方案一（初期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 33 215.0 0.10 257.9 244.1L 65.4V

2/ 34 219.1 0.10 266.0 79.3

3/ 35 222.8 0.11 271.8 87.4

4/ 36 227.3 0.11 276.0 93.1

5/ 37 235.2 0.11 97.4 312.5P 312.5P 1.2983

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 139.327 7.42572 0.93062 9.114 1.466 1.227

2 144.162 7.74912 0.92648 11.426 1.777 1.475

3 147.497 7.98931 0.92383 12.889 1.959 1.613

4 151.131 8.23168 0.92137 14.077 2.088 1.710

5 156.731 8.52935 0.91870 15.259 2.182 1.789

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 162.077 625.375 0.01285 41.801 53.520 66.842

2 162.625 622.100 0.01302 43.264 55.364 69.545

3 163.550 619.740 0.01321 44.452 56.834 71.727

4 165.336 617.595 0.01343 45.634 58.242 73.890

5 170.025 615.536 0.01381 30.375 38.604 49.347

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.8858E-02 2.3856E-02 1.9592E-01 9.1316E-03 1.0488E+01

2 6.8159E-02 2.3798E-02 1.9196E-01 9.0881E-03 1.0237E+01

3 6.7557E-02 2.3833E-02 1.8916E-01 9.0782E-03 1.0049E+01

4 6.6834E-02 2.3953E-02 1.8662E-01 9.0832E-03 9.8594E+00

5 6.5630E-02 2.4260E-02 1.8415E-01 9.1132E-03 9.6256E+00

方案一（末期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 33 212.8 0.10 265.1 251.2L 67.9V

2/ 34 217.0 0.10 273.2 81.8

3/ 35 220.6 0.11 278.9 90.0

4/ 36 225.1 0.11 283.0 95.6

5/ 37 232.8 0.11 99.8 318.8P 318.8P 1.3048

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 134.307 7.15845 0.93480 9.122 1.522 1.274

2 139.056 7.47179 0.93087 11.371 1.833 1.522

3 142.386 7.70944 0.92822 12.808 2.016 1.661

4 146.113 7.95765 0.92558 13.974 2.144 1.756

5 152.032 8.28079 0.92235 15.166 2.236 1.831

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 157.613 642.838 0.01222 41.776 52.374 64.987

2 158.154 639.501 0.01237 43.213 54.149 67.573

3 159.111 636.589 0.01256 44.379 55.601 69.714

4 161.007 633.050 0.01282 45.571 57.102 71.987

5 165.893 627.783 0.01328 30.405 38.103 48.432

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.9799E-02 2.3889E-02 2.0268E-01 9.3888E-03 1.1111E+01

2 6.9096E-02 2.3832E-02 1.9853E-01 9.3407E-03 1.0850E+01

3 6.8485E-02 2.3862E-02 1.9543E-01 9.3178E-03 1.0639E+01

4 6.7728E-02 2.3967E-02 1.9228E-01 9.2994E-03 1.0401E+01

5 6.6435E-02 2.4239E-02 1.8850E-01 9.2855E-03 1.0061E+01

方案二（初期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 31 213.6 0.10 258.3 243.7L 65.1V

2/ 32 217.6 0.10 266.3 79.7

3/ 33 221.1 0.11 271.8 87.6

4/ 34 225.6 0.11 275.8 93.2

5/ 35 233.3 0.11 97.2 312.2P 312.2P 1.2836

178.7L

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 138.577 7.40731 0.93068 9.018 1.459 1.217

2 143.283 7.72461 0.92662 11.417 1.786 1.478

3 146.493 7.95904 0.92404 12.834 1.964 1.613

4 149.983 8.19485 0.92166 13.973 2.088 1.705

5 155.404 8.48497 0.91907 15.103 2.178 1.780

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

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SIDESTRIPPER SS1

1 160.555 626.114 0.01276 41.477 53.103 66.245

2 161.097 622.902 0.01292 42.894 54.890 68.862

3 161.995 620.613 0.01310 44.033 56.297 70.951

4 163.730 618.557 0.01333 45.163 57.639 73.013

5 168.259 616.603 0.01369 30.060 38.202 48.751

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.9121E-02 2.3764E-02 1.9608E-01 9.1244E-03 1.0533E+01

2 6.8431E-02 2.3709E-02 1.9219E-01 9.0824E-03 1.0286E+01

3 6.7842E-02 2.3746E-02 1.8946E-01 9.0734E-03 1.0102E+01

4 6.7132E-02 2.3867E-02 1.8699E-01 9.0794E-03 9.9173E+00

5 6.5948E-02 2.4173E-02 1.8458E-01 9.1102E-03 9.6889E+00

方案二（末期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 31 213.3 0.10 261.1 244.5L 65.2V

2/ 32 217.4 0.10 269.5 81.8

3/ 33 221.0 0.11 275.1 90.2

4/ 34 225.5 0.11 279.1 95.9

5/ 35 233.1 0.11 99.9 321.2P 321.2P 1.3098

179.3L

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 138.309 7.39686 0.93082 9.023 1.462 1.220

2 143.288 7.72792 0.92654 11.727 1.834 1.517

3 146.553 7.96500 0.92392 13.220 2.022 1.660

4 150.021 8.19989 0.92155 14.383 2.149 1.754

5 155.335 8.48600 0.91900 15.512 2.238 1.828

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

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SIDESTRIPPER SS1

1 160.088 626.448 0.01272 41.802 53.506 66.728

2 160.659 623.100 0.01288 43.295 55.387 69.483

3 161.577 620.793 0.01307 44.458 56.822 71.615

4 163.313 618.763 0.01329 45.588 58.162 73.675

5 167.757 616.861 0.01365 30.075 38.210 48.755

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.9193E-02 2.3750E-02 1.9612E-01 9.1273E-03 1.0548E+01

2 6.8471E-02 2.3688E-02 1.9207E-01 9.0816E-03 1.0290E+01

3 6.7873E-02 2.3724E-02 1.8932E-01 9.0722E-03 1.0104E+01

4 6.7167E-02 2.3844E-02 1.8688E-01 9.0783E-03 9.9209E+00

5 6.6001E-02 2.4146E-02 1.8452E-01 9.1091E-03 9.6968E+00

方案三（初期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 31 212.9 0.10 273.0 258.3L 68.5V

2/ 32 216.7 0.10 281.1 83.2

3/ 33 220.1 0.11 286.7 91.3

4/ 34 224.4 0.11 290.9 96.9

5/ 35 231.7 0.11 101.1 326.3P 326.3P 1.3183

189.8L

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 138.369 7.40854 0.93053 9.473 1.535 1.279

2 142.894 7.71771 0.92659 11.889 1.865 1.541

3 145.945 7.94547 0.92408 13.323 2.046 1.677

4 149.242 8.17360 0.92178 14.467 2.173 1.770

5 154.347 8.45277 0.91929 15.601 2.266 1.846

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

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SIDESTRIPPER SS1

1 159.208 626.908 0.01265 43.464 55.603 69.331

2 159.730 623.806 0.01281 44.898 57.409 71.974

3 160.573 621.613 0.01300 46.042 58.819 74.068

4 162.185 619.667 0.01321 47.176 60.165 76.132

5 166.359 617.858 0.01356 31.575 40.103 51.104

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.9292E-02 2.3694E-02 1.9595E-01 9.1198E-03 1.0561E+01

2 6.8622E-02 2.3641E-02 1.9220E-01 9.0796E-03 1.0321E+01

3 6.8055E-02 2.3676E-02 1.8958E-01 9.0714E-03 1.0144E+01

4 6.7377E-02 2.3791E-02 1.8721E-01 9.0777E-03 9.9673E+00

5 6.6251E-02 2.4080E-02 1.8489E-01 9.1078E-03 9.7497E+00

方案三（末期）

COLUMN SUMMARY

---------- NET FLOW RATES ----------- HEATER

TRAY TEMP PRESSURE LIQUID VAPOR FEED PRODUCT DUTIES

DEG C MPAG KG-MOL/HR M\*WATT

------ ------- -------- -------- -------- --------- --------- ------------

SIDESTRIPPER SS1

1/ 31 213.5 0.10 273.1 257.3L 68.5V

2/ 32 217.5 0.10 281.7 84.3

3/ 33 221.1 0.11 287.6 92.9

4/ 34 225.5 0.11 291.8 98.8

5/ 35 233.1 0.11 103.0 331.6P 331.6P 1.3520

188.8L

TRAY NET VAPOR RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM NORMAL ACTUAL

KG/M3 DENSITY K\*KG/HR K\*M3/HR K\*M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 138.238 7.38884 0.93098 9.475 1.536 1.282

2 143.091 7.71293 0.92683 12.057 1.889 1.563

3 146.319 7.94812 0.92424 13.589 2.082 1.710

4 149.748 8.18099 0.92189 14.793 2.214 1.808

5 155.011 8.46435 0.91938 15.967 2.309 1.886

TRAY NET LIQUID RATES AND DENSITIES

--------------- RATES ---------------

TRAY MW ACTUAL DENS Z FROM DRY STD LIQ ACTUAL

KG/M3 DENSITY K\*KG/HR M3/HR M3/HR

---- -------- ------------ -------- ----------- ----------- -----------

SIDESTRIPPER SS1

1 159.897 628.430 0.01266 43.662 55.732 69.478

2 160.447 625.136 0.01282 45.194 57.657 72.295

3 161.335 622.859 0.01300 46.398 59.137 74.491

4 163.025 620.879 0.01322 47.572 60.522 76.620

5 167.397 619.051 0.01358 31.605 40.038 51.054

TRAY TRANSPORT PROPERTIES

TRAY - THERMAL CONDUCTIVITY - ------ VISCOSITY ------- -- SURFACE --

KCAL/HR-M-C CP TENSION

LIQUID VAPOR LIQUID VAPOR DYNE/CM

---- ----------- ----------- ----------- ----------- -------------

SIDESTRIPPER SS1

1 6.9240E-02 2.3776E-02 1.9688E-01 9.1409E-03 1.0610E+01

2 6.8530E-02 2.3710E-02 1.9287E-01 9.0968E-03 1.0355E+01

3 6.7939E-02 2.3743E-02 1.9012E-01 9.0878E-03 1.0170E+01

4 6.7239E-02 2.3862E-02 1.8768E-01 9.0946E-03 9.9886E+00

5 6.6081E-02 2.4162E-02 1.8530E-01 9.1266E-03 9.7662E+00