5 | 104636.4 | 104740.7 | 36119.64 | 36236.15 | 36230.23 | 36114.51 | 36119.64 |
| 59 | 20654.88 | 161770.1 | 161939.5 | 161762   | 162139.4 | 161812.1 | 31550.76 | 31554.71 | 31587.88 | 31560.87 | 31550.76 |
| 60 | 19220.01 | 3174.742 | 3339.884 | 3193.63  | 3220.236 | 3213.526 | 9324.761 | 9326.597 | 9327.702 | 9323.307 | 9324.761 |
| 61 | 18745.44 | 96067.5  | 96154.06 | 96047.95 | 96071.06 | 95725.79 | 33693.43 | 33349.99 | 33670.56 | 33042.67 | 33693.43 |
| 62 | 18417.6  | 34542.39 | 34869.54 | 34379.5  | 34273.58 | 34239.81 | 13272.41 | 13266.96 | 13345.23 | 13283.43 | 13272.41 |
| 63 | 18095.08 | 50201.1  | 50620.84 | 48643.43 | 48624.38 | 48572.18 | 4633.996 | 4652.376 | 4707.483 | 4679.991 | 4633.996 |
| 64 | 17789.05 | 17152.26 | 16893.67 | 17054.27 | 16942.63 | 16957.36 | 5300.383 | 5295.243 | 5347.006 | 5289.004 | 5300.383 |
| 65 | 17484.98 | 37074.35 | 36724.29 | 36881.5  | 36800.27 | 36818.97 | 33410.25 | 33729.65 | 33714.63 | 33573.09 | 33410.25 |
| 66 | 17061.9  | 40608.47 | 40187.89 | 40371.52 | 40355.29 | 40513.64 | 36423.23 | 36844.05 | 36872.5  | 37316.86 | 36423.23 |

## ANNEXE N° 02

|    |          |          |          |          |          |          |          |          |          |          |          |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 67 | 16805.54 | 57105.72 | 56678.73 | 56862.5  | 56761.93 | 57055.93 | 58563.64 | 58989.83 | 58430.66 | 58410.26 | 58563.64 |
| 68 | 16296.38 | 8581.803 | 8526.35  | 8560.521 | 8529.729 | 8569.085 | 24638.69 | 24719.93 | 24796.94 | 24814.34 | 24638.69 |
| 69 | 15864.34 | 61184.16 | 60981.25 | 61248.95 | 61329.23 | 61313.81 | 45981.43 | 45068.28 | 45433.35 | 44659.89 | 45981.43 |
| 70 | 15555    | 6719.658 | 6814.096 | 6620.88  | 6647.831 | 6602.708 | 22367.67 | 22465.74 | 22546.77 | 22526.33 | 22367.67 |
| 71 | 14653.2  | 51461.07 | 47351.48 | 48309.66 | 47806.68 | 48366.56 | 16084.08 | 16016.55 | 16073.37 | 16005.4  | 16084.08 |
| 72 | 14357.17 | 29184.15 | 32788.13 | 31153.55 | 31113.44 | 29252.44 | 13064.82 | 13044.59 | 13075.57 | 13058.93 | 13064.82 |
| 73 | 14025.2  | 67907.5  | 67979.33 | 69900.57 | 68546.45 | 66626.97 | 7467.57  | 7476.212 | 7519.782 | 7495.605 | 7467.57  |
| 74 | 13434.78 | 59244.71 | 58865.25 | 61212.32 | 57491.57 | 52053.07 | 7754.561 | 7766.071 | 7777.801 | 7762.365 | 7754.561 |
| 75 | 13135.98 | 20839.38 | 17904.1  | 17449.19 | 21102.31 | 22250.82 | 985.926  | 991.103  | 1050.467 | 1018.631 | 985.926  |
| 76 | 12864.4  | 3630.948 | 2823.243 | 2860.975 | 3033.597 | 2798.643 | 519.707  | 509.763  | 567.288  | 535.972  | 519.707  |
| 77 | 12465.06 | 49205.62 | 46307.72 | 45483.84 | 49054.64 | 47954.95 | 18518.68 | 18634.28 | 18169.71 | 18548.07 | 18518.68 |
| 78 | 12239.6  | 37786.47 | 37969.13 | 38094.29 | 36924.14 | 37778.51 | 28057.65 | 28154.69 | 27988.03 | 28115.62 | 28057.65 |
| 79 | 11559.35 | 12182.6  | 9579.238 | 7388.346 | 12366.44 | 10828.72 | 10170.54 | 10180.65 | 10187.31 | 10181    | 10170.54 |
| 80 | 11256.99 | 43351.19 | 40680.04 | 40026.31 | 45038.07 | 42850.57 | 16980.73 | 18076.56 | 16082.61 | 16350.24 | 16980.73 |
| 81 | 11082.63 | 16456.93 | 15317.47 | 14376.11 | 15397.76 | 15835.02 | 13027.72 | 13105.98 | 13025.85 | 12994.33 | 13027.72 |
| 82 | 10746.31 | 50267.16 | 48978.52 | 46704.53 | 48095.44 | 48792.69 | 5482.154 | 5521.056 | 5507.43  | 5465.571 | 5482.154 |
| 83 | 10274.44 | 51387.39 | 52035.52 | 52448.45 | 50748.21 | 51306.11 | 43839.28 | 43192.53 | 43987.84 | 43266.11 | 43839.28 |
| 84 | 9687.12  | 52916.26 | 51953.55 | 46982.88 | 46012.86 | 53840.58 | 36702.83 | 36695.66 | 36716.32 | 36704.64 | 36702.83 |
| 85 | 8616.22  | 44965.06 | 45366.32 | 47710.16 | 45963.34 | 46019.36 | 8380.332 | 8374.999 | 8381.231 | 8372.4   | 8380.332 |
| 86 | 7950.1   | 16088.41 | 15750.22 | 15852.13 | 15717.26 | 16810.07 | 3286.801 | 3286.701 | 3287.262 | 3287.212 | 3286.801 |
| 87 | 7359.2   | 11141.16 | 11095.66 | 11485.22 | 11407.42 | 11216.83 | 1736.088 | 1735.987 | 1736.612 | 1736.158 | 1736.088 |
| 88 | 6715.8   | 11437.55 | 11397.01 | 11937.62 | 11712.53 | 11514.43 | 3506.615 | 3506.282 | 3507.141 | 3506.887 | 3506.615 |
| 89 | 5790.66  | 23461.18 | 23353.32 | 23951.77 | 23676.71 | 23455.74 | 6991.498 | 6991.292 | 6991.893 | 6991.699 | 6991.498 |
| 90 | 5158.86  | 308.038  | 307.657  | 307.16   | 308.128  | 307.27   | 559.183  | 557.492  | 560.224  | 559.157  | 559.183  |
| 91 | 3721.71  | 331.258  | 326.978  | 336.763  | 322.902  | 326.863  | 238.651  | 238.469  | 238.761  | 238.64   | 238.651  |
| 92 | 2143.31  | 26711.83 | 26732.51 | 26733.38 | 26736.7  | 26733.98 | 7940.354 | 7940.089 | 7940.515 | 7940.339 | 7940.354 |
| 93 | 1650.12  | 144.134  | 144.134  | 144.224  | 144.041  | 144.13   | 37.299   | 37.296   | 37.3     | 37.298   | 37.299   |
| 94 | 933.04   | 0.92     | 0.92     | 0.921    | 0.92     | 0.92     | 0        | 0        | 0        | 0        | 0        |
| 95 | 0        | 1.78     | 1.78     | 1.78     | 1.78     | 1.78     | 0        | 0        | 0        | 0        | 0        |