

APPENDIX H

Program Outputs

Appendix H.1 : Data Validation Program (Do_data.lst)

Data Validation Program
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```
2
5
6 SCALARS
7 MW1 / 44.1 /
8 MW2 / 56.1 /
9 MW3 / 58.1 /
10 MW4 / 58.1 /
11 MW5 / 72.1 /
12 MW6 / 72.1 /
13 MW7 / 86.2 /
14 MW8 / 100.2 /
15 MW9 / 114.2 /
16 MW10 / 128.2 /
17 MW11 / 98 /
18 MWiC10 / 142 /
19 MWiC11 / 156 /
20 ;
21
22 SCALARS
23 klav / 120000 /
24 Vr / 87.06 /
25 k1 / 6770 /
26 k2 / 13797000000 /
27 k3 / 4970000000 /
28 k4 / 1929700000 /
29 k5 / 1420300000 /
30 k6 / 5370200000 /
31 k7 / 4290200000 /
32 k8 / 4720300000 /
33 k9 / 1210000 /
34 k10 / 396000000000000 /
35 k11 / 401000000000000 /
36 k12 / 19971000 /
37 k13 / 4.02E+16 /
38 k14 / 96770000 /
39 k15 / 8.45E+15 /
40 k16 / 8.006E+16 /
41 k17 / 213740000 /
42 k18 / 3780100000 /
43 k19 / 1.231E+15 /
44 VaC623 / 46.1 /
```

45 Ha / 0.53 /
46 ;
47 SCALARS
48 AE601 / 81 /
49 AE602 / 365 /

GAMS 2.50A Windows NT/95/98

```
50 AE603 / 98 /
51 AE605 / 428 /
52 AE609A / 33 /
53 AE610 / 150.5 /
54 AE611 / 110.55 /
55 AE612 / 263.84 /
56 AE613 / 431.07 /
57 AE616 / 106 /
58 AE617 / 106 /
59 AE621A / 346 /
60 AE626 / 308 /
61 AE627A / 42 /
62 AE628 / 88.7 /
63 AE629 / 743 /
64 AE633 / 284 /
65 AE634 / 3820 /
66 AE640 / 282.42 /
67 AE641 / 133.8 /
68 AE695A / 310 /
69 AE696A / 393 /
70 ContrA / 2.2 /
71 AE6XX / 7360 /
72 AE621B / 115 /
73 AE627B / 41 /
74 AE696B / 131 /
75 AE695B / 103 /
76 ;
77 SCALARS
78 E01MTD / 40.2 /
79 E02MTD / 114.5 /
80 E03MTD / 24.3 /
81 E05MTD / 27.1 /
82 E09MTD / 19.9 /
83 E10MTD / 35.8 /
84 E11MTD / 19.8 /
85 E12MTD / 75.5 /
86 E13MTD / 21.5 /
87 E16MTD / 140.2 /
88 E17MTD / 29.1 /
89 E21MTD / 25.6 /
90 E26MTD / 15.4 /
91 E27MTD / 44.5 /
92 E28MTD / 36.1 /
93 E29MTD / 16.4 /
94 E33MTD / 20.4 /
95 E34MTD / 19.3 /
```

GAMS 2.50A Windows NT/95/98

```
96 E40MTD / 13.6 /
97 E41MTD / 15.7 /
98 E95MTD / 59.2 /
99 E96MTD / 70.4 /
100 ;
101 SCALARS
102 C06AN / 9 /
103 C06BN / 34 /
104 C06CN / 2 /
105 C06DN / 9 /
106 C03N / 40 /
107 C03M / 21 /
108 C01N / 60 /
109 C01M / 41 /
110 ;
111 SCALARS
112 R / 0.0083144 /
113 H298_1 /-12590 /
114 H298_2 /-64.95 /
115 H298_3 /-16240 /
116 H298_4 /-15130 /
117 H298_5 /-18490 /
118 H298_6 /-17650 /
119 H298_7 / 28980 /
120 H298_8 / 33220 /
121 H298_9 /-26940 /
122 H298_10 /-4454 /
123 b_1 /-14380 /
124 b_2 /-2115 /
125 b_3 /-18460 /
126 b_4 /-17590 /
127 b_5 /-20810 /
128 b_6 /-20090 /
129 b_7 /-542.63 /
130 b_8 /-26770 /
131 b_9 /-30480 /
132 b_10 /-8684 /
133 kK601 / 1.12 /
134 WK601 / 460 /
135 hsteam / 1946.60928 /
136 hwatin / 112 /
137 hsteam397 / 1736 /
138 ;
139 SCALARS
140 C03Kn1 / 1.3 /
141 C03Kn2 / 0.65 /
```

GAMS 2.50A Windows NT/95/98

142 C03Kn3 / 0.62 /
143 C03Kn4 / 0.46 /
144 C03Kn5 / 0.22 /
145 C03Kn6 / 0.18 /
146 C03Kn7 / 0.1 /
147 C03Kn8 / 0.045 /
148 C03Kn9 / 0.02 /
149 C03Kn10 / 0.005 /
150 C03Km1 / 1.75 /
151 C03Km2 / 0.93 /
152 C03Km3 / 0.9 /
153 C03Km4 / 0.7 /
154 C03Km5 / 0.35 /
155 C03Km6 / 0.3 /
156 C03Km7 / 0.18 /
157 C03Km8 / 0.07 /
158 C03Km9 / 0.035 /
159 C03Km10 / 0.012 /
160 C01Kn1 / 1.8 /
161 C01Kn2 / 0.75 /
162 C01Kn3 / 0.8 /
163 C01Kn4 / 0.6 /
164 C01Kn5 / 0.26 /
165 C01Kn6 / 0.22 /
166 C01Kn7 / 0.09 /
167 C01Kn8 / 0.04 /
168 C01Kn9 / 0.018 /
169 C01Kn10 / 0.005 /
170 C01Km1 / 2.1 /
171 C01Km2 / 0.85 /
172 C01Km3 / 1 /
173 C01Km4 / 0.7 /
174 C01Km5 / 0.35 /
175 C01Km6 / 0.28 /
176 C01Km7 / 0.15 /
177 C01Km8 / 0.05 /
178 C01Km9 / 0.025 /
179 C01Km10 / 0.008 /
180 K1C616 / 3.5 /
181 K2C616 / 1.7 /
182 K3C616 / 1.4 /
183 K4C616 / 0.95 /
184 K5C616 / 0.4 /
185 K6C616 / 0.3 /
186 K7C616 / 0.13 /
187 K8C616 / 0.04 /

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188 K9C616 / 0.015 /
189 K10C616 / 0.0045 /
190 C14K1 / 3.4 /
191 C14K2 / 1.2 /
192 C14K3 / 1.1 /
193 C14K4 / 0.75 /
194 C14K5 / 0.23 /
195 C14K6 / 0.16 /
196 C14K7 / 0.05 /
197 C14K8 / 0.011 /
198 C14K9 / 0.004 /
199 C14K10 / 0.0008 /
200 K1C615 / 2.2 /
201 K2C615 / 1.2 /
202 K3C615 / 1 /
203 K4C615 / 0.7 /
204 K5C615 / 0.3 /
205 K6C615 / 0.25 /
206 K7C615 / 0.13 /
207 K8C615 / 0.045 /
208 K9C615 / 0.02 /
209 K10C615 / 0.006 /
210 RK1 / 5 /
211 RK2 / 2 /
212 RK3 / 1.7 /
213 RK4 / 1.35 /
214 RK5 / 0.41 /
215 RK6 / 0.3 /
216 RK7 / 0.1 /
217 RK8 / 0.03 /
218 RK9 / 0.01 /
219 RK10 / 0.003 /
220 K1M3 / 3.71 /
221 K2M3 / 1.05 /
222 K3M3 / 1.25 /
223 K4M3 / 0.82 /
224 K5M3 / 0.28 /
225 K6M3 / 0.24 /
226 K7M3 / 0.068 /
227 K8M3 / 0.025 /
228 K9M3 / 0.0075 /
229 K10M3 / 0.0025 /
230 C06Am / 0.9 /
231 C06Bm / 1.2 /
232 C06Cm / 1.1 /
233 C06Dm / 2.9 /

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```
234 ;
235 SCALARS
236 AC07dens / 115.37 /
237 AC08dens / 115.37 /
238 AC18dens / 115.05 /
239 AC19dens / 115.05 /
240 AC29dens / 114.6 /
241 AC30dens / 114.6 /
242 AC40dens / 114.3 /
243 AC41dens / 114.3 /
244 HCdens1 / 0.002055 /
245 HCdens2 / 0.002543 /
246 HCdens3 / 0.002301 /
247 HCdens4 / 0.002389 /
248 HCdens5 / 0.002568 /
249 HCdens6 / 0.002589 /
250 HCdens7 / 0.002702 /
251 HCdens8 / 0.00281 /
252 HCdens9 / 0.002902 /
253 HCdens10 / 0.00296 /
254 ;
255 SCALARS
256 wat1 / 1.0861707 /
257 wat2 / 0.000563134 /
258 wat3 / 0.000000834491 /
259 wat4 / 11426.6 /
260 wat5 / 1018240 /
261 ;
262 SCALARS
263 Kdic4 / 0.0007 /
264 Kdic5 / 0.00056 /
265 Kdic6 / 0.00047 /
266 Kdic7 / 0.000407 /
267 Kdic8 / 0.000356 /
268 Kdic9 / 0.000317 /
269 ;
270
271 * The following are the Measured Variables
272 VARIABLES
273 FAC02, FAC12, FAC23, FAC34, FAC45, FC308, FC316, FC320,
274 FC322, FC328, FC329, FC403, FC407, FC412, FC417, FHC01,
275 FHC32, FSC402, FSC405, FSC411, FSC413, FstmE612, PC302, PC310,
276 PC601, PC603, QHC07, QHC11, QHC14, QHC16, QHC34, QHC38,
277 QHC41, QHC45, TAC09, TAC12, TAC23, TAC31, TAC34, TAC42,
278 TAC45, TC303, TC306, TC307, TC308, TC315, TC316, TC317,
279 TC321, TC324, TC325, TC404, TC405, TC407, TC408, TC410,
```

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280 TC414, TC418, TC419, THC32, TSC402, TSC403, TSC405, TSC408,
281 TSC413, x11AC12, x11AC23, x11AC34, x11AC45, x1C316, x1C325,
x1C417,
282 x1HC32, x1SC402, x1SC403, x1SC408, x2SC402, x2SC403, x2SC408,
x3C316,
283 x3C325, x3C417, x3HC32, x3SC402, x3SC403, x3SC408, x4C316,
x4C417,
284 x4HC32, x4SC402, x4SC403, x4SC408, x5C316, x5C417, x5HC32,
x5SC402,
285 x5SC403, x5SC408, x6SC402, x6SC403, x6SC408, x7HC32, x7SC402,
x7SC403,
286 x7SC408, xx1C322, xx1C414, xx1HC01, xx2HC01, xx3C317, xx3C322,
xx3C407,
287 xx3C412, xx3C414, xx3HC01, xx4C317, xx4C322, xx4C407, xx4C412,
xx4C414,
288 xx4HC01, xx5C407, xx5C412, xx5C414, xx7C414;
289
290 * The following are the Unmeasured Variables
291 VARIABLES
292 C10pC623, C10pC625, C10pC627, C10pC629, C2C623, C2C625, C2C627,
C2C629,
293 C3C623, C3C625, C3C627, C3C629, C3pC623, C3pC625, C3pC627,
C3pC629,
294 C4pC623, C4pC625, C4pC627, C4pC629, C5pC623, C5pC625, C5pC627,
C5pC629,
295 C7pC623, C7pC625, C7pC627, C7pC629, C8pC623, C8pC625, C8pC627,
C8pC629,
296 C9pC623, C9pC625, C9pC627, C9pC629, CHXC623, CHXC625, CHXC627,
CHXC629,
297 CiC10pC623, CiC10pC625, CiC10pC627, CiC10pC629, CiC11pC623,
CiC11pC625, CiC11pC627, CiC11pC629,
298 CiC4eC623, CiC4eC625, CiC4eC627, CiC4eC629, CiC5eC623, CiC5eC625,
CiC5eC627, CiC5eC629,
299 CiC8eC623, CiC8eC625, CiC8eC627, CiC8eC629, Cost, dTE601, dTE602,
dTE603,
300 dTE605, dTE609A, dTE610, dTE611, dTE612, dTE613, dTE616, dTE617,
301 dTE621A, dTE621B, dTE626, dTE627A, dTE627B, dTE628, dTE629,
dTE633,
302 dTE634, dTE640, dTE641, dTE695A, dTE695B, dTE696A, dTE696B,
dTE6XX,
303 Earnings, f1C601, f1C603, f1C606A, f2C601, f3C601, f3C603,
f3C606A,
304 f4C601, f4C603, f4C606A, f5C601, f5C603, f5C606A, f6C601, f7C601,
305 f7C603, f7C606A, FAC05, FAC07, FAC09, FAC15, FAC18, FAC20,
306 FAC26, FAC29, FAC31, FAC37, FAC40, FAC42, FC301, FC302,
307 FC303, FC306, FC307, FC309, FC310, FC311, FC312, FC315,
308 FC317, FC318, FC319, FC321, FC323, FC324, FC325, FC326,
309 FC401, FC402, FC404, FC405, FC406, FC408, FC409, FC410,
310 FC411, FC413, FC414, FC415, FC418, FC419, FC425, FC426,
311 FC427, FC428, FC430, FC431, FC432, FcweE603, FcweE605, FcweE609A,

312 FcweE611, FcweE613, FcweE617, FcweE621A, FcweE621B, FcweE626, FcweE627A,
FcweE627B,
313 FcweE634, FcweE640, FcweE641A, FcweE641B, FHC02, FHC03, FHC04, FHC05,
314 FHC06, FHC07, FHC08, FHC11, FHC14, FHC15, FHC16, FHC22,
315 FHC23, FHC24, FHC25, FHC26, FHC27, FHC28, FHC29, FHC30,
316 FHC31, FHC33, FHC34, FHC38, FHC40, FHC41, FHC45, FlHC28,
317 FlHC29, FlHC30, FlHC31, FlR1, FlR29, FmC302, FmC308, FmC310,
318 FmC311, FmC312, FmC317, FmC322, FmC323, FmC325, FmC405, FmC407,
319 FmC408, FmC409, FmC412, FmC414, FmC425, FmC427, FmC428, FmC430,
320 FmC431, FmC432, FmHC01, FmHC32, FmlHC28, FmlHC29, FmlHC30, FmlR1,
321 FmlR29, FmSC403, FmSC406, FmSC408, FmvHC28, FmvHC29, FmvHC30,
FmvR1,
322 FmvR29, FR1, FR29, FSC401, FSC403, FSC404, FSC406, FSC407,
323 FSC408, FSC409, FSC412, FSC414, FstmE602, FstmE695A, FstmE695B,
FstmE696A,
324 FstmE696B, FvHC28, FvHC29, FvHC30, FvHC31, FvR1, FvR29, h1C601,
325 h1C603, h1C606A, h2C601, h3C601, h3C603, h3C606A, h4C601, h4C603,

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326 h4C606A, h5C601, h5C603, h5C606A, h6C601, h7C601, h7C603,
h7C606A,
327 hAC02, hAC05, hAC07, hAC09, hAC12, hAC15, hAC18, hAC20,
328 hAC23, hAC26, hAC29, hAC31, hAC34, hAC37, hAC40, hAC42,
329 hacAC09, hacAC20, hacAC31, hacAC42, hc301, hc302, hc303, hc306,
330 hc307, hc308, hc309, hc310, hc311, hc312, hc312liq, hc315,
331 hc316, hc317, hc318, hc319, hc321, hc322, hc323, hc324,
332 hc325, hc326, hc329, hc401, hc402, hc403, hc404, hc405,
333 hc406, hc407, hc408, hc408vap, hc409, hc410, hc410vap, hc411,
334 hc412, hc412liq, hc413, hc414, hc414liq, hc415, hc417, hc418,
335 hc419, hc425, hc426, hc427, hc428, hc430, hc431, hc432,
336 hc623, hc625, hc627, hc629, hHC01, hHC02, hHC03, hHC04,
337 hHC05, hHC06, hHC07, hHC11, hHC14, hHC16, hHC29, hHC30,
338 hHC31, hHC32, hHC34, hHC38, hHC41, hHC45, hlHC29, hlHC30,
339 hlHC31, hlR1, hlR29, hr1, hr29, hSC401, hSC402, hSC403,
340 hSC404, hSC405, hSC406, hSC407, hSC408, hSC409, hSC411, hSC412,
341 hSC413, hSC414, hvHC29, hvHC30, hvHC31, hvR1, hvR29, K1C323,
342 K1C325, K1C408, K1C414, K1C428, K1C430, K1C601, K1C603, K1C606A,
343 K1C606C, K1C614B, K1C615_A, K1C616_A, K1E633, K1E6XX, K1SC406,
K1SC408,
344 K2C601, K2E633, K2E6XX, K2SC406, K2SC408, K3C323, K3C325, K3C408,
345 K3C414, K3C428, K3C430, K3C601, K3C603, K3C606A, K3C606C,
K3C614B,
346 K3C615_A, K3C616_A, K3E633, K3E6XX, K3SC406, K3SC408, K4C323,
K4C325,
347 K4C408, K4C414, K4C428, K4C430, K4C601, K4C603, K4C606A, K4C606C,
348 K4C614B, K4C615_A, K4C616_A, K4E633, K4E6XX, K4SC406, K4SC408,
K5C323,
349 K5C325, K5C408, K5C414, K5C428, K5C430, K5C601, K5C603, K5C606A,
350 K5C606C, K5C614B, K5C615_A, K5C616_A, K5E633, K5E6XX, K5SC406,
K5SC408,
351 K6C601, K6SC406, K6SC408, K7C323, K7C325, K7C408, K7C414, K7C428,
352 K7C430, K7C601, K7C603, K7C606A, K7C614B, K7C615_A, K7C616_A,
K7E633,
353 K7E6XX, K7SC406, K7SC408, Kp1C601, Kp1C603, Kp1C606A, Kp1C606D,
Kp2C601,
354 Kp3C601, Kp3C603, Kp3C606A, Kp3C606D, Kp4C601, Kp4C603, Kp4C606A,
Kp4C606D,
355 Kp5C601, Kp5C603, Kp5C606A, Kp5C606D, Kp6C601, Kp7C601, Kp7C603,
Kp7C606A,
356 Kp7C606D, kWad1, kWad2, LpC601, LpC603, LpC606A, PC303, PC306,
357 PC307, PC308, PC309, PC311, PC312, PHC30, PHC32, PR29,
358 Profit, Q2HC07, Q2HC11, Q2HC14, Q2HC16, qFp1C606A, qFp3C606A,
qFp4C606A,
359 qFp5C606A, qFp7C606A, qS1C606A, qS3C606A, qS4C606A, qS5C606A,
qS7C606A, r10C623,
360 r10C625, r10C627, r10C629, r2C623, r2C625, r2C627, r2C629,
r3C623,
361 r3C625, r3C627, r3C629, r4C623, r4C625, r4C627, r4C629, r5C623,
362 r5C625, r5C627, r5C629, r7C623, r7C625, r7C627, r7C629, r8C623,
363 r8C625, r8C627, r8C629, r9C623, r9C625, r9C627, r9C629, rho2HC07,

364 rho2HC11, rho2HC14, rho2HC16, rhoAC09, rhoAC20, rhoAC31, rhoAC42,
riC10C623,
365 riC10C625, riC10C627, riC10C629, riC11C623, riC11C625, riC11C627,
riC11C629, sf1S34,
366 sf2S34, sfS11, sfS19, sfS2, sfS23, sfS27, sfS41, sfS42,
367 sfS5, sfS7, Sm1C601, Sm1C603, Sm1C606A, Sm1C606D, Sm2C601,
Sm3C601,
368 Sm3C603, Sm3C606A, Sm3C606D, Sm4C601, Sm4C603, Sm4C606A,
Sm4C606D, Sm5C601,
369 Sm5C603, Sm5C606A, Sm5C606D, Sm6C601, Sm7C601, Sm7C603, Sm7C606A,
Sm7C606D,
370 Sn1C601, Sn1C603, Sn1C606A, Sn2C601, Sn3C601, Sn3C603, Sn3C606A,
Sn4C601,
371 Sn4C603, Sn4C606A, Sn5C601, Sn5C603, Sn5C606A, Sn6C601, Sn7C601,
Sn7C603,

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372 Sn7C606A, TAC02, TAC05, TAC07, TAC15, TAC18, TAC20, TAC26,
373 TAC29, TAC37, TAC40, TC301, TC302, TC309, TC310, TC311,
374 TC312, TC318, TC319, TC320, TC322, TC323, TC326, TC328,
375 TC329, TC401, TC402, TC403, TC406, TC409, TC411, TC412,
376 TC413, TC415, TC417, TC425, TC426, TC427, TC428, TC430,
377 TC431, TC432, TcwotE609A, TcwotE621A, TcwotE621B, TcwotE627A,
TcwotE627B, TcwotE641A,
378 TcwotE641B, TcwoutE603, TcwoutE605, TcwoutE611, TcwoutE613,
TcwoutE617, TcwoutE626, TcwoutE634,
379 TcwoutE640, THC01, THC02, THC03, THC04, THC05, THC06, THC07,
380 THC11, THC14, THC16, THC22, THC23, THC24, THC25, THC26,
381 THC27, THC28, THC29, THC30, THC31, THC34, THC38, THC41,
382 THC45, TmC601, TmC603, TmC606A, TmC606D, TmK601, TnC601, TnC603,
383 TnC606A, TR1, TR29, TSC401, TSC404, TSC406, TSC407, TSC409,
384 TSC411, TSC412, TSC414, Utilities, VFC614B, VFC615, VFC616, VFM3,
385 VpC601, VpC603, VpC606A, x10AC09, x10AC20, x10AC31, x10AC42,
x11AC02,
386 x11AC05, x11AC07, x11AC09, x11AC15, x11AC18, x11AC20, x11AC26,
x11AC29,
387 x11AC31, x11AC37, x11AC40, x11AC42, x12AC02, x12AC05, x12AC07,
x12AC09,
388 x12AC12, x12AC15, x12AC18, x12AC20, x12AC23, x12AC26, x12AC29,
x12AC31,
389 x12AC34, x12AC37, x12AC40, x12AC42, x12AC45, x1AC09, x1AC20,
x1AC31,
390 x1AC42, x1C301, x1C302, x1C303, x1C306, x1C307, x1C308, x1C309,
391 x1C310, x1C311, x1C312, x1C315, x1C317, x1C318, x1C319, x1C320,
392 x1C321, x1C322, x1C323, x1C324, x1C326, x1C328, x1C329, x1C401,
393 x1C402, x1C403, x1C404, x1C405, x1C406, x1C407, x1C408, x1C409,
394 x1C410, x1C411, x1C412, x1C413, x1C414, x1C415, x1C418, x1C419,
395 x1C425, x1C426, x1C427, x1C428, x1C430, x1C431, x1C432, x1HC01,
396 x1HC02, x1HC03, x1HC04, x1HC05, x1HC06, x1HC07, x1HC08, x1HC11,
397 x1HC14, x1HC15, x1HC16, x1HC22, x1HC23, x1HC24, x1HC25, x1HC26,
398 x1HC27, x1HC28, x1HC29, x1HC30, x1HC31, x1HC33, x1HC34, x1HC38,
399 x1HC40, x1HC41, x1HC45, x1R1, x1R29, x1SC401, x1SC404, x1SC405,
400 x1SC406, x1SC407, x1SC409, x1SC411, x1SC412, x1SC413, x1SC414,
x2AC09,
401 x2AC20, x2AC31, x2AC42, x2C301, x2C417, x2C418, x2C419, x2HC01,
402 x2HC02, x2HC03, x2HC04, x2HC05, x2HC06, x2HC07, x2HC08, x2HC11,
403 x2HC14, x2HC15, x2HC16, x2HC22, x2HC23, x2HC24, x2HC25, x2HC26,
404 x2HC27, x2HC28, x2HC29, x2HC30, x2HC31, x2R1, x2R29, x2SC401,
405 x2SC404, x2SC405, x2SC406, x2SC407, x2SC409, x2SC411, x2SC412,
x2SC413,
406 x2SC414, x3AC09, x3AC20, x3AC31, x3AC42, x3C301, x3C302, x3C303,
407 x3C306, x3C307, x3C308, x3C309, x3C310, x3C311, x3C312, x3C315,
408 x3C317, x3C318, x3C319, x3C320, x3C321, x3C322, x3C323, x3C324,
409 x3C326, x3C328, x3C329, x3C401, x3C402, x3C403, x3C404, x3C405,
410 x3C406, x3C407, x3C408, x3C409, x3C410, x3C411, x3C412, x3C413,
411 x3C414, x3C415, x3C418, x3C419, x3C425, x3C426, x3C427, x3C428,
412 x3C430, x3C431, x3C432, x3HC01, x3HC02, x3HC03, x3HC04, x3HC05,
413 x3HC06, x3HC07, x3HC08, x3HC11, x3HC14, x3HC15, x3HC16, x3HC22,

414 x3HC23, x3HC24, x3HC25, x3HC26, x3HC27, x3HC28, x3HC29, x3HC30,
415 x3HC31, x3HC33, x3HC34, x3HC38, x3HC40, x3HC41, x3HC45, x3R1,
416 x3R29, x3SC401, x3SC404, x3SC405, x3SC406, x3SC407, x3SC409,
x3SC411,
417 x3SC412, x3SC413, x3SC414, x4AC09, x4AC20, x4AC31, x4AC42,
x4C301,

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418 x4C302, x4C303, x4C306, x4C307, x4C308, x4C309, x4C310, x4C311,
419 x4C312, x4C315, x4C317, x4C318, x4C319, x4C320, x4C321, x4C322,
420 x4C323, x4C324, x4C325, x4C326, x4C328, x4C329, x4C401, x4C402,
421 x4C403, x4C404, x4C405, x4C406, x4C407, x4C408, x4C409, x4C410,
422 x4C411, x4C412, x4C413, x4C414, x4C415, x4C418, x4C419, x4C425,
423 x4C426, x4C427, x4C428, x4C430, x4C431, x4C432, x4HC01, x4HC02,
424 x4HC03, x4HC04, x4HC05, x4HC06, x4HC07, x4HC08, x4HC11, x4HC14,
425 x4HC15, x4HC16, x4HC22, x4HC23, x4HC24, x4HC25, x4HC26, x4HC27,
426 x4HC28, x4HC29, x4HC30, x4HC31, x4HC33, x4HC34, x4HC38, x4HC40,
427 x4HC41, x4HC45, x4R1, x4R29, x4SC401, x4SC404, x4SC405, x4SC406,
428 x4SC407, x4SC409, x4SC411, x4SC412, x4SC413, x4SC414, x5AC09,
x5AC20,
429 x5AC31, x5AC42, x5C301, x5C302, x5C303, x5C306, x5C307, x5C308,
430 x5C309, x5C310, x5C311, x5C312, x5C315, x5C317, x5C318, x5C319,
431 x5C320, x5C321, x5C322, x5C323, x5C324, x5C325, x5C326, x5C328,
432 x5C329, x5C401, x5C402, x5C403, x5C404, x5C405, x5C406, x5C407,
433 x5C408, x5C409, x5C410, x5C411, x5C412, x5C413, x5C414, x5C415,
434 x5C418, x5C419, x5C425, x5C426, x5C427, x5C428, x5C430, x5C431,
435 x5C432, x5HC01, x5HC02, x5HC03, x5HC04, x5HC05, x5HC06, x5HC07,
436 x5HC08, x5HC11, x5HC14, x5HC15, x5HC16, x5HC22, x5HC23, x5HC24,
437 x5HC25, x5HC26, x5HC27, x5HC28, x5HC29, x5HC30, x5HC31, x5HC33,
438 x5HC34, x5HC38, x5HC40, x5HC41, x5HC45, x5R1, x5R29, x5SC401,
439 x5SC404, x5SC405, x5SC406, x5SC407, x5SC409, x5SC411, x5SC412,
x5SC413,
440 x5SC414, x6SC401, x6SC404, x6SC405, x6SC406, x6SC407, x6SC409,
x6SC411,
441 x6SC412, x6SC413, x6SC414, x7AC09, x7AC20, x7AC31, x7AC42,
x7C301,
442 x7C302, x7C303, x7C306, x7C307, x7C308, x7C309, x7C310, x7C311,
443 x7C312, x7C315, x7C316, x7C317, x7C318, x7C319, x7C320, x7C321,
444 x7C322, x7C323, x7C324, x7C325, x7C326, x7C328, x7C329, x7C401,
445 x7C402, x7C403, x7C404, x7C405, x7C406, x7C407, x7C408, x7C409,
446 x7C410, x7C411, x7C412, x7C413, x7C414, x7C415, x7C417, x7C418,
447 x7C419, x7C425, x7C426, x7C427, x7C428, x7C430, x7C431, x7C432,
448 x7HC01, x7HC02, x7HC03, x7HC04, x7HC05, x7HC06, x7HC07, x7HC08,
449 x7HC11, x7HC14, x7HC15, x7HC16, x7HC22, x7HC23, x7HC24, x7HC25,
450 x7HC26, x7HC27, x7HC28, x7HC29, x7HC30, x7HC31, x7HC33, x7HC34,
451 x7HC38, x7HC40, x7HC41, x7HC45, x7R1, x7R29, x7SC401, x7SC404,
452 x7SC405, x7SC406, x7SC407, x7SC409, x7SC411, x7SC412, x7SC413,
x7SC414,
453 x8AC09, x8AC20, x8AC31, x8AC42, x9AC09, x9AC20, x9AC31, x9AC42,
454 xAC02, xAC05, xAC07, xAC09, xAC12, xAC15, xAC18, xAC20,
455 xAC23, xAC26, xAC29, xAC31, xAC34, xAC37, xAC40, xAC42,
456 xiC10AC09, xiC10AC20, xiC10AC31, xiC10AC42, xiC11AC09, xiC11AC20,
xiC11AC31, xiC11AC42,
457 xM1C606D, xM3C606D, xM4C606D, xM5C606D, xM7C606D, xx1C302,
xx1C308, xx1C310,
458 xx1C311, xx1C312, xx1C323, xx1C325, xx1C405, xx1C408, xx1C425,
xx1C428,
459 xx1C430, xx1C431, xx1HC28, xx1HC29, xx1HC30, xx1HC32, xx1R1,
xx1R29,

460 xx1SC406, xx1SC408, xx2HC28, xx2HC29, xx2HC30, xx2R1, xx2R29,
xx2SC406,
461 xx2SC408, xx3C302, xx3C308, xx3C310, xx3C311, xx3C312, xx3C323,
xx3C325,
462 xx3C405, xx3C408, xx3C425, xx3C428, xx3C430, xx3C431, xx3C432,
xx3HC28,
463 xx3HC29, xx3HC30, xx3HC32, xx3R1, xx3R29, xx3SC406, xx3SC408,
xx4C302,

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```
464 xx4C308, xx4C310, xx4C311, xx4C312, xx4C323, xx4C325, xx4C405,
xx4C408,
465 xx4C409, xx4C425, xx4C427, xx4C428, xx4C430, xx4C431, xx4C432,
xx4HC28,
466 xx4HC29, xx4HC30, xx4HC32, xx4R1, xx4R29, xx4SC406, xx4SC408,
xx5C302,
467 xx5C308, xx5C310, xx5C311, xx5C312, xx5C323, xx5C325, xx5C405,
xx5C408,
468 xx5C425, xx5C428, xx5C430, xx5C431, xx5HC28, xx5HC29, xx5HC30,
xx5HC32,
469 xx5R1, xx5R29, xx5SC406, xx5SC408, xx6SC406, xx6SC408, xx7C302,
xx7C308,
470 xx7C310, xx7C311, xx7C312, xx7C323, xx7C325, xx7C405, xx7C408,
xx7C425,
471 xx7C428, xx7C430, xx7C431, xx7HC28, xx7HC29, xx7HC30, xx7HC32,
xx7R1,
472 xx7R29, xx7SC406, xx7SC408, y1HC28, y1HC29, y1HC30, y1HC31, y1R1,
473 y1R29, y2HC28, y2HC29, y2HC30, y2HC31, y2R1, y2R29, y3HC28,
474 y3HC29, y3HC30, y3HC31, y3R1, y3R29, y4HC28, y4HC29, y4HC30,
475 y4HC31, y4R1, y4R29, y5HC28, y5HC29, y5HC30, y5HC31, y5R1,
476 y5R29, y7HC28, y7HC29, y7HC30, y7HC31, y7R1, y7R29, yy1HC28,
477 yy1HC29, yy1HC30, yy1R1, yy1R29, yy2HC28, yy2HC29, yy2HC30,
yy2R1,
478 yy2R29, yy3HC28, yy3HC29, yy3HC30, yy3R1, yy3R29, yy4HC28,
yy4HC29,
479 yy4HC30, yy4R1, yy4R29, yy5HC28, yy5HC29, yy5HC30, yy5R1, yy5R29,
480 yy7HC28, yy7HC29, yy7HC30, yy7R1, yy7R29;
481
482 * The following are the Parameters in the Model
483 SCALARS
484 deltaPE634      / 70 /
485 deltaPE640      / 20 /
486 FE601           / 0.5 /
487 FE603           / 1 /
488 FE609A          / 0.5 /
489 FE610           / 1 /
490 FE611           / 0.5 /
491 FE616           / 0.5 /
492 FE617           / 1 /
493 FE621A          / 0.722 /
494 FE621B          / 1 /
495 FE626           / 0.5 /
496 FE627A          / 0.5 /
497 FE627B          / 0.5 /
498 FE628           / 0.5 /
499 FE629           / 0.5 /
500 FE634           / 1 /
501 FE640           / 0.5 /
502 FE641           / 0.5 /
503 hstmE602       / 2145 /
504 hstmE612       / 2145 /
```


505 hstmE695 / 1920 /
506 hstmE696 / 2145 /
507 PC606A / 900 /
508 PC606C / 890 /
509 PC606D / 900 /

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```
510 PE633 / 145 /
511 qC601 / 1 /
512 qC603 / 1 /
513 qC606A / 0.5 /
514 RC601 / 9.141 /
515 RC603 / 14 /
516 sfC631 / 0.977 /
517 sfC632 / 0.982 /
518 sfC633 / 0.991 /
519 sfC634 / 0.99 /
520 Tcwin / 290 /
521 UE601 / 0.008 /
522 UE602 / 0.016 /
523 UE603 / 0.025 /
524 UE605 / 0.045 /
525 UE609A / 0.04 /
526 UE610 / 0.083 /
527 UE611 / 0.099 /
528 UE612 / 0.013 /
529 UE613 / 0.02 /
530 UE616 / 0.01 /
531 UE617 / 0.052 /
532 UE621A / 0.114 /
533 UE621B / 0.078 /
534 UE626 / 0.01 /
535 UE627A / 0.01 /
536 UE627B / 0.01 /
537 UE628 / 0.01 /
538 UE629 / 0.01 /
539 UE633 / 0.016 /
540 UE634 / 0.021 /
541 UE640 / 0.01 /
542 UE641 / 0.084 /
543 UE695A / 0.033 /
544 UE695B / 0.039 /
545 UE696A / 0.012 /
546 UE696B / 0.01 /
547 UE6XX / 0.031 /
548 ;
549
550 VARIABLES
551 ObjVar Objective function using ' ' algorithm;
552
553 SETS
554 Coeff /a1,a2,a3,a4,a5/
555 Comp /1, 2, 3, 4, 5, 6, 7, 8, 9, 10/
```

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```

556 ;
557 TABLE Enth_Coe(Comp,Coeff)
558          a1          a2          a3          a4
559 1          4.211          1.716e-03          7.062e-05          -
9.196e-08
560 2          4.4267          6.6394e-03          6.8065e-05          -
9.2875e-08
561 3          4.455          8.261e-03          8.299e-05          -
1.146e-07
562 4          6.147          1.559e-04          9.679e-05          -
1.255e-07
563 5          1.083          4.457e-02          8.239e-06          -
3.526e-08
564 6          1.898          4.12e-02          1.231e-05          -
3.659e-08
565 7          8.763          2.162e-03          1.317e-04          -
1.738e-07
566 8          1.115e01          -9.494e-03          1.956e-04          -
2.498e-07
567 9          8.157e-01          7.326e-02          1.783e-05          -
6.936e-08
568 10         2.876          7.579e-02          1.346e-05          -
6.409e-08
569 +          a5
570 1          3.644e-11
571 2          3.7347e-11
572 3          4.646e-11
573 4          4.978e-11
574 5          1.579e-11
575 6          1.504e-11
576 7          6.925e-11
577 8          9.489e-11
578 9          3.216e-11
579 10         2.869e-11
580 TABLE Enth_Form(Comp,Coeff)
581          a1          a2          a3
582 1          -80.697          -9.05e-02          4.2104e-05
583 2          21.822          -8.5458e-02          3.8902e-05
584 3          -106.746          -1.0929e-01          5.2693e-05
585 4          -98.186          -1.0974e-01          5.2254e-05
586 5          -121.118          -1.3184e-01          6.5174e-05
587 6          -113.399          -1.3001e-01          6.2902e-05
588 7          -137.114          -1.4707e-01          7.2785e-05
589 8          -151.825          -1.7028e-01          8.4061e-05
590 9          -167.368          -1.9025e-01          9.4496e-05
591 10         -184.627          -2.0407e-01          1.0198e-04
592 TABLE Enth_gas(Comp,Coeff)
593          a1          a2          a3          a4
594 1          28.277          1.16e-01          1.9597e-04          -
2.3271e-07
    
```

595 2	30.11	1.71e-01	1.01e-04	-
1.812e-07				
596 3	6.772	3.4147e-01	-1.0271e-04	-
3.685e-08				
597 4	20.056	2.815e-01	-1.314e-05	-
9.4571e-08				
598 5	-0.881	4.75e-01	-2.479e-04	
6.751e-08				
599 6	26.671	3.234e-01	4.282e-05	-
1.664e-07				
600 7	-7.197	6.009e-01	-3.409e-04	
9.521e-08				
601 8	-3.249	6.663e-01	-3.383e-04	
6.0489e-08				

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602	9	-3.367	7.5824e-01	-3.8216e-04	
5.736e-08					
603	10	51.299	5.356e-01	1.696e-04	-
4.023e-07					
604	+	a5			
605	1	6.867e-11			
606	2	5.732e-11			
607	3	2.043e-11			
608	4	3.415e-11			
609	5	-8.534e-12			
610	6	5.604e-11			
611	7	-1.029e-11			
612	8	2.5385e-12			
613	9	8.0178e-12			
614	10	1.3567e-10			
615	TABLE Enth_liq(Comp,Coeff)				
616		a1	a2	a3	a4
617	1	59.642	3.283e-1	-1.5377e-03	
3.6539e-06					
618	2	50	5.1e-01	-2.02e-03	
2.56e-06					
619	3	71.791	4.8472e-01	-2.0519e-03	
4.0634e-06					
620	4	62.873	5.8913e-01	-2.3558e-03	
4.2257e-06					
621	5	91.474	4.4852e-01	-1.6859e-03	
3.1342e-06					
622	6	80.641	6.2195e-01	-2.2682e-03	
3.7423e-06					
623	7	110.129	5.0521e-01	-1.7675e-03	
3.066e-06					
624	8	118.184	7.1284e-01	-2.3129e-03	
3.4493e-06					
625	9	134.965	8.1458e-01	-2.5182e-03	
3.5416e-06					
626	10	129.481	1.1045	-3.2083e-03	
4.0849e-06					
627	TABLE Enth_Vap(Comp,Coeff)				
628		a1	a2	a3	
629	1	26.89	369.82	0.365	
630	2	33.39	419.59	0.393	
631	3	31.954	408.14	0.392	
632	4	33.02	425.18	0.377	
633	5	37.692	460.43	0.395	
634	6	39.854	469.65	0.398	
635	7	42.78	497.5	0.384	
636	8	49.917	530.37	0.408	
637	9	59.503	559.64	0.481	
638	10	59.521	586.75	0.397	
639					
640	EQUATIONS				

```
641 * The Constraints
642 EQU1, EQU2, EQU3, EQU4, EQU5, EQU6,
643 EQU7, EQU8, EQU9, EQU10, EQU11, EQU12,
644 EQU13, EQU14, EQU15, EQU16, EQU17, EQU18,
645 EQU19, EQU20, EQU21, EQU22, EQU23, EQU24,
646 EQU25, EQU26, EQU27, EQU28, EQU29, EQU30,
647 EQU31, EQU32, EQU33, EQU34, EQU35, EQU36,
```

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648 EQU37, EQU38, EQU39, EQU40, EQU41, EQU42,
649 EQU43, EQU44, EQU45, EQU46, EQU47, EQU48,
650 EQU49, EQU50, EQU51, EQU52, EQU53, EQU54,
651 EQU55, EQU56, EQU57, EQU58, EQU59, EQU60,
652 EQU61, EQU62, EQU63, EQU64, EQU65, EQU66,
653 EQU67, EQU68, EQU69, EQU70, EQU71, EQU72,
654 EQU73, EQU74, EQU75, EQU76, EQU77, EQU78,
655 EQU79, EQU80, EQU81, EQU82, EQU83, EQU84,
656 EQU85, EQU86, EQU87, EQU88, EQU89, EQU90,
657 EQU91, EQU92, EQU93, EQU94, EQU95, EQU96,
658 EQU97, EQU98, EQU99, EQU100, EQU101, EQU102,
659 EQU103, EQU104, EQU105, EQU106, EQU107, EQU108,
660 EQU109, EQU110, EQU111, EQU112, EQU113, EQU114,
661 EQU115, EQU116, EQU117, EQU118, EQU119, EQU120,
662 EQU121, EQU122, EQU123, EQU124, EQU125, EQU126,
663 EQU127, EQU128, EQU129, EQU130, EQU131, EQU132,
664 EQU133, EQU134, EQU135, EQU136, EQU137, EQU138,
665 EQU139, EQU140, EQU141, EQU142, EQU143, EQU144,
666 EQU145, EQU146, EQU147, EQU148, EQU149, EQU150,
667 EQU151, EQU152, EQU153, EQU154, EQU155, EQU156,
668 EQU157, EQU158, EQU159, EQU160, EQU161, EQU162,
669 EQU163, EQU164, EQU165, EQU166, EQU167, EQU168,
670 EQU169, EQU170, EQU171, EQU172, EQU173, EQU174,
671 EQU175, EQU176, EQU177, EQU178, EQU179, EQU180,
672 EQU181, EQU182, EQU183, EQU184, EQU185, EQU186,
673 EQU187, EQU188, EQU189, EQU190, EQU191, EQU192,
674 EQU193, EQU194, EQU195, EQU196, EQU197, EQU198,
675 EQU199, EQU200, EQU201, EQU202, EQU203, EQU204,
676 EQU205, EQU206, EQU207, EQU208, EQU209, EQU210,
677 EQU211, EQU212, EQU213, EQU214, EQU215, EQU216,
678 EQU217, EQU218, EQU219, EQU220, EQU221, EQU222,
679 EQU223, EQU224, EQU225, EQU226, EQU227, EQU228,
680 EQU229, EQU230, EQU231, EQU232, EQU233, EQU234,
681 EQU235, EQU236, EQU237, EQU238, EQU239, EQU240,
682 EQU241, EQU242, EQU243, EQU244, EQU245, EQU246,
683 EQU247, EQU248, EQU249, EQU250, EQU251, EQU252,
684 EQU253, EQU254, EQU255, EQU256, EQU257, EQU258,
685 EQU259, EQU260, EQU261, EQU262, EQU263, EQU264,
686 EQU265, EQU266, EQU267, EQU268, EQU269, EQU270,
687 EQU271, EQU272, EQU273, EQU274, EQU275, EQU276,
688 EQU277, EQU278, EQU279, EQU280, EQU281, EQU282,
689 EQU283, EQU284, EQU285, EQU286, EQU287, EQU288,
690 EQU289, EQU290, EQU291, EQU292, EQU293, EQU294,
691 EQU295, EQU296, EQU297, EQU298, EQU299, EQU300,
692 EQU301, EQU302, EQU303, EQU304, EQU305, EQU306,
693 EQU307, EQU308, EQU309, EQU310, EQU311, EQU312,

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694 EQU313, EQU314, EQU315, EQU316, EQU317, EQU318,
695 EQU319, EQU320, EQU321, EQU322, EQU323, EQU324,
696 EQU325, EQU326, EQU327, EQU328, EQU329, EQU330,
697 EQU331, EQU332, EQU333, EQU334, EQU335, EQU336,
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955 $1/(1+0.5*\text{SQR}((\text{QHC41}-(0.83436))/0.083436))+$
956 $1/(1+0.5*\text{SQR}((\text{FAC45}-(0.104))/0.0104))+$
957 $1/(1+0.5*\text{SQR}((\text{x11AC45}-(0.906))/0.0906))+$
958 $1/(1+0.5*\text{SQR}((\text{QHC16}-(2.034437))/0.2034437))+$
959 $1/(1+0.5*\text{SQR}((\text{QHC45}-(0.839181))/0.0839181))+$
960 $1/(1+0.5*\text{SQR}((\text{x7SC403}-(0.004624639))/0.000462464))+$
961 $1/(1+0.5*\text{SQR}((\text{x4SC403}-(0.853998811))/0.085399881))+$
962 $1/(1+0.5*\text{SQR}((\text{x1SC403}-(0.0001))/0.0001))+$
963 $1/(1+0.5*\text{SQR}((\text{x2SC403}-(0.011920136))/0.001192014))+$
964 $1/(1+0.5*\text{SQR}((\text{x5SC403}-(0.075783178))/0.007578318))+$
965 $1/(1+0.5*\text{SQR}((\text{x4C417}-(0.060949))/0.0060949))+$
966 $1/(1+0.5*\text{SQR}((\text{x5C417}-(0.000877))/0.0001))+$
967 $1/(1+0.5*\text{SQR}((\text{THC32}-(263.435))/26.3435))+$
968 $1/(1+0.5*\text{SQR}((\text{x7HC32}-(0.019678))/0.0019678))+$
969 $1/(1+0.5*\text{SQR}((\text{x5HC32}-(0.009571))/0.0009571))+$

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970 $1/(1+0.5*\text{SQR}((x4\text{HC}32-(0.105414))/0.0105414))+$
971 $1/(1+0.5*\text{SQR}((x3\text{HC}32-(0.818742))/0.0818742))+$
972 $1/(1+0.5*\text{SQR}((x1\text{HC}32-(0.025764))/0.0025764))+$
973 $1/(1+0.5*\text{SQR}(\text{FHC}32-(1.8596))/0.18596))+$
974 $1/(1+0.5*\text{SQR}(\text{FHC}01-(1.01547))/0.101547))+$
975 $1/(1+0.5*\text{SQR}((xx4\text{HC}01-(0.10846))/0.010846))+$
976 $1/(1+0.5*\text{SQR}((xx3\text{HC}01-(0.35583))/0.035583))+$
977 $1/(1+0.5*\text{SQR}((x6\text{SC}403-(0.025008836))/0.002500884))+$
978 $1/(1+0.5*\text{SQR}((x3\text{SC}403-(0.010317757))/0.001031776))+$
979 $1/(1+0.5*\text{SQR}(\text{TSC}403-(337.5927778))/33.75927778))+$
980 $1/(1+0.5*\text{SQR}(\text{TSC}405-(301.2561111))/30.12561111))+$
981 $1/(1+0.5*\text{SQR}((x1\text{C}316-(0.1408))/0.01408))+$
982 $1/(1+0.5*\text{SQR}((x3\text{C}316-(0.779))/0.0779))+$
983 $1/(1+0.5*\text{SQR}((x4\text{C}316-(0.058))/0.0058))+$
984 $1/(1+0.5*\text{SQR}((x5\text{C}316-(0.002))/0.0002))+$
985 $1/(1+0.5*\text{SQR}((xx2\text{HC}01-(0.45251))/0.045251))+$
986 $1/(1+0.5*\text{SQR}((xx1\text{HC}01-(0.10881))/0.010881))+$
987 $1/(1+0.5*\text{SQR}((xx3\text{C}322-(0.94295))/0.094295))+$
988 $1/(1+0.5*\text{SQR}((xx4\text{C}322-(0.0671))/0.00671))+$
989 $1/(1+0.5*\text{SQR}(\text{TC}306-(341.9278))/34.19278))+$
990 $1/(1+0.5*\text{SQR}(\text{PC}310-(264.5339))/26.45339))+$
991 $1/(1+0.5*\text{SQR}(\text{PC}603-(1635.372))/163.5372))+$
992 $1/(1+0.5*\text{SQR}(\text{TC}303-(264.0644))/26.40644))+$
993 $1/(1+0.5*\text{SQR}((x1\text{C}325-(0.971981))/0.0971981))+$
994 $1/(1+0.5*\text{SQR}((x3\text{C}325-(0.001744))/0.0001744))+$
995 $1/(1+0.5*\text{SQR}(\text{TAC}09-(284.18))/28.418))+$
996 $1/(1+0.5*\text{SQR}(\text{TAC}42-(287.1733))/28.71733))+$
997 $1/(1+0.5*\text{SQR}(\text{TC}407-(302.95))/30.295))+$
998 $1/(1+0.5*\text{SQR}(\text{TC}317-(363.4556))/36.34556))+$
999 $1/(1+0.5*\text{SQR}(\text{TC}419-(301.6367))/30.16367))+$
1000 $1/(1+0.5*\text{SQR}(\text{TC}404-(318.67))/31.867))+$
1001 $1/(1+0.5*\text{SQR}(\text{TC}405-(426.12))/42.612))+$
1002 $1/(1+0.5*\text{SQR}(\text{TC}410-(356.2411))/35.62411))+$
1003 $1/(1+0.5*\text{SQR}(\text{TC}414-(324.4561))/32.44561))+$
1004 $1/(1+0.5*\text{SQR}(\text{TC}418-(305.9128))/30.59128))+$
1005 $1/(1+0.5*\text{SQR}(\text{TAC}31-(282.9628))/28.29628))+$
1006 $1/(1+0.5*\text{SQR}(\text{TAC}12-(284.5783))/28.45783))+$
1007 $1/(1+0.5*\text{SQR}(\text{TAC}23-(284.7406))/28.47406))+$
1008 $1/(1+0.5*\text{SQR}(\text{TAC}34-(284.925))/28.4925))+$
1009 $1/(1+0.5*\text{SQR}(\text{TAC}45-(284.9372))/28.49372))+$
1010 $1/(1+0.5*\text{SQR}(\text{PC}302-(102.3615))/10.23615))+$
1011 $1/(1+0.5*\text{SQR}(\text{FC}403-(3.8766))/0.38766))+$
1012 $1/(1+0.5*\text{SQR}(\text{FC}308-(2.199))/0.2199))+$
1013 $1/(1+0.5*\text{SQR}(\text{FSC}405-(0.3344))/0.03344))+$
1014 $1/(1+0.5*\text{SQR}(\text{TC}308-(315.8461))/31.58461))+$
1015 $1/(1+0.5*\text{SQR}(\text{TC}307-(315.5806))/31.55806))+$

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1016 1/(1+0.5*SQR((TC321-(301.045))/30.1045))+
1017 1/(1+0.5*SQR((TC316-(344.0172))/34.40172))+
1018 1/(1+0.5*SQR((TC324-(365.0522))/36.50522))+
1019 1/(1+0.5*SQR((TC315-(308.2378))/30.82378))+
1020 1/(1+0.5*SQR((TC325-(319.6617))/31.96617))+
1021 1/(1+0.5*SQR((FstmE612-(0.1425))/0.01425))+
1022 1/(1+0.5*SQR((FC316-(0.6581))/0.06581))+
1023 1/(1+0.5*SQR((FC328-(0.094244))/0.01543))+
1024 1/(1+0.5*SQR((x4SC408-(0.03306358))/0.003306358))+
1025 1/(1+0.5*SQR((x6SC408-(0.0001))/0.0001))+
1026 1/(1+0.5*SQR((x5SC408-(0.0001))/0.0001))+
1027 1/(1+0.5*SQR((x7SC408-(0.002192698))/0.00021927))+
1028 1/(1+0.5*SQR((TSC408-(319.29))/31.929))+
1029 1/(1+0.5*SQR((x1SC408-(0.047500089))/0.004750009))+
1030 1/(1+0.5*SQR((x3SC408-(0.876121817))/0.087612182))+
1031 1/(1+0.5*SQR((FC412-(0.03238))/0.003238))+
1032 1/(1+0.5*SQR((FC407-(1.107))/0.1107))+
1033 1/(1+0.5*SQR((FC417-(0.2799))/0.02799))+
1034 1/(1+0.5*SQR((x2SC408-(0.022053428))/0.002205343))+
1035 1/(1+0.5*SQR((FSC411-(2.7287))/0.27287))+
1036 1/(1+0.5*SQR((TSC413-(298.6916667))/29.86916667))+
1037 1/(1+0.5*SQR((FSC413-(0.1445))/0.0186))+
1038 1/(1+0.5*SQR((FC320-(0.1468))/0.01468))+
1039 1/(1+0.5*SQR((FC322-(0.4427))/0.04427))+
1040 1/(1+0.5*SQR((FC329-(0.7724))/0.07724))+
1041 1/(1+0.5*SQR((TC408-(426.12))/42.612));
1042
1043 EQU1..x7C308 - x7C309 =e= 0;
1044 EQU2..x3C308 - x3C309 =e= 0;
1045 EQU3..TC317 - TC323 =e= 0;
1046 EQU4..RC603*FC328 - FC329 =e= 0;
1047 EQU5..FC323 - FC324 =e= 0;
1048 EQU6..x1C323 - x1C324 =e= 0;
1049 EQU7..x3C323 - x3C324 =e= 0;
1050 EQU8..x4C323 - x4C324 =e= 0;
1051 EQU9..x5C323 - x5C324 =e= 0;
1052 EQU10..hHC03 - FHC03 * ((x1HC03/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC03,ORD(Coeff))))
1053 +(x2HC03/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC03,ORD(Coeff))))
1054 +(x3HC03/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC03,ORD(Coeff))))
1055 +(x4HC03/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC03,ORD(Coeff))))
1056 +(x5HC03/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC03,ORD(Coeff))))
1057 +(x7HC03/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC03,ORD(Coeff)))) =e= 0;
1058 EQU11..x1HC03 + x2HC03 + x3HC03 + x4HC03 + x5HC03 + x7HC03 =e= 1;
1059 EQU12..FC319 * sf2S34 - FC321 =e= 0;
1060 EQU13..x7C306 - x7C307 =e= 0;
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1061 EQU14..kWad1+KWad2 =e= WK601;

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1062 EQU15..TmK601 *FC306 =e= FC303*(TC303*(PC310/PC303)**((kK601-
1)/kK601)) + FC310*TC310;
1063 EQU16..TC306 =e= TmK601*(PC306/PC310)**((kK601-1)/kK601);
1064 EQU17..x3C306 - x3C307 =e= 0;
1065 EQU18..PC307=e=PC306-deltaPE634;
1066 EQU19..dTE634**3 =e= ((TC306-TcwoutE634)*(TC307-Tcwin)*
1067 ((TC306-TcwoutE634)+(TC307-Tcwin))/2);
1068 EQU20..xx1C312 + xx3C312 + xx4C312 + xx5C312 + xx7C312 =e= 1;
1069 EQU21..K3C615_A * xx3C308 - xx3C312 =e= 0;
1070 EQU22..FC312 =e= VFC615*FC307;
1071 EQU23..(hC308 - hC309) - UE640*AE640*FE640*dTE640 =e= 0;
1072 EQU24..x4C308 - x4C309 =e= 0;
1073 EQU25..x5C308 - x5C309 =e= 0;
1074 EQU26..TC310 - TC311 =e= 0;
1075 EQU27..K4C616_A=e=0.13332*EXP(15.6782-2154.90/(TC310-
34.42))/PC310;
1076 EQU28..PC310 -PC311 =e= 0;
1077 EQU29..K5C616_A=e=0.13332*EXP(15.5338-2348.67/(TC310-
40.05))/PC310;
1078 EQU30..K7C616_A=e=0.13332*EXP(15.7588-2633.90/(TC310-
46.30))/PC310;
1079 EQU31..PC307 - PC312 =e= 0;
1080 EQU32..PC307 - PC308 =e= 0;
1081 EQU33..x7C317 - x7C323 =e= 0;
1082 EQU34..LpC603=e=FC329 + qC603*FC316;
1083 EQU35..VpC603=e=LpC603 - FC317;
1084 EQU36..TnC603=e=(TC325+TC316)/2;
1085 EQU37..x1C326 - x1C329 =e= 0;
1086 EQU38..x3C326 - x3C329 =e= 0;
1087 EQU39..x4C326 - x4C329 =e= 0;
1088 EQU40..x5C326 - x5C329 =e= 0;
1089 EQU41..x7C326 -x7C329 =e= 0;
1090 EQU42..x1C403 + x3C403 + x4C403 + x5C403 + x7C403 =e= 1;
1091 EQU43..x1C404 + x3C404 + x4C404 + x5C404 + x7C404 =e= 1;
1092 EQU44..x1C405 + x3C405 + x4C405 + x5C405 + x7C405 =e= 1;
1093 EQU45..x1C406 + x3C406 + x4C406 + x5C406 + x7C406 =e= 1;
1094 EQU46..x1C407 + x3C407 + x4C407 + x5C407 + x7C407 =e= 1;
1095 EQU47..x1C408 + x3C408 + x4C408 + x5C408 + x7C408 =e= 1;
1096 EQU48..x1C409 + x3C409 + x4C409 + x5C409 + x7C409 =e= 1;
1097 EQU49..x1C410 + x3C410 + x4C410 + x5C410 + x7C410 =e= 1;
1098 EQU50..x1C411 + x3C411 + x4C411 + x5C411 + x7C411 =e= 1;
1099 EQU51..x1C412 + x3C412 + x4C412 + x5C412 + x7C412 =e= 1;
1100 EQU52..x1C413 + x3C413 + x4C413 + x5C413 + x7C413 =e= 1;
1101 EQU53..x1C414 + x3C414 + x4C414 + x5C414 + x7C414 =e= 1;
1102 EQU54..x1C415 + x3C415 + x4C415 + x5C415 + x7C415 =e= 1;
1103 EQU55..x1C417+ x3C417 + x4C417 + x5C417 + x7C417 =e= 1;
1104 EQU56..x1C418 + x2C418 + x3C418 + x4C418 + x5C418 + x7C418 =e= 1;
1105 EQU57..x1C419 + x2C419 + x3C419 + x4C419 + x5C419 + x7C419 =e= 1;
1106 EQU58..x1C303 + x3C303 + x4C303 + x5C303 + x7C303 =e= 1;
1107 EQU59..x1C306 + x3C306 + x4C306 + x5C306 + x7C306 =e= 1;
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1108 EQU60..x1C307 + x3C307 + x4C307 + x5C307 + x7C307 =e= 1;
1109 EQU61..x1C308 + x3C308 + x4C308 +x5C308 + x7C308=e= 1;
1110 EQU62..x1C309 + x3C309 + x4C309 + x5C309 + x7C309 =e= 1;
1111 EQU63..x1C310 + x3C310 + x4C310 + x5C310 + x7C310 =e= 1;
1112 EQU64..x1C311 + x3C311 + x4C311 + x5C311 + x7C311 =e= 1;
1113 EQU65..x1C312 + x3C312 + x4C312 + x5C312 + x7C312 =e= 1;
1114 EQU66..x1C315 + x3C315 + x4C315 + x5C315 + x7C315 =e= 1;
1115 EQU67..x1C316 + x3C316 + x4C316 + x5C316 + x7C316 =e= 1;
1116 EQU68..x1C317 + x3C317 + x4C317 + x5C317 + x7C317 =e= 1;
1117 EQU69..x1C318 + x3C318 + x4C318 + x5C318 + x7C318 =e= 1;
1118 EQU70..x1C319 + x3C319 + x4C319 + x5C319 + x7C319 =e= 1;
1119 EQU71..x1C320 + x3C320 + x4C320 + x5C320 + x7C320 =e= 1;
1120 EQU72..x1C321 + x3C321 + x4C321 + x5C321 + x7C321 =e= 1;
1121 EQU73..x1C322 + x3C322 + x4C322 + x5C322 + x7C322 =e= 1;
1122 EQU74..x1C323 + x3C323 + x4C323 + x5C323 + x7C323 =e= 1;
1123 EQU75..x1C324 + x3C324 + x4C324 + x5C324 + x7C324 =e= 1;
1124 EQU76..(hc406 - hc407) - Fcwe617*4.197*(TcwoutE617 - Tcwin) =e=
0;
1125 EQU77..(hc406 - hc407) - UE617*AE617*FE617*dTE617 =e= 0;
1126 EQU78..(hc405 - hc406) - (hc404 - hc403) =e= 0;
1127 EQU79..(hc405 - hc406) - UE616*AE616*dTE616*FE616 =e= 0;
1128 EQU80..(hc408vap - hc408) - FstmE695A * hstmE695 =e= 0;
1129 EQU81..(hc408vap - hc408) - UE695A*AE695A*dTE695A =e= 0;
1130 EQU82..(hc410vap - hc410) - FstmE696A * hstmE696 =e= 0;
1131 EQU83..(hc410vap - hc410) - UE696A*AE696A*dTE696A =e= 0;
1132 EQU84..(hc412 - hc412liq) - Fcwe627A*4.197*(Tcwote627A - Tcwin)
=e= 0;
1133 EQU85..(hc412 - hc412liq) - UE627A*FE627A*AE627A*dTE627A =e= 0;
1134 EQU86..(hc414 - hc414liq) - Fcwe621A*4.197*(Tcwote621A - Tcwin)
=e= 0;
1135 EQU87..(hc414 - hc414liq) - UE621A*FE621A*AE621A*dTE621A =e= 0;
1136 EQU88..(hc418 - hc419) - Fcwe626*4.197*(TcwoutE626 - Tcwin) =e=
0;
1137 EQU89..(hc418 - hc419) - UE626*AE626*FE626*dTE626 =e= 0;
1138 EQU90..FC306 - FC307=e= 0;
1139 EQU91..x1C306 - x1C307 =e= 0;
1140 EQU92..FC414 - FC415 =e= 0;
1141 EQU93..x1C414 - x1C415 =e= 0;
1142 EQU94..x3C414 - x3C415 =e= 0;
1143 EQU95..x4C414 - x4C415 =e= 0;
1144 EQU96..x5C414 - x5C415 =e= 0;
1145 EQU97..FC418 - FC419 =e= 0;
1146 EQU98..x1C418 - x1C419 =e= 0;
1147 EQU99..x3C418 - x3C419 =e= 0;
1148 EQU100..x4C418 - x4C419 =e= 0;
1149 EQU101..x5C418 - x5C419 =e= 0;
1150 EQU102..hc431 - FC431*
1151 ((x3C431/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC431,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
((1-TC431/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
    
```

```
1152 +(x4C431/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC431,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
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((1-TC431/Enth_Vap("4","a2"))**Enth_Vap("4","a3"))
1153 +(x5C431/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC431,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC431/Enth_Vap("5","a2"))**Enth_Vap("5","a3"))
1154 +(x7C431/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC431,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC431/Enth_Vap("7","a2"))**Enth_Vap("7","a3")) =e= 0;
1155 EQU103..hC412 - FC412 *
1156 ((x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC412/Enth_Vap("3","a2"))**Enth_Vap("3","a3"))
1157 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC412/Enth_Vap("4","a2"))**Enth_Vap("4","a3"))
1158 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC412/Enth_Vap("5","a2"))**Enth_Vap("5","a3"))
1159 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC412/Enth_Vap("7","a2"))**Enth_Vap("7","a3")) =e= 0;
1160 EQU104..TmC603=e=(TC317+TC316)/2;
1161 EQU105..K1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TnC603-
5.261*LOG10(TnC603)+3.282E-11*TnC603+3.7349E-6*TnC603**2);
1162 EQU106..Kp1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TmC603-
5.261*LOG10(TmC603)+3.282E-11*TmC603+3.7349E-6*TmC603**2);
1163 EQU107..K3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TnC603-
8.806*LOG10(TnC603)+8.9246E-11*TnC603+5.7501E-6*TnC603**2);
1164 EQU108..Kp3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TmC603-
8.806*LOG10(TmC603)+8.9246E-11*TmC603+5.7501E-6*TmC603**2);
1165 EQU109..K4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TnC603-
7.1805*LOG10(TnC603)-6.6845E-11*TnC603+4.219E-6*TnC603**2);
1166 EQU110..Kp4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TmC603-
7.1805*LOG10(TmC603)-6.6845E-11*TmC603+4.219E-6*TmC603**2);
1167 EQU111..K5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TnC603-
7.883*LOG10(TnC603)-4.6512E-11*TnC603+3.8997E-6*TnC603**2);
1168 EQU112..Kp5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TmC603-
7.883*LOG10(TmC603)-4.6512E-11*TmC603+3.8997E-6*TmC603**2);
1169 EQU113..K7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TnC603-
9.042*LOG10(TnC603)-1.371E-12*TnC603+3.634E-6*TnC603**2);
1170 EQU114..Kp7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TmC603-
9.042*LOG10(TmC603)-1.371E-12*TmC603+3.634E-6*TmC603**2);
1171 EQU115..Sn1C603 *FC329 =e= K1C603*FC325;
1172 EQU116..SmlC603*LpC603=e= Kp1C603*VpC603;
1173 EQU117..Sn3C603 *FC329 =e= K3C603*FC325;
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1174 EQU118..Sm3C603*LpC603=e= Kp3C603*VpC603;
1175 EQU119..Sn4C603 *FC329 =e= K4C603*FC325;
1176 EQU120..(hc306 - hc307) - Fcwe634*4.197*(TcwoutE634 - Tcwin) =e=
0;
1177 EQU121..(hc306 - hc307) - UE634*AE634*FE634*dTE634 =e= 0;
1178 EQU122..(hc312liq - hc315) - Fcwe641B*4.197*(TcwotE641B - Tcwin)
=e= 0;
1179 EQU123..(hc312liq - hc315) - UE641*AE641*FE641*dTE641 =e= 0;
1180 EQU124..(hc325 - hc326) - Fcwe613*4.197*(TcwoutE613 - Tcwin) =e=
0;
1181 EQU125..(hc325 - hc326) - UE613*AE613*dTE613 =e= 0;
1182 EQU126..(hc324 - hc323) - FstmE612 * hstmE612 =e= 0;
1183 EQU127..(hc324 - hc323) - UE612*AE612*dTE612 =e= 0;
1184 EQU128..FC325 - FC326 =e= 0;
1185 EQU129..FC405 - FC406 =e= 0;
1186 EQU130..hc409 - FC409 *
1187 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1188 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1189 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1190 +(x5C409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC409,ORD(Coeff))))
1191 +(x7C409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC409,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

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((1-TC409/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1192 EQU131..hc428 - FC428 *
1193 ((x3C428/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC428,ORD(Coeff))))
1194 +(x4C428/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC428/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1195 +(x5C428/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC428/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1196 +(x7C428/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC428/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1197 EQU132..Sm4C603*LpC603=e= Kp4C603*VpC603;
1198 EQU133..Sn5C603 *FC329 =e= K5C603*FC325;
1199 EQU134..Sm5C603*LpC603=e= Kp5C603*VpC603;
1200 EQU135..Sn7C603 *FC329 =e= K7C603*FC325;
1201 EQU136..Sm7C603*LpC603=e= Kp7C603*VpC603;
1202 EQU137..f1C603*((1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603) /1E2+
h1C603*Sn1C603**(40-17)*(1-Sm1C603**(17+1))/1E2) =e=

(1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603)/1E2;
1203 EQU138..f3C603*((1-Sn3C603**(40-17))+ RC603*(1-Sn3C603) +
h3C603*Sn3C603**(40-17)*(1-Sm3C603**(17+1))) =e= (1-Sn3C603**(40-1
7))+ RC603*(1-Sn3C603);
1204 EQU139..f4C603*((1-Sn4C603**(40-17))+ RC603*(1-Sn4C603) +
h4C603*Sn4C603**(40-17)*(1-Sm4C603**(17+1))) =e= (1-Sn4C603**(40-1
7))+ RC603*(1-Sn4C603);
1205 EQU140..f5C603*((1-Sn5C603**(40-17))+ RC603*(1-Sn5C603) +
h5C603*Sn5C603**(40-17)*(1-Sm5C603**(17+1))) =e= (1-Sn5C603**(40-1
7))+ RC603*(1-Sn5C603);
1206 EQU141..f7C603*((1-Sn7C603**(40-17))+ RC603*(1-Sn7C603) +
h7C603*Sn7C603**(40-17)*(1-Sm7C603**(17+1))) =e= (1-Sn7C603**(40-1
7))+ RC603*(1-Sn7C603);
1207 EQU142..f1C603 * x1C316 * FC316 =e= x1C317 * FC317;
1208 EQU143..f3C603 * x3C316 * FC316 =e= x3C317 * FC317;
1209 EQU144..f4C603 * x4C316 * FC316 =e= x4C317 * FC317;
1210 EQU145..f5C603 * x5C316 * FC316 =e= x5C317 * FC317;
1211 EQU146..f7C603 * x7C316 * FC316 =e= x7C317 * FC317;
1212 EQU147..h1C603*K1C603*LpC603*(1-Sm1C603) =e= Kp1C603*FC329*(1-
Sn1C603);
1213 EQU148..h3C603*K3C603*LpC603*(1-Sm3C603) =e= Kp3C603*FC329*(1-
Sn3C603);
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1214 EQU149..h4C603*K4C603*LpC603*(1-Sm4C603) =e= Kp4C603*FC329*(1-
Sn4C603);
1215 EQU150..h5C603*K5C603*LpC603*(1-Sm5C603) =e= Kp5C603*FC329*(1-
Sn5C603);
1216 EQU151..h7C603*K7C603*LpC603*(1-Sm7C603) =e= Kp7C603*FC329*(1-
Sn7C603);
1217 EQU152..K1C323*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC323-
5.261*LOG10(TC323)+3.282E-11*TC323+3.7349E-6*TC323**2);
1218 EQU153..K3C323*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC323-
8.806*LOG10(TC323)+8.9246E-11*TC323+5.7501E-6*TC323**2);
1219 EQU154..K4C323*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC323-
7.1805*LOG10(TC323)-6.6845E-11*TC323+4.219E-6*TC323**2);
1220 EQU155..K5C323*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC323-
7.883*LOG10(TC323)-4.6512E-11*TC323+3.8997E-6*TC323**2);
1221 EQU156..K7C323*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC323-
9.042*LOG10(TC323)-1.371E-12*TC323+3.634E-6*TC323**2);
1222
EQU157..K1C323*xx1C323+K3C323*xx3C323+K4C323*xx4C323+K5C323*xx5C323+K7C
323*xx7C323 =e= 1;
1223 EQU158..FmC323 - FC323 * (x1C323/MW1 + x3C323/MW3 + x4C323/MW4 +
x5C323/MW5 + x7C323/MW7)=e= 0;
1224 EQU159..xx1C323 * MW1 * FmC323 - FC323 *x1C323=e= 0;
1225 EQU160..xx3C323 * MW3 * FmC323 - FC323 *x3C323=e= 0;
1226 EQU161..xx4C323 * MW4 * FmC323 - FC323 *x4C323=e= 0;
1227 EQU162..xx5C323 * MW5 * FmC323 - FC323 *x5C323=e= 0;
1228 EQU163..xx1C323+xx3C323+xx4C323+xx5C323+xx7C323 =e= 1;

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1229 EQU164..dTE613*2 =e=
1230 (TC325-TcwoutE613) + (TC326-Tcwin);
1231 EQU165..x1C325 -x1C326 =e=0;
1232 EQU166..x3C325 -x3C326 =e=0;
1233 EQU167..x4C325 -x4C326 =e=0;
1234 EQU168..FC418 - FC417 - FC415 =e= 0;
1235 EQU169..(hc317 - hc318) - (hc316 - hc315) =e= 0;
1236 EQU170..(hc317 - hc318) - UE610*AE610*dTE610*FE610 =e= 0;
1237 EQU171..(hc318 - hc319) - Fcwe611*4.197*(TcwoutE611 - Tcwin) =e=
0;
1238 EQU172..(hc318 - hc319) - UE611*AE611*FE611*dTE611 =e= 0;
1239 EQU173..FC317 - FC318 =e= 0;
1240 EQU174..FC318 - FC319 =e= 0;
1241 EQU175..x1C318 - x1C319 =e= 0;
1242 EQU176..x3C318 - x3C319 =e= 0;
1243 EQU177..x4C318 - x4C319 =e= 0;
1244 EQU178..x5C318 - x5C319 =e= 0;
1245 EQU179..x1C405 - x1C406 =e= 0;
1246 EQU180..x5C325 -x5C326 =e=0;
1247 EQU181..x1C325 + x3C325 +x4C325 +x5C325 +x7C325 =e= 1;
1248 EQU182..x1C326 + x3C326 +x4C326 +x5C326 +x7C326 =e= 1;
1249 EQU183..TC325-TC326 =e= 0;
1250 EQU184..x1C326 -x1C328 =e= 0;
1251 EQU185..x3C326 -x3C328 =e= 0;
1252 EQU186..x4C326 -x4C328 =e= 0;
1253 EQU187..x5C326 -x5C328 =e= 0;
1254 EQU188..x7C326 -x7C328 =e= 0;
1255 EQU189..K1C325*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC325-
5.261*LOG10(TC325)+3.282E-11*TC325+3.7349E-6*TC325**2);
1256 EQU190..K3C325*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC325-
8.806*LOG10(TC325)+8.9246E-11*TC325+5.7501E-6*TC325**2);
1257 EQU191..K4C325*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC325-
7.1805*LOG10(TC325)-6.6845E-11*TC325+4.219E-6*TC325**2);
1258 EQU192..K5C325*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC325-
7.883*LOG10(TC325)-4.6512E-11*TC325+3.8997E-6*TC325**2);
1259 EQU193..K7C325*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC325-
9.042*LOG10(TC325)-1.371E-12*TC325+3.634E-6*TC325**2);
1260
EQU194..xx1C325/K1C325+xx3C325/K3C325+xx4C325/K4C325+xx5C325/K5C325+xx7
C325/K7C325 =e= 1;
1261 EQU195..FmC325 - FC325 * (x1C325/MW1 + x3C325/MW3 + x4C325/MW4 +
x5C325/MW5 + x7C325/MW7)=e= 0;
1262 EQU196..xx1C325 * MW1 * FmC325 - FC325 *x1C325=e= 0;
1263 EQU197..xx3C325 * MW3 * FmC325 - FC325 *x3C325=e= 0;
1264 EQU198..xx4C325 * MW4 * FmC325 - FC325 *x4C325=e= 0;
1265 EQU199..xx5C325 * MW5 * FmC325 - FC325 *x5C325=e= 0;
1266 EQU200..xx1C325+xx3C325+xx4C325+xx5C325+xx7C325 =e= 1;
1267 EQU201..hc309-hc310-hc311=e=0;
1268 EQU202..FAC07*x11AC07 - FAC09*x11AC09 -
0.06*2.02*FHC07*x2HC07/(rho2HC07/1000) =e= 0;
1269 EQU203..1000*FAC09*xiC11AC09 -riC11C623 * VaC623 * MWiC11 =e= 0;
```


1270 EQU204..1000*FAC09*xiC10AC09 - riC10C623*VaC623*MWiC10 =e= 0;
1271 EQU205..FHC07 +FHC34 + FAC07 =e= FAC09;
1272 EQU206..1000*FAC09*x10AC09 - r10C623*VaC623*MW10 =e= 0;
1273 EQU207..1000*FAC09*x9AC09 - r9C623*VaC623*MW9 =e= 0;
1274 EQU208..1000*FAC09*x8AC09 - r8C623*VaC623*MW8 =e= 0;

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1275 EQU209..1000*(FHC07*x7HC07 + FHC34*x7HC34 - FAC09*x7AC09) +
r7C623*VaC623*MW7 =e= 0;
1276 EQU210..FC326 - FC328 - FC329 =e= 0;
1277 EQU211..TC326 - TC328 =e= 0;
1278 EQU212..TC326 - TC329 =e= 0;
1279 EQU213..1000*(FHC07*x5HC07 + FHC34*x5HC34 - FAC09*x5AC09) +
r5C623*VaC623*MW5 =e= 0;
1280 EQU214..1000*(FHC07*x4HC07 + FHC34*x4HC34 - FAC09*x4AC09) +
r4C623*VaC623*MW4 =e= 0;
1281 EQU215..1000*(FHC07*x3HC07 + FHC34*x3HC34 - FAC09*x3AC09) -
r3C623*VaC623*MW3 =e= 0;
1282 EQU216..FHC07*x1HC07 + FHC34*x1HC34 - FAC09*x1AC09 =e= 0;
1283 EQU217..r4C623 =e= k2/1E12*C4pC623*C3C623;
1284 EQU218..r5C623 =e= k3/1E12*C5pC623*C3C623;
1285 EQU219..r7C623 =e= k4/1E14*C7pC623 * C3C623;
1286 EQU220..r9C623 =e= k6/1E12*C9pC623 * C3C623;
1287 EQU221..r10C623 =e= k7/1E12*C10pC623 * C3C623;
1288 EQU222..riC10C623 =e= k8/1E12* CiC10pC623 * C3C623;
1289 EQU223..r8C623 =e= k5/1E12*C8pC623*C3C623;
1290 EQU224..riC11C623 =e=k18/1E12*CiC11pC623*C3C623;
1291 EQU225..-r3C623 + r4C623 + r5C623 + r7C623 + r8C623 + r9C623 +
r10C623 + riC10C623+ riC11C623 =e= 0;
1292 EQU226..1000*(FHC07*x2HC07 - FAC09*x2AC09) - r2C623*VaC623*MW2
=e= 0;
1293 EQU227..-r2C623 + k1/1E6*C2C623*CHXC623 + k11/(1E9*1E6)*C3pC623
*C2C623 + k15/(1E12*1E6)*C8pC623*C2C623 + k19/(1E14*1E6)
*C7pC623*C2C623=e=0;
1294 EQU228..k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623 =e= 0;
1295 EQU229..k13/(1E11*1E9)*CiC8eC623*C3pC623 +k17/1E12*CiC11pC623 -
k14/1E11*CiC5eC623*CHXC623 - k16/(1E11*1E9)*CiC5eC623*C3pC623
=e= 0;
1296 EQU230..k12/1E12*C9pC623 - k13/(1E11*1E9)*CiC8eC623*C3pC623 =e=0;
1297 EQU231..k1/1E6*C2C623*CHXC623 - k2/1E12*C4pC623*C3C623 =e= 0;
1298 EQU232..r3C623 - k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623
- k11/(1E6*1E9)*C3pC623*C2C623 - k13/(1E11*1E9)
*CiC8eC623*C3pC623 - k16/(1E11*1E9) * CiC5eC623*C3pC623 =e= 0;
1299 EQU233..k14/1E11*CiC5eC623*CHXC623 - k3/1E12*C5pC623*C3C623 =e=0;
1300 EQU234..k17/1E12*CiC11pC623 - k4/1E14*C7pC623*C3C623 -
k19/(1E6*1E14)*C7pC623*C2C623 =e= 0;
1301 EQU235..C2C623 /1E6=e= rhoAC09*x2AC09/MW2;
1302 EQU236..C3C623 =e= rhoAC09*x3AC09/MW3;
1303 EQU237..CHXC623 =e= rhoAC09*x11AC09/MW11;
1304 EQU238..FAC09*x1AC09 - FHC27*x1HC27 =e=0;
1305 EQU239..FAC09*x2AC09 - FHC27*x2HC27 =e=0;
1306 EQU240..FAC09*x3AC09 - FHC27*x3HC27 =e=0;
1307 EQU241..FAC09*x4AC09 - FHC27*x4HC27 =e=0;
1308 EQU242..FAC09*x5AC09 - FHC27*x5HC27 =e=0;
1309 EQU243..x11AC05 - x11AC12 =e=0;

1310 EQU244..FAC05*x11AC05 - sfc631*FAC09*x11AC09 =e=0;
1311 EQU245..FAC05*x12AC05 - sfc631*FAC09*x12AC09 =e=0;
1312 EQU246..FAC09*(x11AC09 + x12AC09) - FAC05 - FAC12 =e=0;
1313 EQU247..FAC09*(x7AC09+x8AC09+x9AC09+x10AC09+xiC10AC09+xiC11AC09)
- FHC27*x7HC27 =e= 0;
1314 EQU248..x11AC07 + x12AC07 =e= 1;
1315 EQU249..K3C616_A * xx3C311 - xx3C310 =e= 0;
1316 EQU250..FC310 =e= VFC616*FC309;
1317 EQU251..FC309 - FC310 - FC311 =e= 0;

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1318 EQU252..FC309 * x1C309 - FC311 * x1C311 - FC310 * x1C310 =e= 0;
1319 EQU253..FC309 * x3C309 - FC310 * x3C310 - FC311 * x3C311 =e= 0;
1320 EQU254..FC309 * x4C309 - FC310 * x4C310 - FC311 * x4C311 =e= 0;
1321 EQU255..FC309 * x5C309 - FC310 * x5C310 - FC311 * x5C311 =e= 0;
1322 EQU256..K1C616_A* xx1C311 - xx1C310 =e= 0;
1323 EQU257..K7C616_A * xx7C311 - xx7C310 =e= 0;
1324 EQU258..K4C616_A * xx4C311 - xx4C310 =e= 0;
1325 EQU259..x1AC09 + x2AC09 + x3AC09 + x4AC09 + x5AC09 +x7AC09 +
x8AC09 + x9AC09 + x10AC09 + x11AC09 + x12AC09 + xiC10AC09 +
xiC11AC09 =e= 1;
1326 EQU260..FAC07 -FAC05 - FAC02 =e= 0;
1327 EQU261..FAC07*x11AC07 -FAC05*x11AC05 - FAC02*x11AC02 =e= 0;
1328 EQU262..x11AC05+x12AC05 =e=1;
1329 EQU263..x11AC02+x12AC02 =e=1;
1330 EQU264..k13/(1E11*1E9)*C3pC623*CiC8eC623 - k5/1E12*C8pC623*C3C623
-k15/(1E6*1E12)*C8pC623*C2C623 =e= 0;
1331 EQU265..k11/(1E6*1E9)*C2C623*C3pC623 +
k10/(1E6*1E9)*C3pC623*CiC4eC623 - k6/1E12*C9pC623*C3C623 -
k12/1E12*C9pC623 =e= 0;
1332 EQU266..k16/(1E11*1E9)*CiC5eC623*C3pC623 -
k7/1E12*C10pC623*C3C623 =e= 0;
1333 EQU267..k19/(1E6*1E14)*C7pC623*C2C623 - k8/1E12*CiC10pC623*C3C623
=e= 0;
1334 EQU268..k15/(1E6*1E12)*C8pC623*C2C623 -
k18/1E12*CiC11pC623*C3C623 - k17/1E12*CiC11pC623 =e= 0;
1335 EQU269..x7C325 -x7C326 =e=0;
1336 EQU270..TC323 - TC324 =e= 0;
1337 EQU271..dTE612 =e= 414.6 - TC323;
1338 EQU272..K1C615_A*PC308 =e= 0.1333*10**(21.4469-1.4627E3/TC308-
5.261*LOG10(TC308)+3.282E-11*TC308+3.7349E-6*TC308**2);
1339 EQU273..K3C615_A*PC308 =e= 0.1333*10**(31.2541-1.9532E3/TC308-
8.806*LOG10(TC308)+8.9246E-11*TC308+5.7501E-6*TC308**2);
1340 EQU274..K4C615_A=e=0.13332*EXP(15.6782-2154.90/(TC308-
34.42))/PC308;
1341 EQU275..K5C615_A=e=0.13332*EXP(15.5338-2348.67/(TC308-
40.05))/PC308;
1342 EQU276..K7C615_A=e=0.13332*EXP(15.7588-2633.90/(TC308-
46.30))/PC308;
1343 EQU277..K1C616_A*PC310 =e= 0.1333*10**(21.4469-1.4627E3/TC310-
5.261*LOG10(TC310)+3.282E-11*TC310+3.7349E-6*TC310**2);
1344 EQU278..K3C616_A*PC310 =e= 0.1333*10**(31.2541-1.9532E3/TC310-
8.806*LOG10(TC310)+8.9246E-11*TC310+5.7501E-6*TC310**2);
1345 EQU279..x11AC12+x12AC12 =e=1;
1346 EQU280..FAC18 -FAC12 - FAC15 =e= 0;
1347 EQU281..FAC18*x11AC18 -FAC12*x11AC12 - FAC15*x11AC15 =e= 0;
1348 EQU282..x11AC15+x12AC15 =e=1;
1349 EQU283..x11AC18 + x12AC18 =e= 1;
1350 EQU284..1000*(FHC11*x7HC11 + FHC38*x7HC38 - FAC20*x7AC20) +
r7C625*VaC623*MW7 =e= 0;
1351 EQU285..r10C625 =e= k7/1E12*C10pC625 * C3C625;
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1352 EQU286..r9C625 =e= k6/1E12*C9pC625 * C3C625;
1353 EQU287..r7C625 =e= k4/1E14*C7pC625 * C3C625;
1354 EQU288..r5C625 =e= k3/1E12*C5pC625*C3C625;
1355 EQU289..K5C616_A * xx5C311 - xx5C310 =e= 0;
1356 EQU290..FmC310 - FC310 * (x1C310/MW1 + x3C310/MW3 +x4C310/MW4 +
x5C310/MW5 + x7C310/MW7)=e= 0;
1357 EQU291..xx1C310*MW1*FmC310 - FC310 * x1C310 =e= 0;
1358 EQU292..xx3C310 * MW3 * FmC310 - FC310 * x3C310 =e= 0;
1359 EQU293..xx4C310 * MW4 * FmC310 - FC310 * x4C310 =e= 0;
1360 EQU294..xx5C310 * MW5 * FmC310 - FC310 * x5C310 =e= 0;
1361 EQU295..xx1C310 + xx3C310 + xx4C310 + xx5C310 + xx7C310 =e=1
1362 ;

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1363 EQU296..FmC311 - FC311 * (x1C311/MW1 + x3C311/MW3 + x4C311/MW4 +
x5C311/MW5 + x7C311/MW7)=e= 0;
1364 EQU297..xx1C311 * MW1 * FmC311 - FC311 * x1C311 =e= 0;
1365 EQU298..xx3C311 * MW3 * FmC311 - FC311 * x3C311 =e= 0;
1366 EQU299..xx4C311 * MW4 * FmC311 - FC311 * x4C311 =e= 0;
1367 EQU300..xx5C311 * MW5 * FmC311 - FC311 * x5C311 =e= 0;
1368 EQU301..xx1C311+ xx3C311 + xx4C311 + xx5C311 + xx7C311 =e= 1;
1369 EQU302..FC306 * x1C306 - FC303 * x1C303 - FC310 * x1C310 =e= 0;
1370 EQU303..FC306 * x3C306 - FC303 * x3C303 - FC310 * x3C310 =e= 0;
1371 EQU304..FC306 * x4C306 - FC303 * x4C303 - FC310 * x4C310 =e= 0;
1372 EQU305..FC306 * x5C306 - FC303 * x5C303 - FC310 * x5C310 =e= 0;
1373 EQU306..r4C625 =e= k2/1E12*C4pC625*C3C625;
1374 EQU307..FHC11*x1HC11 + FHC38*x1HC38 - FAC20*x1AC20 =e= 0;
1375 EQU308..1000*(FHC11*x3HC11 + FHC38*x3HC38 - FAC20*x3AC20) -
r3C625*VaC623*MW3 =e= 0;
1376 EQU309..FAC18*x11AC18 - FAC20*x11AC20 -
0.06*2.02*FHC11*x2HC11/(rho2HC11/1000) =e= 0;
1377 EQU310..1000*(FHC11*x5HC11 + FHC38*x5HC38 - FAC20*x5AC20) +
r5C625*VaC623*MW5 =e= 0;
1378 EQU311..riC11C625 =e=k18/1E12*CiC11pC625*C3C625;
1379 EQU312..1000*FAC20*x8AC20 - r8C625*VaC623*MW8 =e= 0;
1380 EQU313..1000*FAC20*x9AC20 - r9C625*VaC623*MW9 =e= 0;
1381 EQU314..1000*FAC20*x10AC20 - r10C625*VaC623*MW10 =e= 0;
1382 EQU315..FHC11 +FHC38 + FAC18 =e= FAC20;
1383 EQU316..1000*FAC20*xiC10AC20 - riC10C625*VaC623*MWiC10 =e= 0;
1384 EQU317..1000*FAC20*xiC11AC20 -riC11C625 * VaC623 * MWiC11 =e= 0;
1385 EQU318..1000*(FHC11*x4HC11 + FHC38*x4HC38 - FAC20*x4AC20) +
r4C625*VaC623*MW4 =e= 0;
1386 EQU319..r3C625 - k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625
- k11/(1E6*1E9)*C3pC625*C2C625 - k13/(1E11*1E9)

*CiC8eC625*C3pC625 - k16/(1E11*1E9) * CiC5eC625*C3pC625 =e= 0;
1387 EQU320..k19/(1E6*1E14)*C7pC625*C2C625 - k8/1E12*CiC10pC625*C3C625
=e= 0;
1388 EQU321..k16/(1E11*1E9)*CiC5eC625*C3pC625 -
k7/1E12*C10pC625*C3C625 =e= 0;
1389 EQU322..k11/(1E6*1E9)*C2C625*C3pC625 +
k10/(1E6*1E9)*C3pC625*CiC4eC625 - k6/1E12*C9pC625*C3C625 -
k12/1E12*C9pC625 =e= 0;
1390 EQU323..k13/(1E11*1E9)*C3pC625*CiC8eC625 - k5/1E12*C8pC625*C3C625
-k15/(1E6*1E12)*C8pC625*C2C625 =e= 0;
1391 EQU324..CHXC625 =e= rhoAC20*x11AC20/MW11;
1392 EQU325..C3C625 =e= rhoAC20*x3AC20/MW3;
1393 EQU326..C2C625/1E6 =e= rhoAC20*x2AC20/MW2;
1394 EQU327..riC10C625 =e= k8/1E12* CiC10pC625 * C3C625;
1395 EQU328..k14/1E11*CiC5eC625*CHXC625 - k3/1E12*C5pC625*C3C625 =e=0;
1396 EQU329..r8C625 =e= k5/1E12*C8pC625*C3C625;
1397 EQU330..k1/1E6*C2C625*CHXC625 - k2/1E12*C4pC625*C3C625 =e= 0;
1398 EQU331..k12/1E12*C9pC625 - k13/(1E11*1E9)*CiC8eC625*C3pC625 =e=0;
1399 EQU332..k13/(1E11*1E9)*CiC8eC625*C3pC625 +k17/1E12*CiC11pC625 -
k14/1E11*CiC5eC625*CHXC625 - k16/(1E11*1E9)*CiC5eC625*C3pC625

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=e= 0;
1400 EQU333..k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625 =e= 0;
1401 EQU334..-r2C625 + k1/1E6*C2C625*CHXC625 + k11/(1E9*1E6)*C3pC625
*C2C625 + k15/(1E12*1E6)*C8pC625*C2C625 + k19/(1E14*1E6)

*C7pC625*C2C625=e=0;
1402 EQU335..1000*(FHC11*x2HC11 - FAC20*x2AC20) - r2C625*VaC623*MW2
=e= 0;
1403 EQU336..-r3C625 + r4C625 + r5C625 + r7C625 + r8C625 + r9C625 +
r10C625 + riC10C625+ riC11C625 =e= 0;
1404 EQU337..k15/(1E6*1E12)*C8pC625*C2C625 -
k18/1E12*CiC11pC625*C3C625 - k17/1E12*CiC11pC625 =e= 0;
1405 EQU338..k17/1E12*CiC11pC625 - k4/1E14*C7pC625*C3C625 -
k19/(1E6*1E14)*C7pC625*C2C625 =e= 0;

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```
1406 EQU339..x1HC08 + x2HC08 + x3HC08 + x4HC08 + x5HC08 + x7HC08 =e=
1;
1407 EQU340..FC307 - FC308 - FC312 =e= 0;
1408 EQU341..FC307 * x1C307 - FC308 * x1C308 - FC312 * x1C312 =e= 0;
1409 EQU342..FC307 * x3C307 - FC308 * x3C308 - FC312 * x3C312 =e= 0;
1410 EQU343..FC307 * x4C307 - FC308 * x4C308 - FC312 * x4C312 =e= 0;
1411 EQU344..FC307 * x5C307 - FC308 * x5C308 - FC312 * x5C312 =e= 0;
1412 EQU345..x1AC20 + x2AC20 + x3AC20 + x4AC20 + x5AC20 +x7AC20 +
x8AC20 + x9AC20 + x10AC20 + x11AC20 + x12AC20 + xiC10AC20 +
xiC11AC20 =e= 1;
1413 EQU346..FAC20*(x7AC20+x8AC20+x9AC20+x10AC20+xiC10AC20+xiC11AC20)
- FHC25*x7HC25 =e= 0;
1414 EQU347..FAC20*(x11AC20 + x12AC20) - FAC15 - FAC23 =e=0;
1415 EQU348..FAC15*x12AC15 - sFC632*FAC20*x12AC20 =e=0;
1416 EQU349..FAC15*x11AC15 - sFC632*FAC20*x11AC20 =e=0;
1417 EQU350..x11AC15 - x11AC23 =e=0;
1418 EQU351..FAC20*x5AC20 - FHC25*x5HC25 =e=0;
1419 EQU352..FAC20*x4AC20 - FHC25*x4HC25 =e=0;
1420 EQU353..FAC20*x3AC20 - FHC25*x3HC25 =e=0;
1421 EQU354..FAC20*x2AC20 - FHC25*x2HC25 =e=0;
1422 EQU355..FAC20*x1AC20 - FHC25*x1HC25 =e=0;
1423 EQU356..dTE641**3 - ((TC312-TcwotE641B)*(TC315-Tcwin)*
1424 ((TC312-TcwotE641B)+(TC315-Tcwin))/2) =e= 0;
1425 EQU357..dTE611**3 =e= ((TC318-TcwoutE611)*(TC319-Tcwin)*
1426 ((TC318-TcwoutE611)+(TC319-Tcwin))/2);
1427 EQU358..dTE610**3 =e= ((TC317-TC316)*(TC318-TC315)*
1428 ((TC317-TC316)+(TC318-TC315))/2);
1429 EQU359..x11AC23+x12AC23 =e=1;
1430 EQU360..x11AC29 + x12AC29 =e= 1;
1431 EQU361..x11AC26+x12AC26 =e=1;
1432 EQU362..x1AC31 + x2AC31 + x3AC31 + x4AC31 + x5AC31 +x7AC31 +
x8AC31 + x9AC31 + x10AC31 + x11AC31 + x12AC31 + xiC10AC31 +
xiC11AC31 =e= 1;
1433 EQU363..Q2HC14 - FHC14 * x2HC14/(rho2HC14/1000) =e= 0;
1434 EQU364..QHC14 - FHC14/0.575 =e= 0;
1435 EQU365..x1HC14 + x2HC14 + x3HC14 + x4HC14 + x5HC14 + x7HC14 =e=
1;
1436 EQU366..QHC41 - FHC41/0.575 =e= 0;
1437 EQU367..x1HC41 +x3HC41 + x4HC41 + x5HC41 + x7HC41 =e= 1;
1438 EQU368..FAC29 -FAC23 - FAC26 =e= 0;
1439 EQU369..FAC29*x11AC29 -FAC23*x11AC23 - FAC26*x11AC26 =e= 0;
1440 EQU370..FAC31*x1AC31 - FHC23*x1HC23 =e=0;
1441 EQU371..FAC31*x2AC31 - FHC23*x2HC23 =e=0;
1442 EQU372..FAC31*x3AC31 - FHC23*x3HC23 =e=0;
1443 EQU373..FAC31*x4AC31 - FHC23*x4HC23 =e=0;
1444 EQU374..K1C615_A * xx1C308 - xx1C312 =e= 0;
1445 EQU375..K7C615_A * xx7C308 - xx7C312 =e= 0;
1446 EQU376..K4C615_A * xx4C308 - xx4C312 =e= 0;
1447 EQU377..K5C615_A * xx5C308 - xx5C312 =e= 0;
```


1448 EQU378..TC312 - TC308 =e= 0;
1449 EQU379..TC312 - TC307 =e= 0;

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```
1450 EQU380..FmC312 - FC312 * (x1C312/MW1 + x3C312/MW3 + x4C312/MW4 +
x5C312/MW5 + x7C312/MW7)=e= 0;
1451 EQU381..xx1C312 * MW1 * FmC312 - FC312 * x1C312 =e= 0 ;
1452 EQU382..xx3C312 * MW3 * FmC312 - FC312 * x3C312 =e= 0 ;
1453 EQU383..xx4C312 * MW4 * FmC312 - FC312 * x4C312 =e= 0 ;
1454 EQU384..xx5C312 * MW5 * FmC312 - FC312 * x5C312 =e= 0 ;
1455 EQU385..FmC308 - FC308 * (x1C308/MW1 + x3C308/MW3 + x4C308/MW4 +
x5C308/MW5 + x7C308/MW7)=e= 0;
1456 EQU386..xx1C308 * MW1 * FmC308 - FC308 *x1C308=e= 0;
1457 EQU387..xx3C308 * MW3 * FmC308 - FC308 *x3C308=e= 0;
1458 EQU388..xx4C308 * MW4 * FmC308 - FC308 *x4C308=e= 0;
1459 EQU389..xx5C308 * MW5 * FmC308 - FC308 *x5C308=e= 0;
1460 EQU390..xx1C308+ xx3C308+ xx4C308+ xx5C308+ xx7C308=e=1;
1461 EQU391..FC306 - FC303 - FC310 =e= 0;
1462 EQU392..1000*kWad1=e= kK601/(kK601 -
1)*FC303*8314/55.5*TC303*((PC310/PC303)**((kK601 -1)/kK601) -1);
1463 EQU393..1000*kWad2=e= kK601/(kK601 -
1)*FC306*8314/55.5*TmK601*((PC306/PC310)**((kK601 -1)/kK601) -1);
1464 EQU394..hC307 - FC307 * ((x1C307/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC307,ORD(Coeff))))
1465 +(x3C307/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC307,ORD(Coeff))))
1466 +(x4C307/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC307,ORD(Coeff))))
1467 +(x5C307/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC307,ORD(Coeff))))
1468 +(x7C307/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC307,ORD(Coeff)))) =e= 0;
1469 EQU395..x4C306 - x4C307 =e= 0;
1470 EQU396..x5C306 - x5C307 =e= 0;
1471 EQU397..FC312 - FC315 =e= 0;
1472 EQU398..x1C312 - x1C315 =e= 0;
1473 EQU399..FC315 - FC316 =e= 0;
1474 EQU400..x1C315 - x1C316 =e= 0;
1475 EQU401..x3C315 - x3C316 =e= 0;
1476 EQU402..PC309=e=PC308-deltaPE640;
1477 EQU403..dTE640**3=e= ((TC308-TcwoutE640)*(TC309-Tcwin)*
((TC308-TcwoutE640)+(TC309-Tcwin))/2);
1479 EQU404..x3C405 - x3C406 =e= 0;
1480 EQU405..FC406 - FC407 =e= 0;
1481 EQU406..x1C406 - x1C407 =e= 0;
1482 EQU407..FC410 - FC411 =e= 0;
1483 EQU408..x3C312 - x3C315 =e= 0;
1484 EQU409..x4C312 - x4C315 =e= 0;
1485 EQU410..x5C312 - x5C315 =e= 0;
1486 EQU411..FAC31*x5AC31 - FHC23*x5HC23 =e=0;
1487 EQU412..x11AC26 - x11AC34 =e=0;
1488 EQU413..FAC26*x11AC26 - sfc633*FAC31*x11AC31 =e=0;
1489 EQU414..FAC26*x12AC26 - sfc633*FAC31*x12AC31 =e=0;
1490 EQU415..FAC31*(x11AC31 + x12AC31) - FAC26 - FAC34 =e=0;
```

1491 EQU416..FAC31*(x7AC31+x8AC31+x9AC31+x10AC31+xiC10AC31+xiC11AC31)
- FHC23*x7HC23 =e= 0;
1492 EQU417..FAC29*x11AC29 - FAC31*x11AC31 -
0.06*2.02*FHC14*x2HC14/(rho2HC14/1000) =e= 0;
1493 EQU418..1000*(FHC14*x7HC14 + FHC41*x7HC41 - FAC31*x7AC31) +
r7C627*VaC623*MW7 =e= 0;
1494 EQU419..1000*FAC31*xiC11AC31 -riC11C627 * VaC623 * MWiC11 =e= 0;
1495 EQU420..1000*FAC31*xiC10AC31 - riC10C627*VaC623*MWiC10 =e= 0;

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```
1496 EQU421..FHC14 +FHC41 + FAC29 =e= FAC31;
1497 EQU422..1000*FAC31*x10AC31 - r10C627*VaC623*MW10 =e= 0;
1498 EQU423..1000*FAC31*x9AC31 - r9C627*VaC623*MW9 =e= 0;
1499 EQU424..1000*FAC31*x8AC31 - r8C627*VaC623*MW8 =e= 0;
1500 EQU425..r3C627 - k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627
- k11/(1E6*1E9)*C3pC627*C2C627 - k13/(1E11*1E9)
*CiC8eC627*C3pC627 - k16/(1E11*1E9) * CiC5eC627*C3pC627 =e= 0;
1501 EQU426..1000*(FHC14*x5HC14 + FHC41*x5HC41 - FAC31*x5AC31) +
r5C627*VaC623*MW5 =e= 0;
1502 EQU427..k19/(1E6*1E14)*C7pC627*C2C627 - k8/1E12*CiC10pC627*C3C627
=e= 0;
1503 EQU428..1000*(FHC14*x3HC14 + FHC41*x3HC41 - FAC31*x3AC31) -
r3C627*VaC623*MW3 =e= 0;
1504 EQU429..FHC14*x1HC14 + FHC41*x1HC41 - FAC31*x1AC31 =e= 0;
1505 EQU430..r4C627 =e= k2/1E12*C4pC627*C3C627;
1506 EQU431..r5C627 =e= k3/1E12*C5pC627*C3C627;
1507 EQU432..r7C627 =e= k4/1E14*C7pC627 * C3C627;
1508 EQU433..r9C627 =e= k6/1E12*C9pC627 * C3C627;
1509 EQU434..r10C627 =e= k7/1E12*C10pC627 * C3C627;
1510 EQU435..riC11C627 =e=k18/1E12*CiC11pC627*C3C627;
1511 EQU436..k14/1E11*CiC5eC627*CHXC627 - k3/1E12*C5pC627*C3C627 =e=0;
1512 EQU437..k15/(1E6*1E12)*C8pC627*C2C627 -
k18/1E12*CiC11pC627*C3C627 - k17/1E12*CiC11pC627 =e= 0;
1513 EQU438..-r3C627 + r4C627 + r5C627 + r7C627 + r8C627 + r9C627 +
r10C627 + riC10C627+ riC11C627 =e= 0;
1514 EQU439..1000*(FHC14*x2HC14 - FAC31*x2AC31) - r2C627*VaC623*MW2
=e= 0;
1515 EQU440..-r2C627 + k1/1E6*C2C627*CHXC627 + k11/(1E9*1E6)*C3pC627
*C2C627 + k15/(1E12*1E6)*C8pC627*C2C627 + k19/(1E14*1E6)
*C7pC627*C2C627=e=0;
1516 EQU441..k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627 =e= 0;
1517 EQU442..k13/(1E11*1E9)*CiC8eC627*C3pC627 +k17/1E12*CiC11pC627 -
k14/1E11*CiC5eC627*CHXC627 - k16/(1E11*1E9)*CiC5eC627*C3pC627
=e= 0;
1518 EQU443..k12/1E12*C9pC627 - k13/(1E11*1E9)*CiC8eC627*C3pC627 =e=0;
1519 EQU444..1000*(FHC14*x4HC14 + FHC41*x4HC41 - FAC31*x4AC31) +
r4C627*VaC623*MW4 =e= 0;
1520 EQU445..r8C627 =e= k5/1E12*C8pC627*C3C627;
1521 EQU446..k17/1E12*CiC11pC627 - k4/1E14*C7pC627*C3C627 -
k19/(1E6*1E14)*C7pC627*C2C627 =e= 0;
1522 EQU447..riC10C627 =e= k8/1E12* CiC10pC627 * C3C627;
1523 EQU448..C2C627/1E6 =e= rhoAC31*x2AC31/MW2;
1524 EQU449..C3C627 =e= rhoAC31*x3AC31/MW3;
1525 EQU450..CHXC627 =e= rhoAC31*x11AC31/MW11;
1526 EQU451..k13/(1E11*1E9)*C3pC627*CiC8eC627 - k5/1E12*C8pC627*C3C627
-k15/(1E6*1E12)*C8pC627*C2C627 =e= 0;
```

1527 EQU452..k11/(1E6*1E9)*C2C627*C3pC627 +
 k10/(1E6*1E9)*C3pC627*CiC4eC627 - k6/1E12*C9pC627*C3C627 -
 k12/1E12*C9pC627 =e= 0;
 1528 EQU453..x4C315 - x4C316 =e= 0;
 1529 EQU454..x5C315 - x5C316 =e= 0;
 1530 EQU455..x1C317 - x1C318 =e= 0;
 1531 EQU456..x3C317 - x3C318 =e= 0;
 1532 EQU457..x4C317 - x4C318 =e= 0;
 1533 EQU458..x5C317 - x5C318 =e= 0;
 1534 EQU459..FC319 - FC320 - FC321 - FC322 =e= 0;
 1535 EQU460..FC319 * x1C319 - FC320 * x1C320 - FC321 * x1C321 - FC322
 * x1C322 =e= 0;
 1536 EQU461..FC319 * x3C319 - FC320 * x3C320 - FC321 * x3C321 - FC322
 * x3C322 =e= 0;
 1537 EQU462..FC319 * x4C319 - FC320 * x4C320 - FC321 * x4C321 - FC322
 * x4C322 =e= 0;
 1538 EQU463..FC319 * x5C319 - FC320 * x5C320 - FC321 * x5C321 - FC322
 * x5C322 =e= 0;

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```
1539 EQU464..FC319 * sf1S34 - FC320 =e= 0;
1540 EQU465..x1C319 - x1C320 =e= 0;
1541 EQU466..x3C319 - x3C320 =e= 0;
1542 EQU467..x4C319 - x4C320 =e= 0;
1543 EQU468..k16/(1E11*1E9)*CiC5eC627*C3pC627 -
k7/1E12*C10pC627*C3C627 =e= 0;
1544 EQU469..k1/1E6*C2C627*CHXC627 - k2/1E12*C4pC627*C3C627 =e= 0;
1545 EQU470..x1HC23+x2HC23+x3HC23+x4HC23+x5HC23+x7HC23 =e=1;
1546 EQU471..x11AC34+x12AC34 =e=1;
1547 EQU472..x1HC22+x2HC22+x3HC22+x4HC22+x5HC22+x7HC22 =e=1;
1548 EQU473..x11AC37+x12AC37 =e=1;
1549 EQU474..x11AC40 + x12AC40 =e= 1;
1550 EQU475..x1AC42 + x2AC42 + x3AC42 + x4AC42 + x5AC42 +x7AC42 +
x8AC42 + x9AC42 + x10AC42 + x11AC42 + x12AC42 + xiC10AC42 +
xiC11AC42 =e= 1;
1551 EQU476..x11AC45+x12AC45 =e=1;
1552 EQU477..Q2HC16 - FHC16 * x2HC16/(rho2HC16/1000) =e= 0;
1553 EQU478..QHC16 - FHC16/0.575 =e= 0;
1554 EQU479..x1HC16 + x2HC16 + x3HC16 + x4HC16 + x5HC16 + x7HC16 =e=
1;
1555 EQU480..FAC40 -FAC34 - FAC37 =e= 0;
1556 EQU481..FAC40*x11AC40 -FAC34*x11AC34 - FAC37*x11AC37 =e= 0;
1557 EQU482..FAC42*(x7AC42+x8AC42+x9AC42+x10AC42+xiC10AC42+xiC11AC42)
- FHC22*x7HC22 =e= 0;
1558 EQU483..FAC42*(x11AC42 + x12AC42) - FAC37 - FAC45 =e=0;
1559 EQU484..FAC37*x12AC37 - sfC634*FAC42*x12AC42 =e=0;
1560 EQU485..FAC37*x11AC37 - sfC634*FAC42*x11AC42 =e=0;
1561 EQU486..x11AC37 - x11AC45 =e=0;
1562 EQU487..FAC42*x5AC42 - FHC22*x5HC22 =e=0;
1563 EQU488..FAC42*x4AC42 - FHC22*x4HC22 =e=0;
1564 EQU489..FAC42*x3AC42 - FHC22*x3HC22 =e=0;
1565 EQU490..FAC42*x2AC42 - FHC22*x2HC22 =e=0;
1566 EQU491..FAC42*x1AC42 - FHC22*x1HC22 =e=0;
1567 EQU492..r3C629 - k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629
- k11/(1E6*1E9)*C3pC629*C2C629 - k13/(1E11*1E9)
*CiC8eC629*C3pC629 - k16/(1E11*1E9) * CiC5eC629*C3pC629 =e= 0;
1568 EQU493..FAC40*x11AC40 - FAC42*x11AC42 -
0.06*2.02*FHC16*x2HC16/(rho2HC16/1000) =e= 0;
1569 EQU494..r9C629 =e= k6/1E12*C9pC629 * C3C629;
1570 EQU495..r7C629 =e= k4/1E14*C7pC629 * C3C629;
1571 EQU496..x5C319 - x5C320 =e= 0;
1572 EQU497..x1C319 - x1C321 =e= 0;
1573 EQU498..x3C319 - x3C321 =e= 0;
1574 EQU499..x4C319 - x4C321 =e= 0;
1575 EQU500..x5C319 - x5C321 =e= 0;
1576 EQU501..FC308 - FC309 =e= 0;
1577 EQU502..x1C308 - x1C309 =e= 0;
1578 EQU503..(hc308 - hc309) - FcweE640*4.197*(TcwoutE640 - Tcwin) =e=
0;
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1579 EQU504..FC316 + FC329 - FC317 - FC325 =e= 0;
1580 EQU505..FC316 * x1C316 + FC329*x1C329 - FC317 * x1C317 -
FC325*x1C325 =e= 0;
1581 EQU506..r5C629 =e= k3/1E12*C5pC629*C3C629;
1582 EQU507..r4C629 =e= k2/1E12*C4pC629*C3C629;

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1583 EQU508..FHC16*x1HC16 + FHC45*x1HC45 - FAC42*x1AC42 =e= 0;
1584 EQU509..1000*(FHC16*x3HC16 + FHC45*x3HC45 - FAC42*x3AC42) -
r3C629*VaC623*MW3 =e= 0;
1585 EQU510..riC11C629 =e=k18/1E12*CiC11pC629*C3C629;
1586 EQU511..1000*(FHC16*x5HC16 + FHC45*x5HC45 - FAC42*x5AC42) +
r5C629*VaC623*MW5 =e= 0;
1587 EQU512..k14/1E11*CiC5eC629*CHXC629 - k3/1E12*C5pC629*C3C629 =e=0;
1588 EQU513..1000*FAC42*x8AC42 - r8C629*VaC623*MW8 =e= 0;
1589 EQU514..1000*FAC42*x9AC42 - r9C629*VaC623*MW9 =e= 0;
1590 EQU515..1000*FAC42*x10AC42 - r10C629*VaC623*MW10 =e= 0;
1591 EQU516..FHC16 +FHC45 + FAC40 =e= FAC42;
1592 EQU517..1000*FAC42*xiC10AC42 - riC10C629*VaC623*MWiC10 =e= 0;
1593 EQU518..1000*FAC42*xiC11AC42 -riC11C629 * VaC623 * MWiC11 =e= 0;
1594 EQU519..1000*(FHC16*x7HC16 + FHC45*x7HC45 - FAC42*x7AC42) +
r7C629*VaC623*MW7 =e= 0;
1595 EQU520..k19/(1E14*1E6)*C7pC629*C2C629 - k8/1E12*CiC10pC629*C3C629
=e= 0;
1596 EQU521..1000*(FHC16*x4HC16 + FHC45*x4HC45 - FAC42*x4AC42) +
r4C629*VaC623*MW4 =e= 0;
1597 EQU522..k16/(1E11*1E9)*CiC5eC629*C3pC629 -
k7/1E12*C10pC629*C3C629 =e= 0;
1598 EQU523..k11/(1E6*1E9)*C2C629*C3pC629 +
k10/(1E6*1E9)*C3pC629*CiC4eC629 - k6/1E12*C9pC629*C3C629 -
k12/1E12*C9pC629 =e= 0;
1599 EQU524..k13/(1E11*1E9)*C3pC629*CiC8eC629 - k5/1E12*C8pC629*C3C629
-k15/(1E6*1E12)*C8pC629*C2C629 =e= 0;
1600 EQU525..CHXC629 =e= rhoAC42*x11AC42/MW11;
1601 EQU526..C3C629 =e= rhoAC42*x3AC42/MW3;
1602 EQU527..C2C629/1E6 =e= rhoAC42*x2AC42/MW2;
1603 EQU528..riC10C629 =e= k8/1E12* CiC10pC629 * C3C629;
1604 EQU529..r10C629 =e= k7/1E12*C10pC629 * C3C629;
1605 EQU530..r8C629 =e= k5/1E12*C8pC629*C3C629;
1606 EQU531..k1/1E6*C2C629*CHXC629 - k2/1E12*C4pC629*C3C629 =e= 0;
1607 EQU532..k12/1E12*C9pC629 - k13/(1E11*1E9)*CiC8eC629*C3pC629 =e=0;
1608 EQU533..k13/(1E11*1E9)*CiC8eC629*C3pC629 +k17/1E12*CiC11pC629 -
k14/1E11*CiC5eC629*CHXC629 - k16/(1E11*1E9)*CiC5eC629*C3pC629

=e= 0;
1609 EQU534..k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629 =e= 0;
1610 EQU535..-r2C629 + k1/1E6*C2C629*CHXC629 + k11/(1E9*1E6)*C3pC629
*C2C629 + k15/(1E12*1E6)*C8pC629*C2C629 + k19/(1E14*1E6)

*C7pC629*C2C629=e=0;
1611 EQU536..1000*(FHC16*x2HC16 - FAC42*x2AC42) - r2C629*VaC623*MW2
=e= 0;
1612 EQU537..-r3C629 + r4C629 + r5C629 + r7C629 + r8C629 + r9C629 +
r10C629 + riC10C629+ riC11C629 =e= 0;
1613 EQU538..k15/(1E6*1E12)*C8pC629*C2C629 -
k18/1E12*CiC11pC629*C3C629 - k17/1E12*CiC11pC629 =e= 0;
1614 EQU539..k17/1E12*CiC11pC629 - k4/1E14*C7pC629*C3C629 -
k19/(1E6*1E14)*C7pC629*C2C629 =e= 0;

1615 EQU540..FC316 * x3C316 + FC329*x3C329 - FC317 * x3C317 -
 FC325*x3C325 =e= 0;
 1616 EQU541..FC316 * x4C316 + FC329*x4C329 - FC317 * x4C317 -
 FC325*x4C325 =e= 0;
 1617 EQU542..FC316 * x5C316 + FC329*x5C329 - FC317 * x5C317 -
 FC325*x5C325 =e= 0;
 1618 EQU543..x1C317 - x1C323 =e= 0;
 1619 EQU544..x3C317 - x3C323 =e= 0;
 1620 EQU545..x4C317 - x4C323 =e= 0;
 1621 EQU546..x5C317 - x5C323 =e= 0;
 1622 EQU547..FHC03 - FC419 - FC321 =e= 0;
 1623 EQU548..FHC03 * x1HC03 - FC419 * x1C419 - FC321 * x1C321 =e= 0;
 1624 EQU549..FHC03 * x3HC03 - FC419 * x3C419 - FC321 * x3C321 =e= 0;
 1625 EQU550..FHC03 * x4HC03 - FC419 * x4C419 - FC321 * x4C321 =e= 0;
 1626 EQU551..FHC03 * x5HC03 - FC419 * x5C419 - FC321 * x5C321 =e= 0;

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1627 EQU552..hHC03 - hC419 - hC321 =e= 0;
1628 EQU553..FHC24 -FHC23 - FHC22 =e= 0;
1629 EQU554..FHC24*x1HC24 -FHC23*x1HC23 - FHC22*x1HC22 =e= 0;
1630 EQU555..FHC24*x3HC24 -FHC23*x3HC23 - FHC22*x3HC22 =e= 0;
1631 EQU556..FHC24*x4HC24 -FHC23*x4HC23 - FHC22*x4HC22 =e= 0;
1632 EQU557..FHC24*x5HC24 -FHC23*x5HC23 - FHC22*x5HC22 =e= 0;
1633 EQU558..FHC24*x7HC24 -FHC23*x7HC23 - FHC22*x7HC22 =e= 0;
1634 EQU559..x1HC24+x2HC24+x3HC24+x4HC24+x5HC24+x7HC24 =e=1;
1635 EQU560..x1HC25+x2HC25+x3HC25+x4HC25+x5HC25+x7HC25 =e=1;
1636 EQU561..FHC26 -FHC25 - FHC24 =e= 0;
1637 EQU562..FHC26*x1HC26 -FHC25*x1HC25 - FHC24*x1HC24 =e= 0;
1638 EQU563..FHC26*x3HC26 -FHC25*x3HC25 - FHC24*x3HC24 =e= 0;
1639 EQU564..FHC26*x4HC26 -FHC25*x4HC25 - FHC24*x4HC24 =e= 0;
1640 EQU565..FHC26*x5HC26 -FHC25*x5HC25 - FHC24*x5HC24 =e= 0;
1641 EQU566..FHC26*x7HC26 -FHC25*x7HC25 - FHC24*x7HC24 =e= 0;
1642 EQU567..x1HC26+x2HC26+x3HC26+x4HC26+x5HC26+x7HC26 =e=1;
1643 EQU568..x1HC27+x2HC27+x3HC27+x4HC27+x5HC27+x7HC27 =e=1;
1644 EQU569..FHC28 -FHC27 - FHC26 =e= 0;
1645 EQU570..FlHC28*x1HC28 + FvHC28*y1HC28 - FHC27*x1HC27 -
FHC26*x1HC26 =e= 0;
1646 EQU571..FlHC28*x3HC28 + FvHC28*y3HC28 - FHC27*x3HC27 -
FHC26*x3HC26 =e= 0;
1647 EQU572..FlHC28*x4HC28 + FvHC28*y4HC28 - FHC27*x4HC27 -
FHC26*x4HC26 =e= 0;
1648 EQU573..FlHC28*x5HC28 + FvHC28*y5HC28 - FHC27*x5HC27 -
FHC26*x5HC26 =e= 0;
1649 EQU574..FlHC28*x7HC28 + FvHC28*y7HC28 - FHC27*x7HC27 -
FHC26*x7HC26 =e= 0;
1650 EQU575..x1HC28+x2HC28+x3HC28+x4HC28+x5HC28+x7HC28 =e=1;
1651 EQU576..FHC28 - FHC29 - FR1 =e= 0;
1652 EQU577..FR1 - FHC28*sfS2 =e=0;
1653 EQU578..FlHC28 - FlHC29 - FlR1 =e= 0;
1654 EQU579..FvHC28 - FvHC29 - FvR1 =e= 0;
1655 EQU580..FlR1 - FlHC28*sfS2 =e=0;
1656 EQU581..FvR1 - FvHC28*sfS2 =e=0;
1657 EQU582..FHC15 - FHC14 - FHC16 =e= 0;
1658 EQU583..FHC15*sfS11 - FHC14 =e= 0;
1659 EQU584..x1HC15 - x1HC14 =e= 0;
1660 EQU585..x2HC15 - x2HC16 =e= 0;
1661 EQU586..x2HC15 - x2HC14 =e= 0;
1662 EQU587..LpC606A=e=FC322 + qC606A*FC404;
1663 EQU588..VpC606A=e=FC432;
1664 EQU589..TnC606A=e=(TC414+TC404)/2;
1665 EQU590..TmC606A=e=(TC430+TC404)/2;
1666 EQU591..FC418 * x1C418 - FC417 * x1C417 - FC415 * x1C415 =e= 0;
1667 EQU592..FC418 * x3C418 - FC417 * x3C417 - FC415 * x3C415 =e= 0;
1668 EQU593..FC418 * x4C418 - FC417 * x4C417 - FC415 * x4C415 =e= 0;
1669 EQU594..FC418 * x5C418 - FC417 * x5C417 - FC415 * x5C415 =e= 0;
1670 EQU595..hC418 - hC417 - hC415 =e= 0;
1671 EQU596..x4C405 - x4C406 =e= 0;
1672 EQU597..x5C405 - x5C406 =e= 0;

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1673 EQU598..FC403 - FC404 =e= 0;
1674 EQU599..x1C403 - x1C404 =e= 0;
1675 EQU600..x3C403 - x3C404 =e= 0;
1676 EQU601..x4C403 - x4C404 =e= 0;
1677 EQU602..x5C403 - x5C404 =e= 0;
1678 EQU603..x3C406 - x3C407 =e= 0;
1679 EQU604..x4C406 - x4C407 =e= 0;
1680 EQU605..x5C406 - x5C407 =e= 0;
1681 EQU606..FC431 - FC412 - FC432 =e= 0;
1682 EQU607..FC432 - sfs41 * FC431 =e= 0;
1683 EQU608..x1C431 - x1C412 =e= 0;
1684 EQU609..x3C431 - x3C412 =e= 0;
1685 EQU610..x4C431 - x4C412 =e= 0;
1686 EQU611..x5C431 - x5C412 =e= 0;
1687 EQU612..TC319 - TC320 =e= 0;
1688 EQU613..TC319 - TC321 =e= 0;
1689 EQU614..TC319 - TC322 =e= 0;
1690 EQU615..x1C431 - x1C432 =e= 0;
1691 EQU616..x3C431 - x3C432 =e= 0;
1692 EQU617..x4C431 - x4C432 =e= 0;
1693 EQU618..x5C431 - x5C432 =e= 0;
1694 EQU619..FC430 + FC427 - FC431 - FC425 =e= 0;
1695 EQU620..FC430 * x1C430 + FC427 * x3C427 - FC431 * x1C431 - FC425
* x1C425 =e= 0;
1696 EQU621..FC430 * x3C430 + FC427 * x3C427 - FC431 * x3C431 - FC425
* x3C425 =e= 0;
1697 EQU622..FC430 * x4C430 + FC427 * x4C427 - FC431 * x4C431 - FC425
* x4C425 =e= 0;
1698 EQU623..FC430 * x5C430 + FC427 * x5C427 - FC431 * x5C431 - FC425
* x5C425 =e= 0;
1699 EQU624..x3HC15 - x3HC14 =e= 0;
1700 EQU625..x4HC15 - x4HC14 =e= 0;
1701 EQU626..x5HC15 - x5HC14 =e= 0;
1702 EQU627..x3HC15 - x3HC16 =e= 0;
1703 EQU628..x4HC15 - x4HC16 =e= 0;
1704 EQU629..x5HC15 - x5HC16 =e= 0;
1705 EQU630..x1HC15 - x1HC16 =e= 0;
1706 EQU631..x1HC15 + x2HC15 + x3HC15 + x4HC15 + x5HC15 + x7HC15 =e=
1;
1707 EQU632..FHC08 - FHC11 - FHC15 =e= 0;
1708 EQU633..FHC08*sfs7 - FHC11 =e= 0;
1709 EQU634..x1HC08 - x1HC11 =e= 0;
1710 EQU635..x2HC08 - x2HC11 =e= 0;
1711 EQU636..x3HC08 - x3HC11 =e= 0;
1712 EQU637..x4HC08 - x4HC11 =e= 0;
1713 EQU638..x5HC08 - x5HC11 =e= 0;
1714 EQU639..x1HC08 - x1HC15 =e= 0;
1715 EQU640..x2HC08 - x2HC15 =e= 0;
1716 EQU641..x3HC08 - x3HC15 =e= 0;
1717 EQU642..x4HC08 - x4HC15 =e= 0;
1718 EQU643..x5HC08 - x5HC15 =e= 0;
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1719 EQU644..Q2HC11 - FHC11 * x2HC11/(rho2HC11/1000) =e= 0;
1720 EQU645..QHC11 - FHC11/0.575 =e= 0;
1721 EQU646..x1HC11 + x2HC11 + x3HC11 + x4HC11 + x5HC11 + x7HC11 =e=
1;
1722 EQU647..FHC06 - FHC07 - FHC08 =e= 0;
1723 EQU648..FHC06*sfs5 - FHC07 =e= 0;
1724 EQU649..x1HC06 - x1HC07 =e= 0;
1725 EQU650..FC425 - FC410 - FC426 =e= 0;
1726 EQU651..FC426 - sfs42 * FC425 =e= 0;
1727 EQU652..x1C425 - x1C410 =e= 0;
1728 EQU653..x3C425 - x3C410 =e= 0;
1729 EQU654..x4C425 - x4C410 =e= 0;
1730 EQU655..x5C425 - x5C410 =e= 0;
1731 EQU656..x1C425 - x1C426 =e= 0;
1732 EQU657..x3C425 - x3C426 =e= 0;
1733 EQU658..x4C425 - x4C426 =e= 0;
1734 EQU659..x5C425 - x5C426 =e= 0;
1735 EQU660..x1C410 - x1C411 =e= 0;
1736 EQU661..x3C410 - x3C411 =e= 0;
1737 EQU662..x4C410 - x4C411 =e= 0;
1738 EQU663..x5C410 - x5C411 =e= 0;
1739 EQU664..hc427 - hc428 - hc411 =e= 0;
1740 EQU665..FC427 * x1C427 - FC428 * x1C428 - FC411 * x1C411 =e= 0;
1741 EQU666..FC427 * x3C427 - FC428 * x3C428 - FC411 * x3C411 =e= 0;
1742 EQU667..FC427 * x4C427 - FC428 * x4C428 - FC411 * x4C411 =e= 0;
1743 EQU668..FC427 * x5C427 - FC428 * x5C428 - FC411 * x5C411 =e= 0;
1744 EQU669..FC426 - FC428 - FC405 =e= 0;
1745 EQU670..x2HC06 - x2HC07 =e= 0;
1746 EQU671..x3HC06 - x3HC07 =e= 0;
1747 EQU672..x4HC06 - x4HC07 =e= 0;
1748 EQU673..x5HC06 - x5HC07 =e= 0;
1749 EQU674..x1HC06 - x1HC08 =e= 0;
1750 EQU675..x2HC06 - x2HC08 =e= 0;
1751 EQU676..x3HC06 - x3HC08 =e= 0;
1752 EQU677..x4HC06 - x4HC08 =e= 0;
1753 EQU678..x5HC06 - x5HC08 =e= 0;
1754 EQU679..x1HC07 + x2HC07 + x3HC07 + x4HC07 + x5HC07 + x7HC07 =e=
1;
1755 EQU680..QHC07 - FHC07/0.575 =e= 0;
1756 EQU681..Q2HC07 - FHC07 * x2HC07/(rho2HC07/1000) =e= 0;
1757 EQU682..x1HC06 + x2HC06 + x3HC06 + x4HC06 + x5HC06 + x7HC06 =e=
1;
1758 EQU683..FHC06 -FHC02 - FHC05 =e= 0;
1759 EQU684..FHC06*x1HC06 - FHC02*x1HC02 - FHC05*x1HC05 =e= 0;
1760 EQU685..FHC06*x2HC06 - FHC02*x2HC02 - FHC05*x2HC05 =e= 0;
1761 EQU686..FHC06*x3HC06 - FHC02*x3HC02 - FHC05*x3HC05 =e= 0;
1762 EQU687..FHC06*x4HC06 - FHC02*x4HC02 - FHC05*x4HC05 =e= 0;
1763 EQU688..FHC06*x5HC06 - FHC02*x5HC02 - FHC05*x5HC05 =e= 0;
1764 EQU689..FHC40 - FHC41 - FHC45 =e= 0;

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1765 EQU690..FHC40*sfS27 - FHC41 =e= 0;
1766 EQU691..x1HC40 - x1HC41 =e= 0;
1767 EQU692..x3HC40 - x3HC41 =e= 0;
1768 EQU693..x4HC40 - x4HC41 =e= 0;
1769 EQU694..x5HC40 - x5HC41 =e= 0;
1770 EQU695..x1HC40 - x1HC45 =e= 0;
1771 EQU696..x3HC40 - x3HC45 =e= 0;
1772 EQU697..x4HC40 - x4HC45 =e= 0;
1773 EQU698..x1HC32 - x1HC33 =e= 0;
1774 EQU699..FC426 * x1C426- FC428 * x1C428 - FC405 * x1C405 =e= 0;
1775 EQU700..FC426 * x3C426- FC428 * x3C428 - FC405 * x3C405 =e= 0;
1776 EQU701..FC426 * x4C426- FC428 * x4C428 - FC405 * x4C405 =e= 0;
1777 EQU702..FC426 * x5C426- FC428 * x5C428 - FC405 * x5C405 =e= 0;
1778 EQU703..FC408 - FC409 =e= 0;
1779 EQU704..x1C408 - x1C409 =e= 0;
1780 EQU705..x3C408 - x3C409 =e= 0;
1781 EQU706..x4C408 - x4C409 =e= 0;
1782 EQU707..x5C408 - x5C409 =e= 0;
1783 EQU708..x5HC40 - x5HC45 =e= 0;
1784 EQU709..FHC32 - FHC33 - FHC40 =e= 0;
1785 EQU710..x1HC45 +x3HC45 + x4HC45 + x5HC45 + x7HC45 =e= 1;
1786 EQU711..QHC45 - FHC45/0.575 =e= 0;
1787 EQU712..x1HC40 +x3HC40 + x4HC40 + x5HC40 + x7HC40 =e= 1;
1788 EQU713..FHC32*sfS19 - FHC33 =e= 0;
1789 EQU714..x3HC32 - x3HC33 =e= 0;
1790 EQU715..x4HC32 - x4HC33 =e= 0;
1791 EQU716..x5HC32 - x5HC33 =e= 0;
1792 EQU717..x1HC32 - x1HC40 =e= 0;
1793 EQU718..x3HC32 - x3HC40 =e= 0;
1794 EQU719..x4HC32 - x4HC40 =e= 0;
1795 EQU720..x5HC32 - x5HC40 =e= 0;
1796 EQU721..x1HC33 +x3HC33 + x4HC33 + x5HC33 + x7HC33 =e= 1;
1797 EQU722..FHC33 - FHC34 - FHC38 =e= 0;
1798 EQU723..FHC33*sfS23 - FHC34 =e= 0;
1799 EQU724..x1HC33 - x1HC34 =e= 0;
1800 EQU725..x3HC33 - x3HC34 =e= 0;
1801 EQU726..x4HC33 - x4HC34 =e= 0;
1802 EQU727..x5HC33 - x5HC34 =e= 0;
1803 EQU728..x1HC33 - x1HC38 =e= 0;
1804 EQU729..x3HC33 - x3HC38 =e= 0;
1805 EQU730..x4HC33 - x4HC38 =e= 0;
1806 EQU731..x5HC33 - x5HC38 =e= 0;
1807 EQU732..x1HC34 +x3HC34 + x4HC34 + x5HC34 + x7HC34 =e= 1;
1808 EQU733..QHC34 - FHC34/0.575 =e= 0;
1809 EQU734..QHC38 - FHC38/0.575 =e= 0;
1810 EQU735..x1HC38 +x3HC38 + x4HC38 + x5HC38 + x7HC38 =e= 1;
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1811 EQU736..FC412 - FC413 =e= 0;
1812 EQU737..x1C412 - x1C413 =e= 0;
1813 EQU738..x3C412 - x3C413 =e= 0;
1814 EQU739..x4C412 - x4C413 =e= 0;
1815 EQU740..x5C412 - x5C413 =e= 0;
1816 EQU741..x1C319 - x1C322 =e= 0;
1817 EQU742..x3C319 - x3C322 =e= 0;
1818 EQU743..x4C319 - x4C322 =e= 0;
1819 EQU744..x5C319 - x5C322 =e= 0;
1820 EQU745..hC414liq - FC414 *
((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff))))
1821 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff))))
1822 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff))))
1823 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff))))
1824 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff)))) =e= 0;
1825 EQU746..dTE621A*2 =e=
1826 (TC414-TcwotE621A) + (TC414-Tcwin);
1827 EQU747..(hC414liq - hC415) - Fcwe621B*4.197*(TcwotE621B - Tcwin)
=e= 0;
1828 EQU748..(hC414liq - hC415) - UE621B*FE621B*AE621B*dTE621B =e= 0;
1829 EQU749..dTE621B**3 =e= ((TC414-TcwotE621B)*(TC415-Tcwin)*
1830 ((TC414-TcwotE621B)+(TC415-Tcwin))/2);
1831 EQU750..hC412liq - FC412 *
((x1C412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC412,ORD(Coeff))))
1832 +(x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff))))
1833 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff))))
1834 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff))))
1835 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff)))) =e= 0;
1836 EQU751..dTE627A*2 =e=
1837 (TC412-TcwotE621A) + (TC412-Tcwin);
1838 EQU752..(hC412liq - hC413) - Fcwe627B*4.197*(TcwotE627B - Tcwin)
=e= 0;
1839 EQU753..(hC412liq - hC413) - UE627B*FE627B*AE627B*dTE627B =e= 0;
1840 EQU754..dTE627B **3 =e= ((TC412-TcwotE627B)*(TC413-Tcwin)*
1841 ((TC412-TcwotE627B)+(TC413-Tcwin))/2);
1842 EQU755..hC411 - FC411 *
1843 ((x1C411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC411,ORD(Coeff))))
1844 +(x3C411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC411,ORD(Coeff))))
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1845 +(x4C411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC411/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1846 +(x5C411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC411/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1847 +(x7C411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC411/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1848 EQU756..hC410vap - FC410 *
1849 ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC410/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1850 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC410/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1851 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

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((1-TC410/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1852 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC410/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1853 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC410/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1854 EQU757..dTE696A =e= 414.6 - TC410;
1855 EQU758..(hC411 - hC410vap) - FstmE696B * hstmE696 =e= 0;
1856 EQU759..(hC411 - hC410vap) - UE696B*AE696B*dTE696B =e= 0;
1857 EQU760..dTE696B*2 =e=
1858 (414.6-TC410) + (414.6-TC411);
1859 EQU761..dTE626**3 =e= ((TC418-TcwoutE626)*(TC419-Tcwin)*
1860 ((TC418-TcwoutE626)+(TC419-Tcwin))/2);
1861 EQU762..dTE617 **3=e= ((TC406-TcwoutE617)*(TC407-Tcwin)*
1862 ((TC406-TcwoutE617)+(TC407-Tcwin))/2);
1863 EQU763..dTE616**3 =e= ((TC405-TC404)*(TC406-TC403)*
1864 ((TC405-TC404)+(TC406-TC403))/2);
1865 EQU764..hC408vap - FC408 *
1866 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1867 )
1868 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1869 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1870 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1871 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1872 EQU765..dTE695A =e= 481 - TC408;
1873 EQU766..(hC409 - hC408vap) - FstmE695B * hstmE695 =e= 0;
1874 EQU767..(hC409 - hC408vap) - UE695B*AE695B*dTE695B =e= 0;
1875 EQU768..dTE695B*2 =e=
1876 (481-TC408) + (481-TC409);
1877 EQU769..hVr1 - FvR1*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff)))+ Enth_Vap("1","a1")
*1000 * ((1-TR1/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1878 +(y3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR1/Enth_Vap(
"3","a2"))**Enth_Vap("3","a3"))))

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1879 +(y4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR1/Enth_Vap("
4","a2"))**Enth_Vap("4","a3")))
1880 +(y5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR1/Enth_Vap("
5","a2"))**Enth_Vap("5","a3")))
1881 +(y7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR1/Enth_Vap("
7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1882 EQU770..y1R1 + y2R1 + y3R1 + y4R1 + y5R1 + y7R1 =e= 1;
1883 EQU771..hlR1 - FlR1* ((x1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff))))
1884 +(x3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff))))
1885 +(x4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff))))
1886 +(x5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff))))
1887 +(x7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff)))) =e= 0;

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1888 EQU772..x1R1 + x2R1 + x3R1 + x4R1 + x5R1 + x7R1 =e= 1;
1889 EQU773..hR1 - h1R1 - hvR1 =e= 0;
1890 EQU774..hvHC29 - FvHC29*((y1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1891 +(y3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC29/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1892 +(y4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC29/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1893 +(y5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC29/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1894 +(y7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC29/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1895 EQU775..hHC29 - h1HC29 - hvHC29 =e= 0;
1896 EQU776..FHC29 - F1HC29 - FvHC29 =e= 0;
1897 EQU777..h1HC29 - F1HC29*((x1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff)))))
1898 +(x3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff)))))
1899 +(x4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff)))))
1900 +(x5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff)))))
1901 +(x7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff))))) =e= 0;
1902 EQU778..xx7HC32 * MW7 * FmHC32 - FHC32 * x7HC32 =e= 0;
1903 EQU779..xx5HC32 * MW5 * FmHC32 - FHC32 * x5HC32 =e= 0;
1904 EQU780..FR1 - F1R1 -FvR1 =e= 0;
1905 EQU781..hC303 - FC303 *
1906 ((x1C303/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC303/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1907 +(x3C303/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC303,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC303/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1908 +(x4C303/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC303/Enth_Vap("4","a2"))**Enth_Vap("4","a3"))))
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1909 +(x5C303/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC303/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1910 +(x7C303/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC303/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1911 EQU782..hC306 - FC306 *
1912 ((x1C306/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC306/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1913 +(x3C306/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC306,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC306/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1914 +(x4C306/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC306/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1915 +(x5C306/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC306/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1916 +(x7C306/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC306/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1917 EQU783..hC308 - FC308* ((x1C308/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC308,ORD(Coeff))))
1918 +(x3C308/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC308,ORD(Coeff))))

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1919 +(x4C308/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC308,ORD(Coeff))))
1920 +(x5C308/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC308,ORD(Coeff))))
1921 +(x7C308/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC308,ORD(Coeff)))) =e= 0;
1922 EQU784..hC310 - FC310 *
1923 ((x1C310/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC310/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1924 +(x3C310/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC310,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC310/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1925 +(x4C310/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC310/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1926 +(x5C310/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC310/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1927 +(x7C310/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC310/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1928 EQU785..hC311 - FC311 * ((x1C311/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC311,ORD(Coeff))))
1929 +(x3C311/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC311,ORD(Coeff))))
1930 +(x4C311/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC311,ORD(Coeff))))
1931 +(x5C311/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC311,ORD(Coeff))))
1932 +(x7C311/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC311,ORD(Coeff)))) =e= 0;
1933 EQU786..hC312 - FC312*
1934 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC312/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1935 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC312/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1936 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC312/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
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1937 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC312/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1938 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC312/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1939 EQU787..hc315 - FC315 * ((x1C315/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC315,ORD(Coeff))))
1940 +(x3C315/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC315,ORD(Coeff))))
1941 +(x4C315/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC315,ORD(Coeff))))
1942 +(x5C315/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC315,ORD(Coeff))))
1943 +(x7C315/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC315,ORD(Coeff)))) =e= 0;
1944 EQU788..hc316 - FC316 * ((x1C316/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC316,ORD(Coeff))))
1945 +(x3C316/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC316,ORD(Coeff))))
1946 +(x4C316/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC316,ORD(Coeff))))
1947 +(x5C316/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC316,ORD(Coeff))))
1948 +(x7C316/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC316,ORD(Coeff)))) =e= 0;
1949 EQU789..hc317 - FC317 * ((x1C317/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC317,ORD(Coeff))))
1950 +(x3C317/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC317,ORD(Coeff))))
1951 +(x4C317/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC317,ORD(Coeff))))
1952 +(x5C317/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC317,ORD(Coeff))))
1953 +(x7C317/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC317,ORD(Coeff)))) =e= 0;
1954 EQU790..hc318 - FC318 * ((x1C318/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC318,ORD(Coeff))))

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1955 +(x3C318/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC318,ORD(Coeff))))
1956 +(x4C318/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC318,ORD(Coeff))))
1957 +(x5C318/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC318,ORD(Coeff))))
1958 +(x7C318/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC318,ORD(Coeff)))) =e= 0;
1959 EQU791..hC319 - FC319 * ((x1C319/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC319,ORD(Coeff))))
1960 +(x3C319/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC319,ORD(Coeff))))
1961 +(x4C319/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC319,ORD(Coeff))))
1962 +(x5C319/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC319,ORD(Coeff))))
1963 +(x7C319/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC319,ORD(Coeff)))) =e= 0;
1964 EQU792..hC403 - FC403 * ((x1C403/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC403,ORD(Coeff))))
1965 +(x3C403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC403,ORD(Coeff))))
1966 +(x4C403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC403,ORD(Coeff))))
1967 +(x5C403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC403,ORD(Coeff))))
1968 +(x7C403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC403,ORD(Coeff)))) =e= 0;
1969 EQU793..xx4HC32 * MW4 * FmHC32 - FHC32 * x4HC32 =e= 0;
1970 EQU794..xx3HC32 * MW3 * FmHC32 - FHC32 * x3HC32 =e= 0;
1971 EQU795..FmHC32 - FHC32 * (x1HC32/MW1 + x3HC32/MW3 + x4HC32/MW4 +
x5HC32/MW5 + x7HC32/MW7) =e= 0;
1972 EQU796..hHC32 - FHC32 * ((x1HC32/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC32,ORD(Coeff))))
1973 +(x3HC32/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC32,ORD(Coeff))))
1974 +(x4HC32/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC32,ORD(Coeff))))
1975 +(x5HC32/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC32,ORD(Coeff))))
1976 +(x7HC32/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC32,ORD(Coeff)))) =e= 0;
1977 EQU797..x1HC32 + x3HC32 + x4HC32 + x5HC32 + x7HC32 =e= 1;
1978 EQU798..xx1HC32 + xx3HC32 + xx4HC32 + xx5HC32 + xx7HC32 =e= 1;
1979 EQU799..hC302 - FC302 *
1980 ((x1C302/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC302,ORD(Coeff))))+ Enth_Vap("1","a1")*1000 *
((1-TC302/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1981 +(x3C302/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC302,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
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((1-TC302/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1982 +(x4C302/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC302/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1983 +(x5C302/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC302/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1984 +(x7C302/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC302/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1985 EQU800..xx7C302 * MW7 * FmC302 - FC302 * x7C302 =e= 0;
1986 EQU801..xx5C302 * MW5 * FmC302 - FC302 * x5C302 =e= 0;
1987 EQU802..xx4C302 * MW4 * FmC302 - FC302 * x4C302 =e= 0;
1988 EQU803..xx3C302 * MW3 * FmC302 - FC302 * x3C302 =e= 0;
1989 EQU804..FmC302 - FC302 * (x1C302/MW1 + x3C302/MW3 + x4C302/MW4 +
x5C302/MW5 + x7C302/MW7) =e= 0;
1990 EQU805..x1C302 + x3C302 + x4C302 + x5C302 + x7C302 =e= 1;
1991 EQU806..xx1C302 + xx3C302 + xx4C302 + xx5C302 + xx7C302 =e= 1;
1992 EQU807..x1C301 + x2C301 + x3C301 + x4C301 + x5C301 + x7C301 =e=
1;
1993 EQU808..hC301 - FC301 *
1994 ((x1C301/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC301/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))

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1995 +(x3C301/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC301,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC301/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1996 +(x4C301/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC301/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1997 +(x5C301/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC301/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1998 +(x7C301/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC301/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1999 EQU809..hC303 - hC302 - hC301 =e= 0;
2000 EQU810..FC303 * x5C303 - FC302 * x5C302 - FC301 * x5C301 =e= 0;
2001 EQU811..FC303 * x4C303 - FC302 * x4C302 - FC301 * x4C301 =e= 0;
2002 EQU812..FC303 * x3C303 - FC302 * x3C302 - FC301 * x3C301 =e= 0;
2003 EQU813..FC303 * x1C303 - FC302 * x1C302 - FC301 * x1C301 =e= 0;
2004 EQU814..FC303 - FC302 - FC301 =e= 0;
2005 EQU815..x1HC02 + x2HC02 + x3HC02 + x4HC02 + x5HC02 + x7HC02 =e=
1;
2006 EQU816..hHC02 - FHC02 * ((x1HC02/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC02,ORD(Coeff))))
2007 +(x2HC02/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC02,ORD(Coeff))))
2008 +(x3HC02/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC02,ORD(Coeff))))
2009 +(x4HC02/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC02,ORD(Coeff))))
2010 +(x5HC02/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC02,ORD(Coeff))))
2011 +(x7HC02/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC02,ORD(Coeff)))) =e= 0;
2012 EQU817..x1HC05 + x2HC05 + x3HC05 + x4HC05 + x5HC05 + x7HC05 =e=
1;
2013 EQU818..hHC05 - FHC05 * ((x1HC05/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC05,ORD(Coeff))))
2014 +(x2HC05/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC05,ORD(Coeff))))
2015 +(x3HC05/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC05,ORD(Coeff))))
2016 +(x4HC05/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC05,ORD(Coeff))))
2017 +(x5HC05/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC05,ORD(Coeff))))
2018 +(x7HC05/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC05,ORD(Coeff)))) =e= 0;
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2019 EQU819..x1HC04 + x2HC04 + x3HC04 + x4HC04 + x5HC04 + x7HC04 =e= 1;
 2020 EQU820..hHC04 - FHC04 * ((x1HC04/MW1)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("1",Coeff) *POWER(THC04,ORD(Coeff))))
 2021 +(x2HC04/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) * POWER(THC04,ORD(Coeff))))
 2022 +(x3HC04/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) * POWER(THC04,ORD(Coeff))))
 2023 +(x4HC04/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff) *POWER(THC04,ORD(Coeff))))
 2024 +(x5HC04/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff) *POWER(THC04,ORD(Coeff))))
 2025 +(x7HC04/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff) *POWER(THC04,ORD(Coeff)))) =e= 0;
 2026 EQU821..hC402 - FC402 * ((x1C402/MW1)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("1",Coeff) *POWER(TC402,ORD(Coeff))))
 2027 +(x3C402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) * POWER(TC402,ORD(Coeff))))
 2028 +(x4C402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff) *POWER(TC402,ORD(Coeff))))
 2029 +(x5C402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff) *POWER(TC402,ORD(Coeff))))
 2030 +(x7C402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff) *POWER(TC402,ORD(Coeff)))) =e= 0;
 2031 EQU822..x1C402 + x3C402 + x4C402 + x5C402 + x7C402 =e= 1;
 2032 EQU823..FHC01 - FHC02 =e= 0;
 2033 EQU824..FC401 - FC402 =e= 0;
 2034 EQU825..(hHC02 - hHC01) - (hC401 - hC402) =e= 0;
 2035 EQU826..(hHC01 - hHC02) - UE628*AE628*FE628*dTE628 =e= 0;
 2036 EQU827..x1HC01 - x1HC02 =e= 0;

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2037 EQU828..x2HC01 - x2HC02 =e= 0;
2038 EQU829..x3HC01 - x3HC02 =e= 0;
2039 EQU830..x4HC01 - x4HC02 =e= 0;
2040 EQU831..x5HC01 - x5HC02 =e= 0;
2041 EQU832..hc321 - FC321 * ((x1C321/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC321,ORD(Coeff))))
2042 +(x3C321/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC321,ORD(Coeff))))
2043 +(x4C321/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC321,ORD(Coeff))))
2044 +(x5C321/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC321,ORD(Coeff))))
2045 +(x7C321/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC321,ORD(Coeff)))) =e= 0;
2046 EQU833..FmC322 - FC322 * (x1C322/MW1 + x3C322/MW3 + x4C322/MW4 +
x5C322/MW5 + x7C322/MW7)=e= 0;
2047 EQU834..hc323 - FC323 * ((x1C323/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC323,ORD(Coeff))))
2048 +(x3C323/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC323,ORD(Coeff))))
2049 +(x4C323/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC323,ORD(Coeff))))
2050 +(x5C323/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC323,ORD(Coeff))))
2051 +(x7C323/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC323,ORD(Coeff)))) =e= 0;
2052 EQU835..hc326 - (FC326/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC326,ORD(Coeff))))
2053 =e= 0;
2054 EQU836..hc329 - (FC329/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC329,ORD(Coeff))))
2055 =e= 0;
2056 EQU837..x1C401 - x1C402 =e= 0;
2057 EQU838..x3C401 - x3C402 =e= 0;
2058 EQU839..x4C401 - x4C402 =e= 0;
2059 EQU840..x5C401 - x5C402 =e= 0;
2060 EQU841..(hc403 - hc402) - UE629*AE629*FE629*dTE629 =e= 0;
2061 EQU842..(hc402 - hc403) - (hHC04 - hHC03) =e= 0;
2062 EQU843..FHC03 - FHC04 =e= 0;
2063 EQU844..FC402 - FC403 =e= 0;
2064 EQU845..x5C402 - x5C403 =e= 0;
2065 EQU846..x4C402 - x4C403 =e= 0;
2066 EQU847..x3C402 - x3C403 =e= 0;
2067 EQU848..x1C402 - x1C403 =e= 0;
2068 EQU849..x5HC03 - x5HC04 =e= 0;
2069 EQU850..x4HC03 - x4HC04 =e= 0;
2070 EQU851..x3HC03 - x3HC04 =e= 0;
2071 EQU852..x2HC03 - x2HC04 =e= 0;
2072 EQU853..x1HC03 - x1HC04 =e= 0;
2073 EQU854..FHC04 - FHC05 =e= 0;
2074 EQU855..THC29 - THC30 =e= 0;
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2075 EQU856..(FlHC29*x5HC29 + FvHC29*y5HC29) - (FlHC30*x5HC30 +
 FvHC30*y5HC30) =e= 0;
 2076 EQU857..(FlHC29*x4HC29 + FvHC29*y4HC29) - (FlHC30*x4HC30 +
 FvHC30*y4HC30) =e= 0;
 2077 EQU858..(FlHC29*x3HC29 + FvHC29*y3HC29) - (FlHC30*x3HC30 +
 FvHC30*y3HC30) =e= 0;
 2078 EQU859..(FlHC29*x1HC29 + FvHC29*y1HC29) - (FlHC30*x1HC30 +
 FvHC30*y1HC30) =e= 0;
 2079 EQU860..(hHC04 - hHC05) - UE633*AE633*dTE633 =e= 0;
 2080 EQU861..(hHC04 - hHC05) - (hHC30 - hHC29) =e= 0;
 2081 EQU862..(FlHC29 + FvHC29) - (FlHC30 + FvHC30) =e= 0;
 2082 EQU863..x5HC04 - x5HC05 =e= 0;

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2083 EQU864..x4HC04 - x4HC05 =e= 0;
2084 EQU865..x3HC04 - x3HC05 =e= 0;
2085 EQU866..x2HC04 - x2HC05 =e= 0;
2086 EQU867..x1HC04 - x1HC05 =e= 0;
2087 EQU868..dTE628 **3=e= ((THC02-TC401)*(THC01-TC402)*
2088 ((THC02-TC401)+(THC01-TC402))/2);
2089 EQU869..dTE629 **3=e= ((THC03-TC403)*(THC04-TC402)*
2090 ((THC03-TC403)*(THC04-TC402))/2);
2091 EQU870..hC309 - FC309 * ((x1C309/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC309,ORD(Coeff))))
2092 +(x3C309/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC309,ORD(Coeff))))
2093 +(x4C309/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC309,ORD(Coeff))))
2094 +(x5C309/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC309,ORD(Coeff))))
2095 +(x7C309/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC309,ORD(Coeff)))) =e= 0;
2096 EQU871..THC34 - THC32 =e=0;
2097 EQU872..hHC34 - FHC34 * ((x1HC34/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC34,ORD(Coeff))))
2098 +(x3HC34/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC34,ORD(Coeff))))
2099 +(x4HC34/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC34,ORD(Coeff))))
2100 +(x5HC34/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC34,ORD(Coeff))))
2101 +(x7HC34/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC34,ORD(Coeff)))) =e= 0;
2102 EQU873..hHC38 - FHC38 * ((x1HC38/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC38,ORD(Coeff))))
2103 +(x3HC38/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC38,ORD(Coeff))))
2104 +(x4HC38/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC38,ORD(Coeff))))
2105 +(x5HC38/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC38,ORD(Coeff))))
2106 +(x7HC38/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC38,ORD(Coeff)))) =e= 0;
2107 EQU874..THC38 - THC32 =e=0;
2108 EQU875..THC32 - THC41 =e= 0;
2109 EQU876..hHC41 - FHC41 * ((x1HC41/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC41,ORD(Coeff))))
2110 +(x3HC41/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC41,ORD(Coeff))))
2111 +(x4HC41/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC41,ORD(Coeff))))
2112 +(x5HC41/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC41,ORD(Coeff))))
2113 +(x7HC41/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC41,ORD(Coeff)))) =e= 0;
```

```

2114 EQU877..THC32 - THC45 =e=0;
2115 EQU878..hHC45 - FHC45 * ((x1HC45/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC45,ORD(Coeff))))
2116 +(x3HC45/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC45,ORD(Coeff))))
2117 +(x4HC45/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC45,ORD(Coeff))))
2118 +(x5HC45/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC45,ORD(Coeff))))
2119 +(x7HC45/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC45,ORD(Coeff)))) =e= 0;
2120 EQU879..hHC06 - FHC06 * ((x1HC06/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC06,ORD(Coeff))))
2121 +(x2HC06/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC06,ORD(Coeff))))
2122 +(x3HC06/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC06,ORD(Coeff))))
2123 +(x4HC06/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC06,ORD(Coeff))))
2124 +(x5HC06/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC06,ORD(Coeff))))
2125 +(x7HC06/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC06,ORD(Coeff)))) =e= 0;
2126 EQU880..hHC06 -hHC02 - hHC05 =e= 0;
2127 EQU881..THC06 - THC07 =e= 0;
2128 EQU882..hHC07 - FHC07 * ((x1HC07/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC07,ORD(Coeff))))

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2129 +(x2HC07/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC07,ORD(Coeff))))
2130 +(x3HC07/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC07,ORD(Coeff))))
2131 +(x4HC07/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC07,ORD(Coeff))))
2132 +(x5HC07/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC07,ORD(Coeff))))
2133 +(x7HC07/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC07,ORD(Coeff)))) =e= 0;
2134 EQU883..THC06 -THC11 =e=0;
2135 EQU884..hHC11 - FHC11 * ((x1HC11/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC11,ORD(Coeff))))
2136 +(x2HC11/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC11,ORD(Coeff))))
2137 +(x3HC11/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC11,ORD(Coeff))))
2138 +(x4HC11/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC11,ORD(Coeff))))
2139 +(x5HC11/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC11,ORD(Coeff))))
2140 +(x7HC11/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC11,ORD(Coeff)))) =e= 0;
2141 EQU885..THC06 -THC14 =e=0;
2142 EQU886..hHC14 - FHC14 * ((x1HC14/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC14,ORD(Coeff))))
2143 +(x2HC14/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC14,ORD(Coeff))))
2144 +(x3HC14/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC14,ORD(Coeff))))
2145 +(x4HC14/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC14,ORD(Coeff))))
2146 +(x5HC14/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC14,ORD(Coeff))))
2147 +(x7HC14/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC14,ORD(Coeff)))) =e= 0;
2148 EQU887..THC06 -THC16 =e=0;
2149 EQU888..hHC16 - FHC16 * ((x1HC16/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC16,ORD(Coeff))))
2150 +(x2HC16/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC16,ORD(Coeff))))
2151 +(x3HC16/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC16,ORD(Coeff))))
2152 +(x4HC16/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC16,ORD(Coeff))))
2153 +(x5HC16/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC16,ORD(Coeff))))
2154 +(x7HC16/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC16,ORD(Coeff)))) =e= 0;
2155 EQU889..hc432 - FC432 *
```

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2156 ((x3C432/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC432,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TC432/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2157 +(x4C432/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC432,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TC432/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2158 +(x5C432/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC432,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *

((1-TC432/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2159 +(x7C432/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC432,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *

((1-TC432/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2160 EQU890..x1C432 + x3C432 + x4C432 + x5C432 + x7C432 =e= 1;
2161 EQU891..FmC432 - FC432 * (x1C432/MW1 + x3C432/MW3 + x4C432/MW4 +
x5C432/MW5 + x7C432/MW7)=e= 0;
2162 EQU892..xx3C432 * FmC432 * MW3 - FC432 * x3C432 =e= 0;
2163 EQU893..xx4C432 * FmC432 * MW4 - FC432 * x4C432 =e= 0;
2164 EQU894..x1C430 + x3C430 + x4C430 + x5C430 + x7C430 =e= 1;
2165 EQU895..FmC430 - FC430 * (x1C430/MW1 + x3C430/MW3 + x4C430/MW4 +
x5C430/MW5 + x7C430/MW7)=e= 0;
2166 EQU896..xx3C430 * FmC430 * MW3 - FC430 * x3C430 =e= 0;
2167 EQU897..hC430 - FC430 * ((x1C430/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC430,ORD(Coeff))))
2168 +(x3C430/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC430,ORD(Coeff))))
2169 +(x4C430/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC430,ORD(Coeff))))
2170 +(x5C430/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC430,ORD(Coeff))))

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2171 +(x7C430/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC430,ORD(Coeff)))) =e= 0;
2172 EQU898..xx4C430 * FmC430 * MW4 - FC430 * x4C430 =e= 0;
2173 EQU899..xx1HC28 + xx2HC28 + xx3HC28 + xx4HC28 + xx5HC28 + xx7HC28
=e= 1;
2174 EQU900..FmlHC28 - FlHC28 * (x1HC28/MW1 + x2HC28/MW2 + x3HC28/MW3
+ x4HC28/MW4 + x5HC28/MW5 + x7HC28/MW7)=e= 0;
2175 EQU901..yy1HC28 + yy2HC28 + yy3HC28 + yy4HC28 + yy5HC28 + yy7HC28
=e= 1;
2176 EQU902..FmvHC28 - FvHC28 * (y1HC28/MW1 + y2HC28/MW2 + y3HC28/MW3
+ y4HC28/MW4 + y5HC28/MW5 + y7HC28/MW7)=e= 0;
2177 EQU903..y1HC28+y2HC28+y3HC28+y4HC28+y5HC28+y7HC28 =e=1;
2178 EQU904..xx1HC28 * MW1 * FmlHC28 - FlHC28 * x1HC28 =e= 0 ;
2179 EQU905..xx3HC28 * MW3 * FmlHC28 - FlHC28 * x3HC28 =e= 0 ;
2180 EQU906..xx4HC28 * MW4 * FmlHC28 - FlHC28 * x4HC28 =e= 0;
2181 EQU907..xx5HC28 * MW5 * FmlHC28 - FlHC28 * x5HC28 =e= 0;
2182 EQU908..xx7HC28 * MW7 * FmlHC28 - FlHC28 * x7HC28 =e= 0;
2183 EQU909..yy7HC28 * MW7 * FmvHC28 - FvHC28 * y7HC28 =e= 0;
2184 EQU910..yy5HC28 * MW5 * FmvHC28 - FvHC28 * y5HC28 =e= 0;
2185 EQU911..yy4HC28 * MW4 * FmvHC28 - FvHC28 * y4HC28 =e= 0;
2186 EQU912..yy3HC28 * MW3 * FmvHC28 - FvHC28 * y3HC28 =e= 0;
2187 EQU913..yy1HC28 * MW1 * FmvHC28 - FvHC28 * y1HC28 =e= 0;
2188 EQU914..FHC28 - FlHC28 - FvHC28 =e= 0;
2189 EQU915..FvHC28 - VFM3* FHC28 =e= 0;
2190 EQU916..xx1HC28 * K1M3 =e= yy1HC28;
2191 EQU917..K1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TnC606A-
5.261*LOG10(TnC606A)+3.282E-11*TnC606A+3.7349E-6*TnC606A**2);
2192 EQU918..xx2HC28 * K2M3 =e= yy2HC28;
2193 EQU919..xx3HC28 * K3M3 =e= yy3HC28;
2194 EQU920..xx4HC28 * K4M3 =e= yy4HC28;
2195 EQU921..xx5HC28 * K5M3 =e= yy5HC28;
2196 EQU922..xx7HC28 * K7M3 =e= yy7HC28;
2197 EQU923..hc427 - FC427 *
2198 ((x3C427/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC427,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC427/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2199 +(x4C427/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC427,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC427/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2200 +(x5C427/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC427,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC427/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2201 +(x7C427/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC427,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC427/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2202 EQU924..x1C427 + x3C427 + x4C427 + x5C427 + x7C427 =e= 1;
```



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2203 EQU925..FmC427 - FC427 * (x1C427/MW1 + x3C427/MW3 + x4C427/MW4 +
x5C427/MW5 + x7C427/MW7)=e= 0;
2204 EQU926..xx4C427 * FmC427 * MW4 - FC427 * x4C427 =e= 0;
2205 EQU927..K3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TnC606A-
8.806*LOG10(TnC606A)+8.9246E-11*TnC606A+5.7501E-6*TnC606A**2);
2206 EQU928..Kp3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TmC606A-
8.806*LOG10(TmC606A)+8.9246E-11*TmC606A+5.7501E-6*TmC606A**2)

;
2207 EQU929..K4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TnC606A-
7.1805*LOG10(TnC606A)-6.6845E-11*TnC606A+4.219E-6*TnC606A**2);
2208 EQU930..Kp4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TmC606A-
7.1805*LOG10(TmC606A)-6.6845E-11*TmC606A+4.219E-6*TmC606A**2)

;
2209 EQU931..K5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TnC606A-
7.883*LOG10(TnC606A)-4.6512E-11*TnC606A+3.8997E-6*TnC606A**2);
2210 EQU932..Kp5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TmC606A-
7.883*LOG10(TmC606A)-4.6512E-11*TmC606A+3.8997E-6*TmC606A**2)

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;
2211 EQU933..K7C606A*PC606A =e= 0.1333*10**(33.0162-2.583E3/TnC606A-
9.042*LOG10(TnC606A)-1.371E-12*TnC606A+3.634E-6*TnC606A**2);
2212 EQU934..Kp7C606A*PC606A =e= 0.1333*10**(33.0162-2.583E3/TmC606A-
9.042*LOG10(TmC606A)-1.371E-12*TmC606A+3.634E-6*TmC606A**2);
2213 EQU935..Sn1C606A *FC322 =e= K1C606A*FC414;
2214 EQU936..Sm1C606A*LpC606A=e= Kp1C606A*VpC606A;
2215 EQU937..Sn3C606A *FC322 =e= K3C606A*FC414;
2216 EQU938..Sm3C606A*LpC606A=e= Kp3C606A*VpC606A;
2217 EQU939..Sn4C606A *FC322 =e= K4C606A*FC414;
2218 EQU940..Sm4C606A*LpC606A=e= Kp4C606A*VpC606A;
2219 EQU941..Sn5C606A *FC322 =e= K5C606A*FC414;
2220 EQU942..Sm5C606A*LpC606A=e= Kp5C606A*VpC606A;
2221 EQU943..Sn7C606A *FC322 =e= K7C606A*FC414;
2222 EQU944..Sm7C606A*LpC606A=e= Kp7C606A*VpC606A;
2223 EQU945..f1C606A*((1-Sn1C606A**(56-47))/1E20+
h1C606A*Sn1C606A**(56-47)*(1-Sm1C606A**(47+1))/1E20) =e= (1-
Sn1C606A**(56-47))
/1E20+ qS1C606A*(Sn1C606A**(56-47)-
Sn1C606A)/1E20+qFp1C606A*h1C606A*Sn1C606A**(56-47)*(1-
Sm1C606A**47)/1E20
2224 ;
2225 EQU946..f3C606A*((1-Sn3C606A**(56-47))/1E10+
h3C606A*Sn3C606A**(56-47)*(1-Sm3C606A**(47+1))/1E10) =e= (1-
Sn3C606A**(56-47))
/1E10+ qS3C606A*(Sn3C606A**(56-47)-
Sn3C606A)/1E10+qFp3C606A*h3C606A*Sn3C606A**(56-47)*(1-
Sm3C606A**47)/1E10
2226 ;
2227 EQU947..f4C606A*((1-Sn4C606A**(56-47))+ h4C606A*Sn4C606A**(56-
47)*(1-Sm4C606A**(47+1))) =e= (1-Sn4C606A**(56-47))+
qS4C606A*(Sn4C606A**(56-47)-
Sn4C606A)+qFp4C606A*h4C606A*Sn4C606A**(56-47)*(1-Sm4C606A**47)
2228 ;
2229 EQU948..f5C606A*((1-Sn5C606A**(56-47))+ h5C606A*Sn5C606A**(56-
47)*(1-Sm5C606A**(47+1))) =e= (1-Sn5C606A**(56-47))+
qS5C606A*(Sn5C606A**(56-47)-
Sn5C606A)+qFp5C606A*h5C606A*Sn5C606A**(56-47)*(1-Sm5C606A**47)
2230 ;
2231 EQU949..f7C606A*((1-Sn7C606A**(56-47))+ h7C606A*Sn7C606A**(56-
47)*(1-Sm7C606A**(47+1))) =e= (1-Sn7C606A**(56-47))+
qS7C606A*(Sn7C606A**(56-47)-
Sn7C606A)+qFp7C606A*h7C606A*Sn7C606A**(56-47)*(1-Sm7C606A**47)
2232 ;
2233 EQU950..f1C606A * (x1C404 * FC404 + x1C322 * FC322 + x1C432 *
FC432) =e= x1C430 * FC430;
2234 EQU951..f3C606A * (x3C404 * FC404 + x3C322 * FC322 + x3C432 *
FC432) =e= x3C430 * FC430;
2235 EQU952..f4C606A * (x4C404 * FC404 + x4C322 * FC322 + x4C432 *
FC432) =e= x4C430 * FC430;
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2236 EQU953..f5C606A * (x5C404 * FC404 + x5C322 * FC322 + x5C432 *
FC432) =e= x5C430 * FC430;
2237 EQU954..f7C606A * (x7C404 * FC404 + x7C322 * FC322 + x7C432 *
FC432) =e= x7C430 * FC430;
2238 EQU955..h1C606A*LpC606A*(1-Sm1C606A) =e= FC322*(1-Sn1C606A);
2239 EQU956..h3C606A*LpC606A*(1-Sm3C606A) =e= FC322*(1-Sn3C606A);
2240 EQU957..h4C606A*LpC606A*(1-Sm4C606A) =e= FC322*(1-Sn4C606A);
2241 EQU958..Kp1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TmC606A-
5.261*LOG10(TmC606A)+3.282E-11*TmC606A+3.7349E-6*TmC606A**2);
2242 EQU959..FmC414 - FC414 * (x1C414/MW1 + x3C414/MW3 + x4C414/MW4 +
x5C414/MW5 + x7C414/MW7 )=e= 0;
2243 EQU960..xx3C414 * FmC414 * MW3 - FC414 * x3C414 =e= 0;
2244 EQU961..hC322 - FC322 * ((x1C322/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC322,ORD(Coeff))))
2245 +(x3C322/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC322,ORD(Coeff))))
2246 +(x4C322/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC322,ORD(Coeff))))
2247 +(x5C322/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC322,ORD(Coeff))))
2248 +(x7C322/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC322,ORD(Coeff)))) =e= 0;
2249 EQU962..xx3C322 * FmC322 * MW3 - FC322 * x3C322 =e= 0;
2250 EQU963..FC427 -FC431 =e= 0;

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2251 EQU964..TC431 - TC425 =e= 0;
2252 EQU965..x1C428 + x3C428 + x4C428 + x5C428 + x7C428 =e= 1;
2253 EQU966..FmC428 - FC428 * (x1C428/MW1 + x3C428/MW3 + x4C428/MW4 +
x5C428/MW5 + x7C428/MW7)=e= 0;
2254 EQU967..xx4C428 * FmC428 * MW4 - FC428 * x4C428 =e= 0;
2255 EQU968..x1C425 + x3C425 + x4C425 + x5C425 + x7C425 =e= 1;
2256 EQU969..FmC425 - FC425 * (x1C425/MW1 + x3C425/MW3 + x4C425/MW4 +
x5C425/MW5 + x7C425/MW7)=e= 0;
2257 EQU970..xx4C425 * FmC425 * MW4 - FC425 * x4C425 =e= 0;
2258 EQU971..x1C408 - x1C405 =e= 0;
2259 EQU972..x3C408 - x3C405 =e= 0;
2260 EQU973..x4C408 - x4C405 =e= 0;
2261 EQU974..x5C408 - x5C405 =e= 0;
2262 EQU975..xM1C606D * FC426**2 *(Sm1C606D-1)=e= FC405 * x1C405 *
(FC428*Kp1C606D*(Sm1C606D**(13-1)-1) + FC426*(Sm1C606D-1));
2263 EQU976..h5C606A*LpC606A*(1-Sm5C606A) =e= FC322*(1-Sn5C606A);
2264 EQU977..h7C606A*LpC606A*(1-Sm7C606A) =e= FC322*(1-Sn7C606A);
2265 EQU978..FC404 * x1C404 + FC432*x1C432 + FC322*x1C322- FC414 *
x1C414 - FC430*x1C430 =e= 0;
2266 EQU979..FC404 * x3C404 + FC432*x3C432 + FC322*x3C322- FC414 *
x3C414 - FC430*x3C430 =e= 0;
2267 EQU980..FC404 * x4C404 + FC432*x4C432 + FC322*x4C322- FC414 *
x4C414 - FC430*x4C430 =e= 0;
2268 EQU981..FC404 * x5C404 + FC432*x5C432 + FC322*x5C322- FC414 *
x5C414 - FC430*x5C430 =e= 0;
2269 EQU982..qS1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
=e= FC322*x1C322;
2270 EQU983..qS3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
=e= FC322*x3C322;
2271 EQU984..qS5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
=e= FC322*x5C322;
2272 EQU985..qS4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
=e= FC322*x4C322;
2273 EQU986..xAC02 * (2* x11AC02/98.08 + (1-x11AC02)/360)*98.08 -
x11AC02 =e= 0;
2274 EQU987..hAC02*(80.06*xAC02 + 360*(1- xAC02))/1E2- FAC02 *
4.184E3* (-145.8407 * x11AC02 /1E2+ 9.739e-03 * (TAC02-273) /1E2+
8.024e-03 * (TAC02-273) *
x11AC02 /1E2+ 83.615 * x11AC02 * x11AC02/1E2 + 65.3921/1E2) =e= 0;
2275 EQU988..xAC05 * (2* x11AC05/98.08 + (1-x11AC05)/360) -
x11AC05/98.08 =e= 0;
2276 EQU989..hAC05*(80.06*xAC05 + 360*(1- xAC05))/1E2 - FAC05 *
4.184E3* (-145.8407 * x11AC05/1E2 + 9.739e-03 * (TAC05-273)/1E2 +
8.024e-03 * (TAC05-273) *
x11AC05/1E2 + 83.615 * x11AC05 * x11AC05/1E2 + 65.3921/1E2) =e= 0;
2277 EQU990..hAC07*(80.06*xAC07 + 360*(1- xAC07))/1E2 - FAC07 *
4.184E3* (-145.8407 * x11AC07/1E2 + 9.739e-03 * (TAC07-273) /1E2+
8.024e-03 * (TAC07-273) *
x11AC07/1E2 + 83.615 * x11AC07 * x11AC07/1E2 + 65.3921/1E2) =e= 0;
2278 EQU991..xAC07 * (2* x11AC07/98.08 + (1-x11AC07)/360) -
x11AC07/98.08 =e= 0;
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2279 EQU992..hAC09 - FAC09 * ((x1AC09/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC09,ORD(Coeff))))
2280 +(x3AC09/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC09,ORD(Coeff))))
2281 +(x4AC09/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC09,ORD(Coeff))))
2282 +(x5AC09/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC09,ORD(Coeff))))
2283 +(x7AC09/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC09,ORD(Coeff))))
2284 +(x8AC09/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC09,ORD(Coeff))))
2285 +(x9AC09/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC09,ORD(Coeff))))
2286 + 3 * (x10AC09/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC09,ORD(Coeff)))) - hacAC09 =e= 0;
2287 EQU993..xAC09 * (2* x11AC09/98.08 + (1-x11AC09)/360) -
x11AC09/98.08 =e= 0;
2288 EQU994..hacAC09*(80.06*xAC09 + 360*(1- xAC09))/1E2 - FAC09 *
4.184E3* (-145.8407 * x11AC09/1E2 + 9.739e-03 * (TAC09-273)
/1E2+ 8.024e-03 * (TAC09-273) *
x11AC09 /1E2+ 83.615 * x11AC09 * x11AC09 /1E2+ 65.3921/1E2) =e= 0;
2289 EQU995..xAC12 * (2* x11AC12/98.08 + (1-x11AC12)/360) -
x11AC12/98.08 =e= 0;
2290 EQU996..hAC12*(80.06*xAC12 + 360*(1- xAC12)) /1E2- FAC12 *
4.184E3* (-145.8407 * x11AC12 /1E2+ 9.739e-03 * (TAC12-273) /1E2+
8.024e-03 * (TAC12-273) *
x11AC12 /1E2+ 83.615 * x11AC12 * x11AC12 /1E2+ 65.3921/1E2) =e= 0;
2291 EQU997..hAC15*(80.06*xAC15 + 360*(1- xAC15))/1E2 - FAC15 *
4.184E3* (-145.8407 * x11AC15 /1E2+ 9.739e-03 * (TAC15-273) /1E2+

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8.024e-03 * (TAC15-273) *
x11AC15 /1E2+ 83.615 * x11AC15 * x11AC15/1E2 + 65.3921/1E2) =e= 0;
2292 EQU998..xAC15 * (2* x11AC15/98.08 + (1-x11AC15)/360) -
x11AC15/98.08 =e= 0;
2293 EQU999..hAC18*(80.06*xAC18 + 360*(1- xAC18))/1E2 - FAC18 *
4.184E3* (-145.8407 * x11AC18 /1E2+ 9.739e-03 * (TAC18-273)/1E2 +
8.024e-03 * (TAC18-273) *
x11AC18/1E2 + 83.615 * x11AC18 * x11AC18/1E2 + 65.3921/1E2) =e= 0;
2294 EQU1000..xAC18 * (2* x11AC18/98.08 + (1-x11AC18)/360) -
x11AC18/98.08 =e= 0;
2295 EQU1001..hacAC20*(80.06*xAC20 + 360*(1- xAC20))/1E2 - FAC20 *
4.184E3* (-145.8407 * x11AC20/1E2 + 9.739e-03 * (TAC20-273)
/1E2+ 8.024e-03 * (TAC20-273) *
x11AC20 /1E2+ 83.615 * x11AC20 * x11AC20 /1E2+ 65.3921/1E2) =e= 0;
2296 EQU1002..hAC20 - FAC20 * ((x1AC20/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC20,ORD(Coeff))))
2297 +(x3AC20/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC20,ORD(Coeff))))
2298 +(x4AC20/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC20,ORD(Coeff))))
2299 +(x5AC20/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC20,ORD(Coeff))))
2300 +(x7AC20/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC20,ORD(Coeff))))
2301 +(x8AC20/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff) *
POWER(TAC20,ORD(Coeff))))
2302 +(x9AC20/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC20,ORD(Coeff))))
2303 + 3 * (x10AC20/MW10)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("10",Coeff) *POWER(TAC20,ORD(Coeff)))) - hacAC20 =e= 0;
2304 EQU1003..xAC20 * (2* x11AC20/98.08 + (1-x11AC20)/360) -
x11AC20/98.08 =e= 0;
2305 EQU1004..hAC23*(80.06*xAC23 + 360*(1- xAC23))/1E2 - FAC23 *
4.184E3* (-145.8407 * x11AC23 /1E2+ 9.739e-03 * (TAC23-273) /1E2+
8.024e-03 * (TAC23-273) *
x11AC23 /1E2+ 83.615 * x11AC23 * x11AC23 /1E2+ 65.3921/1E2) =e= 0;
2306 EQU1005..xAC23 * (2* x11AC23/98.08 + (1-x11AC23)/360) -
x11AC23/98.08 =e= 0;
2307 EQU1006..hAC26*(80.06*xAC26 + 360*(1- xAC26))/1E2 - FAC26 *
4.184E3* (-145.8407 * x11AC26 /1E2+ 9.739e-03 * (TAC26-273)/1E2 +
8.024e-03 * (TAC26-273) *
x11AC23 /1E2+ 83.615 * x11AC26 * x11AC26 /1E2+ 65.3921/1E2) =e= 0;
2308 EQU1007..xAC26 * (2* x11AC26/98.08 + (1-x11AC26)/360) -
x11AC26/98.08 =e= 0;
2309 EQU1008..hAC29*(80.06*xAC29 + 360*(1- xAC29))/1E2 - FAC29 *
4.184E3* (-145.8407 * x11AC29 /1E2+ 9.739e-03 * (TAC29-273) /1E2+
8.024e-03 * (TAC29-273) *
x11AC29/1E2 + 83.615 * x11AC29 * x11AC29 /1E2+ 65.3921/1E2) =e= 0;
2310 EQU1009..xAC29 * (2* x11AC29/98.08 + (1-x11AC29)/360) -
x11AC29/98.08 =e= 0;
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2311 EQU1010..hacAC31*(80.06*xAC31 + 360*(1- xAC31))/1E2 - FAC31 *
4.184E3* (-145.8407 * x11AC31/1E2 + 9.739e-03 * (TAC31-273)
/1E2+ 8.024e-03 * (TAC31-273) *
x11AC31/1E2 + 83.615 * x11AC31 * x11AC31/1E2 + 65.3921/1E2) =e= 0;
2312 EQU1011..hAC31 - FAC31 * ((x1AC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC31,ORD(Coeff))))
2313 +(x3AC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC31,ORD(Coeff))))
2314 +(x4AC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC31,ORD(Coeff))))
2315 +(x5AC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC31,ORD(Coeff))))
2316 +(x7AC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC31,ORD(Coeff))))
2317 +(x8AC31/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC31,ORD(Coeff))))
2318 +(x9AC31/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC31,ORD(Coeff))))
2319 + 3 * (x10AC31/MW10)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("10",Coeff) *POWER(TAC31,ORD(Coeff)))) - hacAC31 =e= 0;
2320 EQU1012..xAC31 * (2* x11AC31/98.08 + (1-x11AC31)/360) -
x11AC31/98.08 =e= 0;
2321 EQU1013..hAC34*(80.06*xAC34 + 360*(1- xAC34)) /1E2- FAC34 *
4.184E3* (-145.8407 * x11AC34 /1E2+ 9.739e-03 * (TAC34-273) /1E2+
8.024e-03 * (TAC34-273) *
x11AC34/1E2 + 83.615 * x11AC34 * x11AC34 /1E2+ 65.3921/1E2) =e= 0;
2322 EQU1014..xAC34 * (2* x11AC34/98.08 + (1-x11AC34)/360) -
x11AC34/98.08 =e= 0;
2323 EQU1015..qS7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC322*x7C322;
2324 EQU1016..qFp1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
=e= FC432*x1C432;
2325 EQU1017..qFp3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
=e= FC432*x3C432;
2326 EQU1018..xM3C606D * FC426**2 * (Sm3C606D-1)=e= FC405 * x3C405 *
(FC428*Kp3C606D*(Sm3C606D** (13-1)-1) + FC426*(Sm3C606D-1));
2327 EQU1019..FmC409 - FC409 * (x1C409/MW1 + x3C409/MW3 + x4C409/MW4 +
x5C409/MW5 + x7C409/MW7)=e= 0;
2328 EQU1020..xx4C409 * FmC409 * MW4 - FC409 * x4C409 =e= 0;
2329 EQU1021..FmC408 - FC408 * (x1C408/MW1 + x3C408/MW3 + x4C408/MW4 +
x5C408/MW5 + x7C408/MW7)=e= 0;

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2330 EQU1022..xx1C408 * FmC408 * MW1 - FC408 * x1C408 =e= 0;
2331 EQU1023..xx3C408 * FmC408 * MW3 - FC408 * x3C408 =e= 0;
2332 EQU1024..xx4C408 * FmC408 * MW4 - FC408 * x4C408 =e= 0;
2333 EQU1025..xx5C408 * FmC408 * MW5 - FC408 * x5C408 =e= 0;
2334 EQU1026..xx1C408 + xx3C408 + xx4C408 + xx5C408 + xx7C408 =e= 1;
2335 EQU1027..FmC405 - FC405 * (x1C405/MW1 + x3C405/MW3 + x4C405/MW4 +
x5C405/MW5 + x7C405/MW7)=e= 0;
2336 EQU1028..xx1C405 * FmC405 * MW1 - FC405 * x1C405 =e= 0;
2337 EQU1029..xx3C405 * FmC405 * MW3 - FC405 * x3C405 =e= 0;
2338 EQU1030..xx4C405 * FmC405 * MW4 - FC405 * x4C405 =e= 0;
2339 EQU1031..xx5C405 * FmC405 * MW5 - FC405 * x5C405 =e= 0;
2340 EQU1032..xx7C405 * FmC405 * MW7 - FC405 * x7C405 =e= 0;
2341 EQU1033..FC427 - FC428 - FC411 =e= 0;
2342 EQU1034..hacAC37*(80.06*xAC37 + 360*(1- xAC37)) /1E2- FAC37 *
4.184E3* (-145.8407 * x11AC37/1E2 + 9.739e-03 * (TAC37-273)/1E2 +
8.024e-03 * (TAC37-273) *
x11AC37 /1E2+ 83.615 * x11AC37 * x11AC37/1E2 + 65.3921/1E2) =e= 0;
2343 EQU1035..xAC37 * (2* x11AC37/98.08 + (1-x11AC37)/360) -
x11AC37/98.08 =e= 0;
2344 EQU1036..hacAC40*(80.06*xAC40 + 360*(1- xAC40))/1E2 - FAC40 *
4.184E3* (-145.8407 * x11AC40 /1E2+ 9.739e-03 * (TAC40-273)/1E2 +
8.024e-03 * (TAC40-273) *
x11AC40/1E2 + 83.615 * x11AC40 * x11AC40/1E2 + 65.3921/1E2) =e= 0;
2345 EQU1037..hacAC42*(80.06*xAC42 + 360*(1- xAC42))/1E2 - FAC42 *
4.184E3* (-145.8407 * x11AC42/1E2 + 9.739e-03 * (TAC42-273)/1E2
+ 8.024e-03 * (TAC42-273) *
x11AC42/1E2 + 83.615 * x11AC42 * x11AC42/1E2 + 65.3921/1E2) =e= 0;
2346 EQU1038..xAC40 * (2* x11AC40/98.08 + (1-x11AC40)/360) -
x11AC40/98.08 =e= 0;
2347 EQU1039..xAC42 * (2* x11AC42/98.08 + (1-x11AC42)/360) -
x11AC42/98.08 =e= 0;
2348 EQU1040..hacAC42 - FAC42 * ((x1AC42/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC42,ORD(Coeff))))
2349 +(x3AC42/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC42,ORD(Coeff))))
2350 +(x4AC42/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC42,ORD(Coeff))))
2351 +(x5AC42/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC42,ORD(Coeff))))
2352 +(x7AC42/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC42,ORD(Coeff))))
2353 +(x8AC42/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC42,ORD(Coeff))))
2354 +(x9AC42/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC42,ORD(Coeff))))
2355 + 3 * (x10AC42/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC42,ORD(Coeff)))) - hacAC42 =e= 0;
2356 EQU1041..x1HC28 -x1HC29 =e= 0;
2357 EQU1042..x2HC28 -x2HC29 =e= 0;
2358 EQU1043..x3HC28 -x3HC29 =e= 0;
2359 EQU1044..x4HC28 -x4HC29 =e= 0;

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2360 EQU1045..x5HC28 -x5HC29 =e= 0;
2361 EQU1046..x1HC28 -x1R1 =e= 0;
2362 EQU1047..x2HC28 -x2R1 =e= 0;
2363 EQU1048..x3HC28 -x3R1 =e= 0;
2364 EQU1049..x4HC28 -x4R1 =e= 0;
2365 EQU1050..x5HC28 -x5R1 =e= 0;
2366 EQU1051..y1HC28 -y1HC29 =e= 0;
2367 EQU1052..y2HC28 -y2HC29 =e= 0;
2368 EQU1053..y3HC28 -y3HC29 =e= 0;
2369 EQU1054..y4HC28 -y4HC29 =e= 0;
2370 EQU1055..y5HC28 -y5HC29 =e= 0;
2371 EQU1056..y1HC28 -y1R1 =e= 0;
2372 EQU1057..y2HC28 -y2R1 =e= 0;

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2373 EQU1058..y3HC28 -y3R1 =e= 0;
2374 EQU1059..y4HC28 -y4R1 =e= 0;
2375 EQU1060..TC425 - TC410 =e= 0;
2376 EQU1061..TC425 - TC426 =e= 0;
2377 EQU1062..TC432 - TC431 =e= 0;
2378 EQU1063..TC431 - TC412 =e= 0;
2379 EQU1064..y5HC28 -y5R1 =e= 0;
2380 EQU1065..THC28 -TR1 =e= 0;
2381 EQU1066..THC28 -THC29 =e= 0;
2382 EQU1067..x1HC29 + x2HC29 + x3HC29 + x4HC29 + x5HC29 + x7HC29 =e=
1;
2383 EQU1068..y1HC29 + y2HC29 + y3HC29 + y4HC29 + y5HC29 + y7HC29 =e=
1;
2384 EQU1069..hvHC30 - FvHC30*((y1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC30/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2385 +(y3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC30/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2386 +(y4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC30/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2387 +(y5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC30/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2388 +(y7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC30/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2389 EQU1070..hHC30 - h1HC30 - hvHC30 =e= 0;
2390 EQU1071..FHC30 - F1HC30 - FvHC30 =e= 0;
2391 EQU1072..h1HC30 - F1HC30*((x1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff))))
2392 +(x3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff))))
2393 +(x4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff))))
2394 +(x5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff))))
2395 +(x7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff)))) =e= 0;
2396 EQU1073..x1HC30 + x2HC30 + x3HC30 + x4HC30 + x5HC30 + x7HC30 =e=
1;
2397 EQU1074..y1HC30 + y2HC30 + y3HC30 + y4HC30 + y5HC30 + y7HC30 =e=
1;
2398 EQU1075..hvr29 - Fvr29*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff)))+ Enth_Vap("1","a1")

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*1000 * ((1-TR29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2399 +(y3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR29/Enth_Va

ap("3","a2"))**Enth_Vap("3","a3")))
2400 +(y4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR29/Enth_Va

p("4","a2"))**Enth_Vap("4","a3")))
2401 +(y5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR29/Enth_Va

p("5","a2"))**Enth_Vap("5","a3")))
2402 +(y7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR29/Enth_Va

p("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2403 EQU1076..y1R29 + y2R29 + y3R29 + y4R29 + y5R29 + y7R29 =e= 1;
2404 EQU1077..h1R29 - F1R29* ((x1R29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff))))
2405 +(x3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff))))
2406 +(x4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff))))
2407 +(x5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff))))
2408 +(x7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))) =e= 0;

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2409 EQU1078..x1R29 + x2R29 + x3R29 + x4R29 + x5R29 + x7R29 =e= 1;
2410 EQU1079..hR29 - h1R29 - hvR29 =e= 0;
2411 EQU1080..FR29 - F1R29 -FvR29 =e= 0;
2412 EQU1081..hvHC31 - FvHC31*((y1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC31/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2413 +(y3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC31/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2414 +(y4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC31/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2415 +(y5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC31/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2416 +(y7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC31/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2417 EQU1082..hHC31 - h1HC31 - hvHC31 =e= 0;
2418 EQU1083..FHC31 - F1HC31 - FvHC31 =e= 0;
2419 EQU1084..h1HC31 - F1HC31*((x1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff))))
2420 +(x3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff))))
2421 +(x4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff))))
2422 +(x5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff))))
2423 +(x7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))) =e= 0;
2424 EQU1085..x1HC31 + x2HC31 + x3HC31 + x4HC31 + x5HC31 + x7HC31 =e=
1;
2425 EQU1086..y1HC31 + y2HC31 + y3HC31 + y4HC31 + y5HC31 + y7HC31 =e=
1;
2426 EQU1087..qFp4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
=e= FC432*x4C432;
2427 EQU1088..qFp5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
=e= FC432*x5C432;
2428 EQU1089..qFp7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC432*x7C432;
2429 EQU1090..K1C430*PC606A =e= 0.1333*10**((21.4469-1.4627E3/TC430-
5.261*LOG10(TC430)+3.282E-11*TC430+3.7349E-6*TC430**2));
2430 EQU1091..K3C430*PC606A =e= 0.1333*10**((31.2541-1.9532E3/TC430-
8.806*LOG10(TC430)+8.9246E-11*TC430+5.7501E-6*TC430**2));
2431 EQU1092..K4C430*PC606A =e= 0.1333*10**((27.0441-1.9049E3/TC430-
7.1805*LOG10(TC430)-6.6845E-11*TC430+4.219E-6*TC430**2));
```

2432 EQU1093..K5C430*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC430-
 7.883*LOG10(TC430)-4.6512E-11*TC430+3.8997E-6*TC430**2);
 2433 EQU1094..K7C430*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC430-
 9.042*LOG10(TC430)-1.371E-12*TC430+3.634E-6*TC430**2);
 2434
 EQU1095..K1C430*xx1C430+K3C430*xx3C430+K4C430*xx4C430+K5C430*xx5C430+K7
 C430*xx7C430 =e= 1;
 2435 EQU1096..xx1C430+xx3C430+xx4C430+xx5C430+xx7C430 =e= 1;
 2436 EQU1097..xx1C430 * FmC430 * MW1 - FC430 * x1C430 =e= 0;
 2437 EQU1098..xx5C430 * FmC430 * MW5 - FC430 * x5C430 =e= 0;
 2438 EQU1099..xx1C414+xx3C414+xx4C414+xx5C414+xx7C414 =e= 1;
 2439 EQU1100..K1C414*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TC414-
 5.261*LOG10(TC414)+3.282E-11*TC414+3.7349E-6*TC414**2);
 2440 EQU1101..K3C414*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TC414-
 8.806*LOG10(TC414)+8.9246E-11*TC414+5.7501E-6*TC414**2);
 2441 EQU1102..K4C414*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TC414-
 7.1805*LOG10(TC414)-6.6845E-11*TC414+4.219E-6*TC414**2);
 2442 EQU1103..K5C414*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC414-
 7.883*LOG10(TC414)-4.6512E-11*TC414+3.8997E-6*TC414**2);
 2443 EQU1104..K7C414*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC414-
 9.042*LOG10(TC414)-1.371E-12*TC414+3.634E-6*TC414**2);
 2444
 EQU1105..xx1C414/K1C414+xx3C414/K3C414+xx4C414/K4C414+xx5C414/K5C414+xx
 7C414/K7C414 =e= 1;
 2445 EQU1106..xx1C414 * FmC414 * MW1 - FC414 * x1C414 =e= 0;
 2446 EQU1107..xx4C414 * FmC414 * MW4 - FC414 * x4C414 =e= 0;
 2447 EQU1108..xx7C414 * FmC414 * MW7 - FC414 * x7C414 =e= 0;
 2448 EQU1109..FC425 - FC430 =e=0;
 2449 EQU1110..x1C431 + x3C431 + x4C431 + x5C431 + x7C431 =e= 1;

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2450 EQU1111..FmC431 - FC431 * (x1C431/MW1 + x3C431/MW3 + x4C431/MW4 +
x5C431/MW5 + x7C431/MW7)=e= 0;
2451 EQU1112..xx4C431 * FmC431 * MW4 - FC431 * x4C431 =e= 0;
2452 EQU1113..xx1C425*K1C606C =e= xx1C431;
2453 EQU1114..xx3C425*K3C606C =e= xx3C431;
2454 EQU1115..xx4C425*K4C606C =e= xx4C431;
2455 EQU1116..xx5C425*K5C606C =e= xx5C431;
2456 EQU1117..xx1C431 * FmC431 * MW1 - FC431 * x1C431 =e= 0;
2457 EQU1118..xx3C431 * FmC431 * MW3 - FC431 * x3C431 =e= 0;
2458 EQU1119..xx5C431 * FmC431 * MW5 - FC431 * x5C431 =e= 0;
2459 EQU1120..xx1C431+ xx3C431+ xx4C431+ xx5C431+ xx7C431 =e= 1;
2460 EQU1121..xx1C425 * FmC425 * MW1 - FC425 * x1C425 =e= 0;
2461 EQU1122..xx3C425 * FmC425 * MW3 - FC425 * x3C425 =e= 0;
2462 EQU1123..xx5C425 * FmC425 * MW5 - FC425 * x5C425 =e= 0;
2463 EQU1124..xx1C425 + xx3C425 +xx4C425 +xx5C425 +xx7C425 =e=1 ;
2464 EQU1125..K1C606C*PC606C =e= 0.1333*10**(21.4469-1.4627E3/TC425-
5.261*LOG10(TC425)+3.282E-11*TC425+3.7349E-6*TC425**2);
2465 EQU1126..K3C606C*PC606C =e= 0.1333*10**(31.2541-1.9532E3/TC425-
8.806*LOG10(TC425)+8.9246E-11*TC425+5.7501E-6*TC425**2);
2466 EQU1127..K4C606C*PC606C =e= 0.1333*10**(27.0441-1.9049E3/TC425-
7.1805*LOG10(TC425)-6.6845E-11*TC425+4.219E-6*TC425**2);
2467 EQU1128..K5C606C*PC606C =e= 0.1333*10**(29.2963-2.1762E3/TC425-
7.883*LOG10(TC425)-4.6512E-11*TC425+3.8997E-6*TC425**2);
2468 EQU1129..xM4C606D * FC426**2 *(Sm4C606D-1)=e= FC405 * x4C405 *
(FC428*Kp4C606D*(Sm4C606D**(13-1)-1) + FC426*(Sm4C606D-1));
2469 EQU1130..xM5C606D * FC426**2 *(Sm5C606D-1)=e= FC405 * x5C405 *
(FC428*Kp5C606D*(Sm5C606D**(13-1)-1) + FC426*(Sm5C606D-1));
2470 EQU1131..xM7C606D * FC426**2 * (Sm7C606D-1)=e= FC405 * x7C405 *
(FC428*Kp7C606D*(Sm7C606D**(13-1)-1) + FC426*(Sm7C606D-1));
2471 EQU1132..xM1C606D + xM3C606D + xM4C606D + xM5C606D + xM7C606D
=e=1;
2472 EQU1133..xx3C428 * FmC428 * MW3 - FC428 * x3C428 =e= 0;
2473 EQU1134..xx1C428 * FmC428 * MW1 - FC428 * x1C428 =e= 0;
2474 EQU1135..xx5C428 * FmC428 * MW5 - FC428 * x5C428 =e= 0;
2475 EQU1136..xx1C428 + xx3C428 + xx4C428 + xx5C428 + xx7C428 =e=1;
2476 EQU1137..K1C428*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC428-
5.261*LOG10(TC428)+3.282E-11*TC428+3.7349E-6*TC428**2);
2477 EQU1138..K3C428*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC428-
8.806*LOG10(TC428)+8.9246E-11*TC428+5.7501E-6*TC428**2);
2478 EQU1139..K4C428*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC428-
7.1805*LOG10(TC428)-6.6845E-11*TC428+4.219E-6*TC428**2);
2479 EQU1140..K5C428*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC428-
7.883*LOG10(TC428)-4.6512E-11*TC428+3.8997E-6*TC428**2);
2480 EQU1141..K7C428*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC428-
9.042*LOG10(TC428)-1.371E-12*TC428+3.634E-6*TC428**2);
2481 EQU1142..xM1C606D*K1C428 =e= xx1C428;
2482 EQU1143..xM3C606D*K3C428 =e= xx3C428;
2483 EQU1144..xM4C606D*K4C428 =e= xx4C428;
2484 EQU1145..xM5C606D*K5C428 =e= xx5C428;
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2485 EQU1146..Kp1C606D*PC606D =e= 0.1333*10**(21.4469-
1.4627E3/TmC606D-5.261*LOG10(TmC606D)+3.282E-11*TmC606D+3.7349E-
6*TmC606D**2)

;
2486 EQU1147..Kp3C606D*PC606D =e= 0.1333*10**(31.2541-
1.9532E3/TmC606D-8.806*LOG10(TmC606D)+8.9246E-11*TmC606D+5.7501E-
6*TmC606D**2

);
2487 EQU1148..Kp4C606D*PC606D =e= 0.1333*10**(27.0441-
1.9049E3/TmC606D-7.1805*LOG10(TmC606D)-6.6845E-11*TmC606D+4.219E-
6*TmC606D**2

);
2488 EQU1149..Kp5C606D*PC606D =e= 0.1333*10**(29.2963-
2.1762E3/TmC606D-7.883*LOG10(TmC606D)-4.6512E-11*TmC606D+3.8997E-
6*TmC606D**2

);
2489 EQU1150..Kp7C606D*PC606D =e= 0.1333*10**(33.0162-2.583E3/TmC606D-
9.042*LOG10(TmC606D)-1.371E-12*TmC606D+3.634E-6*TmC606D**2);
2490 EQU1151..TmC606D * 2 =e= TC428 + TC405;
2491 EQU1152..Sm1C606D*FC426 =e= K1C428 * FC428;

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2492 EQU1153..Sm3C606D*FC426 =e= K3C428 * FC428;
2493 EQU1154..Sm4C606D*FC426 =e= K4C428 * FC428;
2494 EQU1155..Sm5C606D*FC426 =e= K5C428 * FC428;
2495 EQU1156..Sm7C606D*FC426 =e= K7C428 * FC428;
2496 EQU1157..K1C408*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC408-
5.261*LOG10(TC408)+3.282E-11*TC408+3.7349E-6*TC408**2);
2497 EQU1158..K3C408*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC408-
8.806*LOG10(TC408)+8.9246E-11*TC408+5.7501E-6*TC408**2);
2498 EQU1159..K4C408*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC408-
7.1805*LOG10(TC408)-6.6845E-11*TC408+4.219E-6*TC408**2);
2499 EQU1160..K2E6XX*PR29 =e=1.05*PE633;
2500 EQU1161..K3E6XX*PR29 =e= 1.25*PE633;
2501 EQU1162..K4E6XX*PR29 =e=0.82*PE633;
2502 EQU1163..K5E6XX*PR29 =e=0.28*PE633;
2503 EQU1164..K7E6XX*PR29 =e=0.068*PE633;
2504 EQU1165..hC623 =e= hAC09 - hAC07 - hHC07 - hHC34 ;
2505 EQU1166..hC625 =e= hAC20 - hAC18 - hHC11 - hHC38;
2506 EQU1167..hC627 =e= hAC31 - hAC29 - hHC14 - hHC41;
2507 EQU1168..hC629 =e= hAC42 - hAC40 - hHC16 - hHC45;
2508 EQU1169..FHC30 + FR29 =e= FHC31;
2509 EQU1170..FvHC30 + FvR29 =e= FvHC31;
2510 EQU1171..FvHC30*y1HC30 + FvR29*y1R29 =e= FvHC31*y1HC31;
2511 EQU1172..FvHC30*y3HC30 + FvR29*y3R29 =e= FvHC31*y3HC31;
2512 EQU1173..FvHC30*y4HC30 + FvR29*y4R29 =e= FvHC31*y4HC31;
2513 EQU1174..FvHC30*y5HC30 + FvR29*y5R29 =e= FvHC31*y5HC31;
2514 EQU1175..FvHC30*y7HC30 + FvR29*y7R29 =e= FvHC31*y7HC31;
2515 EQU1176..FlHC30*x1HC30 + FlR29*x1R29 =e= FlHC31*x1HC31;
2516 EQU1177..FlHC30*x3HC30 + FlR29*x3R29 =e= FlHC31*x3HC31;
2517 EQU1178..FlHC30*x4HC30 + FlR29*x4R29 =e= FlHC31*x4HC31;
2518 EQU1179..FlHC30*x5HC30 + FlR29*x5R29 =e= FlHC31*x5HC31;
2519 EQU1180..FlHC30*x7HC30 + FlR29*x7R29 =e= FlHC31*x7HC31;
2520 EQU1181..FC301 - FvHC31 =e= 0;
2521 EQU1182..x1C301 - y1HC31 =e=0;
2522 EQU1183..x7C301 - y7HC31 =e=0;
2523 EQU1184..x3C301 - y3HC31 =e=0;
2524 EQU1185..x4C301 - y4HC31 =e=0;
2525 EQU1186..x5C301 - y5HC31 =e=0;
2526 EQU1187..FC401 - FlHC31 =e= 0;
2527 EQU1188..x1C401 - x1HC31 =e=0;
2528 EQU1189..x3C401 - x3HC31 =e=0;
2529 EQU1190..x4C401 - x4HC31 =e=0;
2530 EQU1191..x5C401 - x5HC31 =e=0;
2531 EQU1192..x7C401 - x7HC31 =e=0;
2532 EQU1193..THC32 - TC302 =e= 0;
2533 EQU1194..K4C614B=e=0.13332*EXP(15.6782-2154.90/(TC302-
34.42))/PC302;
2534 EQU1195..PC302 -PHC32 =e= 0;
2535 EQU1196..K5C614B=e=0.13332*EXP(15.5338-2348.67/(TC302-
40.05))/PC302;
2536 EQU1197..K7C614B=e=0.13332*EXP(15.7588-2633.90/(TC302-
46.30))/PC302;

2537 EQU1198..hC311-hC302-hHC32=e=0;

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2538 EQU1199..K3C614B * xx3HC32 - xx3C302 =e= 0;
2539 EQU1200..K1C614B * xx1HC32 - xx1C302 =e= 0;
2540 EQU1201..K4C614B * xx4HC32 - xx4C302 =e= 0;
2541 EQU1202..K5C614B * xx5HC32 - xx5C302 =e= 0;
2542 EQU1203..x1C426 + x3C426 + x4C426 + x5C426 + x7C426 =e= 1;
2543 EQU1204..K5C408*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC408-
7.883*LOG10(TC408)-4.6512E-11*TC408+3.8997E-6*TC408**2);
2544 EQU1205..K7C408*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC408-
9.042*LOG10(TC408)-1.371E-12*TC408+3.634E-6*TC408**2);
2545
EQU1206..K1C408*xx1C408+K3C408*xx3C408+K4C408*xx4C408+K5C408*xx5C408+K7
C408*xx7C408 =e= 1;
2546 EQU1207..dTE633*2 =e= (THC05-THC30) + (THC04-THC29);
2547 EQU1208..xx1HC29 + xx2HC29 + xx3HC29 + xx4HC29 + xx5HC29 +
xx7HC29 =e= 1;
2548 EQU1209..yy1HC29 + yy2HC29 + yy3HC29 + yy4HC29 + yy5HC29 +
yy7HC29 =e= 1;
2549 EQU1210..FmlHC29 - FlHC29 * (x1HC29/MW1 + x2HC29/MW2 + x3HC29/MW3
+ x4HC29/MW4 + x5HC29/MW5 + x7HC29/MW7)=e= 0;
2550 EQU1211..FmvHC29 - FvHC29 * (y1HC29/MW1 + y2HC29/MW2 + y3HC29/MW3
+ y4HC29/MW4 + y5HC29/MW5 + y7HC29/MW7)=e= 0;
2551 EQU1212..xx1HC29 * MW1 * FmlHC29 - FlHC29 * x1HC29 =e= 0;
2552 EQU1213..xx3HC29 * MW3 * FmlHC29 - FlHC29 * x3HC29 =e= 0;
2553 EQU1214..xx4HC29 * MW4 * FmlHC29 - FlHC29 * x4HC29 =e= 0;
2554 EQU1215..xx5HC29 * MW5 * FmlHC29 - FlHC29 * x5HC29 =e= 0;
2555 EQU1216..xx7HC29 * MW7 * FmlHC29 - FlHC29 * x7HC29 =e= 0;
2556 EQU1217..yy7HC29 * MW7 * FmvHC29 - FvHC29 * y7HC29 =e= 0;
2557 EQU1218..yy5HC29 * MW5 * FmvHC29 - FvHC29 * y5HC29 =e= 0;
2558 EQU1219..yy4HC29 * MW4 * FmvHC29 - FvHC29 * y4HC29 =e= 0;
2559 EQU1220..yy3HC29 * MW3 * FmvHC29 - FvHC29 * y3HC29 =e= 0;
2560 EQU1221..yy1HC29 * MW1 * FmvHC29 - FvHC29 * y1HC29 =e= 0;
2561 EQU1222..yy7R1 * MW7 * FmvR1 - FvR1 * y7R1 =e= 0;
2562 EQU1223..yy5R1 * MW5 * FmvR1 - FvR1 * y5R1 =e= 0;
2563 EQU1224..yy4R1 * MW4 * FmvR1 - FvR1 * y4R1 =e= 0;
2564 EQU1225..yy3R1 * MW3 * FmvR1 - FvR1 * y3R1 =e= 0;
2565 EQU1226..yy1R1 * MW1 * FmvR1 - FvR1 * y1R1 =e= 0;
2566 EQU1227..xx7R1 * MW7 * FmlR1 - FlR1 * x7R1 =e= 0;
2567 EQU1228..xx5R1 * MW5 * FmlR1 - FlR1 * x5R1 =e= 0;
2568 EQU1229..xx4R1 * MW4 * FmlR1 - FlR1 * x4R1 =e= 0;
2569 EQU1230..xx3R1 * MW3 * FmlR1 - FlR1 * x3R1 =e= 0;
2570 EQU1231..xx1R1 * MW1 * FmlR1 - FlR1 * x1R1 =e= 0;
2571 EQU1232..FmvR1 - FvR1 * (y1R1/MW1 + y2R1/MW2 + y3R1/MW3 +
y4R1/MW4 + y5R1/MW5 + y7R1/MW7)=e= 0;
2572 EQU1233..FmlR1 - FlR1 * (x1R1/MW1 + x2R1/MW2 + x3R1/MW3 +
x4R1/MW4 + x5R1/MW5 + x7R1/MW7)=e= 0;
2573 EQU1234..xx1R1 + xx2R1 + xx3R1 + xx4R1 + xx5R1 + xx7R1 =e= 1;
2574 EQU1235..yy1R1 + yy2R1 + yy3R1 + yy4R1 + yy5R1 + yy7R1 =e= 1;
2575 EQU1236..K1E633*PHC30 =e= 3.71*PE633;
2576 EQU1237..K2E633*PHC30 =e= 1.05*PE633;
2577 EQU1238..K3E633*PHC30 =e=1.25*PE633;
2578 EQU1239..K4E633*PHC30 =e=0.82*PE633;
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2579 EQU1240..K5E633*PHC30 =e= 0.28*PE633;
2580 EQU1241..K7E633*PHC30 =e= 0.068*PE633;
2581 EQU1242..yy1HC30 * MW1 * FmvHC30 - FvHC30 * y1HC30 =e= 0;
2582 EQU1243..yy3HC30 * MW3 * FmvHC30 - FvHC30 * y3HC30 =e= 0;
2583 EQU1244..yy4HC30 * MW4 * FmvHC30 - FvHC30 * y4HC30 =e= 0;

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2584 EQU1245..yy5HC30 * MW5 * FmvHC30 - FvHC30 * y5HC30 =e= 0;
2585 EQU1246..yy7HC30 * MW7 * FmvHC30 - FvHC30 * y7HC30 =e= 0;
2586 EQU1247..xx1HC30 * MW1 * FmlHC30 - FlHC30 * x1HC30 =e= 0;
2587 EQU1248..xx3HC30 * MW3 * FmlHC30 - FlHC30 * x3HC30 =e= 0;
2588 EQU1249..xx4HC30 * MW4 * FmlHC30 - FlHC30 * x4HC30 =e= 0;
2589 EQU1250..xx5HC30 * MW5 * FmlHC30 - FlHC30 * x5HC30 =e= 0;
2590 EQU1251..xx7HC30 * MW7 * FmlHC30 - FlHC30 * x7HC30 =e= 0;
2591 EQU1252..FmlHC30 - FlHC30 * (x1HC30/MW1 + x2HC30/MW2 + x3HC30/MW3
+ x4HC30/MW4 + x5HC30/MW5 + x7HC30/MW7)=e= 0;
2592 EQU1253..FmvHC30 - FvHC30 * (y1HC30/MW1 + y2HC30/MW2 + y3HC30/MW3
+ y4HC30/MW4 + y5HC30/MW5 + y7HC30/MW7)=e= 0;
2593 EQU1254..xx1HC30 + xx2HC30 + xx3HC30 + xx4HC30 + xx5HC30 +
xx7HC30 =e= 1;
2594 EQU1255..yy1HC30 + yy2HC30 + yy3HC30 + yy4HC30 + yy5HC30 +
yy7HC30 =e= 1;
2595 EQU1256..hc404 - FC404 * ((x1C404/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC404,ORD(Coeff))))
2596 +(x3C404/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC404,ORD(Coeff))))
2597 +(x4C404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC404,ORD(Coeff))))
2598 +(x5C404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC404,ORD(Coeff))))
2599 +(x7C404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC404,ORD(Coeff)))) =e= 0;
2600 EQU1257..hc405 - FC405 * ((x1C405/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC405,ORD(Coeff))))
2601 +(x3C405/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC405,ORD(Coeff))))
2602 +(x4C405/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC405,ORD(Coeff))))
2603 +(x5C405/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC405,ORD(Coeff))))
2604 +(x7C405/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC405,ORD(Coeff)))) =e= 0;
2605 EQU1258..hc406 - FC406 * ((x1C406/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC406,ORD(Coeff))))
2606 +(x3C406/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC406,ORD(Coeff))))
2607 +(x4C406/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC406,ORD(Coeff))))
2608 +(x5C406/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC406,ORD(Coeff))))
2609 +(x7C406/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC406,ORD(Coeff)))) =e= 0;
2610 EQU1259..hc407 - FC407 * ((x1C407/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC407,ORD(Coeff))))
2611 +(x3C407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC407,ORD(Coeff))))
2612 +(x4C407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC407,ORD(Coeff))))
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2613 +(x5C407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC407,ORD(Coeff))))
2614 +(x7C407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC407,ORD(Coeff)))) =e= 0;
2615 EQU1260..hc408 - FC408 * ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC408,ORD(Coeff))))
2616 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
2617 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
2618 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff))))
2619 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))) =e= 0;
2620 EQU1261..hc410 - FC410 * ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC410,ORD(Coeff))))
2621 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff))))
2622 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff))))
2623 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff))))
2624 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))) =e= 0;
2625 EQU1262..hc413 - FC413 * ((x1C413/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC413,ORD(Coeff))))
2626 +(x3C413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC413,ORD(Coeff))))
2627 +(x4C413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC413,ORD(Coeff))))
2628 +(x5C413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC413,ORD(Coeff))))
2629 +(x7C413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC413,ORD(Coeff)))) =e= 0;

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2630 EQU1263..hc414 - FC414 *
2631 ((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff))))+ Enth_Vap("1","a1")*1000 *
((1-TC414/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2632 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
((1-TC414/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2633 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *
((1-TC414/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2634 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *
((1-TC414/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2635 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *
((1-TC414/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2636 EQU1264..hc415 - FC415 * ((x1C415/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC415,ORD(Coeff))))
2637 +(x3C415/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC415,ORD(Coeff))))
2638 +(x4C415/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC415,ORD(Coeff))))
2639 +(x5C415/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC415,ORD(Coeff))))
2640 +(x7C415/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC415,ORD(Coeff)))) =e= 0;
2641 EQU1265..hc417 - FC417 * ((x1C417/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC417,ORD(Coeff))))
2642 +(x3C417/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC417,ORD(Coeff))))
2643 +(x4C417/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC417,ORD(Coeff))))
2644 +(x5C417/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC417,ORD(Coeff))))
2645 +(x7C417/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC417,ORD(Coeff)))) =e= 0;
2646 EQU1266..hc418 - FC418 * ((x1C418/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC418,ORD(Coeff))))
2647 +(x3C418/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC418,ORD(Coeff))))
2648 +(x4C418/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC418,ORD(Coeff))))
2649 +(x5C418/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC418,ORD(Coeff))))
2650 +(x7C418/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC418,ORD(Coeff)))) =e= 0;
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2651 EQU1267..hc419 - FC419 * ((x1C419/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC419,ORD(Coeff))))
2652 +(x3C419/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC419,ORD(Coeff))))
2653 +(x4C419/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC419,ORD(Coeff))))
2654 +(x5C419/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC419,ORD(Coeff))))
2655 +(x7C419/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC419,ORD(Coeff)))) =e= 0;
2656 EQU1268..hc425 - FC425 * ((x1C425/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC425,ORD(Coeff))))
2657 +(x3C425/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC425,ORD(Coeff))))
2658 +(x4C425/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC425,ORD(Coeff))))
2659 +(x5C425/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC425,ORD(Coeff))))
2660 +(x7C425/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC425,ORD(Coeff)))) =e= 0;
2661 EQU1269..hc426 - FC426 * ((x1C426/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC426,ORD(Coeff))))
2662 +(x3C426/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC426,ORD(Coeff))))
2663 +(x4C426/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC426,ORD(Coeff))))
2664 +(x5C426/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC426,ORD(Coeff))))
2665 +(x7C426/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC426,ORD(Coeff)))) =e= 0;
2666 EQU1270..yy7R29 * MW7 * FmvR29 - FvR29 * y7R29 =e= 0;
2667 EQU1271..yy5R29 * MW5 * FmvR29 - FvR29 * y5R29 =e= 0;
2668 EQU1272..yy4R29 * MW4 * FmvR29 - FvR29 * y4R29 =e= 0;
2669 EQU1273..yy3R29 * MW3 * FmvR29 - FvR29 * y3R29 =e= 0;
2670 EQU1274..yy1R29 * MW1 * FmvR29 - FvR29 * y1R29 =e= 0;

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2671 EQU1275..xx7R29 * MW7 * FmlR29 - FlR29 * x7R29 =e= 0;
2672 EQU1276..xx5R29 * MW5 * FmlR29 - FlR29 * x5R29 =e= 0;
2673 EQU1277..xx4R29 * MW4 * FmlR29 - FlR29 * x4R29 =e= 0;
2674 EQU1278..xx3R29 * MW3 * FmlR29 - FlR29 * x3R29 =e= 0;
2675 EQU1279..xx1R29 * MW1 * FmlR29 - FlR29 * x1R29 =e= 0;
2676 EQU1280..yy1R29 + yy2R29 + yy3R29 + yy4R29 + yy5R29 + yy7R29 =e=
1;
2677 EQU1281..xx1R29 + xx2R29 + xx3R29 + xx4R29 + xx5R29 + xx7R29 =e=
1;
2678 EQU1282..FmlR29 - FlR29 * (x1R29/MW1 + x2R29/MW2 + x3R29/MW3 +
x4R29/MW4 + x5R29/MW5 + x7R29/MW7)=e= 0;
2679 EQU1283..FmvR29 - FvR29 * (y1R29/MW1 + y2R29/MW2 + y3R29/MW3 +
y4R29/MW4 + y5R29/MW5 + y7R29/MW7)=e= 0;
2680 EQU1284..yy1HC30 =e= K1E633*xx1HC30;
2681 EQU1285..yy3HC30 =e= K3E633*xx3HC30;
2682 EQU1286..yy4HC30 =e= K4E633*xx4HC30;
2683 EQU1287..yy5HC30 =e= K5E633*xx5HC30;
2684 EQU1288..yy7HC30 =e= K7E633*xx7HC30;
2685 EQU1289..yy1R29 =e= K1E6XX*xx1R29;
2686 EQU1290..yy3R29 =e= K3E6XX*xx3R29;
2687 EQU1291..yy4R29 =e= K4E6XX*xx4R29;
2688 EQU1292..yy5R29 =e= K5E6XX*xx5R29;
2689 EQU1293..yy7R29 =e= K7E6XX*xx7R29;
2690 EQU1294..TR1-TR29 =e= 0;
2691 EQU1295..(FlHC29*x7HC29 + FvHC29*y7HC29) - (FlHC30*x7HC30 +
FvHC30*y7HC30) =e= 0;
2692 EQU1296..(hC623+hC625+hC627+hC629) - (hR29 - hR1) =e= 0;
2693 EQU1297..(FlR1*x7R1 + FvR1*y7R1) - (FlR29*x7R29 + FvR29*y7R29)
=e= 0;
2694 EQU1298..(FlR1*x5R1 + FvR1*y5R1) - (FlR29*x5R29 + FvR29*y5R29)
=e= 0;
2695 EQU1299..(FlR1*x1R1 + FvR1*y1R1) - (FlR29*x1R29 + FvR29*y1R29)
=e= 0;
2696 EQU1300..(FlR1*x3R1 + FvR1*y3R1) - (FlR29*x3R29 + FvR29*y3R29)
=e= 0;
2697 EQU1301..(FlR1*x4R1 + FvR1*y4R1) - (FlR29 *x4R29+ FvR29*y4R29)
=e= 0;
2698 EQU1302..(FlR1 + FvR1) - (FlR29 + FvR29) =e= 0;
2699 EQU1303..(hC623+hC625+hC627+hC629) - UE6XX*AE6XX*dTE6XX =e= 0;
2700 EQU1304..K1E6XX*PR29 =e= 3.71*PE633;
2701 EQU1305..FC418 * x2C418 - FC417 * x1C417 =e= 0;
2702 EQU1306..FC302 =e= VFC614B*FC311;
2703 EQU1307..FC311 - FC302 - FHC32 =e= 0;
2704 EQU1308..K1C614B*PC302 =e= 0.1333*10**(21.4469-1.4627E3/TC302-
5.261*LOG10(TC302)+3.282E-11*TC302+3.7349E-6*TC302**2);
2705 EQU1309..K3C614B*PC302 =e= 0.1333*10**(31.2541-1.9532E3/TC302-
8.806*LOG10(TC302)+8.9246E-11*TC302+5.7501E-6*TC302**2);
2706 EQU1310..FC311*x1C311 - FC302*x1C302 - FHC32*x1HC32 =e= 0;
2707 EQU1311..FC311*x3C311 - FC302*x3C302 - FHC32*x3HC32 =e= 0;
2708 EQU1312..FC311*x4C311 - FC302*x4C302 - FHC32*x4HC32 =e= 0;
2709 EQU1313..FC311*x7C311 - FC302*x7C302 - FHC32*x7HC32 =e= 0;


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2710 EQU1314..hHC01 - FHC01 * ((x1HC01/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff)*POWER(THC01,ORD(Coeff))))
2711 +(x2HC01/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC01,ORD(Coeff))))
2712 +(x3HC01/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC01,ORD(Coeff))))
2713 +(x4HC01/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC01,ORD(Coeff))))
2714 +(x5HC01/MW5)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("5",Coeff)*POWER(THC01,ORD(Coeff))))
2715 +(x7HC01/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC01,ORD(Coeff)))) =e= 0;
2716 EQU1315..x1HC01 + x2HC01 + x3HC01 + x4HC01 + x5HC01 + x7HC01
=e=1;

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2717 EQU1316..hc401 - FC401 * ((x1C401/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC401,ORD(Coeff))))
2718 +(x3C401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC401,ORD(Coeff))))
2719 +(x4C401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC401,ORD(Coeff))))
2720 +(x5C401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC401,ORD(Coeff))))
2721 +(x7C401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC401,ORD(Coeff)))) =e= 0;
2722 EQU1317..x1C401 + x3C401 + x4C401 + x5C401 + x7C401 =e= 1;
2723 EQU1318..TAC09=e=TAC05;
2724 EQU1319..TAC09=e=TAC12;
2725 EQU1320..TAC09=e=THC27;
2726 EQU1321..hAC02 + hAC05 =e= hAC07;
2727 EQU1322..FHC27*THC27 + FHC26*THC26 =e= FHC28*THC28;
2728 EQU1323..TAC20 - TAC15 =e= 0;
2729 EQU1324..TAC20 - TAC23 =e= 0;
2730 EQU1325..TAC20 - THC25 =e= 0;
2731 EQU1326..hAC12 + hAC15 - hAC18 =e=0;
2732 EQU1327..FHC26*THC26 -FHC25 *THC25 - FHC24 *THC24 =e= 0;
2733 EQU1328..hAC23 + hAC26 - hAC29 =e= 0;
2734 EQU1329..TAC31 - TAC26 =e= 0;
2735 EQU1330..TAC31 - TAC34 =e= 0;
2736 EQU1331..TAC31 - THC23 =e= 0;
2737 EQU1332..FHC24*THC24 -FHC23 *THC23 - FHC22 *THC22 =e= 0;
2738 EQU1333..hAC34 + hAC37 - hAC40 =e= 0;
2739 EQU1334..TAC42 =e= TAC37;
2740 EQU1335..TAC42 =e= TAC45;
2741 EQU1336..TAC42 =e= THC22;
2742 EQU1337..hHC30 + hR29 =e= hHC31;
2743 EQU1338..(hc312 - hc312liq) - Fcwe641A*4.197*(Tcwote641A - Tcwin)
=e= 0;
2744 EQU1339..hc312liq - FC312*
2745 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff))))
2746 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff))))
2747 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff))))
2748 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff))))
2749 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))) =e= 0;
2750 EQU1340..THC31 =e= TC401;
2751 EQU1341..THC31 - TC301 =e=0;
2752 EQU1342..xx4C407 * FmC407 * MW4 - FC407 * x4C407 =e= 0;
2753 EQU1343..FmC407 - FC407 * (x1C407/MW1 + x3C407/MW3 + x4C407/MW4 +
x5C407/MW5 + x7C407/MW7 )=e= 0;
2754 EQU1344..xx5C407 * FmC407 * MW5 - FC407 * x5C407 =e= 0;
2755 EQU1345..xx3C407 * FmC407 * MW3 - FC407 * x3C407 =e= 0;
```

2756 EQU1346..FmC412 - FC412 * (x1C412/MW1 + x3C412/MW3 + x4C412/MW4 +
x5C412/MW5 + x7C412/MW7)=e= 0;
2757 EQU1347..xx4C412 * FmC412 * MW4 - FC412 * x4C412 =e= 0;
2758 EQU1348..xx3C412 * FmC412 * MW3 - FC412 * x3C412 =e= 0;
2759 EQU1349..xx5C412 * FmC412 * MW5 - FC412 * x5C412 =e= 0;
2760 EQU1350..xx4C322 * FmC322 * MW4 - FC322 * x4C322 =e= 0;
2761 EQU1351..xx1C322 * FmC322 * MW1 - FC322 * x1C322 =e= 0;
2762 EQU1352..FmC317 - FC317 * (x1C317/MW1 + x3C317/MW3 + x4C317/MW4 +
x5C317/MW5 + x7C317/MW7)=e= 0;

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2763 EQU1353..xx4C317 * FmC317 * MW4 - FC317 * x4C317 =e= 0;
2764 EQU1354..xx3C317 * FmC317 * MW3 - FC317 * x3C317 =e= 0;
2765 EQU1355..FmHC01 - FHC01 * (x1HC01/MW1 + x2HC01/MW2+ x3HC01/MW3 +
x4HC01/MW4 + x5HC01/MW5 + x7HC01/MW7)=e= 0;
2766 EQU1356..xx1HC01 * MW1 * FmHC01 - FHC01 *x1HC01=e= 0;
2767 EQU1357..xx2HC01 * MW2 * FmHC01 - FHC01 *x2HC01=e= 0;
2768 EQU1358..xx3HC01 * MW3 * FmHC01 - FHC01 *x3HC01=e= 0;
2769 EQU1359..xx4HC01 * MW4 * FmHC01 - FHC01 *x4HC01=e= 0;
2770 EQU1360..x2C418 - x2C419 =e= 0;
2771 EQU1361..FHC03 * x2HC03 - FC419 * x2C419 =e= 0;
2772 EQU1362..FC417 - FSC414 - FSC413 =e= 0;
2773 EQU1363..FC417 * x1C417- FSC414* x1SC414 - FSC413* x1SC413 =e= 0;
2774 EQU1364..hc417 - hSC414 - hSC413 =e= 0;
2775 EQU1365..FC417 * x2C417- FSC414* x2SC414 - FSC413* x2SC413 =e= 0;
2776 EQU1366..FC417 * x3C417- FSC414* x3SC414 - FSC413* x3SC413 =e= 0;
2777 EQU1367..FC417 * x4C417- FSC414* x4SC414 - FSC413* x4SC413 =e= 0;
2778 EQU1368..FC417 * x5C417- FSC414* x5SC414 - FSC413* x5SC413 =e= 0;
2779 EQU1369..(hSC404 - hSC405) - UE603*AE603*FE603*dTE603 =e= 0;
2780 EQU1370..x3SC409 - x3SC412 =e= 0;
2781 EQU1371..x6SC409 - x6SC412 =e= 0;
2782 EQU1372..x6SC409 - x6SC411 =e= 0;
2783 EQU1373..x2SC409 - x2SC411 =e= 0;
2784 EQU1374..x1SC409 - x1SC411 =e= 0;
2785 EQU1375..x3SC409 - x3SC411 =e= 0;
2786 EQU1376..x4SC409 - x4SC411 =e= 0;
2787 EQU1377..x2SC409 - x2SC412 =e= 0;
2788 EQU1378..x7SC409 - x7SC411 =e= 0;
2789 EQU1379..x1SC409 - x1SC412 =e= 0;
2790 EQU1380..x4SC409 - x4SC412 =e= 0;
2791 EQU1381..x5SC409 - x5SC412 =e= 0;
2792 EQU1382..FSC409 - FSC411 - FSC412 =e= 0;
2793 EQU1383..TSC409 - TSC412 =e= 0;
2794 EQU1384..TSC409 - TSC411 =e= 0;
2795 EQU1385..x7SC409 - x7SC412 =e= 0;
2796 EQU1386..x5SC409 - x5SC411 =e= 0;
2797 EQU1387..RC601*FSC412 - FSC411 =e= 0;
2798 EQU1388..x3SC412 - x3SC413 =e= 0;
2799 EQU1389..dTE609A**3 =e= ((TSC412-TcwotE609A)*(TSC413-Tcwin)*
2800 ((TSC412-TcwotE609A)+(TSC413-Tcwin))/2);
2801 EQU1390..x4SC412 - x4SC413 =e= 0;
2802 EQU1391..x1SC412 - x1SC413 =e= 0;
2803 EQU1392..x2SC412 - x2SC413 =e= 0;
2804 EQU1393..x6SC412 - x6SC413 =e= 0;
2805 EQU1394..FSC412 - FSC413 =e= 0;
2806 EQU1395..(hSC412 - hSC413) - UE609A*AE609A*FE609A*dTE609A =e= 0;
2807 EQU1396..(hSC412 - hSC413) - Fcwe609A*4.197*(TcwotE609A - Tcwin)
=e= 0;
2808 EQU1397..x5SC412 - x5SC413 =e= 0;

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2809 EQU1398..(hSC408 - hSC409) - FcwE605*4.197*(TcwoutE605 - Tcwin)
=e= 0;
2810 EQU1399..x3SC408 -x3SC409 =e=0;
2811 EQU1400..x7SC408 -x7SC409 =e=0;
2812 EQU1401..FSC408 - FSC409=e= 0;
2813 EQU1402..TSC408 - TSC409 =e=0;
2814 EQU1403..(hSC408 - hSC409) - UE605*AE605*dTE605 =e= 0;
2815 EQU1404..dTE605*2 =e=
2816 (TSC408-TcwoutE605) + (TSC409-Tcwin);
2817 EQU1405..x1SC408 -x1SC409 =e=0;
2818 EQU1406..x5SC408 -x5SC409 =e=0;
2819 EQU1407..x4SC408 -x4SC409 =e=0;
2820 EQU1408..x2SC408 -x2SC409 =e=0;
2821 EQU1409..x6SC408 -x6SC409 =e=0;
2822 EQU1410..x5SC404 - x5SC405 =e= 0;
2823 EQU1411..x6SC404 - x6SC405 =e= 0;
2824 EQU1412..(hSC404 - hSC405) - FcwE603*4.197*(TcwoutE603 - Tcwin)
=e= 0;
2825 EQU1413..x4SC404 - x4SC405 =e= 0;
2826 EQU1414..x3SC404 - x3SC405 =e= 0;
2827 EQU1415..x1SC404 - x1SC405 =e= 0;
2828 EQU1416..dTE603**3 =e= ((TSC404-TcwoutE603)*(TSC405-Tcwin)*
2829 ((TSC404-TcwoutE603)+(TSC405-Tcwin))/2);
2830 EQU1417..FSC404 - FSC405 =e= 0;
2831 EQU1418..x2SC404 - x2SC405 =e= 0;
2832 EQU1419..TSC407 - TSC406 =e= 0;
2833 EQU1420..x3SC407 - x3SC406 =e= 0;
2834 EQU1421..x4SC407 - x4SC406 =e= 0;
2835 EQU1422..dTE602 =e= 414.6 - TSC406;
2836 EQU1423..x6SC407 - x6SC406 =e= 0;
2837 EQU1424..x1SC407 - x1SC406 =e= 0;
2838 EQU1425..(hSC407 - hSC406) - UE602*AE602*dTE602 =e= 0;
2839 EQU1426..(hSC407 - hSC406) - FstmE602 * hstmE602 =e= 0;
2840 EQU1427..x2SC407 - x2SC406 =e= 0;
2841 EQU1428..FSC407 - FSC406 =e= 0;
2842 EQU1429..x5SC407 - x5SC406 =e= 0;
2843 EQU1430..x3SC401 - x3SC402 =e= 0;
2844 EQU1431..x4SC401 - x4SC402 =e= 0;
2845 EQU1432..x5SC403 - x5SC404 =e= 0;
2846 EQU1433..x3SC403 - x3SC404 =e= 0;
2847 EQU1434..x2SC403 - x2SC406 =e= 0;
2848 EQU1435..Sm4C601*LpC601=e= Kp4C601*VpC601;
2849 EQU1436..f4C601 * x4SC402 * FSC402 =e= x4SC403 * FSC403;
2850 EQU1437..x1SC403 - x1SC406 =e= 0;
2851 EQU1438..K3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TnC601-
8.806*LOG10(TnC601)+8.9246E-11*TnC601+5.7501E-6*TnC601**2);
2852 EQU1439..K6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TnC601-
9.2354*LOG10(TnC601)+9.0199E-11*TnC601+4.1050E-6*TnC601**2);
2853 EQU1440..K1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TnC601-
5.261*LOG10(TnC601)+3.282E-11*TnC601+3.7349E-6*TnC601**2);
```

```
2854 EQU1441..K2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TnC601-  
10.048*LOG10(TnC601)+3.0198E-3*TnC601+2.9122E-6*TnC601**2);
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2855 EQU1442..x5SC403 - x5SC406 =e= 0;
2856 EQU1443..Kp3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TmC601-
8.806*LOG10(TmC601)+8.9246E-11*TmC601+5.7501E-6*TmC601**2);
2857 EQU1444..x3SC403 - x3SC406 =e= 0;
2858 EQU1445..Kp1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TmC601-
5.261*LOG10(TmC601)+3.282E-11*TmC601+3.7349E-6*TmC601**2);
2859 EQU1446..FSC402 * x5SC402 + FSC411*x5SC411 - FSC403 * x5SC403 -
FSC408*x5SC408 =e= 0;
2860 EQU1447..Sn7C601 *FSC411 =e= K7C601*FSC408;
2861 EQU1448..FSC402 * x4SC402 + FSC411*x4SC411 - FSC403 * x4SC403 -
FSC408*x4SC408 =e= 0;
2862 EQU1449..FSC402 * x3SC402 + FSC411*x3SC411 - FSC403 * x3SC403 -
FSC408*x3SC408 =e= 0;
2863 EQU1450..FSC402 * x1SC402 + FSC411*x1SC411 - FSC403 * x1SC403 -
FSC408*x1SC408 =e= 0;
2864 EQU1451..FSC402 + FSC411 - FSC403 - FSC408 =e= 0;
2865 EQU1452..x4SC403 - x4SC406 =e= 0;
2866 EQU1453..TSC403 - TSC406 =e= 0;
2867 EQU1454..Kp4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TmC601-
7.1805*LOG10(TmC601)-6.6845E-11*TmC601+4.219E-6*TmC601**2);
2868 EQU1455..K5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TmC601-
7.883*LOG10(TmC601)-4.6512E-11*TmC601+3.8997E-6*TmC601**2);
2869 EQU1456..Kp5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TmC601-
7.883*LOG10(TmC601)-4.6512E-11*TmC601+3.8997E-6*TmC601**2);
2870 EQU1457..K7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TmC601-
9.042*LOG10(TmC601)-1.371E-12*TmC601+3.634E-6*TmC601**2);
2871 EQU1458..Kp2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TmC601-
10.048*LOG10(TmC601)+3.0198E-3*TmC601+2.9122E-6*TmC601**2);
2872 EQU1459..x6SC403 - x6SC406 =e= 0;
2873 EQU1460..x7SC403 - x7SC406 =e= 0;
2874 EQU1461..LpC601=e=FSC411 + qC601*FSC402;
2875 EQU1462..Sn1C601 *FSC411 =e= K1C601*FSC408;
2876 EQU1463..K4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TmC601-
7.1805*LOG10(TmC601)-6.6845E-11*TmC601+4.219E-6*TmC601**2);
2877 EQU1464..Kp7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TmC601-
9.042*LOG10(TmC601)-1.371E-12*TmC601+3.634E-6*TmC601**2);
2878 EQU1465..TmC601=e=(TSC403+TSC402)/2;
2879 EQU1466..TnC601=e=(TSC408+TSC402)/2;
2880 EQU1467..VpC601=e=LpC601 - FSC403;
2881 EQU1468..x1SC413 + x2SC413 + x3SC413 +x4SC413 +x5SC413 + x6SC413
+ x7SC413=e= 1;
2882 EQU1469..hSC413 - FSC413 *
((x1SC413/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC413,ORD(Coeff))))
2883 +(x2SC413/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC413,ORD(Coeff))))
2884 +(x3SC413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC413,ORD(Coeff))))
2885 +(x4SC413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC413,ORD(Coeff))))
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2886 +(x5SC413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC413,ORD(Coeff))))
2887 +(x6SC413/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC413,ORD(Coeff))))
2888 +(x7SC413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC413,ORD(Coeff)))) =e= 0;
2889 EQU1470..hSC414 - FSC414 *
((x1SC414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC414,ORD(Coeff))))
2890 +(x2SC414/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC414,ORD(Coeff))))
2891 +(x3SC414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC414,ORD(Coeff))))
2892 +(x4SC414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC414,ORD(Coeff))))
2893 +(x5SC414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC414,ORD(Coeff))))
2894 +(x6SC414/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC414,ORD(Coeff))))
2895 +(x7SC414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC414,ORD(Coeff)))) =e= 0;
2896 EQU1471..x1SC414 + x2SC414 + x3SC414 +x4SC414 +x5SC414 + x6SC414
+ x7SC414=e= 1;
2897 EQU1472..hSC412 - FSC412 *
((x1SC412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC412,ORD(Coeff))))
2898 +(x2SC412/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC412,ORD(Coeff))))
2899 +(x3SC412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC412,ORD(Coeff))))
2900 +(x4SC412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC412,ORD(Coeff))))

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2901 +(x5SC412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC412,ORD(Coeff))))
2902 +(x6SC412/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC412,ORD(Coeff))))
2903 +(x7SC412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC412,ORD(Coeff)))) =e= 0;
2904 EQU1473..x1SC412 + x2SC412 + x3SC412 +x4SC412 +x5SC412 + x6SC412
+ x7SC412 =e= 1;
2905 EQU1474..hSC411 - FSC411 *
((x1SC411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC411,ORD(Coeff))))
2906 +(x2SC411/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC411,ORD(Coeff))))
2907 +(x3SC411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC411,ORD(Coeff))))
2908 +(x4SC411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC411,ORD(Coeff))))
2909 +(x5SC411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC411,ORD(Coeff))))
2910 +(x6SC411/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC411,ORD(Coeff))))
2911 +(x7SC411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC411,ORD(Coeff)))) =e= 0;
2912 EQU1475..hSC409 - FSC409 *
((x1SC409/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC409,ORD(Coeff))))
2913 +(x2SC409/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC409,ORD(Coeff))))
2914 +(x3SC409/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC409,ORD(Coeff))))
2915 +(x4SC409/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC409,ORD(Coeff))))
2916 +(x5SC409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC409,ORD(Coeff))))
2917 +(x6SC409/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC409,ORD(Coeff))))
2918 +(x7SC409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC409,ORD(Coeff)))) =e= 0;
2919 EQU1476..x1SC409 + x2SC409 + x3SC409 +x4SC409 +x5SC409 + x6SC409
+x7SC409 =e= 1;
2920 EQU1477..xx1SC408 * MW1 * FmSC408 - FSC408 *x1SC408=e= 0;
2921 EQU1478..K6SC408*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC408-
9.2354*LOG10(TSC408)+9.0199E-11*TSC408+4.1050E-6*TSC408**2);
2922 EQU1479..xx6SC408 * MW6 * FmSC408 - FSC408 *x6SC408=e= 0;
2923 EQU1480..xx2SC408 * MW2 * FmSC408 - FSC408 *x2SC408=e= 0;
2924
EQU1481..xx1SC408+xx2SC408+xx3SC408+xx4SC408+xx5SC408+xx6SC408+xx7SC408
=e= 1;
2925 EQU1482..xx5SC408 * MW5 * FmSC408 - FSC408 *x5SC408=e= 0;
2926 EQU1483..K2SC408*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC408-
10.048*LOG10(TSC408)+3.0198E-3*TSC408+2.9122E-6*TSC408**2);
```

2927 EQU1484..xx3SC408 * MW3 * FmSC408 - FSC408 *x3SC408=e= 0;
 2928 EQU1485..K3SC408*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC408-
 8.806*LOG10(TSC408)+8.9246E-11*TSC408+5.7501E-6*TSC408**2);
 2929 EQU1486..FmSC408 - FSC408 * (x1SC408/MW1 + x2SC408/MW2 +
 x3SC408/MW3 + x4SC408/MW4 + x5SC408/MW5 + x6SC408/MW6 + x7SC408/MW7)

 =e= 0;
 2930
 EQU1487..xx1SC408/K1SC408+xx2SC408/K2SC408+xx3SC408/K3SC408+xx4SC408/K4
 SC408+xx5SC408/K5SC408+xx6SC408/K6SC408+xx7SC408/K7SC40

 8 =e= 1;
 2931 EQU1488..K7SC408*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC408-
 9.042*LOG10(TSC408)-1.371E-12*TSC408+3.634E-6*TSC408**2);
 2932 EQU1489..K5SC408*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC408-
 7.883*LOG10(TSC408)-4.6512E-11*TSC408+3.8997E-6*TSC408**2);
 2933 EQU1490..K4SC408*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC408-
 7.1805*LOG10(TSC408)-6.6845E-11*TSC408+4.219E-6*TSC408**2);
 2934 EQU1491..K1SC408*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC408-
 5.261*LOG10(TSC408)+3.282E-11*TSC408+3.7349E-6*TSC408**2);
 2935 EQU1492..x1SC408 + x2SC408 + x3SC408 +x4SC408 +x5SC408 + x6SC408
 +x7SC408 =e= 1;
 2936 EQU1493..xx4SC408 * MW4 * FmSC408 - FSC408 *x4SC408=e= 0;
 2937 EQU1494..x1SC407 + x2SC407 + x3SC407 + x4SC407 + x5SC407 +
 x6SC407 + x7SC407 =e= 1;
 2938
 EQU1495..xx1SC406+xx2SC406+xx3SC406+xx4SC406+xx5SC406+xx6SC406+xx7SC406
 =e= 1;
 2939 EQU1496..K7SC406*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC406-
 9.042*LOG10(TSC406)-1.371E-12*TSC406+3.634E-6*TSC406**2);
 2940
 EQU1497..K1SC406*xx1SC406+K2SC406*xx2SC406+K3SC406*xx3SC406+K4SC406*xx4
 SC406+K5SC406*xx5SC406+K6SC406*xx6SC406+K7SC406*xx7SC40

 6 =e= 1;
 2941 EQU1498..FmSC406 - FSC406 * (x1SC406/MW1 + x2SC406/MW2 +
 x3SC406/MW3 + x4SC406/MW4 + x5SC406/MW5 + x6SC406/MW6 + x7SC406/MW7)

 =e= 0;
 2942 EQU1499..xx2SC406 * MW2 * FmSC406 - FSC406 *x2SC406=e= 0;

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2943 EQU1500..xx6SC406 * MW6 * FmSC406 - FSC406 *x6SC406=e= 0;
2944 EQU1501..K2SC406*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC406-
10.048*LOG10(TSC406)+3.0198E-3*TSC406+2.9122E-6*TSC406**2);
2945 EQU1502..K6SC406*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC406-
9.2354*LOG10(TSC406)+9.0199E-11*TSC406+4.1050E-6*TSC406**2);
2946 EQU1503..xx1SC406 * MW1 * FmSC406 - FSC406 *x1SC406=e= 0;
2947 EQU1504..xx3SC406 * MW3 * FmSC406 - FSC406 *x3SC406=e= 0;
2948 EQU1505..xx4SC406 * MW4 * FmSC406 - FSC406 *x4SC406=e= 0;
2949 EQU1506..K5SC406*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC406-
7.883*LOG10(TSC406)-4.6512E-11*TSC406+3.8997E-6*TSC406**2);
2950 EQU1507..xx5SC406 * MW5 * FmSC406 - FSC406 *x5SC406=e= 0;
2951 EQU1508..x1SC406 + x2SC406 + x3SC406 + x4SC406+ x5SC406 + x6SC406
+ x7SC406 =e= 1;
2952 EQU1509..K4SC406*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC406-
7.1805*LOG10(TSC406)-6.6845E-11*TSC406+4.219E-6*TSC406**2);
2953 EQU1510..K3SC406*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC406-
8.806*LOG10(TSC406)+8.9246E-11*TSC406+5.7501E-6*TSC406**2);
2954 EQU1511..K1SC406*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC406-
5.261*LOG10(TSC406)+3.282E-11*TSC406+3.7349E-6*TSC406**2);
2955 EQU1512..hSC406 - FSC406 *
((x1SC406/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC406,ORD(Coeff))))
2956 +(x2SC406/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC406,ORD(Coeff))))
2957 +(x3SC406/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC406,ORD(Coeff))))
2958 +(x4SC406/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC406,ORD(Coeff))))
2959 +(x5SC406/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC406,ORD(Coeff))))
2960 +(x6SC406/MW6)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("6",Coeff)*POWER(TSC406,ORD(Coeff))))
2961 +(x7SC406/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC406,ORD(Coeff)))) =e= 0;
2962 EQU1513..x1SC405 + x2SC405 + x3SC405 + x4SC405 + x5SC405 +
x6SC405 + x7SC405 =e= 1;
2963 EQU1514..hSC405 - FSC405 *
((x1SC405/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff)*POWER(TSC405,ORD(Coeff))))
2964 +(x2SC405/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC405,ORD(Coeff))))
2965 +(x3SC405/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC405,ORD(Coeff))))
2966 +(x4SC405/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC405,ORD(Coeff))))
2967 +(x5SC405/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC405,ORD(Coeff))))
2968 +(x6SC405/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC405,ORD(Coeff))))
2969 +(x7SC405/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC405,ORD(Coeff)))) =e= 0;
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2970 EQU1515..x1SC404 + x2SC404 + x3SC404 + x4SC404 + x5SC404 +
x6SC404 + x7SC404 =e= 1;
2971 EQU1516..hSC404 - FSC404 *
((x1SC404/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC404,ORD(Coeff))))
2972 +(x2SC404/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC404,ORD(Coeff))))
2973 +(x3SC404/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC404,ORD(Coeff))))
2974 +(x4SC404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC404,ORD(Coeff))))
2975 +(x5SC404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC404,ORD(Coeff))))
2976 +(x6SC404/MW6)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("6",Coeff)*POWER(TSC404,ORD(Coeff))))
2977 +(x7SC404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC404,ORD(Coeff)))) =e= 0;
2978 EQU1517..x1SC403 + x2SC403 + x3SC403 + x4SC403 + x5SC403 +
x6SC403 + x7SC403 =e= 1;
2979 EQU1518..FmSC403 - FSC403*(x1SC403/MW1 + x2SC403/MW2 +
x3SC403/MW3 + x4SC403/MW4 + x5SC403/MW5 + x6SC403/MW6 + x7SC403/MW7 )
=e= 0;
2980 EQU1519..hSC403 - FSC403 *
((x1SC403/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC403,ORD(Coeff))))
2981 +(x2SC403/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC403,ORD(Coeff))))
2982 +(x3SC403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC403,ORD(Coeff))))
2983 +(x4SC403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC403,ORD(Coeff))))
2984 +(x5SC403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC403,ORD(Coeff))))
2985 +(x6SC403/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC403,ORD(Coeff))))
2986 +(x7SC403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC403,ORD(Coeff)))) =e= 0;
2987 EQU1520..x1SC402 + x2SC402 + x3SC402 + x4SC402 + x5SC402 +
x6SC402 + x7SC402 =e= 1;

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2988 EQU1521..hSC402 - FSC402 *
((x1SC402/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC402,ORD(Coeff))))
2989 +(x2SC402/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC402,ORD(Coeff))))
2990 +(x3SC402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC402,ORD(Coeff))))
2991 +(x4SC402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC402,ORD(Coeff))))
2992 +(x5SC402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC402,ORD(Coeff))))
2993 +(x6SC402/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC402,ORD(Coeff))))
2994 +(x7SC402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC402,ORD(Coeff)))) =e= 0;
2995 EQU1522..x1SC401 + x2SC401 + x3SC401 + x4SC401 + x5SC401 +
x6SC401 + x7SC401 =e= 1;
2996 EQU1523..hSC401 - FSC401 *
((x1SC401/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC401,ORD(Coeff))))
2997 +(x2SC401/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC401,ORD(Coeff))))
2998 +(x3SC401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC401,ORD(Coeff))))
2999 +(x4SC401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC401,ORD(Coeff))))
3000 +(x5SC401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC401,ORD(Coeff))))
3001 +(x6SC401/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC401,ORD(Coeff))))
3002 +(x7SC401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC401,ORD(Coeff)))) =e= 0;
3003 EQU1524..VpC601=e=FSC406;
3004 EQU1525..VpC603=e=FC323;
3005 EQU1526..Cost =e= FHC01 * 143.4402*0.9071847 + FSC414 *
160.4628*0.9071847 + FAC02 * 110*0.9071847 + FSC401 *25;
3006 EQU1527..Earnings =e= FC407 * 214.1463*0.9071847;
3007 EQU1528..Utilities =e= (FstmE612 +FstmE602+
(FstmE696A+FstmE696B)) * 1.25*0.9071847 + (FstmE695A+ FstmE695B)*
1.8*0.9071847 +
0.67e-3 *22.35* WK601;
3008 EQU1529..Profit =e= Earnings - Cost - Utilities;
3009 EQU1530..hSC408 - FSC408 *
3010 ((x1SC408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TSC408/Enth_Vap("1","a2"))**Enth_Vap("1","a3"))))
3011 +(x3SC408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC408,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
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((1-TSC408/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
3012 +(x4SC408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TSC408/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
3013 +(x5SC408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TSC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
3014 +(x7SC408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TSC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
3015 EQU1531..hC325 - FC325 *
3016 ((x1C325/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC325/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
3017 +(x3C325/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC325,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC325/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
3018 +(x4C325/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC325/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
3019 +(x5C325/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC325/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
3020 +(x7C325/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC325/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
3021 EQU1532..hSC407 - FSC407 *
3022 ((x1SC407/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC407,ORD(Coeff)))))

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3023 +(x2SC407/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC407,ORD(Coeff))))
3024 +(x3SC407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC407,ORD(Coeff))))
3025 +(x4SC407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TSC407/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
3026 +(x5SC407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TSC407/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
3027 +(x6SC407/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("6","a1")*1000 *
((1-TSC407/Enth_Vap("6","a2"))**Enth_Vap("6","a3")))
3028 +(x7SC407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TSC407/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
3029 EQU1533..hC324 - FC324 *
3030 ((x1C324/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC324/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
3031 +(x3C324/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC324,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC324/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
3032 +(x4C324/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC324/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
3033 +(x5C324/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC324/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
3034 +(x7C324/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC324/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
3035 EQU1534..x1SC403 - x1SC404 =e= 0;
3036 EQU1535..FSC403 - FSC404 =e= 0;
3037 EQU1536..x1SC401 - x1SC402 =e= 0;
3038 EQU1537..FSC401 - FSC402 =e= 0;
3039 EQU1538..(hSC403 - hSC404) - (hSC402 - hSC401) =e= 0;
3040 EQU1539..(hSC403 - hSC404) - UE601*AE601*dTE601*FE601 =e= 0;
3041 EQU1540..dTE601**3 =e= ((TSC403-TSC402)*(TSC404-TSC401)*
3042 ((TSC403-TSC402)+(TSC404-TSC401))/2);
3043 EQU1541..x2SC401 - x2SC402 =e= 0;
3044 EQU1542..x6SC403 - x6SC404 =e= 0;
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3045 EQU1543..x2SC403 - x2SC404 =e= 0;
 3046 EQU1544..x6SC401 - x6SC402 =e= 0;
 3047 EQU1545..x4SC403 - x4SC404 =e= 0;
 3048 EQU1546..x5SC401 - x5SC402 =e= 0;
 3049 EQU1547..FSC402 * x2SC402 + FSC411*x2SC411 - FSC403 * x2SC403 -
 FSC408*x2SC408 =e= 0;
 3050 EQU1548..h6C601*K6C601*LpC601*(1-Sm6C601) =e= Kp6C601*FSC411*(1-
 Sn6C601);
 3051 EQU1549..h2C601*K2C601*LpC601*(1-Sm2C601) =e= Kp2C601*FSC411*(1-
 Sn2C601);
 3052 EQU1550..f6C601 * x6SC402 * FSC402 =e= x6SC403 * FSC403;
 3053 EQU1551..Sn4C601 *FSC411 =e= K4C601*FSC408;
 3054 EQU1552..Sn2C601 *FSC411 =e= K2C601*FSC408;
 3055 EQU1553..Sm1C601*LpC601=e= Kp1C601*VpC601;
 3056 EQU1554..Sn3C601 *FSC411 =e= K3C601*FSC408;
 3057 EQU1555..Sn6C601 *FSC411 =e= K6C601*FSC408;
 3058 EQU1556..Sn5C601 *FSC411 =e= K5C601*FSC408;
 3059 EQU1557..f2C601 * x2SC402 * FSC402 =e= x2SC403 * FSC403;

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3060 EQU1558..f6C601*((1-Sn6C601**(60-37))+ RC601*(1-Sn6C601) +
h6C601*Sn6C601**(60-37)*(1-Sm6C601**(37+1))) =e= (1-Sn6C601**(60-
37))+ RC601*(1-Sn6C601);
3061 EQU1559..f2C601*((1-Sn2C601**(60-37))+ RC601*(1-Sn2C601) +
h2C601*Sn2C601**(60-37)*(1-Sm2C601**(37+1))) =e= (1-Sn2C601**(60-
37))+ RC601*(1-Sn2C601);
3062 EQU1560..Sm6C601*LpC601=e= Kp6C601*VpC601;
3063 EQU1561..Sm2C601*LpC601=e= Kp2C601*VpC601;
3064 EQU1562..Sm3C601*LpC601=e= Kp3C601*VpC601;
3065 EQU1563..f7C601 * x7SC402 * FSC402 =e= x7SC403 * FSC403;
3066 EQU1564..Sm7C601*LpC601=e= Kp7C601*VpC601;
3067 EQU1565..f3C601*((1-Sn3C601**(60-37))+ RC601*(1-Sn3C601) +
h3C601*Sn3C601**(60-37)*(1-Sm3C601**(37+1))) =e= (1-Sn3C601**(60-
37))+ RC601*(1-Sn3C601);
3068 EQU1566..f4C601*((1-Sn4C601**(60-37))+ RC601*(1-Sn4C601) +
h4C601*Sn4C601**(60-37)*(1-Sm4C601**(37+1))) =e= (1-Sn4C601**(60-
37))+ RC601*(1-Sn4C601);
3069 EQU1567..f5C601*((1-Sn5C601**(60-37))+ RC601*(1-Sn5C601) +
h5C601*Sn5C601**(60-37)*(1-Sm5C601**(37+1))) =e= (1-Sn5C601**(60-
37))+ RC601*(1-Sn5C601);
3070 EQU1568..f7C601*((1-Sn7C601**(60-37))+ RC601*(1-Sn7C601) +
h7C601*Sn7C601**(60-37)*(1-Sm7C601**(37+1))) =e= (1-Sn7C601**(60-
37))+ RC601*(1-Sn7C601);
3071 EQU1569..f1C601 * x1SC402 * FSC402 =e= x1SC403 * FSC403;
3072 EQU1570..f3C601 * x3SC402 * FSC402 =e= x3SC403 * FSC403;
3073 EQU1571..FSC402 * x6SC402 + FSC411*x6SC411 - FSC403 * x6SC403 -
FSC408*x6SC408 =e= 0;
3074 EQU1572..f5C601 * x5SC402 * FSC402 =e= x5SC403 * FSC403;
3075 EQU1573..Kp6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TmC601-
9.2354*LOG10(TmC601)+9.0199E-11*TmC601+4.1050E-6*TmC601**2);
3076 EQU1574..h1C601*K1C601*LpC601*(1-Sm1C601) =e= Kp1C601*FSC411*(1-
Sn1C601);
3077 EQU1575..h3C601*K3C601*LpC601*(1-Sm3C601) =e= Kp3C601*FSC411*(1-
Sn3C601);
3078 EQU1576..h4C601*K4C601*LpC601*(1-Sm4C601) =e= Kp4C601*FSC411*(1-
Sn4C601);
3079 EQU1577..h5C601*K5C601*LpC601*(1-Sm5C601) =e= Kp5C601*FSC411*(1-
Sn5C601);
3080 EQU1578..h7C601*K7C601*LpC601*(1-Sm7C601) =e= Kp7C601*FSC411*(1-
Sn7C601);
3081 EQU1579..Sm5C601*LpC601=e= Kp5C601*VpC601;
3082
3083 INEQU1..sf1S34 + sf2S34 =l= 1;
3084 INEQU2..TC306 - TcwoutE634 =g= 8;
3085 INEQU3..TC308 - TcwoutE640 =g= 10;
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3086 INEQU4..TC317-TC316 =g=10;
3087 INEQU5..TC318-TC315 =g=10;
3088 INEQU6..TC319-Tcwin =g=10;
3089 INEQU7..TC318-TcwoutE611 =g=10;
3090 INEQU8..414.6-TC323 =g=10;
3091 INEQU9..414.6-TC324 =g=10;
3092 INEQU10..TC326-Tcwin =g=10;
3093 INEQU11..TC325-TcwoutE613 =g=10;
3094 INEQU12..TC405-TC404 =g=10;
3095 INEQU13..TC406-TC403 =g=10;
3096 INEQU14..TC407-Tcwin =g=10;
3097 INEQU15..TC406-TcwoutE617 =g=10;
3098 INEQU16..TC414-Tcwin =g=10;
3099 INEQU17..TC414-TcwotE621A =g=10;

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3100 INEQU18..TC415-Tcwin =g=10;
3101 INEQU19..TC414-TcwotE621B =g=10;
3102 INEQU20..TC419-Tcwin =g=10;
3103 INEQU21..TC418-TcwoutE626 =g=10;
3104 INEQU22..THC01-TC402 =g=10;
3105 INEQU23..THC02-TC401 =g=10;
3106 INEQU24..TC412-Tcwin =g=8;
3107 INEQU25..TC412-TcwotE627A =g=8;
3108 INEQU26..TC413-TcwotE627B =g=8;
3109 INEQU27..THC04-TC402 =g=8;
3110 INEQU28..THC03-TC403 =g=8;
3111 INEQU29..THC05-THC29 =g=8;
3112 INEQU30..THC04-THC30 =g=8;
3113 INEQU31..TC307-Tcwin =g=8;
3114 INEQU32..TC308-TcwoutE640 =g=10;
3115 INEQU33..TC308-Tcwin =g=10;
3116 INEQU34..TC308-TcwotE641A =g=10;
3117 INEQU35..TC309-TcwotE641B =g=10;
3118 INEQU36..481-TC408 =g=10;
3119 INEQU37..481-TC409 =g=10;
3120 INEQU38..414.6-TC410 =g=10;
3121 INEQU39..414.6-TC411 =g=10;
3122 INEQU40..TSC404-TSC401 =g=10;
3123 INEQU41..TSC403-TSC402 =g=10;
3124 INEQU42..414.6-TSC407 =g=10;
3125 INEQU43..414.6-TSC406 =g=10;
3126 INEQU44..TSC404-TcwoutE603 =g=10;
3127 INEQU45..TSC405-Tcwin =g=10;
3128 INEQU46..TSC408-TcwoutE605 =g=10;
3129 INEQU47..TSC409-Tcwin =g=10;
3130 INEQU48..TSC412 - TcwotE609A =g= 10;
3131 INEQU49..TSC413 - Tcwin =g=10;
3132 INEQU50..f1c601=l=0.0001;
3133
3134 FAC02.L=0.155; FAC12.L=0.155; FAC23.L=0.155;
3135 FAC34.L=0.155; FAC45.L=0.155; FC308.L=3.196;
3136 FC316.L=1.7; FC320.L=0.043; FC322.L=1.5;
3137 FC328.L=0.047; FC329.L=0.665; FC403.L=2.302;
3138 FC407.L=0.911; FC412.L=0.042; FC417.L=0.139;
3139 FHC01.L=0.87; FHC32.L=1.943; FSC402.L=0.484;
3140 FSC405.L=0.344; FSC411.L=1.273; FSC413.L=0.139;
3141 FstmE612.L=0.142; PC302.L=101.847; PC310.L=261.214;
3142 PC601.L=625; PC603.L=1703.728; QHC07.L=1.739;
3143 QHC11.L=1.743; QHC14.L=1.739; QHC16.L=1.739;
3144 QHC34.L=1.079; QHC38.L=0.581; QHC41.L=0.857;
3145 QHC45.L=0.862; TAC09.L=280.004; TAC12.L=280.004;
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3146 TAC23.L=280; TAC31.L=280.105; TAC34.L=280.105;
3147 TAC42.L=281.963; TAC45.L=281.963; TC303.L=280.411;
3148 TC306.L=349.007; TC307.L=328.661; TC308.L=328.661;
3149 TC315.L=308.238; TC316.L=345.659; TC317.L=359;
3150 TC321.L=301.113; TC324.L=359; TC325.L=322.937;
3151 TC404.L=305; TC405.L=410; TC407.L=302.95;
3152 TC408.L=405; TC410.L=363.414; TC414.L=336.829;
3153 TC418.L=305.918; TC419.L=303.525; THC32.L=259.254;
3154 TSC402.L=324.98; TSC403.L=336.03; TSC405.L=301.256;
3155 TSC408.L=318.852; TSC413.L=300; x11AC12.L=0.971;
3156 x11AC23.L=0.944; x11AC34.L=0.917; x11AC45.L=0.89;
3157 x1C316.L=0.119; x1C325.L=1; x1C417.L=0.02;
3158 x1HC32.L=0.023; x1SC402.L=0.006; x1SC403.L=0.0000081;
3159 x1SC408.L=0.02; x2SC402.L=0.009; x2SC403.L=0.012;
3160 x2SC408.L=0.00031; x3C316.L=0.79; x3C325.L=0.00000166;
3161 x3C417.L=0.967; x3HC32.L=0.774; x3SC402.L=0.293;
3162 x3SC403.L=0.021; x3SC408.L=0.967; x4C316.L=0.08;
3163 x4C417.L=0.013; x4HC32.L=0.127; x4SC402.L=0.562;
3164 x4SC403.L=0.784; x4SC408.L=0.013; x5C316.L=0.006;
3165 x5C417.L=0; x5HC32.L=0.03; x5SC402.L=0.052;
3166 x5SC403.L=0.073; x5SC408.L=0; x6SC402.L=0.071;
3167 x6SC403.L=0.1; x6SC408.L=0; x7HC32.L=0.046;
3168 x7SC402.L=0.007; x7SC403.L=0.01; x7SC408.L=0;
3169 xx1C322.L=0.12; xx1C414.L=0.079; xx1HC01.L=0.09;
3170 xx2HC01.L=0.13; xx3C317.L=0.792; xx3C322.L=0.792;
3171 xx3C407.L=0.00000975; xx3C412.L=0.000875; xx3C414.L=0.818;
3172 xx3HC01.L=0.013; xx4C317.L=0.08; xx4C322.L=0.08;
3173 xx4C407.L=0.083; xx4C412.L=0.867; xx4C414.L=0.094;
3174 xx4HC01.L=0.107; xx5C407.L=0.158; xx5C412.L=0.061;
3175 xx5C414.L=0.001; xx7C414.L=0.008;
3176 FAC02.LO=0.09; FAC12.LO=0.01; FAC23.LO=0.01;
3177 FAC34.LO=0.01; FAC45.LO=0.01; FC308.LO=1;
3178 FC316.LO=0.1; FC320.LO=0.01; FC322.LO=0.1;
3179 FC328.LO=0.01; FC329.LO=0.1; FC403.LO=0.1;
3180 FC407.LO=0.75; FC412.LO=0.01; FC417.LO=0.1;
3181 FHC01.LO=0.795; FHC32.LO=0.5; FSC402.LO=0.1;
3182 FSC405.LO=0; FSC411.LO=0.1; FSC413.LO=0.1;
3183 FstmE612.LO=0.05; PC302.LO=101; PC310.LO=230;
3184 PC601.LO=600; PC603.LO=1600; QHC07.LO=0.1;
3185 QHC11.LO=0.1; QHC14.LO=0.1; QHC16.LO=0.1;
3186 QHC34.LO=0.1; QHC38.LO=0.1; QHC41.LO=0.1;
3187 QHC45.LO=0.1; TAC09.LO=280; TAC12.LO=280;
3188 TAC23.LO=280; TAC31.LO=280; TAC34.LO=280;
3189 TAC42.LO=280; TAC45.LO=280; TC303.LO=260;
3190 TC306.LO=320; TC307.LO=300; TC308.LO=270;
3191 TC315.LO=300; TC316.LO=335; TC317.LO=300;

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3192 TC321.LO=250; TC324.LO=359; TC325.LO=300;
3193 TC404.LO=305; TC405.LO=410; TC407.LO=298;
3194 TC408.LO=405; TC410.LO=345; TC414.LO=300;
3195 TC418.LO=301; TC419.LO=298; THC32.LO=250;
3196 TSC402.LO=310; TSC403.LO=320; TSC405.LO=300;
3197 TSC408.LO=300; TSC413.LO=295; x11AC12.LO=0.88;
3198 x11AC23.LO=0.88; x11AC34.LO=0.88; x11AC45.LO=0.88;
3199 x1C316.LO=0.01; x1C325.LO=0.5; x1C417.LO=0.02;
3200 x1HC32.LO=0; x1SC402.LO=0; x1SC403.LO=0;
3201 x1SC408.LO=0; x2SC402.LO=0; x2SC403.LO=0;
3202 x2SC408.LO=0; x3C316.LO=0.5; x3C325.LO=0;
3203 x3C417.LO=0.35; x3HC32.LO=0.1; x3SC402.LO=0.2;
3204 x3SC403.LO=0; x3SC408.LO=0.5; x4C316.LO=0.001;
3205 x4C417.LO=0.001; x4HC32.LO=0; x4SC402.LO=0.48;
3206 x4SC403.LO=0.5; x4SC408.LO=0; x5C316.LO=0;
3207 x5C417.LO=0; x5HC32.LO=0; x5SC402.LO=0;
3208 x5SC403.LO=0; x5SC408.LO=0; x6SC402.LO=0;
3209 x6SC403.LO=0; x6SC408.LO=0; x7HC32.LO=0;
3210 x7SC402.LO=0; x7SC403.LO=0; x7SC408.LO=0;
3211 xx1C322.LO=0; xx1C414.LO=0; xx1HC01.LO=0;
3212 xx2HC01.LO=0.1; xx3C317.LO=0.5; xx3C322.LO=0.5;
3213 xx3C407.LO=0; xx3C412.LO=0; xx3C414.LO=0.5;
3214 xx3HC01.LO=0; xx4C317.LO=0; xx4C322.LO=0;
3215 xx4C407.LO=0.01; xx4C412.LO=0.5; xx4C414.LO=0;
3216 xx4HC01.LO=0; xx5C407.LO=0.01; xx5C412.LO=0;
3217 xx5C414.LO=0; xx7C414.LO=0;
3218 FAC02.UP=0.16; FAC12.UP=0.9; FAC23.UP=0.9;
3219 FAC34.UP=0.9; FAC45.UP=0.9; FC308.UP=6;
3220 FC316.UP=1.8; FC320.UP=1.5; FC322.UP=1.6;
3221 FC328.UP=1; FC329.UP=3; FC403.UP=5;
3222 FC407.UP=5; FC412.UP=1; FC417.UP=2;
3223 FHC01.UP=1.5; FHC32.UP=5; FSC402.UP=4;
3224 FSC405.UP=3; FSC411.UP=3.2; FSC413.UP=0.5;
3225 FstmE612.UP=1; PC302.UP=187; PC310.UP=360;
3226 PC601.UP=625; PC603.UP=1800; QHC07.UP=5;
3227 QHC11.UP=5; QHC14.UP=5; QHC16.UP=5;
3228 QHC34.UP=5; QHC38.UP=5; QHC41.UP=5;
3229 QHC45.UP=5; TAC09.UP=300; TAC12.UP=300;
3230 TAC23.UP=300; TAC31.UP=300; TAC34.UP=300;
3231 TAC42.UP=300; TAC45.UP=300; TC303.UP=300;
3232 TC306.UP=368; TC307.UP=330; TC308.UP=350;
3233 TC315.UP=320; TC316.UP=370; TC317.UP=420;
3234 TC321.UP=350; TC324.UP=385; TC325.UP=360;
3235 TC404.UP=325; TC405.UP=440; TC407.UP=350;
3236 TC408.UP=440; TC410.UP=369; TC414.UP=368;
3237 TC418.UP=350; TC419.UP=310; THC32.UP=310;

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3238 TSC402.UP=340; TSC403.UP=350; TSC405.UP=360;
3239 TSC408.UP=330; TSC413.UP=350; x11AC12.UP=0.999;
3240 x11AC23.UP=0.999; x11AC34.UP=0.999; x11AC45.UP=0.999;
3241 x1C316.UP=0.5; x1C325.UP=1; x1C417.UP=0.2;
3242 x1HC32.UP=0.1; x1SC402.UP=0.1; x1SC403.UP=0.1;
3243 x1SC408.UP=0.1; x2SC402.UP=0.1; x2SC403.UP=0.1;
3244 x2SC408.UP=0.1; x3C316.UP=1; x3C325.UP=0.1;
3245 x3C417.UP=1; x3HC32.UP=1; x3SC402.UP=0.42;
3246 x3SC403.UP=0.1; x3SC408.UP=1; x4C316.UP=0.2;
3247 x4C417.UP=0.4; x4HC32.UP=0.5; x4SC402.UP=0.7;
3248 x4SC403.UP=1; x4SC408.UP=0.1; x5C316.UP=0.01;
3249 x5C417.UP=0.15; x5HC32.UP=2.5; x5SC402.UP=0.1;
3250 x5SC403.UP=0.1; x5SC408.UP=0.1; x6SC402.UP=0.1;
3251 x6SC403.UP=0.12; x6SC408.UP=0.1; x7HC32.UP=2;
3252 x7SC402.UP=0.1; x7SC403.UP=0.1; x7SC408.UP=0.1;
3253 xx1C322.UP=0.12; xx1C414.UP=0.08; xx1HC01.UP=0.5;
3254 xx2HC01.UP=0.6; xx3C317.UP=1; xx3C322.UP=1;
3255 xx3C407.UP=0.1; xx3C412.UP=0.15; xx3C414.UP=1;
3256 xx3HC01.UP=0.55; xx4C317.UP=0.2; xx4C322.UP=0.2;
3257 xx4C407.UP=0.3; xx4C412.UP=1; xx4C414.UP=0.2;
3258 xx4HC01.UP=0.3; xx5C407.UP=0.5; xx5C412.UP=0.1;
3259 xx5C414.UP=0.1; xx7C414.UP=0.008;
3260
3261 C10pC623.L=0.0000338; C10pC625.L=0.0000735; C10pC627.L=0.000214;
3262 C10pC629.L=0.000152; C2C623.L=0.015; C2C625.L=0.015;
3263 C2C627.L=0.015; C2C629.L=0.015; C3C623.L=3.85;
3264 C3C625.L=2.584; C3C627.L=1.5; C3C629.L=1.801;
3265 C3pC623.L=1.173; C3pC625.L=1.198; C3pC627.L=1.215;
3266 C3pC629.L=1.19; C4pC623.L=0.027; C4pC625.L=0.041;
3267 C4pC627.L=0.071; C4pC629.L=0.058; C5pC623.L=0.000408;
3268 C5pC625.L=0.00091; C5pC627.L=0.003; C5pC629.L=0.002;
3269 C7pC623.L=0.0000378; C7pC625.L=0.000179; C7pC627.L=0.001;
3270 C7pC629.L=0.000743; C8pC623.L=0.001; C8pC625.L=0.003;
3271 C8pC627.L=0.01; C8pC629.L=0.007; C9pC623.L=0.419;
3272 C9pC625.L=0.625; C9pC627.L=1.074; C9pC629.L=0.895;
3273 CHXC623.L=13.606; CHXC625.L=14.201; CHXC627.L=14.702;
3274 CHXC629.L=14.035; CiC10pC623.L=0; CiC10pC625.L=0;
3275 CiC10pC627.L=0; CiC10pC629.L=0; CiC11pC623.L=0.0000132;
3276 CiC11pC625.L=0.000042; CiC11pC627.L=0.000202;
CiC11pC629.L=0.000121;
3277 CiC4eC623.L=0.003; CiC4eC625.L=0.003; CiC4eC627.L=0.003;
3278 CiC4eC629.L=0.003; CiC5eC623.L=0.000594; CiC5eC625.L=0.00085;
3279 CiC5eC627.L=0.001; CiC5eC629.L=0.001; CiC8eC623.L=0.018;
3280 CiC8eC625.L=0.026; CiC8eC627.L=0.044; CiC8eC629.L=0.037;
3281 Cost.L=148.943; dTE601.L=10.516; dTE602.L=78.57;
3282 dTE603.L=10.825; dTE605.L=22.741; dTE609A.L=10;
3283 dTE610.L=13.533; dTE611.L=16.018; dTE612.L=55.6;

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3284 dTE613.L=25; dTE616.L=98.994; dTE617.L=33.53;
3285 dTE621A.L=28.414; dTE621B.L=25.722; dTE626.L=11.674;
3286 dTE627A.L=55; dTE627B.L=31.592; dTE628.L=10.806;
3287 dTE629.L=16.246; dTE633.L=11.452; dTE634.L=19.324;
3288 dTE640.L=25.062; dTE641.L=16.152; dTE695A.L=76;
3289 dTE695B.L=48; dTE696A.L=51.186; dTE696B.L=30.593;
3290 dTE6XX.L=1; Earnings.L=176.97; f1C601.L=0.001;
3291 f1C603.L=0.765; f1C606A.L=0.001; f2C601.L=0.99;
3292 f3C601.L=0.05; f3C603.L=1; f3C606A.L=0.000997;
3293 f4C601.L=0.994; f4C603.L=1; f4C606A.L=0.898;
3294 f5C601.L=1; f5C603.L=1; f5C606A.L=0.989;
3295 f6C601.L=1; f7C601.L=1; f7C603.L=1;
3296 f7C606A.L=0.999; FAC05.L=6.653; FAC07.L=6.808;
3297 FAC09.L=8.428; FAC15.L=8.574; FAC18.L=8.729;
3298 FAC20.L=10.065; FAC26.L=18.057; FAC29.L=18.212;
3299 FAC31.L=19.705; FAC37.L=14.803; FAC40.L=14.958;
3300 FAC42.L=16.454; FC301.L=3.643; FC302.L=0.428;
3301 FC303.L=4.071; FC306.L=4.896; FC307.L=4.896;
3302 FC309.L=3.196; FC310.L=0.825; FC311.L=2.371;
3303 FC312.L=1.7; FC315.L=1.7; FC317.L=1.653;
3304 FC318.L=1.653; FC319.L=1.653; FC321.L=0.11;
3305 FC323.L=0.712; FC324.L=0.712; FC325.L=0.712;
3306 FC326.L=0.712; FC401.L=2.302; FC402.L=2.302;
3307 FC404.L=2.302; FC405.L=0.911; FC406.L=0.911;
3308 FC408.L=3.271; FC409.L=3.271; FC410.L=0.833;
3309 FC411.L=0.833; FC413.L=0.042; FC414.L=2.883;
3310 FC415.L=2.883; FC418.L=3.023; FC419.L=3.023;
3311 FC425.L=3.767; FC426.L=2.934; FC427.L=2.856;
3312 FC428.L=2.023; FC430.L=3.767; FC431.L=2.856;
3313 FC432.L=2.814; Fcwe603.L=0.199; Fcwe605.L=0.949;
3314 Fcwe609A.L=0.083; Fcwe611.L=2.139; Fcwe613.L=1.618;
3315 Fcwe617.L=1.551; Fcwe621A.L=5.225; Fcwe621B.L=6.898;
3316 Fcwe626.L=0.724; Fcwe627A.L=0.55; Fcwe627B.L=0.536;
3317 Fcwe634.L=7.241; Fcwe640.L=0.4; Fcwe641A.L=4.111;
3318 Fcwe641B.L=0.881; FHC02.L=0.87; FHC03.L=3.132;
3319 FHC04.L=3.132; FHC05.L=3.132; FHC06.L=4.002;
3320 FHC07.L=1; FHC08.L=3.002; FHC11.L=1.002;
3321 FHC14.L=1; FHC15.L=2; FHC16.L=1;
3322 FHC22.L=1.496; FHC23.L=1.493; FHC24.L=2.989;
3323 FHC25.L=1.336; FHC26.L=4.325; FHC27.L=1.62;
3324 FHC28.L=5.945; FHC29.L=0.679; FHC30.L=0.679;
3325 FHC31.L=5.945; FHC33.L=0.954; FHC34.L=0.62;
3326 FHC38.L=0.334; FHC40.L=0.989; FHC41.L=0.493;
3327 FHC45.L=0.496; FlHC28.L=3.019; FlHC29.L=0.345;
3328 FlHC30.L=0.198; FlHC31.L=2.302; FlR1.L=2.675;
3329 FlR29.L=2.105; FmC302.L=0.007; FmC308.L=0.055;

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3330 FmC310.L=0.015; FmC311.L=0.04; FmC312.L=0.03;
3331 FmC317.L=0.029; FmC322.L=0.027; FmC323.L=0.013;
3332 FmC325.L=0.016; FmC405.L=0.011; FmC407.L=0.011;
3333 FmC408.L=0.04; FmC409.L=0.04; FmC412.L=0.000684;
3334 FmC414.L=0.05; FmC425.L=0.056; FmC427.L=0.045;
3335 FmC428.L=0.032; FmC430.L=0.058; FmC431.L=0.047;
3336 FmC432.L=0.046; FmHC01.L=0.012; FmHC32.L=0.033;
3337 FmlHC28.L=0.047; FmlHC29.L=0.005; FmlHC30.L=0.003;
3338 FmlR1.L=0.042; FmlR29.L=0.032; FmSC403.L=0.006;
3339 FmSC406.L=0.023; FmSC408.L=0.024; FmvHC28.L=0.051;
3340 FmvHC29.L=0.006; FmvHC30.L=0.008; FmvR1.L=0.045;
3341 FmvR29.L=0.055; FR1.L=5.266; FR29.L=5.266;
3342 FSC401.L=0.484; FSC403.L=0.344; FSC404.L=0.344;
3343 FSC406.L=1.412; FSC407.L=1.412; FSC408.L=1.412;
3344 FSC409.L=1.412; FSC412.L=0.139; FSC414.L=0;
3345 FstmE602.L=0.401; FstmE695A.L=0.409; FstmE695B.L=0.1;
3346 FstmE696A.L=0.111; FstmE696B.L=0.019; FvHC28.L=2.926;
3347 FvHC29.L=0.334; FvHC30.L=0.481; FvHC31.L=3.643;
3348 FvR1.L=2.592; FvR29.L=3.162; h1C601.L=1.083;
3349 h1C603.L=-0.308; h1C606A.L=0.988; h2C601.L=0.551;
3350 h3C601.L=3.047; h3C603.L=0.237; h3C606A.L=-65;
3351 h4C601.L=0.576; h4C603.L=0.303; h4C606A.L=0;
3352 h5C601.L=0.893; h5C603.L=0.4; h5C606A.L=0.484;
3353 h6C601.L=0.919; h7C601.L=0.963; h7C603.L=0.466;
3354 h7C606A.L=0.548; hAC02.L=9.363; hAC05.L=345.67;
3355 hAC07.L=355.032; hAC09.L=1238.893; hAC12.L=8.054;
3356 hAC15.L=381.455; hAC18.L=389.509; hAC20.L=1095.317;
3357 hAC23.L=6.896; hAC26.L=712.123; hAC29.L=719.019;
3358 hAC31.L=1498.7; hAC34.L=6.108; hAC37.L=550.6;
3359 hAC40.L=556.708; hAC42.L=1479.085; hacAC09.L=400.225;
3360 hacAC20.L=404.239; hacAC31.L=725.831; hacAC42.L=698.262;
3361 hc301.L=3202.309; hc302.L=362.16; hc303.L=3564.469;
3362 hc306.L=4694.871; hc307.L=3144.814; hc308.L=2047.223;
3363 hc309.L=2011.834; hc310.L=732.158; hc311.L=1279.676;
3364 hc312.L=1592.117; hc312liq.L=1097.591; hc315.L=1007.31;
3365 hc316.L=1177.087; hc317.L=1206.034; hc318.L=1036.258;
3366 hc319.L=948.614; hc321.L=63.005; hc322.L=861.064;
3367 hc323.L=519.83; hc324.L=824.202; hc325.L=576.997;
3368 hc326.L=469.229; hc329.L=437.948; hc401.L=1191.06;
3369 hc402.L=1195.852; hc403.L=1256.207; hc404.L=1308.674;
3370 hc405.L=732.132; hc406.L=679.665; hc407.L=494.768;
3371 hc408.L=2583.757; hc408vap.L=3369.113; hc409.L=3561.113;
3372 hc410.L=589.132; hc410vap.L=826.439; hc411.L=866.516;
3373 hc412.L=41.665; hc412liq.L=30.115; hc413.L=23.373;
3374 hc414.L=2726.349; hc414liq.L=1918.758; hc415.L=1687.138;
3375 hc417.L=79.433; hc418.L=1766.572; hc419.L=1748.594;

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3376 hC425.L=2663.701; hC426.L=2074.569; hC427.L=2889.353;
3377 hC428.L=2022.838; hC430.L=2637.618; hC431.L=2855.907;
3378 hC432.L=2814.242; hC623.L=54.051; hC625.L=10;
3379 hC627.L=10; hC629.L=151.308; hHC01.L=454.527;
3380 hHC02.L=449.735; hHC03.L=1811.6; hHC04.L=1751.245;
3381 hHC05.L=1699.117; hHC06.L=2148.851; hHC07.L=536.914;
3382 hHC11.L=538.109; hHC14.L=536.914; hHC16.L=536.914;
3383 hHC29.L=469.914; hHC30.L=522.042; hHC31.L=4393.369;
3384 hHC32.L=917.516; hHC34.L=292.895; hHC38.L=157.699;
3385 hHC41.L=232.767; hHC45.L=234.155; h1HC29.L=177.154;
3386 h1HC30.L=100.685; h1HC31.L=1191.06; h1R1.L=1374.506;
3387 h1R29.L=1077.84; hR1.L=3645.969; hR29.L=3871.327;
3388 hSC401.L=298.275; hSC402.L=301.683; hSC403.L=223.217;
3389 hSC404.L=219.81; hSC405.L=193.288; hSC406.L=915.321;
3390 hSC407.L=1775.662; hSC408.L=921.092; hSC409.L=872.425;
3391 hSC411.L=786.391; hSC412.L=86.033; hSC413.L=79.433;
3392 hSC414.L=0; hvHC29.L=292.759; hvHC30.L=421.357;
3393 hvHC31.L=3202.309; hvR1.L=2271.462; hvR29.L=2793.488;
3394 K1C323.L=2.018; K1C325.L=1; K1C408.L=7.956;
3395 K1C414.L=2.523; K1C428.L=4.259; K1C430.L=3.799;
3396 K1C601.L=2.666; K1C603.L=1.267; K1C606A.L=1.812;
3397 K1C606C.L=4.173; K1C614B.L=2.98; K1C615_A.L=2.404;
3398 K1C616_A.L=2.852; K1E633.L=4.427; K1E6XX.L=3.982;
3399 K1SC406.L=3.576; K1SC408.L=2.493; K2C601.L=0.784;
3400 K2E633.L=1.253; K2E6XX.L=1.127; K2SC406.L=1.122;
3401 K2SC408.L=0.723; K3C323.L=0.887; K3C325.L=0.401;
3402 K3C408.L=3.836; K3C414.L=1.052; K3C428.L=1.897;
3403 K3C430.L=1.668; K3C601.L=1.067; K3C603.L=0.525;
3404 K3C606A.L=0.723; K3C606C.L=1.851; K3C614B.L=0.93;
3405 K3C615_A.L=0.981; K3C616_A.L=1.021; K3E633.L=1.492;
3406 K3E6XX.L=1.342; K3SC406.L=1.488; K3SC408.L=0.989;
3407 K4C323.L=0.673; K4C325.L=0.29; K4C408.L=3.023;
3408 K4C414.L=0.776; K4C428.L=1.45; K4C430.L=1.266;
3409 K4C601.L=0.769; K4C603.L=0.386; K4C606A.L=0.52;
3410 K4C606C.L=1.413; K4C614B.L=0.58; K4C615_A.L=0.708;
3411 K4C616_A.L=0.686; K4E633.L=0.978; K4E6XX.L=0.88;
3412 K4SC406.L=1.096; K4SC408.L=0.709; K5C323.L=0.308;
3413 K5C325.L=0.12; K5C408.L=1.509; K5C414.L=0.335;
3414 K5C428.L=0.673; K5C430.L=0.579; K5C601.L=0.317;
3415 K5C603.L=0.165; K5C606A.L=0.213; K5C606C.L=0.653;
3416 K5C614B.L=0.162; K5C615_A.L=0.272; K5C616_A.L=0.225;
3417 K5E633.L=0.334; K5E6XX.L=0.301; K5SC406.L=0.472;
3418 K5SC408.L=0.289; K6C601.L=0.247; K6SC406.L=0.375;
3419 K6SC408.L=0.224; K7C323.L=0.12; K7C325.L=0.04;
3420 K7C408.L=0.674; K7C414.L=0.12; K7C428.L=0.268;
3421 K7C430.L=0.226; K7C601.L=0.105; K7C603.L=0.058;

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3422 K7C606A.L=0.071; K7C614B.L=0.039; K7C615_A.L=0.103;
3423 K7C616_A.L=0.068; K7E633.L=0.081; K7E6XX.L=0.073;
3424 K7SC406.L=0.168; K7SC408.L=0.095; Kp1C601.L=3.197;
3425 Kp1C603.L=1.79; Kp1C606A.L=2.282; Kp1C606D.L=6.131;
3426 Kp2C601.L=0.979; Kp3C601.L=1.311; Kp3C603.L=0.775;
3427 Kp3C606A.L=0.939; Kp3C606D.L=2.859; Kp4C601.L=0.958;
3428 Kp4C603.L=0.584; Kp4C606A.L=0.688; Kp4C606D.L=2.23;
3429 Kp5C601.L=0.406; Kp5C603.L=0.263; Kp5C606A.L=0.292;
3430 Kp5C606D.L=1.082; Kp6C601.L=0.32; Kp7C601.L=0.141;
3431 Kp7C603.L=0.1; Kp7C606A.L=0.102; Kp7C606D.L=0.462;
3432 kWad1.L=171.048; kWad2.L=288.952; LpC601.L=1.757;
3433 LpC603.L=2.365; LpC606A.L=2.651; PC303.L=101;
3434 PC306.L=870; PC307.L=800; PC308.L=800;
3435 PC309.L=780; PC311.L=261.214; PC312.L=800;
3436 PHC30.L=121.513; PHC32.L=101.847; PR29.L=135.084;
3437 Profit.L=20; Q2HC07.L=0.035; Q2HC11.L=0.035;
3438 Q2HC14.L=0.035; Q2HC16.L=0.035; qFp1C606A.L=0.007;
3439 qFp3C606A.L=0.00098; qFp4C606A.L=0.865; qFp5C606A.L=0.6;
3440 qFp7C606A.L=0.278; qS1C606A.L=0.796; qS3C606A.L=0.509;
3441 qS4C606A.L=0.046; qS5C606A.L=0.027; qS7C606A.L=0.008;
3442 r10C623.L=0; r10C625.L=0; r10C627.L=0.00000137;
3443 r10C629.L=0.00000117; r2C623.L=0.009; r2C625.L=0.009;
3444 r2C627.L=0.009; r2C629.L=0.009; r3C623.L=0.01;
3445 r3C625.L=0.01; r3C627.L=0.01; r3C629.L=0.01;
3446 r4C623.L=0.001; r4C625.L=0.001; r4C627.L=0.001;
3447 r4C629.L=0.001; r5C623.L=0.00000781; r5C625.L=0.0000117;
3448 r5C627.L=0.0000201; r5C629.L=0.0000167; r7C623.L=0;
3449 r7C625.L=0; r7C627.L=0; r7C629.L=0;
3450 r8C623.L=0.00000817; r8C625.L=0.0000121; r8C627.L=0.0000203;
3451 r8C629.L=0.000017; r9C623.L=0.009; r9C625.L=0.009;
3452 r9C627.L=0.009; r9C629.L=0.009; rho2HC07.L=650;
3453 rho2HC11.L=650; rho2HC14.L=650; rho2HC16.L=650;
3454 rhoAC09.L=1700; rhoAC20.L=1700; rhoAC31.L=1700;
3455 rhoAC42.L=1700; riC10C623.L=0; riC10C625.L=0;
3456 riC10C627.L=0; riC10C629.L=0; riC11C623.L=0;
3457 riC11C625.L=0; riC11C627.L=0.00000114; riC11C629.L=0;
3458 sf1S34.L=0.026; sf2S34.L=0.066; sfS11.L=0.5;
3459 sfS19.L=0.491; sfS2.L=0.886; sfS23.L=0.65;
3460 sfS27.L=0.499; sfS41.L=0.985; sfS42.L=0.779;
3461 sfS5.L=0.25; sfS7.L=0.334; SmlC601.L=2.57;
3462 SmlC603.L=0.539; SmlC606A.L=2.422; SmlC606D.L=2.936;
3463 Sm2C601.L=0.787; Sm3C601.L=1.054; Sm3C603.L=0.233;
3464 Sm3C606A.L=0.997; Sm3C606D.L=1.308; Sm4C601.L=0.77;
3465 Sm4C603.L=0.176; Sm4C606A.L=0.73; Sm4C606D.L=1;
3466 Sm5C601.L=0.326; Sm5C603.L=0.079; Sm5C606A.L=0.31;
3467 Sm5C606D.L=0.464; Sm6C601.L=0.257; Sm7C601.L=0.113;

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3468 Sm7C603.L=0.03; Sm7C606A.L=0.108; Sm7C606D.L=0.185;
3469 Sn1C601.L=2.958; Sn1C603.L=1.358; Sn1C606A.L=3.483;
3470 Sn2C601.L=0.87; Sn3C601.L=1.184; Sn3C603.L=0.562;
3471 Sn3C606A.L=1.39; Sn4C601.L=0.853; Sn4C603.L=0.413;
3472 Sn4C606A.L=1; Sn5C601.L=0.351; Sn5C603.L=0.177;
3473 Sn5C606A.L=0.41; Sn6C601.L=0.274; Sn7C601.L=0.117;
3474 Sn7C603.L=0.062; Sn7C606A.L=0.136; TAC02.L=276;
3475 TAC05.L=280.004; TAC07.L=279.99; TAC15.L=280;
3476 TAC18.L=280.063; TAC20.L=280; TAC26.L=280.105;
3477 TAC29.L=280.224; TAC37.L=281.963; TAC40.L=281.981;
3478 TC301.L=282.932; TC302.L=259.254; TC309.L=324.429;
3479 TC310.L=288.704; TC311.L=288.704; TC312.L=328.661;
3480 TC318.L=321.965; TC319.L=301.113; TC320.L=301.113;
3481 TC322.L=301.113; TC323.L=359; TC326.L=322.937;
3482 TC328.L=322.937; TC329.L=322.937; TC401.L=282.932;
3483 TC402.L=283.85; TC403.L=295.279; TC406.L=388.5;
3484 TC409.L=461; TC411.L=404.6; TC412.L=363.414;
3485 TC413.L=301; TC415.L=305.99; TC417.L=299.989;
3486 TC425.L=363.414; TC426.L=363.414; TC427.L=375.65;
3487 TC428.L=365.245; TC430.L=358.683; TC431.L=363.414;
3488 TC432.L=363.414; TcwotE609A.L=308.852; TcwotE621A.L=326.829;
3489 TcwotE621B.L=298; TcwotE627A.L=295; TcwotE627B.L=293;
3490 TcwoutE641A.L=318.661; TcwoutE641B.L=314.429; TcwoutE603.L=321.814;
3491 TcwoutE605.L=302.221; TcwoutE611.L=299.764; TcwoutE613.L=305.874;
3492 TcwoutE617.L=318.399; TcwoutE626.L=295.918; TcwoutE634.L=341.007;
3493 TcwoutE640.L=311.08; THC01.L=295.504; THC02.L=292.932;
3494 THC03.L=303.279; THC04.L=295.426; THC05.L=288.522;
3495 THC06.L=289.396; THC07.L=289.396; THC11.L=289.396;
3496 THC14.L=289.396; THC16.L=289.396; THC22.L=281.963;
3497 THC23.L=280.105; THC24.L=281.035; THC25.L=280;
3498 THC26.L=280.715; THC27.L=280.004; THC28.L=280.522;
3499 THC29.L=280.522; THC30.L=280.522; THC31.L=282.932;
3500 THC34.L=259.254; THC38.L=259.254; THC41.L=259.254;
3501 THC45.L=259.254; TmC601.L=330.505; TmC603.L=352.33;
3502 TmC606A.L=331.841; TmC606D.L=387.623; TmK601.L=306.796;
3503 TnC601.L=321.916; TnC603.L=334.298; TnC606A.L=320.914;
3504 TR1.L=280.522; TR29.L=280.522; TSC401.L=322.219;
3505 TSC404.L=332.219; TSC406.L=336.03; TSC407.L=336.03;
3506 TSC409.L=318.852; TSC411.L=318.852; TSC412.L=318.852;
3507 TSC414.L=320; Utilities.L=8.027; VFC614B.L=0.181;
3508 VFC615.L=0.347; VFC616.L=0.258; VFM3.L=0.492;
3509 VpC601.L=1.412; VpC603.L=0.712; VpC606A.L=2.814;
3510 x10AC09.L=0; x10AC20.L=0; x10AC31.L=0;
3511 x10AC42.L=0; x11AC02.L=0.998; x11AC05.L=0.971;
3512 x11AC07.L=0.972; x11AC09.L=0.784; x11AC15.L=0.944;
3513 x11AC18.L=0.944; x11AC20.L=0.819; x11AC26.L=0.917;

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3514 x11AC29.L=0.917; x11AC31.L=0.848; x11AC37.L=0.89;
3515 x11AC40.L=0.89; x11AC42.L=0.809; x12AC02.L=0.002;
3516 x12AC05.L=0.029; x12AC07.L=0.028; x12AC09.L=0.023;
3517 x12AC12.L=0.029; x12AC15.L=0.056; x12AC18.L=0.056;
3518 x12AC20.L=0.049; x12AC23.L=0.056; x12AC26.L=0.083;
3519 x12AC29.L=0.083; x12AC31.L=0.077; x12AC34.L=0.083;
3520 x12AC37.L=0.11; x12AC40.L=0.11; x12AC42.L=0.1;
3521 x12AC45.L=0.11; x1AC09.L=0.009; x1AC20.L=0.007;
3522 x1AC31.L=0.004; x1AC42.L=0.004; x1C301.L=0.068;
3523 x1C302.L=0.069; x1C303.L=0.068; x1C306.L=0.072;
3524 x1C307.L=0.072; x1C308.L=0.048; x1C309.L=0.048;
3525 x1C310.L=0.094; x1C311.L=0.031; x1C312.L=0.119;
3526 x1C315.L=0.119; x1C317.L=0.094; x1C318.L=0.094;
3527 x1C319.L=0.094; x1C320.L=0.094; x1C321.L=0.094;
3528 x1C322.L=0.094; x1C323.L=0.094; x1C324.L=0.094;
3529 x1C326.L=1; x1C328.L=1; x1C329.L=1;
3530 x1C401.L=0.015; x1C402.L=0.015; x1C403.L=0.015;
3531 x1C404.L=0.015; x1C405.L=0; x1C406.L=0;
3532 x1C407.L=0; x1C408.L=0; x1C409.L=0;
3533 x1C410.L=0.0001; x1C411.L=0.0001; x1C412.L=0.000463;
3534 x1C413.L=0.000463; x1C414.L=0.061; x1C415.L=0.061;
3535 x1C418.L=0.059; x1C419.L=0.059; x1C425.L=0.0001;
3536 x1C426.L=0.0001; x1C427.L=0.000132; x1C428.L=0.000145;
3537 x1C430.L=0.0000468; x1C431.L=0.000463; x1C432.L=0.000463;
3538 x1HC01.L=0.055; x1HC02.L=0.055; x1HC03.L=0.06;
3539 x1HC04.L=0.06; x1HC05.L=0.06; x1HC06.L=0.059;
3540 x1HC07.L=0.059; x1HC08.L=0.059; x1HC11.L=0.059;
3541 x1HC14.L=0.059; x1HC15.L=0.059; x1HC16.L=0.059;
3542 x1HC22.L=0.047; x1HC23.L=0.047; x1HC24.L=0.047;
3543 x1HC25.L=0.05; x1HC26.L=0.048; x1HC27.L=0.045;
3544 x1HC28.L=0.019; x1HC29.L=0.019; x1HC30.L=0.012;
3545 x1HC31.L=0.015; x1HC33.L=0.023; x1HC34.L=0.023;
3546 x1HC38.L=0.023; x1HC40.L=0.023; x1HC41.L=0.023;
3547 x1HC45.L=0.023; x1R1.L=0.019; x1R29.L=0.015;
3548 x1SC401.L=0.006; x1SC404.L=0.0000081; x1SC405.L=0.0000081;
3549 x1SC406.L=0.0000081; x1SC407.L=0.0000081; x1SC409.L=0.02;
3550 x1SC411.L=0.02; x1SC412.L=0.02; x1SC413.L=0.02;
3551 x1SC414.L=0.1; x2AC09.L=0; x2AC20.L=0;
3552 x2AC31.L=0; x2AC42.L=0; x2C301.L=0;
3553 x2C417.L=0.00031; x2C418.L=0.000922; x2C419.L=0.000922;
3554 x2HC01.L=0.1; x2HC02.L=0.1; x2HC03.L=0.000889;
3555 x2HC04.L=0.000889; x2HC05.L=0.000889; x2HC06.L=0.022;
3556 x2HC07.L=0.022; x2HC08.L=0.022; x2HC11.L=0.022;
3557 x2HC14.L=0.022; x2HC15.L=0.022; x2HC16.L=0.022;
3558 x2HC22.L=0; x2HC23.L=0; x2HC24.L=0;
3559 x2HC25.L=0; x2HC26.L=0; x2HC27.L=0;

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3560 x2HC28.L=0; x2HC29.L=0; x2HC30.L=0;
3561 x2HC31.L=0; x2R1.L=0; x2R29.L=0;
3562 x2SC401.L=0.009; x2SC404.L=0.012; x2SC405.L=0.012;
3563 x2SC406.L=0.012; x2SC407.L=0.012; x2SC409.L=0.00031;
3564 x2SC411.L=0.00031; x2SC412.L=0.00031; x2SC413.L=0.00031;
3565 x2SC414.L=0.1; x3AC09.L=0.132; x3AC20.L=0.088;
3566 x3AC31.L=0.051; x3AC42.L=0.062; x3C301.L=0.781;
3567 x3C302.L=0.71; x3C303.L=0.774; x3C306.L=0.78;
3568 x3C307.L=0.78; x3C308.L=0.775; x3C309.L=0.775;
3569 x3C310.L=0.812; x3C311.L=0.762; x3C312.L=0.79;
3570 x3C315.L=0.79; x3C317.L=0.813; x3C318.L=0.813;
3571 x3C319.L=0.813; x3C320.L=0.813; x3C321.L=0.813;
3572 x3C322.L=0.813; x3C323.L=0.813; x3C324.L=0.813;
3573 x3C326.L=0.00000166; x3C328.L=0.00000166; x3C329.L=0.00000166;
3574 x3C401.L=0.51; x3C402.L=0.51; x3C403.L=0.51;
3575 x3C404.L=0.51; x3C405.L=0.00000694; x3C406.L=0.00000694;
3576 x3C407.L=0.00000694; x3C408.L=0.00000694; x3C409.L=0.00000694;
3577 x3C410.L=0.000406; x3C411.L=0.000406; x3C412.L=0.000834;
3578 x3C413.L=0.000834; x3C414.L=0.83; x3C415.L=0.83;
3579 x3C418.L=0.837; x3C419.L=0.837; x3C425.L=0.000406;
3580 x3C426.L=0.000406; x3C427.L=0.000533; x3C428.L=0.000586;
3581 x3C430.L=0.000634; x3C431.L=0.000834; x3C432.L=0.000834;
3582 x3HC01.L=0.01; x3HC02.L=0.01; x3HC03.L=0.836;
3583 x3HC04.L=0.836; x3HC05.L=0.836; x3HC06.L=0.656;
3584 x3HC07.L=0.656; x3HC08.L=0.656; x3HC11.L=0.656;
3585 x3HC14.L=0.656; x3HC15.L=0.656; x3HC16.L=0.656;
3586 x3HC22.L=0.677; x3HC23.L=0.677; x3HC24.L=0.677;
3587 x3HC25.L=0.665; x3HC26.L=0.673; x3HC27.L=0.684;
3588 x3HC28.L=0.568; x3HC29.L=0.568; x3HC30.L=0.446;
3589 x3HC31.L=0.51; x3HC33.L=0.774; x3HC34.L=0.774;
3590 x3HC38.L=0.774; x3HC40.L=0.774; x3HC41.L=0.774;
3591 x3HC45.L=0.774; x3R1.L=0.568; x3R29.L=0.516;
3592 x3SC401.L=0.293; x3SC404.L=0.021; x3SC405.L=0.021;
3593 x3SC406.L=0.021; x3SC407.L=0.021; x3SC409.L=0.967;
3594 x3SC411.L=0.967; x3SC412.L=0.967; x3SC413.L=0.967;
3595 x3SC414.L=0.5; x4AC09.L=0.02; x4AC20.L=0.014;
3596 x4AC31.L=0.008; x4AC42.L=0.01; x4C301.L=0.105;
3597 x4C302.L=0.073; x4C303.L=0.101; x4C306.L=0.099;
3598 x4C307.L=0.099; x4C308.L=0.108; x4C309.L=0.108;
3599 x4C310.L=0.084; x4C311.L=0.117; x4C312.L=0.08;
3600 x4C315.L=0.08; x4C317.L=0.082; x4C318.L=0.082;
3601 x4C319.L=0.082; x4C320.L=0.082; x4C321.L=0.082;
3602 x4C322.L=0.082; x4C323.L=0.082; x4C324.L=0.082;
3603 x4C325.L=0; x4C326.L=0; x4C328.L=0;
3604 x4C329.L=0; x4C401.L=0.104; x4C402.L=0.104;
3605 x4C403.L=0.104; x4C404.L=0.104; x4C405.L=0.059;

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3606 x4C406.L=0.059; x4C407.L=0.059; x4C408.L=0.059;
3607 x4C409.L=0.059; x4C410.L=0.527; x4C411.L=0.527;
3608 x4C412.L=0.826; x4C413.L=0.826; x4C414.L=0.095;
3609 x4C415.L=0.095; x4C418.L=0.092; x4C419.L=0.092;
3610 x4C425.L=0.527; x4C426.L=0.527; x4C427.L=0.676;
3611 x4C428.L=0.738; x4C430.L=0.641; x4C431.L=0.826;
3612 x4C432.L=0.826; x4HC01.L=0.085; x4HC02.L=0.085;
3613 x4HC03.L=0.091; x4HC04.L=0.091; x4HC05.L=0.091;
3614 x4HC06.L=0.09; x4HC07.L=0.09; x4HC08.L=0.09;
3615 x4HC11.L=0.09; x4HC14.L=0.09; x4HC15.L=0.09;
3616 x4HC16.L=0.09; x4HC22.L=0.105; x4HC23.L=0.105;
3617 x4HC24.L=0.105; x4HC25.L=0.102; x4HC26.L=0.104;
3618 x4HC27.L=0.106; x4HC28.L=0.109; x4HC29.L=0.109;
3619 x4HC30.L=0.096; x4HC31.L=0.104; x4HC33.L=0.127;
3620 x4HC34.L=0.127; x4HC38.L=0.127; x4HC40.L=0.127;
3621 x4HC41.L=0.127; x4HC45.L=0.127; x4R1.L=0.109;
3622 x4R29.L=0.105; x4SC401.L=0.562; x4SC404.L=0.784;
3623 x4SC405.L=0.784; x4SC406.L=0.784; x4SC407.L=0.784;
3624 x4SC409.L=0.013; x4SC411.L=0.013; x4SC412.L=0.013;
3625 x4SC413.L=0.013; x4SC414.L=0.1; x5AC09.L=0.006;
3626 x5AC20.L=0.004; x5AC31.L=0.002; x5AC42.L=0.003;
3627 x5C301.L=0.019; x5C302.L=0.005; x5C303.L=0.017;
3628 x5C306.L=0.015; x5C307.L=0.015; x5C308.L=0.021;
3629 x5C309.L=0.021; x5C310.L=0.006; x5C311.L=0.026;
3630 x5C312.L=0.006; x5C315.L=0.006; x5C317.L=0.006;
3631 x5C318.L=0.006; x5C319.L=0.006; x5C320.L=0.006;
3632 x5C321.L=0.006; x5C322.L=0.006; x5C323.L=0.006;
3633 x5C324.L=0.006; x5C325.L=0; x5C326.L=0;
3634 x5C328.L=0; x5C329.L=0; x5C401.L=0.054;
3635 x5C402.L=0.054; x5C403.L=0.054; x5C404.L=0.054;
3636 x5C405.L=0.14; x5C406.L=0.14; x5C407.L=0.14;
3637 x5C408.L=0.14; x5C409.L=0.14; x5C410.L=0.099;
3638 x5C411.L=0.099; x5C412.L=0.072; x5C413.L=0.072;
3639 x5C414.L=0.001; x5C415.L=0.001; x5C418.L=0.001;
3640 x5C419.L=0.001; x5C425.L=0.099; x5C426.L=0.099;
3641 x5C427.L=0.086; x5C428.L=0.08; x5C430.L=0.088;
3642 x5C431.L=0.072; x5C432.L=0.072; x5HC01.L=0.15;
3643 x5HC02.L=0.15; x5HC03.L=0.001; x5HC04.L=0.001;
3644 x5HC05.L=0.001; x5HC06.L=0.034; x5HC07.L=0.034;
3645 x5HC08.L=0.034; x5HC11.L=0.034; x5HC14.L=0.034;
3646 x5HC15.L=0.034; x5HC16.L=0.034; x5HC22.L=0.033;
3647 x5HC23.L=0.033; x5HC24.L=0.033; x5HC25.L=0.033;
3648 x5HC26.L=0.033; x5HC27.L=0.032; x5HC28.L=0.049;
3649 x5HC29.L=0.049; x5HC30.L=0.058; x5HC31.L=0.054;
3650 x5HC33.L=0.03; x5HC34.L=0.03; x5HC38.L=0.03;
3651 x5HC40.L=0.03; x5HC41.L=0.03; x5HC45.L=0.03;

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3652 x5R1.L=0.049; x5R29.L=0.054; x5SC401.L=0.052;
3653 x5SC404.L=0.073; x5SC405.L=0.073; x5SC406.L=0.073;
3654 x5SC407.L=0.073; x5SC409.L=0; x5SC411.L=0;
3655 x5SC412.L=0; x5SC413.L=0; x5SC414.L=0;
3656 x6SC401.L=0.071; x6SC404.L=0.1; x6SC405.L=0.1;
3657 x6SC406.L=0.1; x6SC407.L=0.1; x6SC409.L=0;
3658 x6SC411.L=0; x6SC412.L=0; x6SC413.L=0;
3659 x6SC414.L=0.1; x7AC09.L=0.02; x7AC20.L=0.015;
3660 x7AC31.L=0.008; x7AC42.L=0.01; x7C301.L=0.027;
3661 x7C302.L=0.144; x7C303.L=0.039; x7C306.L=0.033;
3662 x7C307.L=0.033; x7C308.L=0.048; x7C309.L=0.048;
3663 x7C310.L=0.005; x7C311.L=0.064; x7C312.L=0.005;
3664 x7C315.L=0.005; x7C316.L=0.005; x7C317.L=0.005;
3665 x7C318.L=0.005; x7C319.L=0.005; x7C320.L=0.005;
3666 x7C321.L=0.005; x7C322.L=0.005; x7C323.L=0.005;
3667 x7C324.L=0.005; x7C325.L=0; x7C326.L=0;
3668 x7C328.L=0; x7C329.L=0; x7C401.L=0.316;
3669 x7C402.L=0.316; x7C403.L=0.316; x7C404.L=0.316;
3670 x7C405.L=0.801; x7C406.L=0.801; x7C407.L=0.801;
3671 x7C408.L=0.801; x7C409.L=0.801; x7C410.L=0.374;
3672 x7C411.L=0.374; x7C412.L=0.101; x7C413.L=0.101;
3673 x7C414.L=0.012; x7C415.L=0.012; x7C417.L=0.00031;
3674 x7C418.L=0.011; x7C419.L=0.011; x7C425.L=0.374;
3675 x7C426.L=0.374; x7C427.L=0.238; x7C428.L=0.181;
3676 x7C430.L=0.271; x7C431.L=0.101; x7C432.L=0.101;
3677 x7HC01.L=0.6; x7HC02.L=0.6; x7HC03.L=0.01;
3678 x7HC04.L=0.01; x7HC05.L=0.01; x7HC06.L=0.139;
3679 x7HC07.L=0.139; x7HC08.L=0.139; x7HC11.L=0.139;
3680 x7HC14.L=0.139; x7HC15.L=0.139; x7HC16.L=0.139;
3681 x7HC22.L=0.138; x7HC23.L=0.139; x7HC24.L=0.139;
3682 x7HC25.L=0.15; x7HC26.L=0.142; x7HC27.L=0.131;
3683 x7HC28.L=0.255; x7HC29.L=0.255; x7HC30.L=0.389;
3684 x7HC31.L=0.316; x7HC33.L=0.046; x7HC34.L=0.046;
3685 x7HC38.L=0.046; x7HC40.L=0.046; x7HC41.L=0.046;
3686 x7HC45.L=0.046; x7R1.L=0.255; x7R29.L=0.31;
3687 x7SC401.L=0.007; x7SC404.L=0.01; x7SC405.L=0.01;
3688 x7SC406.L=0.01; x7SC407.L=0.01; x7SC409.L=0;
3689 x7SC411.L=0; x7SC412.L=0; x7SC413.L=0;
3690 x7SC414.L=0.1; x8AC09.L=0.00000448; x8AC20.L=0.00000554;
3691 x8AC31.L=0.00000475; x8AC42.L=0.00000478; x9AC09.L=0.005;
3692 x9AC20.L=0.005; x9AC31.L=0.002; x9AC42.L=0.003;
3693 xAC02.L=0.5; xAC05.L=0.498; xAC07.L=0.498;
3694 xAC09.L=0.482; xAC12.L=0.498; xAC15.L=0.496;
3695 xAC18.L=0.496; xAC20.L=0.485; xAC23.L=0.496;
3696 xAC26.L=0.494; xAC29.L=0.494; xAC31.L=0.488;
3697 xAC34.L=0.494; xAC37.L=0.492; xAC40.L=0.492;

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3698 xAC42.L=0.484; xiC10AC09.L=0; xiC10AC20.L=0;
3699 xiC10AC31.L=0; xiC10AC42.L=0; xiC11AC09.L=0;
3700 xiC11AC20.L=0; xiC11AC31.L=0; xiC11AC42.L=0;
3701 xM1C606D.L=0.0000485; xM3C606D.L=0.000334; xM4C606D.L=0.55;
3702 xM5C606D.L=0.104; xM7C606D.L=0.346; xx1C302.L=0.093;
3703 xx1C308.L=0.063; xx1C310.L=0.12; xx1C311.L=0.042;
3704 xx1C312.L=0.151; xx1C323.L=0.12; xx1C325.L=1;
3705 xx1C405.L=0; xx1C408.L=0; xx1C425.L=0.000153;
3706 xx1C428.L=0.000207; xx1C430.L=0.0000689; xx1C431.L=0.00064;
3707 xx1HC28.L=0.027; xx1HC29.L=0.027; xx1HC30.L=0.018;
3708 xx1HC32.L=0.031; xx1R1.L=0.027; xx1R29.L=0.023;
3709 xx1SC406.L=0.0000111; xx1SC408.L=0.026; xx2HC28.L=0;
3710 xx2HC29.L=0; xx2HC30.L=0; xx2R1.L=0;
3711 xx2R29.L=0; xx2SC406.L=0.013; xx2SC408.L=0.000319;
3712 xx3C302.L=0.729; xx3C308.L=0.779; xx3C310.L=0.791;
3713 xx3C311.L=0.774; xx3C312.L=0.764; xx3C323.L=0.792;
3714 xx3C325.L=0.00000126; xx3C405.L=0.00000975; xx3C408.L=0.00000975;
3715 xx3C425.L=0.000473; xx3C428.L=0.000633; xx3C430.L=0.000709;
3716 xx3C431.L=0.000875; xx3C432.L=0.000875; xx3HC28.L=0.621;
3717 xx3HC29.L=0.621; xx3HC30.L=0.515; xx3HC32.L=0.784;
3718 xx3R1.L=0.621; xx3R29.L=0.578; xx3SC406.L=0.021;
3719 xx3SC408.L=0.961; xx4C302.L=0.075; xx4C308.L=0.109;
3720 xx4C310.L=0.082; xx4C311.L=0.119; xx4C312.L=0.077;
3721 xx4C323.L=0.08; xx4C325.L=0; xx4C405.L=0.083;
3722 xx4C408.L=0.083; xx4C409.L=0.083; xx4C425.L=0.613;
3723 xx4C427.L=0.746; xx4C428.L=0.797; xx4C430.L=0.716;
3724 xx4C431.L=0.867; xx4C432.L=0.867; xx4HC28.L=0.12;
3725 xx4HC29.L=0.12; xx4HC30.L=0.11; xx4HC32.L=0.129;
3726 xx4R1.L=0.12; xx4R29.L=0.117; xx4SC406.L=0.814;
3727 xx4SC408.L=0.012; xx5C302.L=0.004; xx5C308.L=0.017;
3728 xx5C310.L=0.005; xx5C311.L=0.021; xx5C312.L=0.005;
3729 xx5C323.L=0.005; xx5C325.L=0; xx5C405.L=0.158;
3730 xx5C408.L=0.158; xx5C425.L=0.093; xx5C428.L=0.07;
3731 xx5C430.L=0.079; xx5C431.L=0.061; xx5HC28.L=0.044;
3732 xx5HC29.L=0.044; xx5HC30.L=0.054; xx5HC32.L=0.025;
3733 xx5R1.L=0.044; xx5R29.L=0.049; xx5SC406.L=0.061;
3734 xx5SC408.L=0; xx6SC406.L=0.084; xx6SC408.L=0;
3735 xx7C302.L=0.1; xx7C308.L=0.033; xx7C310.L=0.003;
3736 xx7C311.L=0.044; xx7C312.L=0.003; xx7C323.L=0.004;
3737 xx7C325.L=0; xx7C405.L=0.759; xx7C408.L=0.759;
3738 xx7C425.L=0.293; xx7C428.L=0.132; xx7C430.L=0.204;
3739 xx7C431.L=0.071; xx7HC28.L=0.188; xx7HC29.L=0.188;
3740 xx7HC30.L=0.303; xx7HC32.L=0.031; xx7R1.L=0.188;
3741 xx7R29.L=0.234; xx7SC406.L=0.007; xx7SC408.L=0;
3742 y1HC28.L=0.077; y1HC29.L=0.077; y1HC30.L=0.062;
3743 y1HC31.L=0.068; y1R1.L=0.077; y1R29.L=0.069;

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3744 y2HC28.L=0; y2HC29.L=0; y2HC30.L=0;
3745 y2HC31.L=0; y2R1.L=0; y2R29.L=0;
3746 y3HC28.L=0.789; y3HC29.L=0.789; y3HC30.L=0.771;
3747 y3HC31.L=0.781; y3R1.L=0.789; y3R29.L=0.783;
3748 y4HC28.L=0.1; y4HC29.L=0.1; y4HC30.L=0.108;
3749 y4HC31.L=0.105; y4R1.L=0.1; y4R29.L=0.104;
3750 y5HC28.L=0.015; y5HC29.L=0.015; y5HC30.L=0.022;
3751 y5HC31.L=0.019; y5R1.L=0.015; y5R29.L=0.018;
3752 y7HC28.L=0.019; y7HC29.L=0.019; y7HC30.L=0.037;
3753 y7HC31.L=0.027; y7R1.L=0.019; y7R29.L=0.026;
3754 yy1HC28.L=0.1; yy1HC29.L=0.1; yy1HC30.L=0.081;
3755 yy1R1.L=0.1; yy1R29.L=0.09; yy2HC28.L=0;
3756 yy2HC29.L=0; yy2HC30.L=0; yy2R1.L=0;
3757 yy2R29.L=0; yy3HC28.L=0.777; yy3HC29.L=0.777;
3758 yy3HC30.L=0.768; yy3R1.L=0.777; yy3R29.L=0.775;
3759 yy4HC28.L=0.098; yy4HC29.L=0.098; yy4HC30.L=0.108;
3760 yy4R1.L=0.098; yy4R29.L=0.103; yy5HC28.L=0.012;
3761 yy5HC29.L=0.012; yy5HC30.L=0.018; yy5R1.L=0.012;
3762 yy5R29.L=0.015; yy7HC28.L=0.013; yy7HC29.L=0.013;
3763 yy7HC30.L=0.025; yy7R1.L=0.013; yy7R29.L=0.017;
3764 C10pC623.LO=0; C10pC625.LO=0; C10pC627.LO=0;
3765 C10pC629.LO=0; C2C623.LO=0; C2C625.LO=0;
3766 C2C627.LO=0; C2C629.LO=0; C3C623.LO=0;
3767 C3C625.LO=0; C3C627.LO=0; C3C629.LO=0;
3768 C3pC623.LO=0; C3pC625.LO=0; C3pC627.LO=0;
3769 C3pC629.LO=0; C4pC623.LO=0; C4pC625.LO=0;
3770 C4pC627.LO=0; C4pC629.LO=0; C5pC623.LO=0;
3771 C5pC625.LO=0; C5pC627.LO=0; C5pC629.LO=0;
3772 C7pC623.LO=0; C7pC625.LO=0; C7pC627.LO=0;
3773 C7pC629.LO=0; C8pC623.LO=0; C8pC625.LO=0;
3774 C8pC627.LO=0; C8pC629.LO=0; C9pC623.LO=0;
3775 C9pC625.LO=0; C9pC627.LO=0; C9pC629.LO=0;
3776 CHXC623.LO=2.5; CHXC625.LO=2.5; CHXC627.LO=2.5;
3777 CHXC629.LO=2.5; CiC10pC623.LO=0; CiC10pC625.LO=0;
3778 CiC10pC627.LO=0; CiC10pC629.LO=0; CiC11pC623.LO=0;
3779 CiC11pC625.LO=0; CiC11pC627.LO=0; CiC11pC629.LO=0;
3780 CiC4eC623.LO=0; CiC4eC625.LO=0; CiC4eC627.LO=0;
3781 CiC4eC629.LO=0; CiC5eC623.LO=0; CiC5eC625.LO=0;
3782 CiC5eC627.LO=0; CiC5eC629.LO=0; CiC8eC623.LO=0;
3783 CiC8eC625.LO=0; CiC8eC627.LO=0; CiC8eC629.LO=0;
3784 Cost.LO=-10000; dTE601.LO=5; dTE602.LO=5;
3785 dTE603.LO=5; dTE605.LO=5; dTE609A.LO=5;
3786 dTE610.LO=5; dTE611.LO=5; dTE612.LO=10;
3787 dTE613.LO=4; dTE616.LO=10; dTE617.LO=5;
3788 dTE621A.LO=5; dTE621B.LO=5; dTE626.LO=5;
3789 dTE627A.LO=5; dTE627B.LO=5; dTE628.LO=5;

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3790 dTE629.LO=5; dTE633.LO=5; dTE634.LO=5;
3791 dTE640.LO=5; dTE641.LO=5; dTE695A.LO=5;
3792 dTE695B.LO=5; dTE696A.LO=10; dTE696B.LO=10;
3793 dTE6XX.LO=1; Earnings.LO=-10000; f1C601.LO=0;
3794 f1C603.LO=0; f1C606A.LO=0; f2C601.LO=0.5;
3795 f3C601.LO=0.05; f3C603.LO=0; f3C606A.LO=0;
3796 f4C601.LO=0.95; f4C603.LO=0; f4C606A.LO=0;
3797 f5C601.LO=0.5; f5C603.LO=0.5; f5C606A.LO=0.5;
3798 f6C601.LO=0.5; f7C601.LO=0.5; f7C603.LO=0.5;
3799 f7C606A.LO=0.5; FAC05.LO=0.1; FAC07.LO=0.1;
3800 FAC09.LO=0.01; FAC15.LO=0.1; FAC18.LO=0.1;
3801 FAC20.LO=0.01; FAC26.LO=0.1; FAC29.LO=0.1;
3802 FAC31.LO=0.01; FAC37.LO=0.1; FAC40.LO=0.1;
3803 FAC42.LO=0.01; FC301.LO=1; FC302.LO=0.1;
3804 FC303.LO=2; FC306.LO=0.1; FC307.LO=0.0001;
3805 FC309.LO=0.0001; FC310.LO=0.0001; FC311.LO=0;
3806 FC312.LO=0.0001; FC315.LO=0.0001; FC317.LO=0.1;
3807 FC318.LO=0.0001; FC319.LO=0.0001; FC321.LO=0;
3808 FC323.LO=0.5; FC324.LO=0.5; FC325.LO=0.5;
3809 FC326.LO=0.01; FC401.LO=0.1; FC402.LO=0.1;
3810 FC404.LO=0; FC405.LO=0.1; FC406.LO=0;
3811 FC408.LO=0; FC409.LO=0; FC410.LO=0.1;
3812 FC411.LO=0; FC413.LO=0; FC414.LO=0.1;
3813 FC415.LO=0; FC418.LO=0.1; FC419.LO=0.0001;
3814 FC425.LO=1; FC426.LO=0; FC427.LO=0;
3815 FC428.LO=0; FC430.LO=1; FC431.LO=0;
3816 FC432.LO=1; Fcwe603.LO=0.1; Fcwe605.LO=0.1;
3817 Fcwe609A.LO=0.01; Fcwe611.LO=0.1; Fcwe613.LO=0.1;
3818 Fcwe617.LO=1; Fcwe621A.LO=0.1; Fcwe621B.LO=0.1;
3819 Fcwe626.LO=0.1; Fcwe627A.LO=0.1; Fcwe627B.LO=0.1;
3820 Fcwe634.LO=4; Fcwe640.LO=0.4; Fcwe641A.LO=0.1;
3821 Fcwe641B.LO=0.1; FHC02.LO=0.01; FHC03.LO=1;
3822 FHC04.LO=1; FHC05.LO=1; FHC06.LO=1;
3823 FHC07.LO=1; FHC08.LO=1; FHC11.LO=1;
3824 FHC14.LO=1; FHC15.LO=1; FHC16.LO=1;
3825 FHC22.LO=1; FHC23.LO=1; FHC24.LO=1;
3826 FHC25.LO=1; FHC26.LO=1; FHC27.LO=1;
3827 FHC28.LO=1; FHC29.LO=0; FHC30.LO=0;
3828 FHC31.LO=0; FHC33.LO=0; FHC34.LO=0;
3829 FHC38.LO=0; FHC40.LO=0; FHC41.LO=0;
3830 FHC45.LO=0; FlHC28.LO=1; FlHC29.LO=0;
3831 FlHC30.LO=0; FlHC31.LO=0; FlR1.LO=0;
3832 FlR29.LO=0; FmC302.LO=0; FmC308.LO=0.0001;
3833 FmC310.LO=0; FmC311.LO=0; FmC312.LO=0;
3834 FmC317.LO=0.001; FmC322.LO=0; FmC323.LO=0;
3835 FmC325.LO=0.01; FmC405.LO=0; FmC407.LO=0;

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3836 FmC408.LO=0; FmC409.LO=0; FmC412.LO=0;
3837 FmC414.LO=0.0001; FmC425.LO=0; FmC427.LO=0;
3838 FmC428.LO=0; FmC430.LO=0; FmC431.LO=0;
3839 FmC432.LO=0; FmHC01.LO=0; FmHC32.LO=0;
3840 FmlHC28.LO=0.01; FmlHC29.LO=0; FmlHC30.LO=0;
3841 FmlR1.LO=0; FmlR29.LO=0; FmSC403.LO=0.001;
3842 FmSC406.LO=0; FmSC408.LO=0; FmvHC28.LO=0;
3843 FmvHC29.LO=0; FmvHC30.LO=0; FmvR1.LO=0;
3844 FmvR29.LO=0; FR1.LO=0; FR29.LO=0;
3845 FSC401.LO=0.1; FSC403.LO=0.1; FSC404.LO=0.1;
3846 FSC406.LO=0; FSC407.LO=0; FSC408.LO=0.05;
3847 FSC409.LO=0.05; FSC412.LO=0.102; FSC414.LO=0;
3848 FstmE602.LO=0.1; FstmE695A.LO=0; FstmE695B.LO=0.1;
3849 FstmE696A.LO=0.01; FstmE696B.LO=0.01; FvHC28.LO=0;
3850 FvHC29.LO=0; FvHC30.LO=0; FvHC31.LO=0;
3851 FvR1.LO=0; FvR29.LO=0; h1C601.LO=0.8;
3852 h1C603.LO=-3; h1C606A.LO=0; h2C601.LO=0.395;
3853 h3C601.LO=0.5; h3C603.LO=0; h3C606A.LO=-65;
3854 h4C601.LO=0.45; h4C603.LO=0; h4C606A.LO=-10;
3855 h5C601.LO=0.5; h5C603.LO=0; h5C606A.LO=-5;
3856 h6C601.LO=0.5; h7C601.LO=0.5; h7C603.LO=0;
3857 h7C606A.LO=0; hAC02.LO=0; hAC05.LO=10;
3858 hAC07.LO=10; hAC09.LO=10; hAC12.LO=0;
3859 hAC15.LO=10; hAC18.LO=10; hAC20.LO=10;
3860 hAC23.LO=0; hAC26.LO=10; hAC29.LO=10;
3861 hAC31.LO=10; hAC34.LO=0; hAC37.LO=10;
3862 hAC40.LO=10; hAC42.LO=10; hacAC09.LO=10;
3863 hacAC20.LO=10; hacAC31.LO=10; hacAC42.LO=10;
3864 hc301.LO=10; hc302.LO=0; hc303.LO=0.0001;
3865 hc306.LO=0.0001; hc307.LO=0.0001; hc308.LO=0.0001;
3866 hc309.LO=0.0001; hc310.LO=0.0001; hc311.LO=0.001;
3867 hc312.LO=0.0001; hc312liq.LO=0; hc315.LO=0.0001;
3868 hc316.LO=0.0001; hc317.LO=0.0001; hc318.LO=0.0001;
3869 hc319.LO=0.0001; hc321.LO=0; hc322.LO=0.0001;
3870 hc323.LO=0; hc324.LO=0.0001; hc325.LO=0.0001;
3871 hc326.LO=0.0001; hc329.LO=0.0001; hc401.LO=0;
3872 hc402.LO=10; hc403.LO=0.0001; hc404.LO=0.0001;
3873 hc405.LO=0.0001; hc406.LO=0.0001; hc407.LO=0.0001;
3874 hc408.LO=0.0001; hc408vap.LO=10; hc409.LO=0.0001;
3875 hc410.LO=0.0001; hc410vap.LO=10; hc411.LO=10;
3876 hc412.LO=0.0001; hc412liq.LO=1; hc413.LO=0.0001;
3877 hc414.LO=0.0001; hc414liq.LO=10; hc415.LO=0.0001;
3878 hc417.LO=0.0001; hc418.LO=0.0001; hc419.LO=0.0001;
3879 hc425.LO=10; hc426.LO=10; hc427.LO=0;
3880 hc428.LO=10; hc430.LO=10; hc431.LO=10;
3881 hc432.LO=10; hc623.LO=10; hc625.LO=10;

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3882 hC627.LO=10; hC629.LO=10; hHC01.LO=0;
3883 hHC02.LO=0; hHC03.LO=1; hHC04.LO=10;
3884 hHC05.LO=10; hHC06.LO=10; hHC07.LO=10;
3885 hHC11.LO=10; hHC14.LO=10; hHC16.LO=10;
3886 hHC29.LO=20; hHC30.LO=20; hHC31.LO=100;
3887 hHC32.LO=0; hHC34.LO=0; hHC38.LO=0;
3888 hHC41.LO=0; hHC45.LO=0; hHC29.LO=0;
3889 hHC30.LO=0; hHC31.LO=20; hR1.LO=0;
3890 hR29.LO=10; hR1.LO=0; hR29.LO=20;
3891 hSC401.LO=10; hSC402.LO=10; hSC403.LO=10;
3892 hSC404.LO=10; hSC405.LO=10; hSC406.LO=0.1;
3893 hSC407.LO=10; hSC408.LO=10; hSC409.LO=10;
3894 hSC411.LO=10; hSC412.LO=10; hSC413.LO=10;
3895 hSC414.LO=0; hvHC29.LO=10; hvHC30.LO=10;
3896 hvHC31.LO=20; hvR1.LO=0; hvR29.LO=10;
3897 K1C323.LO=1; K1C325.LO=0.5; K1C408.LO=1;
3898 K1C414.LO=1; K1C428.LO=0; K1C430.LO=1;
3899 K1C601.LO=1.5; K1C603.LO=1; K1C606A.LO=1;
3900 K1C606C.LO=1; K1C614B.LO=2; K1C615_A.LO=0.5;
3901 K1C616_A.LO=0.5; K1E633.LO=1; K1E6XX.LO=1;
3902 K1SC406.LO=2; K1SC408.LO=1.5; K2C601.LO=0.5;
3903 K2E633.LO=0.2; K2E6XX.LO=0.2; K2SC406.LO=0.5;
3904 K2SC408.LO=0.5; K3C323.LO=0.5; K3C325.LO=0.01;
3905 K3C408.LO=1; K3C414.LO=0.5; K3C428.LO=0;
3906 K3C430.LO=1; K3C601.LO=0.5; K3C603.LO=0.5;
3907 K3C606A.LO=0.5; K3C606C.LO=1; K3C614B.LO=0.6;
3908 K3C615_A.LO=0.1; K3C616_A.LO=0.1; K3E633.LO=0.3;
3909 K3E6XX.LO=0.3; K3SC406.LO=1; K3SC408.LO=0.7;
3910 K4C323.LO=0.5; K4C325.LO=0.03; K4C408.LO=1;
3911 K4C414.LO=0.5; K4C428.LO=0; K4C430.LO=0.5;
3912 K4C601.LO=0.2; K4C603.LO=0.1; K4C606A.LO=0.1;
3913 K4C606C.LO=1; K4C614B.LO=0.5; K4C615_A.LO=0.05;
3914 K4C616_A.LO=0.05; K4E633.LO=0.2; K4E6XX.LO=0.2;
3915 K4SC406.LO=0.8; K4SC408.LO=0.5; K5C323.LO=0.1;
3916 K5C325.LO=0.1; K5C408.LO=0.5; K5C414.LO=0.1;
3917 K5C428.LO=0; K5C430.LO=0.2; K5C601.LO=0.1;
3918 K5C603.LO=0.01; K5C606A.LO=0.1; K5C606C.LO=0.1;
3919 K5C614B.LO=0.05; K5C615_A.LO=0.002; K5C616_A.LO=0.002;
3920 K5E633.LO=0.05; K5E6XX.LO=0.05; K5SC406.LO=0.1;
3921 K5SC408.LO=0.2; K6C601.LO=0.1; K6SC406.LO=0;
3922 K6SC408.LO=0.1; K7C323.LO=0.1; K7C325.LO=0.001;
3923 K7C408.LO=0.1; K7C414.LO=0.05; K7C428.LO=0;
3924 K7C430.LO=0; K7C601.LO=0.01; K7C603.LO=0.01;
3925 K7C606A.LO=0.05; K7C614B.LO=0.001; K7C615_A.LO=0.001;
3926 K7C616_A.LO=0.011; K7E633.LO=0.01; K7E6XX.LO=0.01;
3927 K7SC406.LO=0.1; K7SC408.LO=0.05; Kp1C601.LO=1;

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3928 Kp1C603.LO=1; Kp1C606A.LO=1; Kp1C606D.LO=1;
3929 Kp2C601.LO=0.5; Kp3C601.LO=1; Kp3C603.LO=0.5;
3930 Kp3C606A.LO=0.5; Kp3C606D.LO=1; Kp4C601.LO=0.5;
3931 Kp4C603.LO=0.2; Kp4C606A.LO=0.1; Kp4C606D.LO=1;
3932 Kp5C601.LO=0.1; Kp5C603.LO=0.1; Kp5C606A.LO=0.1;
3933 Kp5C606D.LO=1; Kp6C601.LO=0.1; Kp7C601.LO=0.01;
3934 Kp7C603.LO=0.01; Kp7C606A.LO=0.05; Kp7C606D.LO=0.1;
3935 kWad1.LO=50; kWad2.LO=105; LpC601.LO=1;
3936 LpC603.LO=1; LpC606A.LO=0.5; PC303.LO=101;
3937 PC306.LO=650; PC307.LO=600; PC308.LO=600;
3938 PC309.LO=580; PC311.LO=260; PC312.LO=600;
3939 PHC30.LO=101; PHC32.LO=101; PR29.LO=101;
3940 Profit.LO=10; Q2HC07.LO=0; Q2HC11.LO=0;
3941 Q2HC14.LO=0; Q2HC16.LO=0; qFp1C606A.LO=0;
3942 qFp3C606A.LO=0; qFp4C606A.LO=0; qFp5C606A.LO=0;
3943 qFp7C606A.LO=0; qS1C606A.LO=0; qS3C606A.LO=0;
3944 qS4C606A.LO=0; qS5C606A.LO=0; qS7C606A.LO=0;
3945 r10C623.LO=0; r10C625.LO=0; r10C627.LO=0;
3946 r10C629.LO=0; r2C623.LO=0; r2C625.LO=0;
3947 r2C627.LO=0; r2C629.LO=0; r3C623.LO=0;
3948 r3C625.LO=0; r3C627.LO=0; r3C629.LO=0;
3949 r4C623.LO=0; r4C625.LO=0; r4C627.LO=0;
3950 r4C629.LO=0; r5C623.LO=0; r5C625.LO=0;
3951 r5C627.LO=0; r5C629.LO=0; r7C623.LO=0;
3952 r7C625.LO=0; r7C627.LO=0; r7C629.LO=0;
3953 r8C623.LO=0; r8C625.LO=0; r8C627.LO=0;
3954 r8C629.LO=0; r9C623.LO=0; r9C625.LO=0;
3955 r9C627.LO=0; r9C629.LO=0; rho2HC07.LO=610;
3956 rho2HC11.LO=610; rho2HC14.LO=610; rho2HC16.LO=610;
3957 rhoAC09.LO=1500; rhoAC20.LO=1500; rhoAC31.LO=1500;
3958 rhoAC42.LO=1500; riC10C623.LO=0; riC10C625.LO=0;
3959 riC10C627.LO=0; riC10C629.LO=0; riC11C623.LO=0;
3960 riC11C625.LO=0; riC11C627.LO=0; riC11C629.LO=0;
3961 sf1S34.LO=0.0001; sf2S34.LO=0; sfS11.LO=0.1;
3962 sfS19.LO=0.1; sfS2.LO=0.1; sfS23.LO=0.1;
3963 sfS27.LO=0.1; sfS41.LO=0.0001; sfS42.LO=0.0001;
3964 sfS5.LO=0.1; sfS7.LO=0.1; SmlC601.LO=1;
3965 SmlC603.LO=0.05; SmlC606A.LO=0.1; SmlC606D.LO=1;
3966 Sm2C601.LO=0.5; Sm3C601.LO=0.5; Sm3C603.LO=0.001;
3967 Sm3C606A.LO=0.1; Sm3C606D.LO=1; Sm4C601.LO=0.4;
3968 Sm4C603.LO=0.01; Sm4C606A.LO=0.1; Sm4C606D.LO=0.5;
3969 Sm5C601.LO=0.1; Sm5C603.LO=0.01; Sm5C606A.LO=0.05;
3970 Sm5C606D.LO=0.1; Sm6C601.LO=0.1; Sm7C601.LO=0.01;
3971 Sm7C603.LO=0.001; Sm7C606A.LO=0.001; Sm7C606D.LO=0.1;
3972 Sn1C601.LO=1; Sn1C603.LO=1; Sn1C606A.LO=1;
3973 Sn2C601.LO=0.5; Sn3C601.LO=0.5; Sn3C603.LO=0.5;

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3974 Sn3C606A.LO=1; Sn4C601.LO=0.5; Sn4C603.LO=0.2;
3975 Sn4C606A.LO=0.8; Sn5C601.LO=0.1; Sn5C603.LO=0.1;
3976 Sn5C606A.LO=0.3; Sn6C601.LO=0.1; Sn7C601.LO=0.01;
3977 Sn7C603.LO=0.01; Sn7C606A.LO=0.1; TAC02.LO=276;
3978 TAC05.LO=273; TAC07.LO=273; TAC15.LO=273;
3979 TAC18.LO=273; TAC20.LO=280; TAC26.LO=273;
3980 TAC29.LO=273; TAC37.LO=273; TAC40.LO=273;
3981 TC301.LO=200; TC302.LO=250; TC309.LO=270;
3982 TC310.LO=200; TC311.LO=270; TC312.LO=300;
3983 TC318.LO=250; TC319.LO=250; TC320.LO=250;
3984 TC322.LO=250; TC323.LO=300; TC326.LO=300;
3985 TC328.LO=300; TC329.LO=300; TC401.LO=260;
3986 TC402.LO=270; TC403.LO=280; TC406.LO=298;
3987 TC409.LO=400; TC411.LO=300; TC412.LO=330;
3988 TC413.LO=250; TC415.LO=250; TC417.LO=275;
3989 TC425.LO=300; TC426.LO=300; TC427.LO=360;
3990 TC428.LO=300; TC430.LO=300; TC431.LO=300;
3991 TC432.LO=350; TcwotE609A.LO=298; TcwotE621A.LO=298;
3992 TcwotE621B.LO=298; TcwotE627A.LO=295; TcwotE627B.LO=293;
3993 TcwotE641A.LO=295; TcwotE641B.LO=295; TcwoutE603.LO=296.836;
3994 TcwoutE605.LO=298; TcwoutE611.LO=295; TcwoutE613.LO=298;
3995 TcwoutE617.LO=295; TcwoutE626.LO=295; TcwoutE634.LO=295;
3996 TcwoutE640.LO=295; THC01.LO=295; THC02.LO=275;
3997 THC03.LO=290; THC04.LO=280; THC05.LO=270;
3998 THC06.LO=273; THC07.LO=273; THC11.LO=273;
3999 THC14.LO=273; THC16.LO=273; THC22.LO=273;
4000 THC23.LO=273; THC24.LO=273; THC25.LO=273;
4001 THC26.LO=273; THC27.LO=273; THC28.LO=270;
4002 THC29.LO=270; THC30.LO=250; THC31.LO=260;
4003 THC34.LO=250; THC38.LO=250; THC41.LO=250;
4004 THC45.LO=250; TmC601.LO=315; TmC603.LO=350;
4005 TmC606A.LO=327; TmC606D.LO=370; TmK601.LO=273;
4006 TnC601.LO=310; TnC603.LO=320; TnC606A.LO=310;
4007 TR1.LO=270; TR29.LO=260; TSC401.LO=280;
4008 TSC404.LO=310; TSC406.LO=320; TSC407.LO=320;
4009 TSC409.LO=308; TSC411.LO=308; TSC412.LO=308;
4010 TSC414.LO=275; Utilities.LO=-10000; VFC614B.LO=0.1;
4011 VFC615.LO=0.001; VFC616.LO=0.05; VFM3.LO=0;
4012 VpC601.LO=1; VpC603.LO=0.01; VpC606A.LO=0.1;
4013 x10AC09.LO=0; x10AC20.LO=0; x10AC31.LO=0;
4014 x10AC42.LO=0; x11AC02.LO=0.97; x11AC05.LO=0.89;
4015 x11AC07.LO=0.89; x11AC09.LO=0; x11AC15.LO=0.89;
4016 x11AC18.LO=0.89; x11AC20.LO=0; x11AC26.LO=0.89;
4017 x11AC29.LO=0.89; x11AC31.LO=0; x11AC37.LO=0.89;
4018 x11AC40.LO=0.89; x11AC42.LO=0; x12AC02.LO=0.002;
4019 x12AC05.LO=0.001; x12AC07.LO=0.001; x12AC09.LO=0;

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4020 x12AC12.LO=0.001; x12AC15.LO=0.001; x12AC18.LO=0.001;
4021 x12AC20.LO=0; x12AC23.LO=0.001; x12AC26.LO=0.001;
4022 x12AC29.LO=0.001; x12AC31.LO=0; x12AC34.LO=0.001;
4023 x12AC37.LO=0.001; x12AC40.LO=0.001; x12AC42.LO=0;
4024 x12AC45.LO=0.001; x1AC09.LO=0; x1AC20.LO=0;
4025 x1AC31.LO=0; x1AC42.LO=0; x1C301.LO=0;
4026 x1C302.LO=0; x1C303.LO=0.05; x1C306.LO=0;
4027 x1C307.LO=0; x1C308.LO=0; x1C309.LO=0;
4028 x1C310.LO=0; x1C311.LO=0; x1C312.LO=0;
4029 x1C315.LO=0.0001; x1C317.LO=0; x1C318.LO=0.0001;
4030 x1C319.LO=0.0001; x1C320.LO=0; x1C321.LO=0.0001;
4031 x1C322.LO=0; x1C323.LO=0; x1C324.LO=0;
4032 x1C326.LO=0.4; x1C328.LO=0.4; x1C329.LO=0.4;
4033 x1C401.LO=0; x1C402.LO=0; x1C403.LO=0;
4034 x1C404.LO=0; x1C405.LO=0; x1C406.LO=0;
4035 x1C407.LO=0; x1C408.LO=0; x1C409.LO=0;
4036 x1C410.LO=0.0001; x1C411.LO=0; x1C412.LO=0;
4037 x1C413.LO=0; x1C414.LO=0; x1C415.LO=0;
4038 x1C418.LO=0; x1C419.LO=0.0001; x1C425.LO=0;
4039 x1C426.LO=0; x1C427.LO=0; x1C428.LO=0;
4040 x1C430.LO=0; x1C431.LO=0; x1C432.LO=0;
4041 x1HC01.LO=0.001; x1HC02.LO=0; x1HC03.LO=0.0001;
4042 x1HC04.LO=0; x1HC05.LO=0; x1HC06.LO=0;
4043 x1HC07.LO=0; x1HC08.LO=0; x1HC11.LO=0;
4044 x1HC14.LO=0; x1HC15.LO=0; x1HC16.LO=0;
4045 x1HC22.LO=0; x1HC23.LO=0; x1HC24.LO=0;
4046 x1HC25.LO=0; x1HC26.LO=0; x1HC27.LO=0;
4047 x1HC28.LO=0; x1HC29.LO=0; x1HC30.LO=0;
4048 x1HC31.LO=0; x1HC33.LO=0; x1HC34.LO=0;
4049 x1HC38.LO=0; x1HC40.LO=0; x1HC41.LO=0;
4050 x1HC45.LO=0; x1R1.LO=0; x1R29.LO=0;
4051 x1SC401.LO=0; x1SC404.LO=0; x1SC405.LO=0;
4052 x1SC406.LO=0; x1SC407.LO=0; x1SC409.LO=0;
4053 x1SC411.LO=0; x1SC412.LO=0; x1SC413.LO=0;
4054 x1SC414.LO=0; x2AC09.LO=0; x2AC20.LO=0;
4055 x2AC31.LO=0; x2AC42.LO=0; x2C301.LO=0;
4056 x2C417.LO=0; x2C418.LO=0; x2C419.LO=0;
4057 x2HC01.LO=0.1; x2HC02.LO=0.1; x2HC03.LO=0;
4058 x2HC04.LO=0; x2HC05.LO=0; x2HC06.LO=0;
4059 x2HC07.LO=0; x2HC08.LO=0; x2HC11.LO=0;
4060 x2HC14.LO=0; x2HC15.LO=0; x2HC16.LO=0;
4061 x2HC22.LO=0; x2HC23.LO=0; x2HC24.LO=0;
4062 x2HC25.LO=0; x2HC26.LO=0; x2HC27.LO=0;
4063 x2HC28.LO=0; x2HC29.LO=0; x2HC30.LO=0;
4064 x2HC31.LO=0; x2R1.LO=0; x2R29.LO=0;
4065 x2SC401.LO=0; x2SC404.LO=0; x2SC405.LO=0;

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4066 x2SC406.LO=0; x2SC407.LO=0; x2SC409.LO=0;
4067 x2SC411.LO=0; x2SC412.LO=0; x2SC413.LO=0;
4068 x2SC414.LO=0; x3AC09.LO=0; x3AC20.LO=0;
4069 x3AC31.LO=0; x3AC42.LO=0; x3C301.LO=0.5;
4070 x3C302.LO=0.45; x3C303.LO=0.5; x3C306.LO=0;
4071 x3C307.LO=0; x3C308.LO=0; x3C309.LO=0.2;
4072 x3C310.LO=0; x3C311.LO=0; x3C312.LO=0;
4073 x3C315.LO=0.0001; x3C317.LO=0.5; x3C318.LO=0.0001;
4074 x3C319.LO=0.0001; x3C320.LO=0.0001; x3C321.LO=0.0001;
4075 x3C322.LO=0; x3C323.LO=0.5; x3C324.LO=0.5;
4076 x3C326.LO=0; x3C328.LO=0; x3C329.LO=0;
4077 x3C401.LO=0; x3C402.LO=0; x3C403.LO=0.0001;
4078 x3C404.LO=0.0001; x3C405.LO=0; x3C406.LO=0;
4079 x3C407.LO=0; x3C408.LO=0; x3C409.LO=0;
4080 x3C410.LO=0.0001; x3C411.LO=0.0001; x3C412.LO=0;
4081 x3C413.LO=0; x3C414.LO=0.5; x3C415.LO=0;
4082 x3C418.LO=0.0001; x3C419.LO=0.0001; x3C425.LO=0;
4083 x3C426.LO=0.0001; x3C427.LO=0; x3C428.LO=0;
4084 x3C430.LO=0; x3C431.LO=0; x3C432.LO=0;
4085 x3HC01.LO=0.01; x3HC02.LO=0; x3HC03.LO=0.1;
4086 x3HC04.LO=0.1; x3HC05.LO=0.1; x3HC06.LO=0.3;
4087 x3HC07.LO=0.3; x3HC08.LO=0.3; x3HC11.LO=0.3;
4088 x3HC14.LO=0.3; x3HC15.LO=0.3; x3HC16.LO=0.3;
4089 x3HC22.LO=0.1; x3HC23.LO=0.1; x3HC24.LO=0.1;
4090 x3HC25.LO=0.1; x3HC26.LO=0.1; x3HC27.LO=0.1;
4091 x3HC28.LO=0.1; x3HC29.LO=0.1; x3HC30.LO=0.1;
4092 x3HC31.LO=0.1; x3HC33.LO=0.1; x3HC34.LO=0.1;
4093 x3HC38.LO=0.1; x3HC40.LO=0.1; x3HC41.LO=0.1;
4094 x3HC45.LO=0.1; x3R1.LO=0; x3R29.LO=0.1;
4095 x3SC401.LO=0.2; x3SC404.LO=0; x3SC405.LO=0;
4096 x3SC406.LO=0; x3SC407.LO=0; x3SC409.LO=0.5;
4097 x3SC411.LO=0.5; x3SC412.LO=0.5; x3SC413.LO=0.5;
4098 x3SC414.LO=0.5; x4AC09.LO=0; x4AC20.LO=0;
4099 x4AC31.LO=0; x4AC42.LO=0; x4C301.LO=0;
4100 x4C302.LO=0; x4C303.LO=0.05; x4C306.LO=0;
4101 x4C307.LO=0; x4C308.LO=0; x4C309.LO=0;
4102 x4C310.LO=0; x4C311.LO=0; x4C312.LO=0;
4103 x4C315.LO=0.0001; x4C317.LO=0; x4C318.LO=0.0001;
4104 x4C319.LO=0.0001; x4C320.LO=0.0001; x4C321.LO=0.0001;
4105 x4C322.LO=0; x4C323.LO=0.01; x4C324.LO=0.01;
4106 x4C325.LO=0; x4C326.LO=0; x4C328.LO=0;
4107 x4C329.LO=0; x4C401.LO=0.001; x4C402.LO=0.001;
4108 x4C403.LO=0.0001; x4C404.LO=0.0001; x4C405.LO=0.0001;
4109 x4C406.LO=0; x4C407.LO=0.01; x4C408.LO=0;
4110 x4C409.LO=0; x4C410.LO=0.0001; x4C411.LO=0;
4111 x4C412.LO=0.5; x4C413.LO=0.0001; x4C414.LO=0.01;

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4112 x4C415.LO=0.0001; x4C418.LO=0.0001; x4C419.LO=0.0001;
4113 x4C425.LO=0; x4C426.LO=0.0001; x4C427.LO=0;
4114 x4C428.LO=0; x4C430.LO=0.5; x4C431.LO=0.0001;
4115 x4C432.LO=0.5; x4HC01.LO=0; x4HC02.LO=0;
4116 x4HC03.LO=0; x4HC04.LO=0; x4HC05.LO=0;
4117 x4HC06.LO=0; x4HC07.LO=0; x4HC08.LO=0;
4118 x4HC11.LO=0; x4HC14.LO=0; x4HC15.LO=0;
4119 x4HC16.LO=0; x4HC22.LO=0; x4HC23.LO=0;
4120 x4HC24.LO=0; x4HC25.LO=0; x4HC26.LO=0;
4121 x4HC27.LO=0; x4HC28.LO=0; x4HC29.LO=0;
4122 x4HC30.LO=0; x4HC31.LO=0; x4HC33.LO=0;
4123 x4HC34.LO=0; x4HC38.LO=0; x4HC40.LO=0;
4124 x4HC41.LO=0; x4HC45.LO=0; x4R1.LO=0;
4125 x4R29.LO=0.01; x4SC401.LO=0.5; x4SC404.LO=0.48;
4126 x4SC405.LO=0.48; x4SC406.LO=0.7; x4SC407.LO=0.7;
4127 x4SC409.LO=0; x4SC411.LO=0; x4SC412.LO=0;
4128 x4SC413.LO=0; x4SC414.LO=0; x5AC09.LO=0;
4129 x5AC20.LO=0; x5AC31.LO=0; x5AC42.LO=0;
4130 x5C301.LO=0; x5C302.LO=0; x5C303.LO=0;
4131 x5C306.LO=0; x5C307.LO=0; x5C308.LO=0;
4132 x5C309.LO=0; x5C310.LO=0; x5C311.LO=0;
4133 x5C312.LO=0; x5C315.LO=0.0001; x5C317.LO=0;
4134 x5C318.LO=0.0001; x5C319.LO=0.0001; x5C320.LO=0;
4135 x5C321.LO=0.0001; x5C322.LO=0; x5C323.LO=0.002;
4136 x5C324.LO=0.002; x5C325.LO=0; x5C326.LO=0;
4137 x5C328.LO=0; x5C329.LO=0; x5C401.LO=0;
4138 x5C402.LO=0; x5C403.LO=0.0001; x5C404.LO=0;
4139 x5C405.LO=0; x5C406.LO=0; x5C407.LO=0;
4140 x5C408.LO=0; x5C409.LO=0; x5C410.LO=0.0001;
4141 x5C411.LO=0; x5C412.LO=0; x5C413.LO=0;
4142 x5C414.LO=0; x5C415.LO=0; x5C418.LO=0;
4143 x5C419.LO=0.0001; x5C425.LO=0; x5C426.LO=0.0001;
4144 x5C427.LO=0; x5C428.LO=0; x5C430.LO=0;
4145 x5C431.LO=0; x5C432.LO=0; x5HC01.LO=0;
4146 x5HC02.LO=0; x5HC03.LO=0; x5HC04.LO=0;
4147 x5HC05.LO=0; x5HC06.LO=0; x5HC07.LO=0;
4148 x5HC08.LO=0; x5HC11.LO=0; x5HC14.LO=0;
4149 x5HC15.LO=0; x5HC16.LO=0; x5HC22.LO=0;
4150 x5HC23.LO=0; x5HC24.LO=0; x5HC25.LO=0;
4151 x5HC26.LO=0; x5HC27.LO=0; x5HC28.LO=0;
4152 x5HC29.LO=0.01; x5HC30.LO=0; x5HC31.LO=0;
4153 x5HC33.LO=0; x5HC34.LO=0; x5HC38.LO=0;
4154 x5HC40.LO=0; x5HC41.LO=0; x5HC45.LO=0;
4155 x5R1.LO=0; x5R29.LO=0.01; x5SC401.LO=0.008;
4156 x5SC404.LO=0; x5SC405.LO=0; x5SC406.LO=0.01;
4157 x5SC407.LO=0.01; x5SC409.LO=0; x5SC411.LO=0;

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4158 x5SC412.LO=0; x5SC413.LO=0; x5SC414.LO=0;
4159 x6SC401.LO=0; x6SC404.LO=0; x6SC405.LO=0;
4160 x6SC406.LO=0; x6SC407.LO=0; x6SC409.LO=0;
4161 x6SC411.LO=0; x6SC412.LO=0; x6SC413.LO=0;
4162 x6SC414.LO=0; x7AC09.LO=0; x7AC20.LO=0;
4163 x7AC31.LO=0; x7AC42.LO=0; x7C301.LO=0;
4164 x7C302.LO=0; x7C303.LO=0; x7C306.LO=0;
4165 x7C307.LO=0; x7C308.LO=0; x7C309.LO=0;
4166 x7C310.LO=0; x7C311.LO=0; x7C312.LO=0;
4167 x7C315.LO=0; x7C316.LO=0; x7C317.LO=0;
4168 x7C318.LO=0; x7C319.LO=0; x7C320.LO=0;
4169 x7C321.LO=0; x7C322.LO=0; x7C323.LO=0;
4170 x7C324.LO=0; x7C325.LO=0; x7C326.LO=0;
4171 x7C328.LO=0; x7C329.LO=0; x7C401.LO=0;
4172 x7C402.LO=0; x7C403.LO=0.0001; x7C404.LO=0.0001;
4173 x7C405.LO=0.0001; x7C406.LO=0.001; x7C407.LO=0.01;
4174 x7C408.LO=0; x7C409.LO=0; x7C410.LO=0.0001;
4175 x7C411.LO=0; x7C412.LO=0; x7C413.LO=0;
4176 x7C414.LO=0; x7C415.LO=0; x7C417.LO=0.0001;
4177 x7C418.LO=0.0001; x7C419.LO=0; x7C425.LO=0.2;
4178 x7C426.LO=0.0001; x7C427.LO=0; x7C428.LO=0;
4179 x7C430.LO=0; x7C431.LO=0; x7C432.LO=0;
4180 x7HC01.LO=0; x7HC02.LO=0; x7HC03.LO=0;
4181 x7HC04.LO=0; x7HC05.LO=0; x7HC06.LO=0;
4182 x7HC07.LO=0; x7HC08.LO=0; x7HC11.LO=0;
4183 x7HC14.LO=0; x7HC15.LO=0; x7HC16.LO=0;
4184 x7HC22.LO=0; x7HC23.LO=0; x7HC24.LO=0;
4185 x7HC25.LO=0; x7HC26.LO=0; x7HC27.LO=0;
4186 x7HC28.LO=0; x7HC29.LO=0.1; x7HC30.LO=0.1;
4187 x7HC31.LO=0.1; x7HC33.LO=0; x7HC34.LO=0;
4188 x7HC38.LO=0; x7HC40.LO=0; x7HC41.LO=0;
4189 x7HC45.LO=0; x7R1.LO=0; x7R29.LO=0.1;
4190 x7SC401.LO=0; x7SC404.LO=0; x7SC405.LO=0;
4191 x7SC406.LO=0; x7SC407.LO=0; x7SC409.LO=0;
4192 x7SC411.LO=0; x7SC412.LO=0; x7SC413.LO=0;
4193 x7SC414.LO=0; x8AC09.LO=0; x8AC20.LO=0;
4194 x8AC31.LO=0; x8AC42.LO=0; x9AC09.LO=0;
4195 x9AC20.LO=0; x9AC31.LO=0; x9AC42.LO=0;
4196 xAC02.LO=0.4; xAC05.LO=0.4; xAC07.LO=0.4;
4197 xAC09.LO=0.4; xAC12.LO=0.4; xAC15.LO=0.4;
4198 xAC18.LO=0.4; xAC20.LO=0.4; xAC23.LO=0.4;
4199 xAC26.LO=0.4; xAC29.LO=0.4; xAC31.LO=0.4;
4200 xAC34.LO=0.4; xAC37.LO=0.4; xAC40.LO=0.4;
4201 xAC42.LO=0.4; xiC10AC09.LO=0; xiC10AC20.LO=0;
4202 xiC10AC31.LO=0; xiC10AC42.LO=0; xiC11AC09.LO=0;
4203 xiC11AC20.LO=0; xiC11AC31.LO=0; xiC11AC42.LO=0;

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4204 xM1C606D.LO=0; xM3C606D.LO=0; xM4C606D.LO=0;
4205 xM5C606D.LO=0; xM7C606D.LO=0; xx1C302.LO=0;
4206 xx1C308.LO=0; xx1C310.LO=0; xx1C311.LO=0;
4207 xx1C312.LO=0; xx1C323.LO=0; xx1C325.LO=0.4;
4208 xx1C405.LO=0; xx1C408.LO=0; xx1C425.LO=0;
4209 xx1C428.LO=0; xx1C430.LO=0; xx1C431.LO=0;
4210 xx1HC28.LO=0.01; xx1HC29.LO=0; xx1HC30.LO=0.01;
4211 xx1HC32.LO=0; xx1R1.LO=0; xx1R29.LO=0;
4212 xx1SC406.LO=0; xx1SC408.LO=0; xx2HC28.LO=0;
4213 xx2HC29.LO=0; xx2HC30.LO=0; xx2R1.LO=0;
4214 xx2R29.LO=0; xx2SC406.LO=0; xx2SC408.LO=0;
4215 xx3C302.LO=0.5; xx3C308.LO=0; xx3C310.LO=0;
4216 xx3C311.LO=0; xx3C312.LO=0; xx3C323.LO=0.5;
4217 xx3C325.LO=0; xx3C405.LO=0; xx3C408.LO=0;
4218 xx3C425.LO=0; xx3C428.LO=0; xx3C430.LO=0;
4219 xx3C431.LO=0; xx3C432.LO=0; xx3HC28.LO=0.2;
4220 xx3HC29.LO=0.1; xx3HC30.LO=0.1; xx3HC32.LO=0.3;
4221 xx3R1.LO=0.1; xx3R29.LO=0.1; xx3SC406.LO=0;
4222 xx3SC408.LO=0.5; xx4C302.LO=0; xx4C308.LO=0;
4223 xx4C310.LO=0; xx4C311.LO=0; xx4C312.LO=0;
4224 xx4C323.LO=0.08; xx4C325.LO=0; xx4C405.LO=0.0001;
4225 xx4C408.LO=0; xx4C409.LO=0.0001; xx4C425.LO=0;
4226 xx4C427.LO=0; xx4C428.LO=0; xx4C430.LO=0.5;
4227 xx4C431.LO=0.0001; xx4C432.LO=0.5; xx4HC28.LO=0.01;
4228 xx4HC29.LO=0.01; xx4HC30.LO=0.01; xx4HC32.LO=0;
4229 xx4R1.LO=0; xx4R29.LO=0.01; xx4SC406.LO=0.6;
4230 xx4SC408.LO=0; xx5C302.LO=0; xx5C308.LO=0;
4231 xx5C310.LO=0; xx5C311.LO=0; xx5C312.LO=0;
4232 xx5C323.LO=0.001; xx5C325.LO=0; xx5C405.LO=0.0001;
4233 xx5C408.LO=0; xx5C425.LO=0; xx5C428.LO=0;
4234 xx5C430.LO=0; xx5C431.LO=0; xx5HC28.LO=0.01;
4235 xx5HC29.LO=0; xx5HC30.LO=0; xx5HC32.LO=0;
4236 xx5R1.LO=0; xx5R29.LO=0; xx5SC406.LO=0;
4237 xx5SC408.LO=0; xx6SC406.LO=0; xx6SC408.LO=0;
4238 xx7C302.LO=0; xx7C308.LO=0; xx7C310.LO=0;
4239 xx7C311.LO=0; xx7C312.LO=0; xx7C323.LO=0.002;
4240 xx7C325.LO=0; xx7C405.LO=0.0001; xx7C408.LO=0;
4241 xx7C425.LO=0; xx7C428.LO=0; xx7C430.LO=0;
4242 xx7C431.LO=0; xx7HC28.LO=0.1; xx7HC29.LO=0;
4243 xx7HC30.LO=0.1; xx7HC32.LO=0; xx7R1.LO=0.1;
4244 xx7R29.LO=0.1; xx7SC406.LO=0; xx7SC408.LO=0;
4245 y1HC28.LO=0.05; y1HC29.LO=0.05; y1HC30.LO=0.05;
4246 y1HC31.LO=0.05; y1R1.LO=0; y1R29.LO=0.05;
4247 y2HC28.LO=0; y2HC29.LO=0; y2HC30.LO=0;
4248 y2HC31.LO=0; y2R1.LO=0; y2R29.LO=0;
4249 y3HC28.LO=0.2; y3HC29.LO=0.1; y3HC30.LO=0.1;

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4250 y3HC31.LO=0.1; y3R1.LO=0.1; y3R29.LO=0.1;
4251 y4HC28.LO=0; y4HC29.LO=0; y4HC30.LO=0.01;
4252 y4HC31.LO=0; y4R1.LO=0; y4R29.LO=0;
4253 y5HC28.LO=0; y5HC29.LO=0; y5HC30.LO=0;
4254 y5HC31.LO=0; y5R1.LO=0; y5R29.LO=0;
4255 y7HC28.LO=0.01; y7HC29.LO=0; y7HC30.LO=0;
4256 y7HC31.LO=0; y7R1.LO=0; y7R29.LO=0;
4257 yy1HC28.LO=0.1; yy1HC29.LO=0.1; yy1HC30.LO=0.05;
4258 yy1R1.LO=0.1; yy1R29.LO=0.05; yy2HC28.LO=0;
4259 yy2HC29.LO=0; yy2HC30.LO=0; yy2R1.LO=0;
4260 yy2R29.LO=0; yy3HC28.LO=0.1; yy3HC29.LO=0.1;
4261 yy3HC30.LO=0.1; yy3R1.LO=0.1; yy3R29.LO=0.1;
4262 yy4HC28.LO=0.01; yy4HC29.LO=0.01; yy4HC30.LO=0.01;
4263 yy4R1.LO=0; yy4R29.LO=0.01; yy5HC28.LO=0.001;
4264 yy5HC29.LO=0; yy5HC30.LO=0; yy5R1.LO=0;
4265 yy5R29.LO=0; yy7HC28.LO=0; yy7HC29.LO=0;
4266 yy7HC30.LO=0; yy7R1.LO=0; yy7R29.LO=0;
4267 C10pC623.UP=0.5; C10pC625.UP=0.5; C10pC627.UP=0.5;
4268 C10pC629.UP=0.5; C2C623.UP=0.1; C2C625.UP=0.1;
4269 C2C627.UP=0.1; C2C629.UP=0.1; C3C623.UP=6;
4270 C3C625.UP=6; C3C627.UP=6; C3C629.UP=6;
4271 C3pC623.UP=10; C3pC625.UP=10; C3pC627.UP=10;
4272 C3pC629.UP=10; C4pC623.UP=1; C4pC625.UP=1;
4273 C4pC627.UP=1; C4pC629.UP=1; C5pC623.UP=0.1;
4274 C5pC625.UP=0.1; C5pC627.UP=0.1; C5pC629.UP=0.1;
4275 C7pC623.UP=0.1; C7pC625.UP=0.1; C7pC627.UP=0.1;
4276 C7pC629.UP=0.1; C8pC623.UP=0.1; C8pC625.UP=0.1;
4277 C8pC627.UP=0.1; C8pC629.UP=0.1; C9pC623.UP=10;
4278 C9pC625.UP=10; C9pC627.UP=10; C9pC629.UP=10;
4279 CHXC623.UP=15; CHXC625.UP=15; CHXC627.UP=15;
4280 CHXC629.UP=15; CiC10pC623.UP=1; CiC10pC625.UP=1;
4281 CiC10pC627.UP=1; CiC10pC629.UP=1; CiC11pC623.UP=0.1;
4282 CiC11pC625.UP=0.1; CiC11pC627.UP=0.1; CiC11pC629.UP=0.1;
4283 CiC4eC623.UP=0.1; CiC4eC625.UP=0.1; CiC4eC627.UP=0.1;
4284 CiC4eC629.UP=0.1; CiC5eC623.UP=0.1; CiC5eC625.UP=0.1;
4285 CiC5eC627.UP=0.1; CiC5eC629.UP=0.1; CiC8eC623.UP=0.3;
4286 CiC8eC625.UP=0.3; CiC8eC627.UP=0.3; CiC8eC629.UP=0.3;
4287 Cost.UP=10000; dTE601.UP=50; dTE602.UP=90;
4288 dTE603.UP=50; dTE605.UP=50; dTE609A.UP=20;
4289 dTE610.UP=50; dTE611.UP=50; dTE612.UP=90;
4290 dTE613.UP=30; dTE616.UP=120; dTE617.UP=50;
4291 dTE621A.UP=50; dTE621B.UP=40; dTE626.UP=50;
4292 dTE627A.UP=55; dTE627B.UP=50; dTE628.UP=60;
4293 dTE629.UP=80; dTE633.UP=50; dTE634.UP=20;
4294 dTE640.UP=50; dTE641.UP=50; dTE695A.UP=90;
4295 dTE695B.UP=60; dTE696A.UP=90; dTE696B.UP=90;

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4296 dTE6XX.UP=50; Earnings.UP=10000; f1C601.UP=0.1;
4297 f1C603.UP=1; f1C606A.UP=1; f2C601.UP=1;
4298 f3C601.UP=1; f3C603.UP=1; f3C606A.UP=1;
4299 f4C601.UP=1; f4C603.UP=1; f4C606A.UP=1;
4300 f5C601.UP=1; f5C603.UP=1; f5C606A.UP=1;
4301 f6C601.UP=1; f7C601.UP=1; f7C603.UP=1;
4302 f7C606A.UP=1; FAC05.UP=20; FAC07.UP=20;
4303 FAC09.UP=20; FAC15.UP=20; FAC18.UP=20;
4304 FAC20.UP=20; FAC26.UP=20; FAC29.UP=20;
4305 FAC31.UP=20; FAC37.UP=20; FAC40.UP=20;
4306 FAC42.UP=20; FC301.UP=6; FC302.UP=5;
4307 FC303.UP=6; FC306.UP=15; FC307.UP=15;
4308 FC309.UP=10; FC310.UP=3; FC311.UP=8;
4309 FC312.UP=5; FC315.UP=5; FC317.UP=3;
4310 FC318.UP=3; FC319.UP=3; FC321.UP=5;
4311 FC323.UP=3; FC324.UP=3; FC325.UP=3;
4312 FC326.UP=3; FC401.UP=5; FC402.UP=5;
4313 FC404.UP=5; FC405.UP=2; FC406.UP=5;
4314 FC408.UP=10; FC409.UP=10; FC410.UP=10;
4315 FC411.UP=10; FC413.UP=1; FC414.UP=5;
4316 FC415.UP=10; FC418.UP=5; FC419.UP=10;
4317 FC425.UP=10; FC426.UP=5; FC427.UP=10;
4318 FC428.UP=5; FC430.UP=10; FC431.UP=10;
4319 FC432.UP=5; Fcwe603.UP=20; Fcwe605.UP=15;
4320 Fcwe609A.UP=1; Fcwe611.UP=20; Fcwe613.UP=15;
4321 Fcwe617.UP=25; Fcwe621A.UP=10; Fcwe621B.UP=20;
4322 Fcwe626.UP=20; Fcwe627A.UP=10; Fcwe627B.UP=30;
4323 Fcwe634.UP=60; Fcwe640.UP=50; Fcwe641A.UP=30;
4324 Fcwe641B.UP=10; FHC02.UP=5; FHC03.UP=10;
4325 FHC04.UP=10; FHC05.UP=10; FHC06.UP=12;
4326 FHC07.UP=5; FHC08.UP=5; FHC11.UP=5;
4327 FHC14.UP=5; FHC15.UP=5; FHC16.UP=5;
4328 FHC22.UP=6; FHC23.UP=6; FHC24.UP=6;
4329 FHC25.UP=6; FHC26.UP=6; FHC27.UP=10;
4330 FHC28.UP=12; FHC29.UP=12; FHC30.UP=12;
4331 FHC31.UP=12; FHC33.UP=1; FHC34.UP=1;
4332 FHC38.UP=1; FHC40.UP=1; FHC41.UP=1;
4333 FHC45.UP=1; FlHC28.UP=10; FlHC29.UP=12;
4334 FlHC30.UP=12; FlHC31.UP=12; FlR1.UP=10;
4335 FlR29.UP=12; FmC302.UP=0.1; FmC308.UP=0.5;
4336 FmC310.UP=0.8; FmC311.UP=0.5; FmC312.UP=0.1;
4337 FmC317.UP=0.1; FmC322.UP=1; FmC323.UP=0.4;
4338 FmC325.UP=1; FmC405.UP=0.1; FmC407.UP=0.1;
4339 FmC408.UP=2; FmC409.UP=0.2; FmC412.UP=0.1;
4340 FmC414.UP=0.1; FmC425.UP=2; FmC427.UP=0.2;
4341 FmC428.UP=0.1; FmC430.UP=0.2; FmC431.UP=1;

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4342 FmC432.UP=0.1; FmHC01.UP=0.1; FmHC32.UP=0.1;
4343 FmlHC28.UP=0.2; FmlHC29.UP=0.1; FmlHC30.UP=0.1;
4344 FmlR1.UP=0.2; FmlR29.UP=0.1; FmSC403.UP=0.1;
4345 FmSC406.UP=0.1; FmSC408.UP=1; FmvHC28.UP=0.2;
4346 FmvHC29.UP=0.1; FmvHC30.UP=0.1; FmvR1.UP=0.2;
4347 FmvR29.UP=0.1; FR1.UP=12; FR29.UP=12;
4348 FSC401.UP=5; FSC403.UP=3; FSC404.UP=3;
4349 FSC406.UP=3; FSC407.UP=3; FSC408.UP=3.2;
4350 FSC409.UP=3.2; FSC412.UP=1; FSC414.UP=0.5;
4351 FstmE602.UP=1; FstmE695A.UP=10; FstmE695B.UP=10;
4352 FstmE696A.UP=10; FstmE696B.UP=10; FvHC28.UP=8;
4353 FvHC29.UP=12; FvHC30.UP=12; FvHC31.UP=12;
4354 FvR1.UP=12; FvR29.UP=12; h1C601.UP=2;
4355 h1C603.UP=1; h1C606A.UP=10; h2C601.UP=5;
4356 h3C601.UP=6; h3C603.UP=1; h3C606A.UP=-35;
4357 h4C601.UP=2; h4C603.UP=1; h4C606A.UP=1;
4358 h5C601.UP=1.5; h5C603.UP=1.5; h5C606A.UP=2;
4359 h6C601.UP=3; h7C601.UP=1.5; h7C603.UP=1.5;
4360 h7C606A.UP=1; hAC02.UP=10000; hAC05.UP=10000;
4361 hAC07.UP=10000; hAC09.UP=10000; hAC12.UP=10000;
4362 hAC15.UP=10000; hAC18.UP=10000; hAC20.UP=10000;
4363 hAC23.UP=10000; hAC26.UP=10000; hAC29.UP=10000;
4364 hAC31.UP=10000; hAC34.UP=10000; hAC37.UP=10000;
4365 hAC40.UP=10000; hAC42.UP=10000; hacAC09.UP=10000;
4366 hacAC20.UP=10000; hacAC31.UP=10000; hacAC42.UP=10000;
4367 hc301.UP=10000; hc302.UP=5000; hc303.UP=10000;
4368 hc306.UP=10000; hc307.UP=10000; hc308.UP=10000;
4369 hc309.UP=10000; hc310.UP=5000; hc311.UP=10000;
4370 hc312.UP=10000; hc312liq.UP=10000; hc315.UP=10000;
4371 hc316.UP=10000; hc317.UP=10000; hc318.UP=10000;
4372 hc319.UP=10000; hc321.UP=5000; hc322.UP=5000;
4373 hc323.UP=10000; hc324.UP=10000; hc325.UP=10000;
4374 hc326.UP=5000; hc329.UP=5000; hc401.UP=5000;
4375 hc402.UP=10000; hc403.UP=10000; hc404.UP=10000;
4376 hc405.UP=5000; hc406.UP=5000; hc407.UP=5000;
4377 hc408.UP=10000; hc408vap.UP=10000; hc409.UP=10000;
4378 hc410.UP=10000; hc410vap.UP=10000; hc411.UP=10000;
4379 hc412.UP=5000; hc412liq.UP=1000; hc413.UP=5000;
4380 hc414.UP=10000; hc414liq.UP=10000; hc415.UP=5000;
4381 hc417.UP=5000; hc418.UP=10000; hc419.UP=10000;
4382 hc425.UP=10000; hc426.UP=5000; hc427.UP=10000;
4383 hc428.UP=10000; hc430.UP=10000; hc431.UP=10000;
4384 hc432.UP=10000; hc623.UP=5000; hc625.UP=5000;
4385 hc627.UP=5000; hc629.UP=5000; hHC01.UP=5000;
4386 hHC02.UP=5000; hHC03.UP=10000; hHC04.UP=10000;
4387 hHC05.UP=10000; hHC06.UP=10000; hHC07.UP=5000;

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4388 hHC11.UP=5000; hHC14.UP=5000; hHC16.UP=5000;
4389 hHC29.UP=10000; hHC30.UP=10000; hHC31.UP=10000;
4390 hHC32.UP=5000; hHC34.UP=5000; hHC38.UP=5000;
4391 hHC41.UP=5000; hHC45.UP=5000; hHC29.UP=10000;
4392 hHC30.UP=10000; hHC31.UP=10000; hLR1.UP=10000;
4393 hLR29.UP=10000; hR1.UP=10000; hR29.UP=10000;
4394 hSC401.UP=10000; hSC402.UP=10000; hSC403.UP=10000;
4395 hSC404.UP=10000; hSC405.UP=10000; hSC406.UP=10000;
4396 hSC407.UP=10000; hSC408.UP=10000; hSC409.UP=5000;
4397 hSC411.UP=5000; hSC412.UP=10000; hSC413.UP=10000;
4398 hSC414.UP=500; hvHC29.UP=10000; hvHC30.UP=10000;
4399 hvHC31.UP=10000; hvR1.UP=10000; hvR29.UP=10000;
4400 K1C323.UP=3; K1C325.UP=2; K1C408.UP=15;
4401 K1C414.UP=4; K1C428.UP=10; K1C430.UP=6;
4402 K1C601.UP=3; K1C603.UP=3; K1C606A.UP=3;
4403 K1C606C.UP=7; K1C614B.UP=3.5; K1C615_A.UP=4;
4404 K1C616_A.UP=5; K1E633.UP=5.5; K1E6XX.UP=5.5;
4405 K1SC406.UP=5; K1SC408.UP=3.5; K2C601.UP=1;
4406 K2E633.UP=1.5; K2E6XX.UP=1.5; K2SC406.UP=1.2;
4407 K2SC408.UP=1; K3C323.UP=1.5; K3C325.UP=1.5;
4408 K3C408.UP=6; K3C414.UP=3; K3C428.UP=5;
4409 K3C430.UP=5; K3C601.UP=2; K3C603.UP=1;
4410 K3C606A.UP=3; K3C606C.UP=5; K3C614B.UP=1.5;
4411 K3C615_A.UP=2; K3C616_A.UP=2; K3E633.UP=2;
4412 K3E6XX.UP=3; K3SC406.UP=2; K3SC408.UP=1.5;
4413 K4C323.UP=1; K4C325.UP=1; K4C408.UP=5;
4414 K4C414.UP=2; K4C428.UP=5; K4C430.UP=3;
4415 K4C601.UP=1; K4C603.UP=1; K4C606A.UP=3;
4416 K4C606C.UP=4; K4C614B.UP=1; K4C615_A.UP=1.5;
4417 K4C616_A.UP=1.5; K4E633.UP=1.5; K4E6XX.UP=1.5;
4418 K4SC406.UP=1.5; K4SC408.UP=1; K5C323.UP=0.6;
4419 K5C325.UP=0.6; K5C408.UP=3; K5C414.UP=2;
4420 K5C428.UP=2; K5C430.UP=1.5; K5C601.UP=0.5;
4421 K5C603.UP=0.5; K5C606A.UP=1; K5C606C.UP=1.2;
4422 K5C614B.UP=0.8; K5C615_A.UP=1; K5C616_A.UP=1;
4423 K5E633.UP=1; K5E6XX.UP=1; K5SC406.UP=0.6;
4424 K5SC408.UP=0.6; K6C601.UP=1; K6SC406.UP=0.5;
4425 K6SC408.UP=0.5; K7C323.UP=0.3; K7C325.UP=0.2;
4426 K7C408.UP=1; K7C414.UP=1; K7C428.UP=2;
4427 K7C430.UP=1; K7C601.UP=0.5; K7C603.UP=0.5;
4428 K7C606A.UP=0.5; K7C614B.UP=0.1; K7C615_A.UP=1;
4429 K7C616_A.UP=1; K7E633.UP=0.1; K7E6XX.UP=0.1;
4430 K7SC406.UP=0.3; K7SC408.UP=0.2; Kp1C601.UP=5;
4431 Kp1C603.UP=3; Kp1C606A.UP=5; Kp1C606D.UP=12;
4432 Kp2C601.UP=1.5; Kp3C601.UP=2; Kp3C603.UP=1.5;
4433 Kp3C606A.UP=3; Kp3C606D.UP=5; Kp4C601.UP=1.5;

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4434 Kp4C603.UP=1; Kp4C606A.UP=3; Kp4C606D.UP=5;
4435 Kp5C601.UP=1; Kp5C603.UP=0.5; Kp5C606A.UP=1;
4436 Kp5C606D.UP=5; Kp6C601.UP=1; Kp7C601.UP=1;
4437 Kp7C603.UP=0.3; Kp7C606A.UP=0.5; Kp7C606D.UP=5;
4438 kWad1.UP=300; kWad2.UP=355; LpC601.UP=5;
4439 LpC603.UP=10; LpC606A.UP=5; PC303.UP=140;
4440 PC306.UP=900; PC307.UP=850; PC308.UP=800;
4441 PC309.UP=780; PC311.UP=400; PC312.UP=850;
4442 PHC30.UP=140; PHC32.UP=200; PR29.UP=140;
4443 Profit.UP=10000; Q2HC07.UP=1; Q2HC11.UP=1;
4444 Q2HC14.UP=1; Q2HC16.UP=1; qFp1C606A.UP=1;
4445 qFp3C606A.UP=0.1; qFp4C606A.UP=1; qFp5C606A.UP=1;
4446 qFp7C606A.UP=1; qS1C606A.UP=1; qS3C606A.UP=1;
4447 qS4C606A.UP=0.5; qS5C606A.UP=0.55; qS7C606A.UP=0.16;
4448 r10C623.UP=0.1; r10C625.UP=0.1; r10C627.UP=0.1;
4449 r10C629.UP=0.1; r2C623.UP=0.832; r2C625.UP=0.832;
4450 r2C627.UP=0.832; r2C629.UP=0.832; r3C623.UP=0.15;
4451 r3C625.UP=0.15; r3C627.UP=0.15; r3C629.UP=0.15;
4452 r4C623.UP=0.03; r4C625.UP=0.03; r4C627.UP=0.03;
4453 r4C629.UP=0.03; r5C623.UP=0.3; r5C625.UP=0.3;
4454 r5C627.UP=0.3; r5C629.UP=0.3; r7C623.UP=0.05;
4455 r7C625.UP=0.05; r7C627.UP=0.05; r7C629.UP=0.05;
4456 r8C623.UP=0.1; r8C625.UP=0.1; r8C627.UP=0.1;
4457 r8C629.UP=0.1; r9C623.UP=0.1; r9C625.UP=0.1;
4458 r9C627.UP=0.1; r9C629.UP=0.1; rho2HC07.UP=650;
4459 rho2HC11.UP=650; rho2HC14.UP=650; rho2HC16.UP=650;
4460 rhoAC09.UP=1700; rhoAC20.UP=1700; rhoAC31.UP=1700;
4461 rhoAC42.UP=1700; riC10C623.UP=0.3; riC10C625.UP=0.3;
4462 riC10C627.UP=0.3; riC10C629.UP=0.3; riC11C623.UP=0.1;
4463 riC11C625.UP=0.1; riC11C627.UP=0.1; riC11C629.UP=0.1;
4464 sf1S34.UP=1; sf2S34.UP=1; sfS11.UP=0.8;
4465 sfS19.UP=0.8; sfS2.UP=1; sfS23.UP=0.8;
4466 sfS27.UP=0.8; sfS41.UP=1; sfS42.UP=1;
4467 sfS5.UP=0.5; sfS7.UP=0.8; SmlC601.UP=5;
4468 SmlC603.UP=1; SmlC606A.UP=5; SmlC606D.UP=5;
4469 Sm2C601.UP=1; Sm3C601.UP=2; Sm3C603.UP=0.5;
4470 Sm3C606A.UP=5; Sm3C606D.UP=10; Sm4C601.UP=1.5;
4471 Sm4C603.UP=0.5; Sm4C606A.UP=5; Sm4C606D.UP=5;
4472 Sm5C601.UP=0.6; Sm5C603.UP=0.5; Sm5C606A.UP=5;
4473 Sm5C606D.UP=5; Sm6C601.UP=1; Sm7C601.UP=0.2;
4474 Sm7C603.UP=0.2; Sm7C606A.UP=5; Sm7C606D.UP=5;
4475 Sn1C601.UP=5; Sn1C603.UP=3; Sn1C606A.UP=20;
4476 Sn2C601.UP=1.5; Sn3C601.UP=1.5; Sn3C603.UP=1.5;
4477 Sn3C606A.UP=15; Sn4C601.UP=1; Sn4C603.UP=1;
4478 Sn4C606A.UP=10; Sn5C601.UP=0.8; Sn5C603.UP=0.4;
4479 Sn5C606A.UP=10; Sn6C601.UP=1; Sn7C601.UP=0.5;

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4480 Sn7C603.UP=0.5; Sn7C606A.UP=5; TAC02.UP=290;
4481 TAC05.UP=300; TAC07.UP=300; TAC15.UP=300;
4482 TAC18.UP=300; TAC20.UP=300; TAC26.UP=300;
4483 TAC29.UP=300; TAC37.UP=300; TAC40.UP=300;
4484 TC301.UP=300; TC302.UP=290; TC309.UP=350;
4485 TC310.UP=310; TC311.UP=310; TC312.UP=369;
4486 TC318.UP=365; TC319.UP=400; TC320.UP=400;
4487 TC322.UP=400; TC323.UP=420; TC326.UP=360;
4488 TC328.UP=360; TC329.UP=375; TC401.UP=300;
4489 TC402.UP=305; TC403.UP=320; TC406.UP=400;
4490 TC409.UP=461; TC411.UP=418; TC412.UP=405;
4491 TC413.UP=350; TC415.UP=400; TC417.UP=350;
4492 TC425.UP=410; TC426.UP=410; TC427.UP=405;
4493 TC428.UP=405; TC430.UP=400; TC431.UP=405;
4494 TC432.UP=400; TcwotE609A.UP=320; TcwotE621A.UP=355;
4495 TcwotE621B.UP=325; TcwotE627A.UP=360; TcwotE627B.UP=310;
4496 TcwotE641A.UP=360; TcwotE641B.UP=325; TcwoutE603.UP=350;
4497 TcwoutE605.UP=320; TcwoutE611.UP=350; TcwoutE613.UP=320;
4498 TcwoutE617.UP=350; TcwoutE626.UP=310; TcwoutE634.UP=360;
4499 TcwoutE640.UP=330; THC01.UP=370; THC02.UP=302;
4500 THC03.UP=360; THC04.UP=310; THC05.UP=300;
4501 THC06.UP=300; THC07.UP=300; THC11.UP=300;
4502 THC14.UP=300; THC16.UP=300; THC22.UP=290;
4503 THC23.UP=290; THC24.UP=290; THC25.UP=290;
4504 THC26.UP=290; THC27.UP=290; THC28.UP=290;
4505 THC29.UP=290; THC30.UP=300; THC31.UP=310;
4506 THC34.UP=310; THC38.UP=310; THC41.UP=310;
4507 THC45.UP=310; TmC601.UP=360; TmC603.UP=375;
4508 TmC606A.UP=370; TmC606D.UP=400; TmK601.UP=333;
4509 TnC601.UP=340; TnC603.UP=375; TnC606A.UP=370;
4510 TR1.UP=290; TR29.UP=300; TSC401.UP=350;
4511 TSC404.UP=365; TSC406.UP=360; TSC407.UP=400;
4512 TSC409.UP=360; TSC411.UP=375; TSC412.UP=360;
4513 TSC414.UP=320; Utilities.UP=10000; VFC614B.UP=0.8;
4514 VFC615.UP=0.6; VFC616.UP=1; VFM3.UP=0.55;
4515 VpC601.UP=5; VpC603.UP=3; VpC606A.UP=10;
4516 x10AC09.UP=0.1; x10AC20.UP=0.1; x10AC31.UP=0.1;
4517 x10AC42.UP=0.1; x11AC02.UP=0.998; x11AC05.UP=0.999;
4518 x11AC07.UP=0.999; x11AC09.UP=1; x11AC15.UP=0.999;
4519 x11AC18.UP=0.999; x11AC20.UP=1; x11AC26.UP=0.999;
4520 x11AC29.UP=0.999; x11AC31.UP=1; x11AC37.UP=0.999;
4521 x11AC40.UP=0.999; x11AC42.UP=1; x12AC02.UP=0.03;
4522 x12AC05.UP=0.11; x12AC07.UP=0.11; x12AC09.UP=0.1;
4523 x12AC12.UP=0.12; x12AC15.UP=0.11; x12AC18.UP=0.11;
4524 x12AC20.UP=0.1; x12AC23.UP=0.12; x12AC26.UP=0.11;
4525 x12AC29.UP=0.11; x12AC31.UP=0.1; x12AC34.UP=0.12;

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4526 x12AC37.UP=0.11; x12AC40.UP=0.11; x12AC42.UP=0.1;
4527 x12AC45.UP=0.12; x1AC09.UP=0.1; x1AC20.UP=0.1;
4528 x1AC31.UP=0.1; x1AC42.UP=0.1; x1C301.UP=0.2;
4529 x1C302.UP=0.2; x1C303.UP=0.22; x1C306.UP=0.5;
4530 x1C307.UP=0.5; x1C308.UP=0.4; x1C309.UP=0.5;
4531 x1C310.UP=0.5; x1C311.UP=0.2; x1C312.UP=1;
4532 x1C315.UP=1; x1C317.UP=0.3; x1C318.UP=0.3;
4533 x1C319.UP=0.1; x1C320.UP=0.1; x1C321.UP=0.1;
4534 x1C322.UP=0.15; x1C323.UP=0.2; x1C324.UP=0.3;
4535 x1C326.UP=1; x1C328.UP=1; x1C329.UP=1;
4536 x1C401.UP=0.2; x1C402.UP=0.2; x1C403.UP=0.2;
4537 x1C404.UP=0.2; x1C405.UP=0.01; x1C406.UP=0.01;
4538 x1C407.UP=0.01; x1C408.UP=1; x1C409.UP=0.01;
4539 x1C410.UP=1; x1C411.UP=0.1; x1C412.UP=0.05;
4540 x1C413.UP=0.1; x1C414.UP=0.25; x1C415.UP=0.2;
4541 x1C418.UP=0.3; x1C419.UP=0.2; x1C425.UP=0.1;
4542 x1C426.UP=0.1; x1C427.UP=1; x1C428.UP=0.1;
4543 x1C430.UP=0.1; x1C431.UP=0.1; x1C432.UP=0.1;
4544 x1HC01.UP=0.3; x1HC02.UP=0.3; x1HC03.UP=0.2;
4545 x1HC04.UP=0.2; x1HC05.UP=0.2; x1HC06.UP=0.2;
4546 x1HC07.UP=0.2; x1HC08.UP=0.2; x1HC11.UP=0.2;
4547 x1HC14.UP=0.2; x1HC15.UP=0.2; x1HC16.UP=0.2;
4548 x1HC22.UP=0.5; x1HC23.UP=0.5; x1HC24.UP=0.5;
4549 x1HC25.UP=0.5; x1HC26.UP=0.5; x1HC27.UP=0.5;
4550 x1HC28.UP=0.2; x1HC29.UP=0.2; x1HC30.UP=0.2;
4551 x1HC31.UP=0.1; x1HC33.UP=0.1; x1HC34.UP=0.1;
4552 x1HC38.UP=0.1; x1HC40.UP=0.1; x1HC41.UP=0.1;
4553 x1HC45.UP=0.1; x1R1.UP=0.1; x1R29.UP=0.2;
4554 x1SC401.UP=0.1; x1SC404.UP=0.1; x1SC405.UP=0.1;
4555 x1SC406.UP=0.1; x1SC407.UP=0.1; x1SC409.UP=0.1;
4556 x1SC411.UP=0.1; x1SC412.UP=0.1; x1SC413.UP=0.1;
4557 x1SC414.UP=0.1; x2AC09.UP=1; x2AC20.UP=1;
4558 x2AC31.UP=1; x2AC42.UP=1; x2C301.UP=0.01;
4559 x2C417.UP=0.1; x2C418.UP=0.1; x2C419.UP=0.1;
4560 x2HC01.UP=0.7; x2HC02.UP=1; x2HC03.UP=0.1;
4561 x2HC04.UP=0.1; x2HC05.UP=0.1; x2HC06.UP=0.15;
4562 x2HC07.UP=0.15; x2HC08.UP=0.15; x2HC11.UP=0.15;
4563 x2HC14.UP=0.15; x2HC15.UP=0.15; x2HC16.UP=0.15;
4564 x2HC22.UP=0.1; x2HC23.UP=0.1; x2HC24.UP=0.1;
4565 x2HC25.UP=0.1; x2HC26.UP=0.1; x2HC27.UP=0.1;
4566 x2HC28.UP=0.1; x2HC29.UP=0.1; x2HC30.UP=0.1;
4567 x2HC31.UP=0.1; x2R1.UP=0.1; x2R29.UP=0.1;
4568 x2SC401.UP=0.1; x2SC404.UP=0.1; x2SC405.UP=0.1;
4569 x2SC406.UP=0.1; x2SC407.UP=0.1; x2SC409.UP=0.1;
4570 x2SC411.UP=0.1; x2SC412.UP=0.1; x2SC413.UP=0.1;
4571 x2SC414.UP=0.1; x3AC09.UP=0.7; x3AC20.UP=0.7;

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4572 x3AC31.UP=0.7; x3AC42.UP=0.7; x3C301.UP=1;
4573 x3C302.UP=1; x3C303.UP=0.8; x3C306.UP=1;
4574 x3C307.UP=1; x3C308.UP=1; x3C309.UP=0.8;
4575 x3C310.UP=1; x3C311.UP=1; x3C312.UP=1;
4576 x3C315.UP=1; x3C317.UP=1; x3C318.UP=1;
4577 x3C319.UP=1; x3C320.UP=1; x3C321.UP=1;
4578 x3C322.UP=1; x3C323.UP=0.95; x3C324.UP=0.95;
4579 x3C326.UP=0.5; x3C328.UP=0.5; x3C329.UP=0.5;
4580 x3C401.UP=1; x3C402.UP=0.8; x3C403.UP=1;
4581 x3C404.UP=1; x3C405.UP=0.1; x3C406.UP=0.01;
4582 x3C407.UP=0.01; x3C408.UP=1; x3C409.UP=0.01;
4583 x3C410.UP=0.1; x3C411.UP=0.2; x3C412.UP=0.1;
4584 x3C413.UP=0.1; x3C414.UP=1; x3C415.UP=1;
4585 x3C418.UP=1; x3C419.UP=1; x3C425.UP=0.1;
4586 x3C426.UP=0.1; x3C427.UP=1; x3C428.UP=0.3;
4587 x3C430.UP=0.1; x3C431.UP=0.1; x3C432.UP=0.1;
4588 x3HC01.UP=0.6; x3HC02.UP=0.5; x3HC03.UP=1;
4589 x3HC04.UP=1; x3HC05.UP=1; x3HC06.UP=1;
4590 x3HC07.UP=1; x3HC08.UP=1; x3HC11.UP=1;
4591 x3HC14.UP=1; x3HC15.UP=1; x3HC16.UP=1;
4592 x3HC22.UP=0.9; x3HC23.UP=0.9; x3HC24.UP=0.9;
4593 x3HC25.UP=0.9; x3HC26.UP=0.9; x3HC27.UP=0.9;
4594 x3HC28.UP=0.6; x3HC29.UP=0.6; x3HC30.UP=0.6;
4595 x3HC31.UP=0.6; x3HC33.UP=1; x3HC34.UP=1;
4596 x3HC38.UP=1; x3HC40.UP=1; x3HC41.UP=1;
4597 x3HC45.UP=1; x3R1.UP=0.6; x3R29.UP=0.6;
4598 x3SC401.UP=0.4; x3SC404.UP=0.1; x3SC405.UP=0.1;
4599 x3SC406.UP=0.1; x3SC407.UP=0.1; x3SC409.UP=1;
4600 x3SC411.UP=1; x3SC412.UP=1; x3SC413.UP=1;
4601 x3SC414.UP=1; x4AC09.UP=0.2; x4AC20.UP=0.2;
4602 x4AC31.UP=0.2; x4AC42.UP=0.2; x4C301.UP=0.5;
4603 x4C302.UP=0.5; x4C303.UP=0.2; x4C306.UP=0.8;
4604 x4C307.UP=0.8; x4C308.UP=0.5; x4C309.UP=0.4;
4605 x4C310.UP=0.3; x4C311.UP=0.5; x4C312.UP=1;
4606 x4C315.UP=0.3; x4C317.UP=0.2; x4C318.UP=0.3;
4607 x4C319.UP=0.3; x4C320.UP=0.3; x4C321.UP=0.3;
4608 x4C322.UP=0.4; x4C323.UP=0.25; x4C324.UP=0.25;
4609 x4C325.UP=0.1; x4C326.UP=0.1; x4C328.UP=0.1;
4610 x4C329.UP=0.1; x4C401.UP=0.5; x4C402.UP=0.5;
4611 x4C403.UP=0.3; x4C404.UP=0.3; x4C405.UP=0.2;
4612 x4C406.UP=0.2; x4C407.UP=0.3; x4C408.UP=0.2;
4613 x4C409.UP=0.3; x4C410.UP=1; x4C411.UP=1;
4614 x4C412.UP=1; x4C413.UP=1; x4C414.UP=0.25;
4615 x4C415.UP=0.3; x4C418.UP=0.3; x4C419.UP=0.3;
4616 x4C425.UP=1; x4C426.UP=1; x4C427.UP=1;
4617 x4C428.UP=1; x4C430.UP=1; x4C431.UP=1;

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4618 x4C432.UP=1; x4HC01.UP=0.25; x4HC02.UP=0.25;
4619 x4HC03.UP=0.3; x4HC04.UP=0.5; x4HC05.UP=0.5;
4620 x4HC06.UP=0.4; x4HC07.UP=0.4; x4HC08.UP=0.4;
4621 x4HC11.UP=0.4; x4HC14.UP=0.4; x4HC15.UP=0.4;
4622 x4HC16.UP=0.4; x4HC22.UP=0.5; x4HC23.UP=0.5;
4623 x4HC24.UP=0.5; x4HC25.UP=0.5; x4HC26.UP=0.5;
4624 x4HC27.UP=0.5; x4HC28.UP=0.5; x4HC29.UP=0.3;
4625 x4HC30.UP=0.3; x4HC31.UP=0.3; x4HC33.UP=0.5;
4626 x4HC34.UP=0.5; x4HC38.UP=0.5; x4HC40.UP=0.5;
4627 x4HC41.UP=0.5; x4HC45.UP=0.5; x4R1.UP=0.3;
4628 x4R29.UP=0.3; x4SC401.UP=0.7; x4SC404.UP=1;
4629 x4SC405.UP=1; x4SC406.UP=1; x4SC407.UP=1;
4630 x4SC409.UP=0.1; x4SC411.UP=0.1; x4SC412.UP=0.1;
4631 x4SC413.UP=0.1; x4SC414.UP=0.1; x5AC09.UP=0.1;
4632 x5AC20.UP=0.1; x5AC31.UP=0.1; x5AC42.UP=0.1;
4633 x5C301.UP=0.2; x5C302.UP=0.1; x5C303.UP=0.1;
4634 x5C306.UP=0.6; x5C307.UP=0.6; x5C308.UP=0.2;
4635 x5C309.UP=0.2; x5C310.UP=0.1; x5C311.UP=0.2;
4636 x5C312.UP=0.4; x5C315.UP=0.1; x5C317.UP=0.1;
4637 x5C318.UP=0.1; x5C319.UP=0.1; x5C320.UP=0.1;
4638 x5C321.UP=0.1; x5C322.UP=0.1; x5C323.UP=0.1;
4639 x5C324.UP=0.1; x5C325.UP=0.01; x5C326.UP=0.01;
4640 x5C328.UP=0.01; x5C329.UP=0.01; x5C401.UP=0.5;
4641 x5C402.UP=0.5; x5C403.UP=0.2; x5C404.UP=0.2;
4642 x5C405.UP=0.2; x5C406.UP=0.2; x5C407.UP=0.2;
4643 x5C408.UP=0.2; x5C409.UP=0.3; x5C410.UP=1;
4644 x5C411.UP=1; x5C412.UP=0.1; x5C413.UP=0.3;
4645 x5C414.UP=0.1; x5C415.UP=0.1; x5C418.UP=0.1;
4646 x5C419.UP=0.1; x5C425.UP=1; x5C426.UP=1;
4647 x5C427.UP=1; x5C428.UP=0.4; x5C430.UP=0.1;
4648 x5C431.UP=0.2; x5C432.UP=0.1; x5HC01.UP=0.15;
4649 x5HC02.UP=0.15; x5HC03.UP=0.1; x5HC04.UP=0.3;
4650 x5HC05.UP=0.3; x5HC06.UP=0.3; x5HC07.UP=0.3;
4651 x5HC08.UP=0.3; x5HC11.UP=0.3; x5HC14.UP=0.3;
4652 x5HC15.UP=0.3; x5HC16.UP=0.3; x5HC22.UP=0.5;
4653 x5HC23.UP=0.5; x5HC24.UP=0.5; x5HC25.UP=0.5;
4654 x5HC26.UP=0.5; x5HC27.UP=0.5; x5HC28.UP=0.5;
4655 x5HC29.UP=0.3; x5HC30.UP=0.3; x5HC31.UP=0.3;
4656 x5HC33.UP=2.5; x5HC34.UP=2.5; x5HC38.UP=2.5;
4657 x5HC40.UP=2.5; x5HC41.UP=2.5; x5HC45.UP=2.5;
4658 x5R1.UP=0.3; x5R29.UP=0.4; x5SC401.UP=0.1;
4659 x5SC404.UP=0.1; x5SC405.UP=0.1; x5SC406.UP=0.1;
4660 x5SC407.UP=0.1; x5SC409.UP=0.1; x5SC411.UP=0.1;
4661 x5SC412.UP=0.1; x5SC413.UP=0.1; x5SC414.UP=0.1;
4662 x6SC401.UP=0.1; x6SC404.UP=0.12; x6SC405.UP=0.1;
4663 x6SC406.UP=0.1; x6SC407.UP=0.1; x6SC409.UP=0.1;

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4664 x6SC411.UP=0.1; x6SC412.UP=0.1; x6SC413.UP=0.1;
4665 x6SC414.UP=0.1; x7AC09.UP=0.1; x7AC20.UP=0.1;
4666 x7AC31.UP=0.1; x7AC42.UP=0.1; x7C301.UP=0.1;
4667 x7C302.UP=0.3; x7C303.UP=0.1; x7C306.UP=0.8;
4668 x7C307.UP=0.8; x7C308.UP=0.3; x7C309.UP=0.3;
4669 x7C310.UP=0.2; x7C311.UP=1; x7C312.UP=0.5;
4670 x7C315.UP=0.01; x7C316.UP=0.01; x7C317.UP=0.1;
4671 x7C318.UP=0.15; x7C319.UP=0.15; x7C320.UP=0.1;
4672 x7C321.UP=0.1; x7C322.UP=0.1; x7C323.UP=0.02;
4673 x7C324.UP=0.1; x7C325.UP=0.2; x7C326.UP=0.2;
4674 x7C328.UP=0.2; x7C329.UP=0.1; x7C401.UP=1;
4675 x7C402.UP=0.6; x7C403.UP=1; x7C404.UP=1;
4676 x7C405.UP=1; x7C406.UP=1; x7C407.UP=1;
4677 x7C408.UP=1; x7C409.UP=1; x7C410.UP=1;
4678 x7C411.UP=1; x7C412.UP=0.2; x7C413.UP=0.3;
4679 x7C414.UP=0.1; x7C415.UP=0.1; x7C417.UP=0.08;
4680 x7C418.UP=0.1; x7C419.UP=0.1; x7C425.UP=1;
4681 x7C426.UP=1; x7C427.UP=1; x7C428.UP=0.5;
4682 x7C430.UP=0.35; x7C431.UP=0.3; x7C432.UP=0.3;
4683 x7HC01.UP=0.6; x7HC02.UP=0.6; x7HC03.UP=0.1;
4684 x7HC04.UP=0.25; x7HC05.UP=0.25; x7HC06.UP=0.3;
4685 x7HC07.UP=0.3; x7HC08.UP=0.3; x7HC11.UP=0.3;
4686 x7HC14.UP=0.3; x7HC15.UP=0.3; x7HC16.UP=0.3;
4687 x7HC22.UP=0.5; x7HC23.UP=0.5; x7HC24.UP=0.5;
4688 x7HC25.UP=0.5; x7HC26.UP=0.5; x7HC27.UP=0.5;
4689 x7HC28.UP=0.5; x7HC29.UP=0.5; x7HC30.UP=0.5;
4690 x7HC31.UP=0.6; x7HC33.UP=2; x7HC34.UP=2;
4691 x7HC38.UP=2; x7HC40.UP=2; x7HC41.UP=2;
4692 x7HC45.UP=2; x7R1.UP=0.5; x7R29.UP=0.6;
4693 x7SC401.UP=0.1; x7SC404.UP=0.12; x7SC405.UP=0.12;
4694 x7SC406.UP=0.01; x7SC407.UP=0.1; x7SC409.UP=0.1;
4695 x7SC411.UP=0.1; x7SC412.UP=0.1; x7SC413.UP=0.1;
4696 x7SC414.UP=0.1; x8AC09.UP=0.1; x8AC20.UP=0.1;
4697 x8AC31.UP=0.1; x8AC42.UP=0.1; x9AC09.UP=0.3;
4698 x9AC20.UP=0.3; x9AC31.UP=0.3; x9AC42.UP=0.3;
4699 xAC02.UP=1; xAC05.UP=1; xAC07.UP=1;
4700 xAC09.UP=1; xAC12.UP=1; xAC15.UP=1;
4701 xAC18.UP=1; xAC20.UP=1; xAC23.UP=1;
4702 xAC26.UP=1; xAC29.UP=1; xAC31.UP=1;
4703 xAC34.UP=1; xAC37.UP=1; xAC40.UP=1;
4704 xAC42.UP=1; xiC10AC09.UP=1; xiC10AC20.UP=1;
4705 xiC10AC31.UP=1; xiC10AC42.UP=1; xiC11AC09.UP=1;
4706 xiC11AC20.UP=1; xiC11AC31.UP=1; xiC11AC42.UP=1;
4707 xM1C606D.UP=0.5; xM3C606D.UP=0.5; xM4C606D.UP=0.65;
4708 xM5C606D.UP=0.5; xM7C606D.UP=1; xx1C302.UP=0.25;
4709 xx1C308.UP=0.5; xx1C310.UP=0.5; xx1C311.UP=0.3;

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4710 xx1C312.UP=1; xx1C323.UP=0.2; xx1C325.UP=1;
4711 xx1C405.UP=0.01; xx1C408.UP=1; xx1C425.UP=1;
4712 xx1C428.UP=1; xx1C430.UP=0.5; xx1C431.UP=0.1;
4713 xx1HC28.UP=0.2; xx1HC29.UP=0.2; xx1HC30.UP=0.2;
4714 xx1HC32.UP=0.1; xx1R1.UP=0.2; xx1R29.UP=0.1;
4715 xx1SC406.UP=0.2; xx1SC408.UP=0.1; xx2HC28.UP=0.1;
4716 xx2HC29.UP=0.1; xx2HC30.UP=0.1; xx2R1.UP=0.1;
4717 xx2R29.UP=0.1; xx2SC406.UP=0.1; xx2SC408.UP=1;
4718 xx3C302.UP=1; xx3C308.UP=1; xx3C310.UP=1;
4719 xx3C311.UP=1; xx3C312.UP=1; xx3C323.UP=0.92;
4720 xx3C325.UP=0.5; xx3C405.UP=0.1; xx3C408.UP=1;
4721 xx3C425.UP=1; xx3C428.UP=1; xx3C430.UP=0.1;
4722 xx3C431.UP=0.5; xx3C432.UP=0.15; xx3HC28.UP=0.8;
4723 xx3HC29.UP=0.8; xx3HC30.UP=0.6; xx3HC32.UP=1;
4724 xx3R1.UP=0.8; xx3R29.UP=0.6; xx3SC406.UP=0.1;
4725 xx3SC408.UP=1; xx4C302.UP=0.5; xx4C308.UP=0.5;
4726 xx4C310.UP=0.3; xx4C311.UP=0.5; xx4C312.UP=0.15;
4727 xx4C323.UP=0.28; xx4C325.UP=0.05; xx4C405.UP=0.2;
4728 xx4C408.UP=0.3; xx4C409.UP=0.3; xx4C425.UP=1;
4729 xx4C427.UP=1; xx4C428.UP=1; xx4C430.UP=1;
4730 xx4C431.UP=1; xx4C432.UP=1; xx4HC28.UP=0.3;
4731 xx4HC29.UP=0.3; xx4HC30.UP=0.3; xx4HC32.UP=0.5;
4732 xx4R1.UP=0.3; xx4R29.UP=0.3; xx4SC406.UP=1;
4733 xx4SC408.UP=0.05; xx5C302.UP=0.1; xx5C308.UP=0.8;
4734 xx5C310.UP=0.1; xx5C311.UP=0.1; xx5C312.UP=0.3;
4735 xx5C323.UP=0.15; xx5C325.UP=0.001; xx5C405.UP=0.2;
4736 xx5C408.UP=0.3; xx5C425.UP=1; xx5C428.UP=1;
4737 xx5C430.UP=1; xx5C431.UP=1; xx5HC28.UP=0.3;
4738 xx5HC29.UP=0.3; xx5HC30.UP=0.3; xx5HC32.UP=0.2;
4739 xx5R1.UP=0.3; xx5R29.UP=0.3; xx5SC406.UP=0.15;
4740 xx5SC408.UP=0.1; xx6SC406.UP=0.1; xx6SC408.UP=1;
4741 xx7C302.UP=0.2; xx7C308.UP=0.1; xx7C310.UP=0.1;
4742 xx7C311.UP=0.3; xx7C312.UP=0.1; xx7C323.UP=0.1;
4743 xx7C325.UP=0.1; xx7C405.UP=1; xx7C408.UP=1;
4744 xx7C425.UP=1; xx7C428.UP=1; xx7C430.UP=1;
4745 xx7C431.UP=1; xx7HC28.UP=0.4; xx7HC29.UP=0.5;
4746 xx7HC30.UP=0.5; xx7HC32.UP=0.2; xx7R1.UP=0.5;
4747 xx7R29.UP=0.5; xx7SC406.UP=0.1; xx7SC408.UP=0.1;
4748 y1HC28.UP=0.5; y1HC29.UP=0.5; y1HC30.UP=0.5;
4749 y1HC31.UP=0.4; y1R1.UP=0.5; y1R29.UP=0.5;
4750 y2HC28.UP=0.1; y2HC29.UP=0.1; y2HC30.UP=0.1;
4751 y2HC31.UP=0.1; y2R1.UP=0.1; y2R29.UP=0.1;
4752 y3HC28.UP=0.9; y3HC29.UP=0.9; y3HC30.UP=0.85;
4753 y3HC31.UP=0.85; y3R1.UP=0.9; y3R29.UP=0.85;
4754 y4HC28.UP=0.5; y4HC29.UP=0.3; y4HC30.UP=0.4;
4755 y4HC31.UP=0.3; y4R1.UP=0.3; y4R29.UP=0.5;

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```
4756 y5HC28.UP=0.2; y5HC29.UP=0.2; y5HC30.UP=0.2;
4757 y5HC31.UP=0.2; y5R1.UP=0.2; y5R29.UP=0.2;
4758 y7HC28.UP=0.5; y7HC29.UP=0.1; y7HC30.UP=0.1;
4759 y7HC31.UP=0.2; y7R1.UP=0.1; y7R29.UP=0.2;
4760 yy1HC28.UP=0.5; yy1HC29.UP=0.6; yy1HC30.UP=0.6;
4761 yy1R1.UP=0.6; yy1R29.UP=0.6; yy2HC28.UP=0.1;
4762 yy2HC29.UP=0.1; yy2HC30.UP=0.1; yy2R1.UP=0.1;
4763 yy2R29.UP=0.1; yy3HC28.UP=0.9; yy3HC29.UP=0.8;
4764 yy3HC30.UP=0.8; yy3R1.UP=0.8; yy3R29.UP=0.8;
4765 yy4HC28.UP=0.3; yy4HC29.UP=0.3; yy4HC30.UP=0.3;
4766 yy4R1.UP=0.3; yy4R29.UP=0.3; yy5HC28.UP=0.2;
4767 yy5HC29.UP=0.2; yy5HC30.UP=0.1; yy5R1.UP=0.2;
4768 yy5R29.UP=0.2; yy7HC28.UP=0.2; yy7HC29.UP=0.2;
4769 yy7HC30.UP=0.1; yy7R1.UP=0.1; yy7R29.UP=0.2;
4770
4771 MODEL Alkyl /ALL/;
4772 OPTION LIMCOL=0;
4773 OPTION LIMROW=0;
4774 OPTION ITERLIM= 10000;
4775 OPTION DOMLIM= 0;
4776 OPTION RESLIM= 10000;
4777
4778 OPTION NLP=CONOPT2;
4779 SOLVE Alkyl Using NLP Maximizing ObjVar;
4780
```

COMPILATION TIME = 1.100 SECONDS 1.6 Mb WIN-18-097

Data Validation Program
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Model Statistics SOLVE ALKYL USING NLP FROM LINE 4779
GAMS 2.50A Windows NT/95/98

MODEL STATISTICS

BLOCKS OF EQUATIONS	1630	SINGLE EQUATIONS	1630
BLOCKS OF VARIABLES	1635	SINGLE VARIABLES	1635
NON ZERO ELEMENTS	6716	NON LINEAR N-Z	4229
DERIVATIVE POOL	128	CONSTANT POOL	461
CODE LENGTH	77819		

GENERATION TIME = 0.550 SECONDS 3.0 Mb WIN-18-097

EXECUTION TIME = 0.760 SECONDS 2.9 Mb WIN-18-097

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S O L V E S U M M A R Y

MODEL	ALKYL	OBJECTIVE	OBJVAR
TYPE	NLP	DIRECTION	MAXIMIZE
SOLVER	CONOPT2	FROM LINE	4779

**** SOLVER STATUS 1 NORMAL COMPLETION
**** MODEL STATUS 2 LOCALLY OPTIMAL
**** OBJECTIVE VALUE 78.7615

RESOURCE USAGE, LIMIT	132.590	10000.000
ITERATION COUNT, LIMIT	1192	10000
EVALUATION ERRORS	0	0

C O N O P T Wintel version 2.070F-003-035
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Bagsvaerdvej 246 A
DK-2880 Bagsvaerd, Denmark

Using control program file C:\PROGRAM FILES\GAMSIDE\CONOPT2.OPT

Rtmaxj=1E9;
rtnwmi=1E-8;
*rtredg=1E-9;
*lslack =t;
lsscal= t;
*lstcrs =t;
lfstal =2000;

** Warning ** Rtmaxj is very large. Try to scale the model.
CONOPT may become unreliable and there are no
guaranties.

** Optimal solution. Reduced gradient less than tolerance.

CONOPT time Total	132.262 seconds
of which: Function evaluations	37.219 = 28.1%
Derivative evaluations	19.641 = 14.8%

Work length =	3.50 Mbytes
Estimate =	3.50 Mbytes
Max used =	2.01 Mbytes

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1	.	.	.
.			
---- EQU EQU2	.	.	.
132.6845			
---- EQU EQU3	.	.	.
0.4416			
---- EQU EQU4	.	.	.
-8.2868			
---- EQU EQU5	.	.	.
33.7971			
---- EQU EQU6	.	.	.
-0.8970			
---- EQU EQU7	.	.	.
-0.1321			
---- EQU EQU8	.	.	.
0.8113			
---- EQU EQU9	.	.	.
-0.2158			
---- EQU EQU10	.	.	.
-0.0256			
---- EQU EQU11	1.0000	1.0000	1.0000
-45.3015			
---- EQU EQU12	.	.	.
EPS			
---- EQU EQU13	.	.	.
.			
---- EQU EQU14	460.0000	460.0000	460.0000
-0.0007			
---- EQU EQU15	.	.	.
-0.0010			
---- EQU EQU16	.	.	.
-0.0048			
---- EQU EQU17	.	.	.
205.2786			
---- EQU EQU18	-70.0000	-70.0000	-70.0000
EPS			
---- EQU EQU19	.	.	.
2.382803E-5			
---- EQU EQU20	1.0000	1.0000	1.0000
46.0833			
---- EQU EQU21	.	.	.
0.5032			
---- EQU EQU22	.	.	.
EPS			
---- EQU EQU23	.	.	.
EPS			
---- EQU EQU24	.	.	.
175.7064			

---- EQU EQU25	.	.	.
86.7126			
---- EQU EQU26	.	.	.
0.0109			
---- EQU EQU27	.	.	.
1.1240			
---- EQU EQU28	.	.	.
EPS			
---- EQU EQU29	.	.	.
0.0464			
---- EQU EQU30	.	.	.
0.0206			
---- EQU EQU31	.	.	.
EPS			
---- EQU EQU32	.	.	.
EPS			
---- EQU EQU33	.	.	.
139.8773			
---- EQU EQU34	.	.	.
-2.8551			
---- EQU EQU35	.	.	.
4.0289			
---- EQU EQU36	.	.	.
0.4460			
---- EQU EQU37	.	.	.
1793.4473			
---- EQU EQU38	.	.	.
1284.0939			
---- EQU EQU39	.	.	.
1489.3548			
---- EQU EQU40	.	.	.
1112.1878			
---- EQU EQU41	.	.	.
EPS			
---- EQU EQU42	1.0000	1.0000	1.0000
46.3056			
---- EQU EQU43	1.0000	1.0000	1.0000
22.9337			
---- EQU EQU44	1.0000	1.0000	1.0000
-7.2547			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU45 0.6778	1.0000	1.0000	1.0000
---- EQU EQU46 -1.0482	1.0000	1.0000	1.0000
---- EQU EQU47 -21.7206	1.0000	1.0000	1.0000
---- EQU EQU48 28.7773	1.0000	1.0000	1.0000
---- EQU EQU49 1.5379	1.0000	1.0000	1.0000
---- EQU EQU50 EPS	1.0000	1.0000	1.0000
---- EQU EQU51 -2.6429	1.0000	1.0000	1.0000
---- EQU EQU52 EPS	1.0000	1.0000	1.0000
---- EQU EQU53 -88.6676	1.0000	1.0000	1.0000
---- EQU EQU54 5.793026E-6	1.0000	1.0000	1.0000 -
---- EQU EQU55 -7.7877	1.0000	1.0000	1.0000
---- EQU EQU56 0.5908	1.0000	1.0000	1.0000
---- EQU EQU57 1.0760	1.0000	1.0000	1.0000
---- EQU EQU58 14.0248	1.0000	1.0000	1.0000
---- EQU EQU59 1.5750	1.0000	1.0000	1.0000
---- EQU EQU60 -0.9838	1.0000	1.0000	1.0000
---- EQU EQU61 -3.3208	1.0000	1.0000	1.0000
---- EQU EQU62 -8.9515	1.0000	1.0000	1.0000
---- EQU EQU63 3.0285	1.0000	1.0000	1.0000
---- EQU EQU64 63.4693	1.0000	1.0000	1.0000
---- EQU EQU65 44.1684	1.0000	1.0000	1.0000
---- EQU EQU66 36.0558	1.0000	1.0000	1.0000
---- EQU EQU67 4641.0734	1.0000	1.0000	1.0000 -
---- EQU EQU68 4341.7328	1.0000	1.0000	1.0000

---- EQU EQU69	1.0000	1.0000	1.0000
-28.9436			
---- EQU EQU70	1.0000	1.0000	1.0000
EPS			
---- EQU EQU71	1.0000	1.0000	1.0000
EPS			
---- EQU EQU72	1.0000	1.0000	1.0000
0.0178			
---- EQU EQU73	1.0000	1.0000	1.0000
6.5343			
---- EQU EQU74	1.0000	1.0000	1.0000
169.3515			
---- EQU EQU75	1.0000	1.0000	1.0000
-27.2486			
---- EQU EQU76	.	.	.
EPS			
---- EQU EQU77	.	.	.
EPS			
---- EQU EQU78	.	.	.
0.0096			
---- EQU EQU79	.	.	.
-0.0086			
---- EQU EQU80	.	.	.
EPS			
---- EQU EQU81	.	.	.
0.0020			
---- EQU EQU82	.	.	.
EPS			
---- EQU EQU83	.	.	.
-0.0060			
---- EQU EQU84	.	.	.
EPS			
---- EQU EQU85	.	.	.
-0.0022			
---- EQU EQU86	.	.	.
EPS			
---- EQU EQU87	.	.	.
0.0064			
---- EQU EQU88	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU89 -0.0003	.	.	.
---- EQU EQU90 19.0964	.	.	.
---- EQU EQU91 -89.8679	.	.	.
---- EQU EQU92 13.7353	.	.	.
---- EQU EQU93 29.3441	.	.	.
---- EQU EQU94 136.7955	.	.	.
---- EQU EQU95 146.0592	.	.	.
---- EQU EQU96 82.8167	.	.	.
---- EQU EQU97 14.2607	.	.	.
---- EQU EQU98 32.1722	.	.	.
---- EQU EQU99 149.6969	.	.	.
---- EQU EQU100 159.8243	.	.	.
---- EQU EQU101 90.6070	.	.	.
---- EQU EQU102 EPS	.	.	.
---- EQU EQU103 0.0022	.	.	.
---- EQU EQU104 0.3208	.	.	.
---- EQU EQU105 0.0103	.	.	.
---- EQU EQU106 0.0058	.	.	.
---- EQU EQU107 1.7396019E-6	.	.	.
---- EQU EQU108 EPS	.	.	.
---- EQU EQU109 EPS	.	.	.
---- EQU EQU110 EPS	.	.	.
---- EQU EQU111 EPS	.	.	.
---- EQU EQU112 EPS	.	.	.

---- EQU EQU113	.	.	.
EPS			
---- EQU EQU114	.	.	.
EPS			
---- EQU EQU115	.	.	.
29.3026			
---- EQU EQU116	.	.	.
6.8826			
---- EQU EQU117	.	.	.
0.0038			
---- EQU EQU118	.	.	.
3.6663706E-5			
---- EQU EQU119	.	.	.
2.8121029E-7			
---- EQU EQU120	.	.	.
EPS			
---- EQU EQU121	.	.	.
-0.0003			
---- EQU EQU122	.	.	.
EPS			
---- EQU EQU123	.	.	.
-0.0131			
---- EQU EQU124	.	.	.
EPS			
---- EQU EQU125	.	.	.
EPS			
---- EQU EQU126	.	.	.
-0.0019			
---- EQU EQU127	.	.	.
0.0368			
---- EQU EQU128	.	.	.
124.5209			-
---- EQU EQU129	.	.	.
-3.2368			
---- EQU EQU130	.	.	.
0.0079			
---- EQU EQU131	.	.	.
EPS			
---- EQU EQU132	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU133 EPS	.	.	.	
---- EQU EQU134 EPS	.	.	.	
---- EQU EQU135 EPS	.	.	.	
---- EQU EQU136 EPS	.	.	.	
---- EQU EQU137 2.8065	0.1500	0.1500	0.1500	
---- EQU EQU138 169.9775	15.0000	15.0000	15.0000	-
---- EQU EQU139 -8.6026	15.0000	15.0000	15.0000	
---- EQU EQU140 -0.9114	15.0000	15.0000	15.0000	
---- EQU EQU141 -2.6435	15.0000	15.0000	15.0000	
---- EQU EQU142 191.2455	.	.	.	
---- EQU EQU143 856.7693	.	.	.	
---- EQU EQU144 554.8611	.	.	.	
---- EQU EQU145 1064.1499	.	.	.	
---- EQU EQU146 2547.0455	.	.	.	
---- EQU EQU147 -16.0720	.	.	.	
---- EQU EQU148 0.0003	.	.	.	
---- EQU EQU149 EPS	.	.	.	
---- EQU EQU150 EPS	.	.	.	
---- EQU EQU151 EPS	.	.	.	
---- EQU EQU152 -0.0023	.	.	.	
---- EQU EQU153 -0.0153	.	.	.	
---- EQU EQU154 -0.0015	.	.	.	
---- EQU EQU155 9.338156E-5	.	.	.	-
---- EQU EQU156 -0.0001	.	.	.	

---- EQU EQU157	1.0000	1.0000	1.0000	
32.7432				
---- EQU EQU158	.	.	.	
1153.9784				
---- EQU EQU159	.	.	.	-
100.0801				
---- EQU EQU160	.	.	.	
-30.6787				
---- EQU EQU161	.	.	.	
167.0452				
---- EQU EQU162	.	.	.	
-6.0604				
---- EQU EQU163	1.0000	1.0000	1.0000	
-3.9565				
---- EQU EQU164	-290.0000	-290.0000	-290.0000	
EPS				
---- EQU EQU165	.	.	.	
1793.4473				
---- EQU EQU166	.	.	.	
1284.0939				
---- EQU EQU167	.	.	.	
1489.3548				
---- EQU EQU168	.	.	.	
30.5107				
---- EQU EQU169	.	.	.	
-0.0493				
---- EQU EQU170	.	.	.	
0.0210				
---- EQU EQU171	.	.	.	
EPS				
---- EQU EQU172	.	.	.	
EPS				
---- EQU EQU173	.	.	.	
30.5663				
---- EQU EQU174	.	.	.	
12.7279				
---- EQU EQU175	.	.	.	
2.4296				
---- EQU EQU176	.	.	.	
28.2854				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU177 99.3439	.	.	.
---- EQU EQU178 1.1110	.	.	.
---- EQU EQU179 0.8747	.	.	.
---- EQU EQU180 1112.1878	.	.	.
---- EQU EQU181 125.3696	1.0000	1.0000	1.0000
---- EQU EQU182 .	1.0000	1.0000	1.0000
---- EQU EQU183 EPS	.	.	.
---- EQU EQU184 EPS	.	.	.
---- EQU EQU185 EPS	.	.	.
---- EQU EQU186 EPS	.	.	.
---- EQU EQU187 EPS	.	.	.
---- EQU EQU188 EPS	.	.	.
---- EQU EQU189 -0.0060	.	.	.
---- EQU EQU190 EPS	.	.	.
---- EQU EQU191 EPS	.	.	.
---- EQU EQU192 EPS	.	.	.
---- EQU EQU193 EPS	.	.	.
---- EQU EQU194 -10.1920	1.0000	1.0000	1.0000
---- EQU EQU195 13465.1013	.	.	.
---- EQU EQU196 305.3311	.	.	.
---- EQU EQU197 217.3707	.	.	.
---- EQU EQU198 208.0998	.	.	.
---- EQU EQU199 129.5311	.	.	.
---- EQU EQU200 255.2454	1.0000	1.0000	1.0000

---- EQU EQU201	.	.	.	
0.0049				
---- EQU EQU202	.	.	.	-
1117.9947				
---- EQU EQU203	.	.	.	
1.1109				
---- EQU EQU204	.	.	.	
1.1109				
---- EQU EQU205	.	.	.	
1083.9345				
---- EQU EQU206	.	.	.	
1.1305				
---- EQU EQU207	.	.	.	
1.1175				
---- EQU EQU208	.	.	.	
1.1175				
---- EQU EQU209	.	.	.	
-1.1175				
---- EQU EQU210	.	.	.	-
124.5209				
---- EQU EQU211	.	.	.	
EPS				
---- EQU EQU212	.	.	.	
EPS				
---- EQU EQU213	.	.	.	
-1.0892				
---- EQU EQU214	.	.	.	
-1.0679				
---- EQU EQU215	.	.	.	
-1.0712				
---- EQU EQU216	.	.	.	-
1108.3261				
---- EQU EQU217	.	.	.	
3009.6907				
---- EQU EQU218	.	.	.	
3769.6181				
---- EQU EQU219	.	.	.	
4589.9888				
---- EQU EQU220	.	.	.	
6032.7653				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU221	.	.	.
6830.4309	.	.	.
---- EQU EQU222	.	.	.
7421.3095	.	.	.
---- EQU EQU223	.	.	.
5311.2750	.	.	.
---- EQU EQU224	.	.	.
8138.2646	.	.	.
---- EQU EQU225	.	.	.
149.3364	.	.	.
---- EQU EQU226	.	.	.
-1.1653	.	.	.
---- EQU EQU227	.	.	.
3013.6722	.	.	.
---- EQU EQU228	.	.	.
3014.3750	.	.	.
---- EQU EQU229	.	.	.
3772.7556	.	.	.
---- EQU EQU230	.	.	.
6060.1274	.	.	.
---- EQU EQU231	.	.	.
3009.6907	.	.	.
---- EQU EQU232	.	.	.
3018.4208	.	.	.
---- EQU EQU233	.	.	.
3769.6181	.	.	.
---- EQU EQU234	.	.	.
4589.3867	.	.	.
---- EQU EQU235	.	.	.
18.7931	.	.	.
---- EQU EQU236	.	.	.
7.017536E-5	.	.	.
---- EQU EQU237	.	.	.
-0.0005	.	.	.
---- EQU EQU238	.	.	.
-13.7240	.	.	.
---- EQU EQU239	.	.	.
-19.4548	.	.	.
---- EQU EQU240	.	.	.
23.1331	.	.	.
---- EQU EQU241	.	.	.
26.3061	.	.	.
---- EQU EQU242	.	.	.
4.7576	.	.	.
---- EQU EQU243	.	.	.
231.6344	.	.	.
---- EQU EQU244	.	.	.
4.5811	.	.	.

---- EQU EQU245	.	.	.	-
1143.3013				
---- EQU EQU246	.	.	.	
-29.6960				
---- EQU EQU247	.	.	.	
-23.5601				
---- EQU EQU248	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU249	.	.	.	
-0.7954				
---- EQU EQU250	.	.	.	
EPS				
---- EQU EQU251	.	.	.	
-20.7043				
---- EQU EQU252	.	.	.	
-39.1706				
---- EQU EQU253	.	.	.	
42.5438				
---- EQU EQU254	.	.	.	
56.4419				
---- EQU EQU255	.	.	.	
27.9175				
---- EQU EQU256	.	.	.	
12.0449				
---- EQU EQU257	.	.	.	
-0.3117				
---- EQU EQU258	.	.	.	
-9.7302				
---- EQU EQU259	1.0000	1.0000	1.0000	-
9336.1571				
---- EQU EQU260	.	.	.	-
1083.9345				
---- EQU EQU261	.	.	.	
1117.9947				
---- EQU EQU262	1.0000	1.0000	1.0000	
7770.4721				
---- EQU EQU263	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU264	.	.	.	-
5305.7926				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU265 6032.7958	.	.	.	-
---- EQU EQU266 6830.4309	.	.	.	-
---- EQU EQU267 7421.3095	.	.	.	-
---- EQU EQU268 8142.0059	.	.	.	-
---- EQU EQU269 EPS	.	.	.	
---- EQU EQU270 -0.2380	.	.	.	
---- EQU EQU271 0.1263	414.6000	414.6000	414.6000	
---- EQU EQU272 -0.0016	.	.	.	
---- EQU EQU273 -0.0005	.	.	.	
---- EQU EQU274 5.0466	.	.	.	
---- EQU EQU275 0.2258	.	.	.	
---- EQU EQU276 -2.3214	.	.	.	
---- EQU EQU277 -0.0019	.	.	.	
---- EQU EQU278 0.0023	.	.	.	
---- EQU EQU279 EPS	1.0000	1.0000	1.0000	
---- EQU EQU280 1369.0552	.	.	.	-
---- EQU EQU281 1453.6539	.	.	.	
---- EQU EQU282 12360.2314	1.0000	1.0000	1.0000	
---- EQU EQU283 EPS	1.0000	1.0000	1.0000	
---- EQU EQU284 -1.4016	.	.	.	
---- EQU EQU285 8484.5554	.	.	.	
---- EQU EQU286 7502.4408	.	.	.	
---- EQU EQU287 5692.8950	.	.	.	
---- EQU EQU288 4687.8328	.	.	.	

---- EQU EQU289	.	.	.	
-2.2188				
---- EQU EQU290	.	.	.	
-24.4035				
---- EQU EQU291	.	.	.	
20.8740				
---- EQU EQU292	.	.	.	
-0.6202				
---- EQU EQU293	.	.	.	
-12.0766				
---- EQU EQU294	.	.	.	
-1.9705				
---- EQU EQU295	1.0000	1.0000	1.0000	
-0.3117				
---- EQU EQU296	.	.	.	
0.9639				
---- EQU EQU297	.	.	.	
-20.1982				
---- EQU EQU298	.	.	.	
0.3542				
---- EQU EQU299	.	.	.	
2.9889				
---- EQU EQU300	.	.	.	
0.1737				
---- EQU EQU301	1.0000	1.0000	1.0000	
0.0220				
---- EQU EQU302	.	.	.	
18.3263				
---- EQU EQU303	.	.	.	
-41.8661				
---- EQU EQU304	.	.	.	
-44.4265				
---- EQU EQU305	.	.	.	
-25.8989				
---- EQU EQU306	.	.	.	
3744.5307				
---- EQU EQU307	.	.	.	-
1392.4720				
---- EQU EQU308	.	.	.	
-1.3553				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU309 1453.6539	.	.	-
---- EQU EQU310 -1.3733	.	.	
---- EQU EQU311 10154.7939	.	.	
---- EQU EQU312 1.4016	.	.	
---- EQU EQU313 1.4017	.	.	
---- EQU EQU314 1.4148	.	.	
---- EQU EQU315 1369.0552	.	.	
---- EQU EQU316 1.3949	.	.	
---- EQU EQU317 1.3949	.	.	
---- EQU EQU318 -1.3521	.	.	
---- EQU EQU319 3753.2645	.	.	-
---- EQU EQU320 9254.5163	.	.	-
---- EQU EQU321 8484.5554	.	.	-
---- EQU EQU322 7502.4823	.	.	-
---- EQU EQU323 6589.9409	.	.	-
---- EQU EQU324 -0.0004	.	.	
---- EQU EQU325 -0.0001	.	.	
---- EQU EQU326 22.4014	.	.	
---- EQU EQU327 9254.5163	.	.	
---- EQU EQU328 4687.8328	.	.	-
---- EQU EQU329 6597.5641	.	.	
---- EQU EQU330 3744.5307	.	.	-
---- EQU EQU331 7527.5319	.	.	-
---- EQU EQU332 4690.8555	.	.	-

---- EQU EQU333	.	.	.	-
3749.2178				
---- EQU EQU334	.	.	.	
3748.4678				
---- EQU EQU335	.	.	.	
-1.4494				
---- EQU EQU336	.	.	.	-
123.1297				
---- EQU EQU337	.	.	.	-
10160.3974				
---- EQU EQU338	.	.	.	-
5692.0410				
---- EQU EQU339	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU340	.	.	.	
-16.5404				
---- EQU EQU341	.	.	.	
-18.3546				
---- EQU EQU342	.	.	.	
41.8508				
---- EQU EQU343	.	.	.	
44.4241				
---- EQU EQU344	.	.	.	
25.8949				
---- EQU EQU345	1.0000	1.0000	1.0000	-
14017.5454				
---- EQU EQU346	.	.	.	
-23.5816				
---- EQU EQU347	.	.	.	
-19.1934				
---- EQU EQU348	.	.	.	-
1416.0142				
---- EQU EQU349	.	.	.	
66.4342				
---- EQU EQU350	.	.	.	-
278.5745				
---- EQU EQU351	.	.	.	
4.7361				
---- EQU EQU352	.	.	.	
26.2845				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU353 23.1116	.	.	.	
---- EQU EQU354 -19.4763	.	.	.	
---- EQU EQU355 -13.7455	.	.	.	
---- EQU EQU356 8.615168E-5	.	.	.	-
---- EQU EQU357 EPS	.	.	.	
---- EQU EQU358 0.0004	.	.	.	
---- EQU EQU359 EPS	1.0000	1.0000	1.0000	
---- EQU EQU360 EPS	1.0000	1.0000	1.0000	
---- EQU EQU361 28743.6453	1.0000	1.0000	1.0000	
---- EQU EQU362 31257.6979	1.0000	1.0000	1.0000	-
---- EQU EQU363 EPS	.	.	.	
---- EQU EQU364 1.8660	.	.	.	
---- EQU EQU365 1645.7335	1.0000	1.0000	1.0000	
---- EQU EQU366 -2.0301	.	.	.	
---- EQU EQU367 803.8106	1.0000	1.0000	1.0000	
---- EQU EQU368 1621.0826	.	.	.	-
---- EQU EQU369 1749.7196	.	.	.	
---- EQU EQU370 -13.7474	.	.	.	
---- EQU EQU371 -19.4783	.	.	.	
---- EQU EQU372 23.1097	.	.	.	
---- EQU EQU373 26.2826	.	.	.	
---- EQU EQU374 20.4583	.	.	.	
---- EQU EQU375 46.0833	.	.	.	
---- EQU EQU376 -47.2595	.	.	.	

---- EQU EQU377	.	.	.	
-13.4298				
---- EQU EQU378	.	.	.	-
5.709950E-5				
---- EQU EQU379	.	.	.	
0.0238				
---- EQU EQU380	.	.	.	
1439.1494				
---- EQU EQU381	.	.	.	
-18.1463				
---- EQU EQU382	.	.	.	
-24.4997				
---- EQU EQU383	.	.	.	
-50.1726				
---- EQU EQU384	.	.	.	
-25.7774				
---- EQU EQU385	.	.	.	
-92.2439				
---- EQU EQU386	.	.	.	
-19.4276				
---- EQU EQU387	.	.	.	
1.4237				
---- EQU EQU388	.	.	.	
12.7140				
---- EQU EQU389	.	.	.	
2.2571				
---- EQU EQU390	1.0000	1.0000	1.0000	
-4.8607				
---- EQU EQU391	.	.	.	
17.0016				
---- EQU EQU392	.	.	.	
6.9629343E-7				
---- EQU EQU393	.	.	.	
6.9629314E-7				
---- EQU EQU394	.	.	.	
-0.0003				
---- EQU EQU395	.	.	.	
217.8845				
---- EQU EQU396	.	.	.	
126.9777				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU397 26.4610	.	.	.	
---- EQU EQU398 -35.1656	.	.	.	
---- EQU EQU399 47.9477	.	.	.	
---- EQU EQU400 -30.9274	.	.	.	
---- EQU EQU401 49.3181	.	.	.	
---- EQU EQU402 EPS	-20.0000	-20.0000	-20.0000	
---- EQU EQU403 EPS	.	.	.	
---- EQU EQU404 412.1682	.	.	.	-
---- EQU EQU405 -2.4899	.	.	.	
---- EQU EQU406 1.0006	.	.	.	
---- EQU EQU407 21.2295	.	.	.	
---- EQU EQU408 46.8364	.	.	.	
---- EQU EQU409 5.0885	.	.	.	
---- EQU EQU410 6.2188	.	.	.	
---- EQU EQU411 4.7342	.	.	.	
---- EQU EQU412 332.0264	.	.	.	-
---- EQU EQU413 135.1171	.	.	.	
---- EQU EQU414 1631.5133	.	.	.	-
---- EQU EQU415 5.6055	.	.	.	
---- EQU EQU416 -23.5835	.	.	.	
---- EQU EQU417 1749.7196	.	.	.	-
---- EQU EQU418 -1.6526	.	.	.	
---- EQU EQU419 1.6460	.	.	.	
---- EQU EQU420 1.6460	.	.	.	

---- EQU EQU421	.	.	.	
1621.0826				
---- EQU EQU422	.	.	.	
1.6656				
---- EQU EQU423	.	.	.	
1.6527				
---- EQU EQU424	.	.	.	
1.6526				
---- EQU EQU425	.	.	.	-
4402.4696				
---- EQU EQU426	.	.	.	
-1.6243				
---- EQU EQU427	.	.	.	-
10875.2577				
---- EQU EQU428	.	.	.	
-1.6063				
---- EQU EQU429	.	.	.	-
1643.4538				
---- EQU EQU430	.	.	.	
4393.7395				
---- EQU EQU431	.	.	.	
5499.0454				
---- EQU EQU432	.	.	.	
6667.2579				
---- EQU EQU433	.	.	.	
8800.7803				
---- EQU EQU434	.	.	.	
9943.5987				
---- EQU EQU435	.	.	.	
11937.5982				
---- EQU EQU436	.	.	.	-
5499.0454				
---- EQU EQU437	.	.	.	-
11946.8421				
---- EQU EQU438	.	.	.	-
100.0898				
---- EQU EQU439	.	.	.	
-1.7004				
---- EQU EQU440	.	.	.	
4397.5968				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU441 4398.3670	.	.	.	-
---- EQU EQU442 5501.9261	.	.	.	-
---- EQU EQU443 8821.2976	.	.	.	-
---- EQU EQU444 -1.6031	.	.	.	
---- EQU EQU445 7733.9170	.	.	.	
---- EQU EQU446 6665.8461	.	.	.	-
---- EQU EQU447 10875.2577	.	.	.	
---- EQU EQU448 42.1437	.	.	.	
---- EQU EQU449 -0.0002	.	.	.	
---- EQU EQU450 -0.0004	.	.	.	
---- EQU EQU451 7721.8411	.	.	.	-
---- EQU EQU452 8800.8366	.	.	.	-
---- EQU EQU453 7.1331	.	.	.	
---- EQU EQU454 6.4872	.	.	.	
---- EQU EQU455 6.0939	.	.	.	
---- EQU EQU456 30.4150	.	.	.	
---- EQU EQU457 101.1277	.	.	.	
---- EQU EQU458 1.3618	.	.	.	
---- EQU EQU459 12.6071	.	.	.	
---- EQU EQU460 1.3308	.	.	.	
---- EQU EQU461	
---- EQU EQU462	
---- EQU EQU463	
---- EQU EQU464 EPS	.	.	.	

---- EQU EQU465	.	.	.	
-0.1992				
---- EQU EQU466	.	.	.	
EPS				
---- EQU EQU467	.	.	.	
EPS				
---- EQU EQU468	.	.	.	-
9943.5987				
---- EQU EQU469	.	.	.	-
4393.7395				
---- EQU EQU470	1.0000	1.0000	1.0000	
-28.9862				
---- EQU EQU471	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU472	1.0000	1.0000	1.0000	
-29.0895				
---- EQU EQU473	1.0000	1.0000	1.0000	
29783.7422				
---- EQU EQU474	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU475	1.0000	1.0000	1.0000	-
33032.3770				
---- EQU EQU476	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU477	.	.	.	
EPS				
---- EQU EQU478	.	.	.	
1.6920				
---- EQU EQU479	1.0000	1.0000	1.0000	
1910.6904				
---- EQU EQU480	.	.	.	-
1882.5925				
---- EQU EQU481	.	.	.	
2073.3887				
---- EQU EQU482	.	.	.	
-23.4805				
---- EQU EQU483	.	.	.	
2.1559				
---- EQU EQU484	.	.	.	-
1880.2862				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU485 192.3663	.	.	.	
---- EQU EQU486 -1.8212	.	.	.	
---- EQU EQU487 4.8372	.	.	.	
---- EQU EQU488 26.3856	.	.	.	
---- EQU EQU489 23.2127	.	.	.	
---- EQU EQU490 -19.3753	.	.	.	
---- EQU EQU491 -13.6444	.	.	.	
---- EQU EQU492 5087.6765	.	.	.	-
---- EQU EQU493 2073.3887	.	.	.	-
---- EQU EQU494 10171.2033	.	.	.	
---- EQU EQU495 7695.6672	.	.	.	
---- EQU EQU496 EPS	.	.	.	
---- EQU EQU497 0.3045	.	.	.	
---- EQU EQU498 1.6357	.	.	.	
---- EQU EQU499 1.7465	.	.	.	
---- EQU EQU500 0.9902	.	.	.	
---- EQU EQU501 19.1893	.	.	.	
---- EQU EQU502 120.4169	.	.	.	-
---- EQU EQU503 EPS	.	.	.	
---- EQU EQU504 2555.7777	.	.	.	-
---- EQU EQU505 2394.2081	.	.	.	
---- EQU EQU506 6355.2351	.	.	.	
---- EQU EQU507 5078.9464	.	.	.	
---- EQU EQU508 1908.4274	.	.	.	-

---- EQU EQU509	.	.	.	
-1.8713				
---- EQU EQU510	.	.	.	
13818.0112				
---- EQU EQU511	.	.	.	
-1.8893				
---- EQU EQU512	.	.	.	-
6355.2351				
---- EQU EQU513	.	.	.	
1.9176				
---- EQU EQU514	.	.	.	
1.9176				
---- EQU EQU515	.	.	.	
1.9307				
---- EQU EQU516	.	.	.	
1882.5925				
---- EQU EQU517	.	.	.	
1.9109				
---- EQU EQU518	.	.	.	
1.9109				
---- EQU EQU519	.	.	.	
-1.9176				
---- EQU EQU520	.	.	.	-
12584.7186				
---- EQU EQU521	.	.	.	
-1.8680				
---- EQU EQU522	.	.	.	-
11485.9974				
---- EQU EQU523	.	.	.	-
10171.2558				
---- EQU EQU524	.	.	.	-
8921.8861				
---- EQU EQU525	.	.	.	
-0.0004				
---- EQU EQU526	.	.	.	
-0.0002				
---- EQU EQU527	.	.	.	
38.3342				
---- EQU EQU528	.	.	.	
12584.7186				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU529	.	.	.
11485.9974			
---- EQU EQU530	.	.	.
8933.3336			
---- EQU EQU531	.	.	.
5078.9464			-
---- EQU EQU532	.	.	.
10192.4519			-
---- EQU EQU533	.	.	.
6358.2424			-
---- EQU EQU534	.	.	.
5083.5792			-
---- EQU EQU535	.	.	.
5082.8256			
---- EQU EQU536	.	.	.
-1.9654			
---- EQU EQU537	.	.	.
-75.6079			
---- EQU EQU538	.	.	.
13826.5170			-
---- EQU EQU539	.	.	.
7694.3415			-
---- EQU EQU540	.	.	.
1714.2339			
---- EQU EQU541	.	.	.
1988.2521			
---- EQU EQU542	.	.	.
1484.7435			
---- EQU EQU543	.	.	.
206.1363			
---- EQU EQU544	.	.	.
157.5116			
---- EQU EQU545	.	.	.
.			
---- EQU EQU546	.	.	.
142.1880			
---- EQU EQU547	.	.	.
29.9893			
---- EQU EQU548	.	.	.
-10.1016			
---- EQU EQU549	.	.	.
-46.8437			
---- EQU EQU550	.	.	.
-50.0072			
---- EQU EQU551	.	.	.
-28.3417			
---- EQU EQU552	.	.	.
0.0009			

----	EQU	EQU553	.	.	.
29.7097					
----	EQU	EQU554	.	.	.
-5.7308					
----	EQU	EQU555	.	.	.
-42.5879					
----	EQU	EQU556	.	.	.
-45.7609					
----	EQU	EQU557	.	.	.
-24.2124					
----	EQU	EQU558	.	.	.
4.1053					
----	EQU	EQU559	1.0000	1.0000	1.0000
EPS					
----	EQU	EQU560	1.0000	1.0000	1.0000
-25.9611					
----	EQU	EQU561	.	.	.
29.7097					
----	EQU	EQU562	.	.	.
-5.7308					
----	EQU	EQU563	.	.	.
-42.5879					
----	EQU	EQU564	.	.	.
-45.7609					
----	EQU	EQU565	.	.	.
-24.2124					
----	EQU	EQU566	.	.	.
4.1053					
----	EQU	EQU567	1.0000	1.0000	1.0000
EPS					
----	EQU	EQU568	1.0000	1.0000	1.0000
-31.7105					
----	EQU	EQU569	.	.	.
29.7097					
----	EQU	EQU570	.	.	.
-5.7308					
----	EQU	EQU571	.	.	.
-42.5879					
----	EQU	EQU572	.	.	.
-45.7609					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU573 -24.2124	.	.	.
---- EQU EQU574 4.1053	.	.	.
---- EQU EQU575 31.3883	1.0000	1.0000	1.0000
---- EQU EQU576 EPS	.	.	.
---- EQU EQU577
---- EQU EQU578 10.2349	.	.	.
---- EQU EQU579 18.8555	.	.	.
---- EQU EQU580 0.5109	.	.	.
---- EQU EQU581 -0.5245	.	.	.
---- EQU EQU582 11.1904	.	.	.
---- EQU EQU583 EPS	.	.	.
---- EQU EQU584 9.8985	.	.	.
---- EQU EQU585 337.6809	.	.	.
---- EQU EQU586 277.3269	.	.	.
---- EQU EQU587 1.8964	.	.	.
---- EQU EQU588 -1.8315	.	.	.
---- EQU EQU589 -0.0121	.	.	.
---- EQU EQU590 -0.1171	.	.	.
---- EQU EQU591 -10.0408	.	.	.
---- EQU EQU592 -46.8081	.	.	.
---- EQU EQU593 -49.9779	.	.	.
---- EQU EQU594 -28.3379	.	.	.
---- EQU EQU595 EPS	.	.	.
---- EQU EQU596 -19.3819	.	.	.

----	EQU	EQU597	.	.	.
0.9923					
----	EQU	EQU598	.	.	.
4.6106					
----	EQU	EQU599	.	.	.
3.3107					
----	EQU	EQU600	.	.	.
44.4101					
----	EQU	EQU601	.	.	.
93.2004					
----	EQU	EQU602	.	.	.
66.7711					
----	EQU	EQU603	.	.	.
412.0973					-
----	EQU	EQU604	.	.	.
-19.3205					
----	EQU	EQU605	.	.	.
1.0037					
----	EQU	EQU606	.	.	.
32.5254					
----	EQU	EQU607	.	.	.
EPS					
----	EQU	EQU608	.	.	.
2.6488					
----	EQU	EQU609	.	.	.
5.2302					
----	EQU	EQU610	.	.	.
-3.3529					
----	EQU	EQU611	.	.	.
0.5247					
----	EQU	EQU612	.	.	.
EPS					
----	EQU	EQU613	.	.	.
EPS					
----	EQU	EQU614	.	.	.
EPS					
----	EQU	EQU615	.	.	.
-1.6445					
----	EQU	EQU616	.	.	.
55.2844					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU617 114.7310	.	.	.
---- EQU EQU618 81.7414	.	.	.
---- EQU EQU619 -3.4526	.	.	.
---- EQU EQU620 -0.8722	.	.	.
---- EQU EQU621 20.7952	.	.	.
---- EQU EQU622 41.7666	.	.	.
---- EQU EQU623 29.4437	.	.	.
---- EQU EQU624 46.7288	.	.	.
---- EQU EQU625 49.9012	.	.	.
---- EQU EQU626 28.3236	.	.	.
---- EQU EQU627 46.7193	.	.	.
---- EQU EQU628 49.8917	.	.	.
---- EQU EQU629 28.3221	.	.	.
---- EQU EQU630 9.8818	.	.	.
---- EQU EQU631 EPS	1.0000	1.0000	1.0000
---- EQU EQU632 11.1904	.	.	.
---- EQU EQU633 EPS	.	.	.
---- EQU EQU634 9.8992	.	.	.
---- EQU EQU635 222.1059	.	.	.
---- EQU EQU636 46.7293	.	.	.
---- EQU EQU637 49.9016	.	.	.
---- EQU EQU638 28.3237	.	.	.
---- EQU EQU639 19.7803	.	.	.
---- EQU EQU640 615.0078	.	.	.

----	EQU EQU641	.	.	.
93.4481				
----	EQU EQU642	.	.	.
99.7929				
----	EQU EQU643	.	.	.
56.6457				
----	EQU EQU644	.	.	.
EPS				
----	EQU EQU645	.	.	.
2.3254				
----	EQU EQU646	1.0000	1.0000	1.0000
1394.6255				
----	EQU EQU647	.	.	.
11.1904				
----	EQU EQU648	.	.	.
EPS				
----	EQU EQU649	.	.	.
10.7203				
----	EQU EQU650	.	.	.
19.5141				
----	EQU EQU651	.	.	.
EPS				
----	EQU EQU652	.	.	.
0.8123				
----	EQU EQU653	.	.	.
17.3252				
----	EQU EQU654	.	.	.
35.7151				
----	EQU EQU655	.	.	.
25.1757				
----	EQU EQU656	.	.	.
-1.1298				
----	EQU EQU657	.	.	.
59.8527				
----	EQU EQU658	.	.	.
132.7412				
----	EQU EQU659	.	.	.
85.5202				
----	EQU EQU660	.	.	.
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU661 16.9752	.	.	.
---- EQU EQU662 35.5869	.	.	.
---- EQU EQU663 25.0873	.	.	.
---- EQU EQU664 EPS	.	.	.
---- EQU EQU665 EPS	.	.	.
---- EQU EQU666 -19.9229	.	.	.
---- EQU EQU667 -41.7666	.	.	.
---- EQU EQU668 -29.4437	.	.	.
---- EQU EQU669 -1.8684	.	.	.
---- EQU EQU670 172.8286	.	.	.
---- EQU EQU671 50.6250	.	.	.
---- EQU EQU672 54.0621	.	.	.
---- EQU EQU673 30.6863	.	.	.
---- EQU EQU674 29.6796	.	.	.
---- EQU EQU675 837.1137	.	.	.
---- EQU EQU676 140.1773	.	.	.
---- EQU EQU677 149.6945	.	.	.
---- EQU EQU678 84.9694	.	.	.
---- EQU EQU679 1203.2587	1.0000	1.0000	1.0000
---- EQU EQU680 1.4134	.	.	.
---- EQU EQU681 EPS	.	.	.
---- EQU EQU682 28.1876	1.0000	1.0000	1.0000
---- EQU EQU683 38.0094	.	.	.
---- EQU EQU684 -9.1466	.	.	.

---- EQU EQU685	.	.	.	-
248.4664				
---- EQU EQU686	.	.	.	
-46.2852				
---- EQU EQU687	.	.	.	
-49.5449				
---- EQU EQU688	.	.	.	
-28.2803				
---- EQU EQU689	.	.	.	
21.1897				
---- EQU EQU690	.	.	.	
EPS				
---- EQU EQU691	.	.	.	
4.7392				
---- EQU EQU692	.	.	.	
22.7563				
---- EQU EQU693	.	.	.	
24.3041				
---- EQU EQU694	.	.	.	
13.8173				
---- EQU EQU695	.	.	.	
4.8593				
---- EQU EQU696	.	.	.	
23.3687				
---- EQU EQU697	.	.	.	
24.9585				
---- EQU EQU698	.	.	.	
8.5358				
---- EQU EQU699	.	.	.	
-0.3903				
---- EQU EQU700	.	.	.	
20.6759				
---- EQU EQU701	.	.	.	
45.8550				
---- EQU EQU702	.	.	.	
29.5426				
---- EQU EQU703	.	.	.	
-8.5913				
---- EQU EQU704	.	.	.	
28.7773				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU705 28.7773	.	.	.
---- EQU EQU706 28.7773	.	.	.
---- EQU EQU707 3.9017	.	.	.
---- EQU EQU708 14.1913	.	.	.
---- EQU EQU709 21.1897	.	.	.
---- EQU EQU710 958.4523	1.0000	1.0000	1.0000
---- EQU EQU711 -4.0173	.	.	.
---- EQU EQU712 EPS	1.0000	1.0000	1.0000
---- EQU EQU713 EPS	.	.	.
---- EQU EQU714 40.9990	.	.	.
---- EQU EQU715 43.7876	.	.	.
---- EQU EQU716 24.8948	.	.	.
---- EQU EQU717 9.5985	.	.	.
---- EQU EQU718 46.1250	.	.	.
---- EQU EQU719 49.2626	.	.	.
---- EQU EQU720 28.0086	.	.	.
---- EQU EQU721 EPS	1.0000	1.0000	1.0000
---- EQU EQU722 21.1897	.	.	.
---- EQU EQU723 EPS	.	.	.
---- EQU EQU724 5.3041	.	.	.
---- EQU EQU725 25.4774	.	.	.
---- EQU EQU726 27.2104	.	.	.
---- EQU EQU727 15.4701	.	.	.
---- EQU EQU728 3.2318	.	.	.

---- EQU EQU729	.	.	.
15.5215			
---- EQU EQU730	.	.	.
16.5773			
---- EQU EQU731	.	.	.
9.4247			
---- EQU EQU732	1.0000	1.0000	1.0000
607.5046			
---- EQU EQU733	.	.	.
-3.1909			
---- EQU EQU734	.	.	.
-2.5688			
---- EQU EQU735	1.0000	1.0000	1.0000
464.6742			
---- EQU EQU736	.	.	.
EPS			
---- EQU EQU737	.	.	.
EPS			
---- EQU EQU738	.	.	.
EPS			
---- EQU EQU739	.	.	.
EPS			
---- EQU EQU740	.	.	.
EPS			
---- EQU EQU741	.	.	.
.			
---- EQU EQU742	.	.	.
26.6497			
---- EQU EQU743	.	.	.
97.5974			
---- EQU EQU744	.	.	.
0.1208			
---- EQU EQU745	.	.	.
0.0064			
---- EQU EQU746	-290.0000	-290.0000	-290.0000
0.0906			
---- EQU EQU747	.	.	.
EPS			
---- EQU EQU748	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU749 EPS	.	.	.	
---- EQU EQU750 -0.0022	.	.	.	
---- EQU EQU751 -0.0906	-290.0000	-290.0000	-290.0000	
---- EQU EQU752 EPS	.	.	.	
---- EQU EQU753 EPS	.	.	.	
---- EQU EQU754 EPS	.	.	.	
---- EQU EQU755 EPS	.	.	.	
---- EQU EQU756 0.0060	.	.	.	
---- EQU EQU757 -0.0283	414.6000	414.6000	414.6000	
---- EQU EQU758 EPS	.	.	.	
---- EQU EQU759 EPS	.	.	.	
---- EQU EQU760 EPS	829.2000	829.2000	829.2000	
---- EQU EQU761 1.055078E-6	.	.	.	-
---- EQU EQU762 EPS	.	.	.	
---- EQU EQU763 1.620027E-7	.	.	.	-
---- EQU EQU764 -0.0098	.	.	.	
---- EQU EQU765 0.0200	481.0000	481.0000	481.0000	
---- EQU EQU766 EPS	.	.	.	
---- EQU EQU767 -0.0079	.	.	.	
---- EQU EQU768 -0.0158	962.0000	962.0000	962.0000	
---- EQU EQU769 -0.0195	.	.	.	
---- EQU EQU770 -48.0454	1.0000	1.0000	1.0000	
---- EQU EQU771 -0.0195	.	.	.	
---- EQU EQU772 -29.8941	1.0000	1.0000	1.0000	

----	EQU	EQU773	.	.	.
-0.0195					
----	EQU	EQU774	.	.	.
-0.0160					
----	EQU	EQU775	.	.	.
-0.0160					
----	EQU	EQU776	.	.	.
.					
----	EQU	EQU777	.	.	.
-0.0160					
----	EQU	EQU778	.	.	.
12.7936					
----	EQU	EQU779	.	.	.
15.4202					
----	EQU	EQU780	.	.	.
EPS					
----	EQU	EQU781	.	.	.
0.0040					
----	EQU	EQU782	.	.	.
0.0003					
----	EQU	EQU783	.	.	.
EPS					
----	EQU	EQU784	.	.	.
0.0049					
----	EQU	EQU785	.	.	.
-0.0020					
----	EQU	EQU786	.	.	.
EPS					
----	EQU	EQU787	.	.	.
0.0362					
----	EQU	EQU788	.	.	.
-0.0493					
----	EQU	EQU789	.	.	.
0.0284					
----	EQU	EQU790	.	.	.
-0.0284					
----	EQU	EQU791	.	.	.
EPS					
----	EQU	EQU792	.	.	.
0.0383					

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU793 21.0514	.	.	.
---- EQU EQU794 19.5290	.	.	.
---- EQU EQU795 1108.8872	.	.	.
---- EQU EQU796 0.0069	.	.	.
---- EQU EQU797 -47.4779	1.0000	1.0000	1.0000
---- EQU EQU798 -34.9529	1.0000	1.0000	1.0000
---- EQU EQU799 0.0029	.	.	.
---- EQU EQU800 -21.2451	.	.	.
---- EQU EQU801 -27.4541	.	.	.
---- EQU EQU802 -46.3761	.	.	.
---- EQU EQU803 -32.2354	.	.	.
---- EQU EQU804 1761.2619	.	.	.
---- EQU EQU805 -12.5650	1.0000	1.0000	1.0000
---- EQU EQU806 12.9710	1.0000	1.0000	1.0000
---- EQU EQU807	1.0000	1.0000	1.0000
EPS			
---- EQU EQU808 -0.0040	.	.	.
---- EQU EQU809 -0.0040	.	.	.
---- EQU EQU810 -25.8893	.	.	.
---- EQU EQU811 -44.2637	.	.	.
---- EQU EQU812 -41.7960	.	.	.
---- EQU EQU813 18.5341	.	.	.
---- EQU EQU814 20.1125	.	.	.
---- EQU EQU815 -7.7528	1.0000	1.0000	1.0000
---- EQU EQU816 -0.0174	.	.	.

---- EQU EQU817	1.0000	1.0000	1.0000
1.0118			
---- EQU EQU818	.	.	.
0.0006			
---- EQU EQU819	1.0000	1.0000	1.0000
18.3674			
---- EQU EQU820	.	.	.
0.0107			
---- EQU EQU821	.	.	.
-0.0168			
---- EQU EQU822	1.0000	1.0000	1.0000
-19.3449			
---- EQU EQU823	.	.	.
5.1183			
---- EQU EQU824	.	.	.
-7.8153			
---- EQU EQU825	.	.	.
-0.0312			
---- EQU EQU826	.	.	.
-0.0352			
---- EQU EQU827	.	.	.
8.6379			
---- EQU EQU828	.	.	.
210.2207			
---- EQU EQU829	.	.	.
39.9025			
---- EQU EQU830	.	.	.
42.5803			
---- EQU EQU831	.	.	.
24.1236			
---- EQU EQU832	.	.	.
0.0009			
---- EQU EQU833	.	.	.
7.9056			
---- EQU EQU834	.	.	.
0.0349			
---- EQU EQU835	.	.	.
EPS			
---- EQU EQU836	.	.	.
EPS			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU837 0.1972	.	.	.
---- EQU EQU838 42.5829	.	.	.
---- EQU EQU839 91.6987	.	.	.
---- EQU EQU840 66.5779	.	.	.
---- EQU EQU841 -0.0233	.	.	.
---- EQU EQU842 0.0247	.	.	.
---- EQU EQU843 -0.3609	.	.	.
---- EQU EQU844 -16.6151	.	.	.
---- EQU EQU845 66.4651	.	.	.
---- EQU EQU846 90.7427	.	.	.
---- EQU EQU847 41.3769	.	.	.
---- EQU EQU848 -1.8418	.	.	.
---- EQU EQU849 91.2791	.	.	.
---- EQU EQU850 159.1100	.	.	.
---- EQU EQU851 148.3329	.	.	.
---- EQU EQU852 806.3218	.	.	.
---- EQU EQU853 27.4083	.	.	.
---- EQU EQU854 5.6935	.	.	.
---- EQU EQU855 -0.0008	.	.	.
---- EQU EQU856 19.2228	.	.	.
---- EQU EQU857 34.0439	.	.	.
---- EQU EQU858 29.7151	.	.	.
---- EQU EQU859 -28.5516	.	.	.
---- EQU EQU860 -0.0021	.	.	.

---- EQU EQU861	.	.	.	
0.0160				
---- EQU EQU862	.	.	.	
-20.1125				
---- EQU EQU863	.	.	.	
91.4008				
---- EQU EQU864	.	.	.	
160.0863				
---- EQU EQU865	.	.	.	
149.5373				
---- EQU EQU866	.	.	.	
803.2534				
---- EQU EQU867	.	.	.	
29.4544				
---- EQU EQU868	.	.	.	-
4.440385E-5				
---- EQU EQU869	.	.	.	
-0.0001				
---- EQU EQU870	.	.	.	
-0.0049				
---- EQU EQU871	.	.	.	
-0.0162				
---- EQU EQU872	.	.	.	
-0.0133				
---- EQU EQU873	.	.	.	
-0.0135				
---- EQU EQU874	.	.	.	
-0.0100				
---- EQU EQU875	.	.	.	
0.0144				
---- EQU EQU876	.	.	.	
-0.0133				
---- EQU EQU877	.	.	.	
0.0148				
---- EQU EQU878	.	.	.	
-0.0133				
---- EQU EQU879	.	.	.	
0.0134				
---- EQU EQU880	.	.	.	
-0.0134				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU881 0.0339	.	.	.
---- EQU EQU882 -0.0133	.	.	.
---- EQU EQU883 0.0318	.	.	.
---- EQU EQU884 -0.0135	.	.	.
---- EQU EQU885 0.0313	.	.	.
---- EQU EQU886 -0.0133	.	.	.
---- EQU EQU887 0.0313	.	.	.
---- EQU EQU888 -0.0133	.	.	.
---- EQU EQU889 EPS	.	.	.
---- EQU EQU890 13.2322	1.0000	1.0000	1.0000
---- EQU EQU891 EPS	.	.	.
---- EQU EQU892 EPS	.	.	.
---- EQU EQU893 EPS	.	.	.
---- EQU EQU894 -19.3666	1.0000	1.0000	1.0000
---- EQU EQU895 -36.8060	.	.	.
---- EQU EQU896 1.1905	.	.	.
---- EQU EQU897 EPS	.	.	.
---- EQU EQU898 0.8593	.	.	.
---- EQU EQU899 -71.8380	1.0000	1.0000	1.0000
---- EQU EQU900 -29.9200	.	.	.
---- EQU EQU901 68.4171	1.0000	1.0000	1.0000
---- EQU EQU902 -39.0312	.	.	.
---- EQU EQU903 50.4105	1.0000	1.0000	1.0000
---- EQU EQU904 -24.5731	.	.	.

---- EQU EQU905	.	.	.
-5.9459			
---- EQU EQU906	.	.	.
-0.3798			
---- EQU EQU907	.	.	.
10.2375			
---- EQU EQU908	.	.	.
14.8617			
---- EQU EQU909	.	.	.
21.7219			
---- EQU EQU910	.	.	.
17.1092			
---- EQU EQU911	.	.	.
6.8586			
---- EQU EQU912	.	.	.
0.7160			
---- EQU EQU913	.	.	.
-15.5540			
---- EQU EQU914	.	.	.
-19.4454			
---- EQU EQU915	.	.	.
EPS			
---- EQU EQU916	.	.	.
33.1913			
---- EQU EQU917	.	.	.
EPS			
---- EQU EQU918	.	.	.
68.4171			
---- EQU EQU919	.	.	.
70.5535			
---- EQU EQU920	.	.	.
88.8812			
---- EQU EQU921	.	.	.
131.7669			
---- EQU EQU922	.	.	.
164.5750			
---- EQU EQU923	.	.	.
EPS			
---- EQU EQU924	1.0000	1.0000	1.0000
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU925 EPS	.	.	.
---- EQU EQU926 EPS	.	.	.
---- EQU EQU927 9.451855E-5	.	.	.
---- EQU EQU928 -0.0059	.	.	.
---- EQU EQU929 -0.0015	.	.	.
---- EQU EQU930 EPS	.	.	.
---- EQU EQU931 0.0014	.	.	.
---- EQU EQU932 2.4187861E-6	.	.	.
---- EQU EQU933 -0.0001	.	.	.
---- EQU EQU934 EPS	.	.	.
---- EQU EQU935 EPS	.	.	.
---- EQU EQU936 -0.0021	.	.	.
---- EQU EQU937 -0.0291	.	.	.
---- EQU EQU938 -1.8920	.	.	.
---- EQU EQU939 -0.4562	.	.	.
---- EQU EQU940 EPS	.	.	.
---- EQU EQU941 0.4431	.	.	.
---- EQU EQU942 0.0008	.	.	.
---- EQU EQU943 -0.0398	.	.	.
---- EQU EQU944 EPS	.	.	.
---- EQU EQU945 -0.0007	1.000000E-20	1.000000E-20	1.000000E-20
---- EQU EQU946 .	1.000000E-10	1.000000E-10	1.000000E-10
---- EQU EQU947 1.5293	1.0000	1.0000	1.0000
---- EQU EQU948 -22.1436	1.0000	1.0000	1.0000

---- EQU EQU949	1.0000	1.0000	1.0000	
5.0676				
---- EQU EQU950	.	.	.	
-6.4162				
---- EQU EQU951	.	.	.	
EPS				
---- EQU EQU952	.	.	.	
EPS				
---- EQU EQU953	.	.	.	
69.3394				
---- EQU EQU954	.	.	.	
-4.7418				
---- EQU EQU955	.	.	.	
EPS				
---- EQU EQU956	.	.	.	
0.0291				
---- EQU EQU957	.	.	.	
-0.0716				
---- EQU EQU958	.	.	.	-
6.603383E-6				
---- EQU EQU959	.	.	.	
3227.6891				
---- EQU EQU960	.	.	.	
-52.3880				
---- EQU EQU961	.	.	.	
EPS				
---- EQU EQU962	.	.	.	
2.0546				
---- EQU EQU963	.	.	.	
.				
---- EQU EQU964	.	.	.	
-0.1814				
---- EQU EQU965	1.0000	1.0000	1.0000	
5.9811				
---- EQU EQU966	.	.	.	
260.3516				
---- EQU EQU967	.	.	.	
-5.5491				
---- EQU EQU968	1.0000	1.0000	1.0000	
-6.2936				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU969 144.7909	.	.	.
---- EQU EQU970 4.0053	.	.	.
---- EQU EQU971 282.0913	.	.	.
---- EQU EQU972 -92.1745	.	.	.
---- EQU EQU973 -67.7694	.	.	.
---- EQU EQU974 -22.1289	.	.	.
---- EQU EQU975 6.1454673E-5	.	.	.
---- EQU EQU976 0.0016	.	.	.
---- EQU EQU977 EPS	.	.	.
---- EQU EQU978 -2.6736	.	.	.
---- EQU EQU979 15.0694	.	.	.
---- EQU EQU980 36.3721	.	.	.
---- EQU EQU981 -44.7892	.	.	.
---- EQU EQU982 EPS	.	.	.
---- EQU EQU983 EPS	.	.	.
---- EQU EQU984 28.5352	.	.	.
---- EQU EQU985 EPS	.	.	.
---- EQU EQU986 -0.0820	.	.	.
---- EQU EQU987 -0.0060	.	.	.
---- EQU EQU988 301.5934	.	.	.
---- EQU EQU989 -0.0060	.	.	.
---- EQU EQU990 EPS	.	.	.
---- EQU EQU991 EPS	.	.	.
---- EQU EQU992 0.0133	.	.	.

----	EQU	EQU993	.	.	.	
409.1108						
----	EQU	EQU994	.	.	.	
0.0059						
----	EQU	EQU995	.	.	.	
-7.2182						
----	EQU	EQU996	.	.	.	
-0.0061						
----	EQU	EQU997	.	.	.	
-0.0061						
----	EQU	EQU998	.	.	.	-
345.4026						
----	EQU	EQU999	.	.	.	
EPS						
----	EQU	EQU1000	.	.	.	
EPS						
----	EQU	EQU1001	.	.	.	
0.0060						
----	EQU	EQU1002	.	.	.	
0.0135						
----	EQU	EQU1003	.	.	.	
404.9485						
----	EQU	EQU1004	.	.	.	
-0.0060						
----	EQU	EQU1005	.	.	.	
-6.2275						
----	EQU	EQU1006	.	.	.	
-0.0060						
----	EQU	EQU1007	.	.	.	-
623.4033						
----	EQU	EQU1008	.	.	.	
EPS						
----	EQU	EQU1009	.	.	.	
EPS						
----	EQU	EQU1010	.	.	.	
0.0060						
----	EQU	EQU1011	.	.	.	
0.0133						
----	EQU	EQU1012	.	.	.	
678.7538						

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1013 -0.0060	.	.	.
---- EQU EQU1014 -5.6568	.	.	.
---- EQU EQU1015 -0.6499	.	.	.
---- EQU EQU1016 2.6575	.	.	.
---- EQU EQU1017 EPS	.	.	.
---- EQU EQU1018 -2.7626	.	.	.
---- EQU EQU1019 EPS	.	.	.
---- EQU EQU1020 EPS	.	.	.
---- EQU EQU1021 175.5336	.	.	.
---- EQU EQU1022 -88.8299	.	.	.
---- EQU EQU1023 -29.2805	.	.	.
---- EQU EQU1024 -21.7514	.	.	.
---- EQU EQU1025 -6.2309	.	.	.
---- EQU EQU1026 -14.3829	1.0000	1.0000	1.0000
---- EQU EQU1027 EPS	.	.	.
---- EQU EQU1028 EPS	.	.	.
---- EQU EQU1029 EPS	.	.	.
---- EQU EQU1030 EPS	.	.	.
---- EQU EQU1031 EPS	.	.	.
---- EQU EQU1032 EPS	.	.	.
---- EQU EQU1033 3.4526	.	.	.
---- EQU EQU1034 -0.0060	.	.	.
---- EQU EQU1035 545.7771	.	.	.
---- EQU EQU1036 EPS	.	.	.

----	EQU	EQU1037	.	.	.
0.0059					
----	EQU	EQU1038	.	.	.
EPS					
----	EQU	EQU1039	.	.	.
716.8647					
----	EQU	EQU1040	.	.	.
0.0133					
----	EQU	EQU1041	.	.	.
-7.9730					
----	EQU	EQU1042	.	.	.
-3.1024					
----	EQU	EQU1043	.	.	.
6.3146					
----	EQU	EQU1044	.	.	.
7.3565					
----	EQU	EQU1045	.	.	.
3.6169					
----	EQU	EQU1046	.	.	.
-82.2781					
----	EQU	EQU1047	.	.	.
-29.8941					
----	EQU	EQU1048	.	.	.
71.2348					
----	EQU	EQU1049	.	.	.
96.5445					
----	EQU	EQU1050	.	.	.
67.6239					
----	EQU	EQU1051	.	.	.
-7.7635					
----	EQU	EQU1052	.	.	.
-4.4085					
----	EQU	EQU1053	.	.	.
6.1005					
----	EQU	EQU1054	.	.	.
7.2308					
----	EQU	EQU1055	.	.	.
3.5211					
----	EQU	EQU1056	.	.	.
-74.0973					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1057 -48.0454	.	.	.
---- EQU EQU1058 68.7003	.	.	.
---- EQU EQU1059 94.9298	.	.	.
---- EQU EQU1060 -0.0164	.	.	.
---- EQU EQU1061 EPS	.	.	.
---- EQU EQU1062 EPS	.	.	.
---- EQU EQU1063 0.1814	.	.	.
---- EQU EQU1064 65.8408	.	.	.
---- EQU EQU1065 0.2081	.	.	.
---- EQU EQU1066 0.0083	.	.	.
---- EQU EQU1067 -3.1024	1.0000	1.0000	1.0000
---- EQU EQU1068 -4.4085	1.0000	1.0000	1.0000
---- EQU EQU1069 -0.0055	.	.	.
---- EQU EQU1070 -0.0055	.	.	.
---- EQU EQU1071 12.9532	.	.	.
---- EQU EQU1072 -0.0055	.	.	.
---- EQU EQU1073 EPS	1.0000	1.0000	1.0000
---- EQU EQU1074 EPS	1.0000	1.0000	1.0000
---- EQU EQU1075 -0.0020	.	.	.
---- EQU EQU1076 EPS	1.0000	1.0000	1.0000
---- EQU EQU1077 -0.0020	.	.	.
---- EQU EQU1078 15.3658	1.0000	1.0000	1.0000
---- EQU EQU1079 -0.0020	.	.	.
---- EQU EQU1080 12.9532	.	.	.

---- EQU EQU1081	.	.	.
0.0215			
---- EQU EQU1082	.	.	.
0.0215			
---- EQU EQU1083	.	.	.
-12.9532			
---- EQU EQU1084	.	.	.
0.0215			
---- EQU EQU1085	1.0000	1.0000	1.0000
EPS			
---- EQU EQU1086	1.0000	1.0000	1.0000
EPS			
---- EQU EQU1087	.	.	.
EPS			
---- EQU EQU1088	.	.	.
-0.0117			
---- EQU EQU1089	.	.	.
EPS			
---- EQU EQU1090	.	.	.
2.6013163E-6			
---- EQU EQU1091	.	.	.
6.5950021E-6			
---- EQU EQU1092	.	.	.
0.0021			
---- EQU EQU1093	.	.	.
0.0002			
---- EQU EQU1094	.	.	.
0.0007			
---- EQU EQU1095	1.0000	1.0000	1.0000
-2.7381			
---- EQU EQU1096	1.0000	1.0000	1.0000
0.6232			
---- EQU EQU1097	.	.	.
3.8835			
---- EQU EQU1098	.	.	.
0.2352			
---- EQU EQU1099	1.0000	1.0000	1.0000
168.5271			
---- EQU EQU1100	.	.	.
-0.0001			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1101 -0.0069	.	.	.
---- EQU EQU1102 -0.0014	.	.	.
---- EQU EQU1103 9.008590E-5	.	.	.
---- EQU EQU1104 -0.0052	.	.	.
---- EQU EQU1105 -8.4065	1.0000	1.0000	1.0000
---- EQU EQU1106 -89.2083	.	.	.
---- EQU EQU1107 -70.2870	.	.	.
---- EQU EQU1108 -65.7371	.	.	.
---- EQU EQU1109 1.7161	.	.	.
---- EQU EQU1110 5.6841	1.0000	1.0000	1.0000
---- EQU EQU1111 172.9934	.	.	.
---- EQU EQU1112 -3.4134	.	.	.
---- EQU EQU1113 -1.4069	.	.	.
---- EQU EQU1114 -1.0762	.	.	.
---- EQU EQU1115 -9.1820	.	.	.
---- EQU EQU1116 -2.6398	.	.	.
---- EQU EQU1117 -0.6891	.	.	.
---- EQU EQU1118 -0.4001	.	.	.
---- EQU EQU1119 -0.7908	.	.	.
---- EQU EQU1120 EPS	1.0000	1.0000	1.0000
---- EQU EQU1121 2.3910	.	.	.
---- EQU EQU1122 0.6154	.	.	.
---- EQU EQU1123 0.4285	.	.	.
---- EQU EQU1124 EPS	1.0000	1.0000	1.0000

---- EQU EQU1125	.	.	.	
9.9154001E-7				
---- EQU EQU1126	.	.	.	
1.7654204E-6				
---- EQU EQU1127	.	.	.	
0.0063				
---- EQU EQU1128	.	.	.	
0.0003				
---- EQU EQU1129	.	.	.	
3.9563				
---- EQU EQU1130	.	.	.	
3.0753				
---- EQU EQU1131	.	.	.	
2.1778				
---- EQU EQU1132	1.0000	1.0000	1.0000	
14.8655				
---- EQU EQU1133	.	.	.	
-2.2138				
---- EQU EQU1134	.	.	.	
-2.4931				
---- EQU EQU1135	.	.	.	
-0.6896				
---- EQU EQU1136	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU1137	.	.	.	
7.6441662E-7				
---- EQU EQU1138	.	.	.	-
3.025149E-5				
---- EQU EQU1139	.	.	.	
0.0018				
---- EQU EQU1140	.	.	.	
-0.0010				
---- EQU EQU1141	.	.	.	
-0.0014				
---- EQU EQU1142	.	.	.	
-3.4678				
---- EQU EQU1143	.	.	.	
-4.0569				
---- EQU EQU1144	.	.	.	
-10.1692				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1145 -1.5682	.	.	.
---- EQU EQU1146 EPS	.	.	.
---- EQU EQU1147 2.818471E-6	.	.	-
---- EQU EQU1148 EPS	.	.	.
---- EQU EQU1149 -0.0008	.	.	.
---- EQU EQU1150 -0.0035	.	.	.
---- EQU EQU1151 -0.0249	.	.	.
---- EQU EQU1152 2.4363786E-7	.	.	.
---- EQU EQU1153 -0.0159	.	.	.
---- EQU EQU1154 -1.9825	.	.	.
---- EQU EQU1155 -0.5178	.	.	.
---- EQU EQU1156 -0.6260	.	.	.
---- EQU EQU1157 EPS	.	.	.
---- EQU EQU1158 7.072449E-7	.	.	-
---- EQU EQU1159 -0.0020	.	.	.
---- EQU EQU1160 EPS	152.2500	152.2500	152.2500
---- EQU EQU1161 -0.0270	181.2500	181.2500	181.2500
---- EQU EQU1162 0.0148	118.9000	118.9000	118.9000
---- EQU EQU1163 0.0185	40.6000	40.6000	40.6000
---- EQU EQU1164 0.1248	9.8600	9.8600	9.8600
---- EQU EQU1165 0.0133	.	.	.
---- EQU EQU1166 0.0135	.	.	.
---- EQU EQU1167 0.0133	.	.	.
---- EQU EQU1168 0.0133	.	.	.

---- EQU EQU1169	.	.	.
-12.9532			
---- EQU EQU1170	.	.	.
-7.1594			
---- EQU EQU1171	.	.	.
-34.5534			
---- EQU EQU1172	.	.	.
26.3742			
---- EQU EQU1173	.	.	.
28.4257			
---- EQU EQU1174	.	.	.
10.7325			
---- EQU EQU1175	.	.	.
-15.1211			
---- EQU EQU1176	.	.	.
-4.5345			
---- EQU EQU1177	.	.	.
13.8206			
---- EQU EQU1178	.	.	.
35.2675			
---- EQU EQU1179	.	.	.
24.0565			
---- EQU EQU1180	.	.	.
-5.1285			
---- EQU EQU1181	.	.	.
-19.7044			
---- EQU EQU1182	.	.	.
54.7692			
---- EQU EQU1183	.	.	.
-12.4902			
---- EQU EQU1184	.	.	.
166.0873			-
---- EQU EQU1185	.	.	.
175.4853			-
---- EQU EQU1186	.	.	.
107.5072			-
---- EQU EQU1187	.	.	.
-8.4390			
---- EQU EQU1188	.	.	.
-16.9331			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1189 -57.7871	.	.	.
---- EQU EQU1190 106.4391	.	.	.
---- EQU EQU1191 -79.7688	.	.	.
---- EQU EQU1192 -12.9845	.	.	.
---- EQU EQU1193 -0.0174	.	.	.
---- EQU EQU1194 0.9493	.	.	.
---- EQU EQU1195 EPS	.	.	.
---- EQU EQU1196 0.0508	.	.	.
---- EQU EQU1197 EPS	.	.	.
---- EQU EQU1198 0.0069	.	.	.
---- EQU EQU1199 -1.2193	.	.	.
---- EQU EQU1200 12.9710	.	.	.
---- EQU EQU1201 -7.4441	.	.	.
---- EQU EQU1202 -2.0267	.	.	.
---- EQU EQU1203 EPS	1.0000	1.0000	1.0000
---- EQU EQU1204 -0.0036	.	.	.
---- EQU EQU1205 -0.0181	.	.	.
---- EQU EQU1206 21.3490	1.0000	1.0000	1.0000
---- EQU EQU1207 -0.0047	.	.	.
---- EQU EQU1208 EPS	1.0000	1.0000	1.0000
---- EQU EQU1209 EPS	1.0000	1.0000	1.0000
---- EQU EQU1210 EPS	.	.	.
---- EQU EQU1211 EPS	.	.	.
---- EQU EQU1212 EPS	.	.	.

----	EQU	EQU1213	.	.	.
EPS					
----	EQU	EQU1214	.	.	.
EPS					
----	EQU	EQU1215	.	.	.
EPS					
----	EQU	EQU1216	.	.	.
EPS					
----	EQU	EQU1217	.	.	.
EPS					
----	EQU	EQU1218	.	.	.
EPS					
----	EQU	EQU1219	.	.	.
EPS					
----	EQU	EQU1220	.	.	.
EPS					
----	EQU	EQU1221	.	.	.
EPS					
----	EQU	EQU1222	.	.	.
EPS					
----	EQU	EQU1223	.	.	.
EPS					
----	EQU	EQU1224	.	.	.
EPS					
----	EQU	EQU1225	.	.	.
EPS					
----	EQU	EQU1226	.	.	.
EPS					
----	EQU	EQU1227	.	.	.
EPS					
----	EQU	EQU1228	.	.	.
EPS					
----	EQU	EQU1229	.	.	.
EPS					
----	EQU	EQU1230	.	.	.
EPS					
----	EQU	EQU1231	.	.	.
EPS					
----	EQU	EQU1232	.	.	.
EPS					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1233 EPS	.	.	.
---- EQU EQU1234 EPS	1.0000	1.0000	1.0000
---- EQU EQU1235 EPS	1.0000	1.0000	1.0000
---- EQU EQU1236 4.3393268E-5	537.9500	537.9500	537.9500
---- EQU EQU1237 EPS	152.2500	152.2500	152.2500
---- EQU EQU1238 -0.0024	181.2500	181.2500	181.2500
---- EQU EQU1239 0.0002	118.9000	118.9000	118.9000
---- EQU EQU1240 0.0009	40.6000	40.6000	40.6000
---- EQU EQU1241 0.0343	9.8600	9.8600	9.8600
---- EQU EQU1242 -1.0178	.	.	.
---- EQU EQU1243 1.4533	.	.	.
---- EQU EQU1244 -0.6953	.	.	.
---- EQU EQU1245 -3.7797	.	.	.
---- EQU EQU1246 -15.0261	.	.	.
---- EQU EQU1247 27.0254	.	.	.
---- EQU EQU1248 -13.0017	.	.	.
---- EQU EQU1249 4.0807	.	.	.
---- EQU EQU1250 7.5743	.	.	.
---- EQU EQU1251 7.3127	.	.	.
---- EQU EQU1252 EPS	.	.	.
---- EQU EQU1253 EPS	.	.	.
---- EQU EQU1254 EPS	1.0000	1.0000	1.0000
---- EQU EQU1255 EPS	1.0000	1.0000	1.0000
---- EQU EQU1256 0.0096	.	.	.

----	EQU	EQU1257	.	.	.
-0.0010					
----	EQU	EQU1258	.	.	.
0.0010					
----	EQU	EQU1259	.	.	.
EPS					
----	EQU	EQU1260	.	.	.
0.0020					
----	EQU	EQU1261	.	.	.
-0.0060					
----	EQU	EQU1262	.	.	.
EPS					
----	EQU	EQU1263	.	.	.
-0.0064					
----	EQU	EQU1264	.	.	.
EPS					
----	EQU	EQU1265	.	.	.
EPS					
----	EQU	EQU1266	.	.	.
0.0003					
----	EQU	EQU1267	.	.	.
0.0006					
----	EQU	EQU1268	.	.	.
EPS					
----	EQU	EQU1269	.	.	.
EPS					
----	EQU	EQU1270	.	.	.
-14.4905					
----	EQU	EQU1271	.	.	.
-13.0016					
----	EQU	EQU1272	.	.	.
-5.2610					
----	EQU	EQU1273	.	.	.
1.9084					
----	EQU	EQU1274	.	.	.
-4.9298					
----	EQU	EQU1275	.	.	.
1.7893					
----	EQU	EQU1276	.	.	.
6.6105					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1277 7.8336	.	.	.
---- EQU EQU1278 -4.3318	.	.	.
---- EQU EQU1279 33.2109	.	.	.
---- EQU EQU1280 EPS	1.0000	1.0000	1.0000
---- EQU EQU1281 EPS	1.0000	1.0000	1.0000
---- EQU EQU1282 EPS	.	.	.
---- EQU EQU1283 EPS	.	.	.
---- EQU EQU1284 0.3030	.	.	.
---- EQU EQU1285 -0.5700	.	.	.
---- EQU EQU1286 0.2727	.	.	.
---- EQU EQU1287 1.8397	.	.	.
---- EQU EQU1288 8.7440	.	.	.
---- EQU EQU1289 12.3843	.	.	.
---- EQU EQU1290 -6.3163	.	.	.
---- EQU EQU1291 17.4121	.	.	.
---- EQU EQU1292 53.3995	.	.	.
---- EQU EQU1293 71.1537	.	.	.
---- EQU EQU1294 0.0185	.	.	.
---- EQU EQU1295 4.6028	.	.	.
---- EQU EQU1296 0.0195	.	.	.
---- EQU EQU1297 1.0998	.	.	.
---- EQU EQU1298 25.4691	.	.	.
---- EQU EQU1299 -29.6236	.	.	.
---- EQU EQU1300 26.2316	.	.	.

---- EQU EQU1301	.	.	.	
35.4999				
---- EQU EQU1302	.	.	.	
-19.9669				
---- EQU EQU1303	.	.	.	
-0.0328				
---- EQU EQU1304	537.9500	537.9500	537.9500	
0.0021				
---- EQU EQU1305	.	.	.	-
247.6102				
---- EQU EQU1306	.	.	.	
EPS				
---- EQU EQU1307	.	.	.	
6.3819				
---- EQU EQU1308	.	.	.	
-0.0040				
---- EQU EQU1309	.	.	.	
0.0093				
---- EQU EQU1310	.	.	.	
-87.5540				
---- EQU EQU1311	.	.	.	
14.7520				
---- EQU EQU1312	.	.	.	
31.2977				
---- EQU EQU1313	.	.	.	
-28.0873				
---- EQU EQU1314	.	.	.	
0.0040				
---- EQU EQU1315	1.0000	1.0000	1.0000	
-22.8881				
---- EQU EQU1316	.	.	.	
-0.0312				
---- EQU EQU1317	1.0000	1.0000	1.0000	
-22.7532				
---- EQU EQU1318	.	.	.	
0.0301				
---- EQU EQU1319	.	.	.	
-0.0024				
---- EQU EQU1320	.	.	.	
0.0593				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1321 0.0133	.	.	.
---- EQU EQU1322 0.0364	.	.	.
---- EQU EQU1323 0.0387	.	.	.
---- EQU EQU1324 -0.0033	.	.	.
---- EQU EQU1325 0.0485	.	.	.
---- EQU EQU1326 0.0135	.	.	.
---- EQU EQU1327 -0.0364	.	.	.
---- EQU EQU1328 0.0133	.	.	.
---- EQU EQU1329 0.0766	.	.	.
---- EQU EQU1330 -0.0036	.	.	.
---- EQU EQU1331 0.0541	.	.	.
---- EQU EQU1332 -0.0364	.	.	.
---- EQU EQU1333 0.0133	.	.	.
---- EQU EQU1334 0.0670	.	.	.
---- EQU EQU1335 -0.0008	.	.	.
---- EQU EQU1336 0.0546	.	.	.
---- EQU EQU1337 0.0215	.	.	.
---- EQU EQU1338 EPS	.	.	.
---- EQU EQU1339 0.0131	.	.	.
---- EQU EQU1340 0.1935	.	.	.
---- EQU EQU1341 0.0184	.	.	.
---- EQU EQU1342 21.6807	.	.	.
---- EQU EQU1343 -98.7968	.	.	.
---- EQU EQU1344 -0.8734	.	.	.

---- EQU EQU1345	.	.	.	
451.1701				
---- EQU EQU1346	.	.	.	-
5512.0462				
---- EQU EQU1347	.	.	.	
111.2713				
---- EQU EQU1348	.	.	.	
-94.1662				
---- EQU EQU1349	.	.	.	
-0.0223				
---- EQU EQU1350	.	.	.	
-22.0666				
---- EQU EQU1351	.	.	.	
-0.0002				
---- EQU EQU1352	.	.	.	
7.0693				
---- EQU EQU1353	.	.	.	
-19.7344				
---- EQU EQU1354	.	.	.	
1.8374				
---- EQU EQU1355	.	.	.	
-50.2542				
---- EQU EQU1356	.	.	.	
-17.9724				
---- EQU EQU1357	.	.	.	
0.3398				
---- EQU EQU1358	.	.	.	
0.1755				
---- EQU EQU1359	.	.	.	
21.7506				
---- EQU EQU1360	.	.	.	
791.0760				
---- EQU EQU1361	.	.	.	-
247.0889				
---- EQU EQU1362	.	.	.	
-15.4633				
---- EQU EQU1363	.	.	.	-
141.2200				
---- EQU EQU1364	.	.	.	
EPS				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1365 7.769302E-7	.	.	-
---- EQU EQU1366 3.2216023E-7	.	.	.
---- EQU EQU1367 154.6332	.	.	.
---- EQU EQU1368 EPS	.	.	.
---- EQU EQU1369 EPS	.	.	.
---- EQU EQU1370 EPS	.	.	.
---- EQU EQU1371 EPS	.	.	.
---- EQU EQU1372 40302.8695	.	.	-
---- EQU EQU1373 413.8785	.	.	.
---- EQU EQU1374 647.8714	.	.	.
---- EQU EQU1375 495.3360	.	.	.
---- EQU EQU1376 194.7189	.	.	.
---- EQU EQU1377 EPS	.	.	.
---- EQU EQU1378 EPS	.	.	.
---- EQU EQU1379 20.8943	.	.	.
---- EQU EQU1380 -22.8789	.	.	.
---- EQU EQU1381 EPS	.	.	.
---- EQU EQU1382 1.0023	.	.	.
---- EQU EQU1383 EPS	.	.	.
---- EQU EQU1384 EPS	.	.	.
---- EQU EQU1385 EPS	.	.	.
---- EQU EQU1386 40266.7330	.	.	-
---- EQU EQU1387 -3.2225	.	.	.
---- EQU EQU1388 EPS	.	.	.

---- EQU EQU1389	.	.	.	
EPS				
---- EQU EQU1390	.	.	.	
-22.8789				
---- EQU EQU1391	.	.	.	
20.8943				
---- EQU EQU1392	.	.	.	
EPS				
---- EQU EQU1393	.	.	.	
EPS				
---- EQU EQU1394	.	.	.	
30.4592				
---- EQU EQU1395	.	.	.	
EPS				
---- EQU EQU1396	.	.	.	
EPS				
---- EQU EQU1397	.	.	.	
EPS				
---- EQU EQU1398	.	.	.	
EPS				
---- EQU EQU1399	.	.	.	
495.3360				
---- EQU EQU1400	.	.	.	
EPS				
---- EQU EQU1401	.	.	.	
1.0023				
---- EQU EQU1402	.	.	.	
EPS				
---- EQU EQU1403	.	.	.	
EPS				
---- EQU EQU1404	-290.0000	-290.0000	-290.0000	
EPS				
---- EQU EQU1405	.	.	.	
668.7657				
---- EQU EQU1406	.	.	.	-
40266.7330				
---- EQU EQU1407	.	.	.	
171.8400				
---- EQU EQU1408	.	.	.	
413.8785				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1409 40302.8695	.	.	.	-
---- EQU EQU1410 6.781807E-7	.	.	.	-
---- EQU EQU1411 7.764161E-7	.	.	.	-
---- EQU EQU1412 EPS	.	.	.	
---- EQU EQU1413 EPS	.	.	.	
---- EQU EQU1414 EPS	.	.	.	
---- EQU EQU1415 EPS	.	.	.	
---- EQU EQU1416 EPS	.	.	.	
---- EQU EQU1417 9.4293	.	.	.	
---- EQU EQU1418 EPS	.	.	.	
---- EQU EQU1419 0.0156	.	.	.	
---- EQU EQU1420 -3.1028	.	.	.	
---- EQU EQU1421 0.3862	.	.	.	
---- EQU EQU1422 -0.0440	414.6000	414.6000	414.6000	
---- EQU EQU1423 0.3304	.	.	.	
---- EQU EQU1424 -2.7039	.	.	.	
---- EQU EQU1425 -0.0075	.	.	.	
---- EQU EQU1426 EPS	.	.	.	
---- EQU EQU1427 -4.9061	.	.	.	
---- EQU EQU1428 7.1976	.	.	.	
---- EQU EQU1429 -0.0480	.	.	.	
---- EQU EQU1430 4.3735	.	.	.	
---- EQU EQU1431 3.6600	.	.	.	
---- EQU EQU1432 0.5828	.	.	.	

---- EQU EQU1433	.	.	.	
4.7003				
---- EQU EQU1434	.	.	.	
12.7161				
---- EQU EQU1435	.	.	.	
0.7895				
---- EQU EQU1436	.	.	.	
257.0031				
---- EQU EQU1437	.	.	.	
71.2586				
---- EQU EQU1438	.	.	.	
0.0037				
---- EQU EQU1439	.	.	.	
EPS				
---- EQU EQU1440	.	.	.	
EPS				
---- EQU EQU1441	.	.	.	
0.0002				
---- EQU EQU1442	.	.	.	
-0.6576				
---- EQU EQU1443	.	.	.	
0.0127				
---- EQU EQU1444	.	.	.	
19.2033				
---- EQU EQU1445	.	.	.	
EPS				
---- EQU EQU1446	.	.	.	-
29772.8554				
---- EQU EQU1447	.	.	.	
EPS				
---- EQU EQU1448	.	.	.	
143.9733				
---- EQU EQU1449	.	.	.	
366.2469				
---- EQU EQU1450	.	.	.	
479.0302				
---- EQU EQU1451	.	.	.	-
375.2595				
---- EQU EQU1452	.	.	.	
8.6199				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1453 0.3914	.	.	.	
---- EQU EQU1454 0.0025	.	.	.	
---- EQU EQU1455 EPS	.	.	.	
---- EQU EQU1456 EPS	.	.	.	
---- EQU EQU1457 EPS	.	.	.	
---- EQU EQU1458 4.0555397E-5	.	.	.	
---- EQU EQU1459 -2.3164	.	.	.	
---- EQU EQU1460 -3.1790	.	.	.	
---- EQU EQU1461 3.3025	.	.	.	
---- EQU EQU1462 EPS	.	.	.	
---- EQU EQU1463 0.0141	.	.	.	
---- EQU EQU1464 EPS	.	.	.	
---- EQU EQU1465 0.2787	.	.	.	
---- EQU EQU1466 0.2387	.	.	.	
---- EQU EQU1467 9.7194	.	.	.	
---- EQU EQU1468 6.611210E-7	1.0000	1.0000	1.0000	-
---- EQU EQU1469 EPS	.	.	.	
---- EQU EQU1470 EPS	.	.	.	
---- EQU EQU1471 5.628622E-7	1.0000	1.0000	1.0000	-
---- EQU EQU1472 EPS	.	.	.	
---- EQU EQU1473 .	1.0000	1.0000	1.0000	
---- EQU EQU1474 EPS	.	.	.	
---- EQU EQU1475 EPS	.	.	.	
---- EQU EQU1476 .	1.0000	1.0000	1.0000	

---- EQU EQU1477	.	.	.	
-43.6035				
---- EQU EQU1478	.	.	.	
EPS				
---- EQU EQU1479	.	.	.	
-16.0397				
---- EQU EQU1480	.	.	.	
-30.9822				
---- EQU EQU1481	1.0000	1.0000	1.0000	
52.3707				
---- EQU EQU1482	.	.	.	
-18.6745				
---- EQU EQU1483	.	.	.	-
3.378307E-6				
---- EQU EQU1484	.	.	.	
-31.1273				
---- EQU EQU1485	.	.	.	
-0.0076				
---- EQU EQU1486	.	.	.	
1814.8733				
---- EQU EQU1487	1.0000	1.0000	1.0000	
-4.7958				
---- EQU EQU1488	.	.	.	
EPS				
---- EQU EQU1489	.	.	.	
EPS				
---- EQU EQU1490	.	.	.	
-0.0001				
---- EQU EQU1491	.	.	.	-
7.920557E-5				
---- EQU EQU1492	1.0000	1.0000	1.0000	
49.1242				
---- EQU EQU1493	.	.	.	
-29.8324				
---- EQU EQU1494	1.0000	1.0000	1.0000	
10.5895				
---- EQU EQU1495	1.0000	1.0000	1.0000	
-2.8975				
---- EQU EQU1496	.	.	.	-
8.934968E-5				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1497 17.4060	1.0000	1.0000	1.0000	
---- EQU EQU1498 581.4664	.	.	.	
---- EQU EQU1499 -11.7822	.	.	.	
---- EQU EQU1500 -1.9927	.	.	.	
---- EQU EQU1501 -0.0004	.	.	.	
---- EQU EQU1502 -0.0022	.	.	.	
---- EQU EQU1503 -53.6199	.	.	.	
---- EQU EQU1504 -15.7490	.	.	.	
---- EQU EQU1505 -11.0762	.	.	.	
---- EQU EQU1506 -0.0017	.	.	.	
---- EQU EQU1507 -2.9217	.	.	.	
---- EQU EQU1508 .	1.0000	1.0000	1.0000	
---- EQU EQU1509 -0.0229	.	.	.	
---- EQU EQU1510 -0.0006	.	.	.	
---- EQU EQU1511 EPS	.	.	.	
---- EQU EQU1512 -0.0075	.	.	.	
---- EQU EQU1513 2.027919E-7	1.0000	1.0000	1.0000	-
---- EQU EQU1514 EPS	.	.	.	
---- EQU EQU1515 -61.0861	1.0000	1.0000	1.0000	
---- EQU EQU1516 -0.2916	.	.	.	
---- EQU EQU1517 197.6522	1.0000	1.0000	1.0000	
---- EQU EQU1518 EPS	.	.	.	
---- EQU EQU1519 0.2916	.	.	.	
---- EQU EQU1520 250.8282	1.0000	1.0000	1.0000	-

---- EQU EQU1521	.	.	.
-0.2073			
---- EQU EQU1522	1.0000	1.0000	1.0000
59.7001			
---- EQU EQU1523	.	.	.
0.2073			
---- EQU EQU1524	.	.	.
-2.3142			
---- EQU EQU1525	.	.	.
8.3036			
---- EQU EQU1526	.	.	.
EPS			
---- EQU EQU1527	.	.	.
EPS			
---- EQU EQU1528	6.8883	6.8883	6.8883
EPS			
---- EQU EQU1529	.	.	.
EPS			
---- EQU EQU1530	.	.	.
EPS			
---- EQU EQU1531	.	.	.
EPS			
---- EQU EQU1532	.	.	.
0.0075			
---- EQU EQU1533	.	.	.
-0.0349			
---- EQU EQU1534	.	.	.
8.1275			
---- EQU EQU1535	.	.	.
195.3716			
---- EQU EQU1536	.	.	.
7.5216			
---- EQU EQU1537	.	.	.
127.8336			
---- EQU EQU1538	.	.	.
-0.2073			
---- EQU EQU1539	.	.	.
-0.0842			
---- EQU EQU1540	.	.	.
8.191917E-5			-

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1541	.	.	.	
-10.4939				
---- EQU EQU1542	.	.	.	
1.5706				
---- EQU EQU1543	.	.	.	
-10.9810				
---- EQU EQU1544	.	.	.	
1.4455				
---- EQU EQU1545	.	.	.	
3.9695				
---- EQU EQU1546	.	.	.	
0.5123				
---- EQU EQU1547	.	.	.	
306.0180				
---- EQU EQU1548	.	.	.	
EPS				
---- EQU EQU1549	.	.	.	
0.0274				
---- EQU EQU1550	.	.	.	
30184.7389				
---- EQU EQU1551	.	.	.	
6.1618				
---- EQU EQU1552	.	.	.	
0.0932				
---- EQU EQU1553	.	.	.	
EPS				
---- EQU EQU1554	.	.	.	
1.8015				
---- EQU EQU1555	.	.	.	
EPS				
---- EQU EQU1556	.	.	.	
EPS				
---- EQU EQU1557	.	.	.	
165.2067				
---- EQU EQU1558	10.1410	10.1410	10.1410	-
129.2220				
---- EQU EQU1559	10.1410	10.1410	10.1410	
-0.2982				
---- EQU EQU1560	.	.	.	
EPS				
---- EQU EQU1561	.	.	.	
0.0133				
---- EQU EQU1562	.	.	.	
5.1028				
---- EQU EQU1563	.	.	.	
37.8124				
---- EQU EQU1564	.	.	.	
EPS				

---- EQU EQU1565	10.1410	10.1410	10.1410	
0.0122				
---- EQU EQU1566	10.1410	10.1410	10.1410	
-28.8222				
---- EQU EQU1567	10.1410	10.1410	10.1410	-
109.6583				
---- EQU EQU1568	10.1410	10.1410	10.1410	
-0.0066				
---- EQU EQU1569	.	.	.	-
12798.4355				
---- EQU EQU1570	.	.	.	
89.7198				
---- EQU EQU1571	.	.	.	-
29799.5744				
---- EQU EQU1572	.	.	.	
30061.7604				
---- EQU EQU1573	.	.	.	
EPS				
---- EQU EQU1574	.	.	.	
EPS				
---- EQU EQU1575	.	.	.	
-1.3771				
---- EQU EQU1576	.	.	.	
1.6066				
---- EQU EQU1577	.	.	.	
EPS				
---- EQU EQU1578	.	.	.	
EPS				
---- EQU EQU1579	.	.	.	
EPS				
---- EQU INEQU1	-INF	0.1057	1.0000	
.				
---- EQU INEQU2	8.0000	8.0000	+INF	
-0.0255				
---- EQU INEQU3	10.0000	26.4697	+INF	
.				
---- EQU INEQU4	10.0000	13.8472	+INF	
.				
---- EQU INEQU5	10.0000	14.2033	+INF	
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU INEQU6	300.0000	301.1193	+INF
.			
---- EQU INEQU7	10.0000	26.3943	+INF
.			
---- EQU INEQU8	-404.6000	-359.0000	+INF
.			
---- EQU INEQU9	-404.6000	-359.0000	+INF
.			
---- EQU INEQU10	300.0000	322.6859	+INF
.			
---- EQU INEQU11	10.0000	20.8376	+INF
.			
---- EQU INEQU12	10.0000	102.9052	+INF
.			
---- EQU INEQU13	10.0000	91.4874	+INF
.			
---- EQU INEQU14	300.0000	302.9500	+INF
.			
---- EQU INEQU15	10.0000	71.3599	+INF
.			
---- EQU INEQU16	300.0000	336.7774	+INF
.			
---- EQU INEQU17	10.0000	10.7041	+INF
.			
---- EQU INEQU18	300.0000	307.9904	+INF
.			
---- EQU INEQU19	10.0000	32.4241	+INF
.			
---- EQU INEQU20	300.0000	305.9727	+INF
.			
---- EQU INEQU21	10.0000	10.0000	+INF
-0.0003			
---- EQU INEQU22	10.0000	11.6936	+INF
.			
---- EQU INEQU23	10.0000	10.0000	+INF
-0.0401			
---- EQU INEQU24	298.0000	363.0366	+INF
.			
---- EQU INEQU25	8.0000	68.0366	+INF
.			
---- EQU INEQU26	8.0000	8.7833	+INF
.			
---- EQU INEQU27	8.0000	11.9941	+INF
.			
---- EQU INEQU28	8.0000	8.0000	+INF
-0.3261			
---- EQU INEQU29	8.0000	8.4873	+INF
.			

----	EQU	INEQU30	8.0000	15.4353	+INF
.					
----	EQU	INEQU31	298.0000	328.9195	+INF
.					
----	EQU	INEQU32	10.0000	26.4697	+INF
.					
----	EQU	INEQU33	300.0000	328.9195	+INF
.					
----	EQU	INEQU34	10.0000	10.0000	+INF
EPS					
----	EQU	INEQU35	10.0000	10.0000	+INF
-0.0395					
----	EQU	INEQU36	-471.0000	-405.0000	+INF
.					
----	EQU	INEQU37	-471.0000	-461.0000	+INF
.					
----	EQU	INEQU38	-404.6000	-363.0366	+INF
.					
----	EQU	INEQU39	-404.6000	-403.7611	+INF
.					
----	EQU	INEQU40	10.0000	10.0000	+INF
-0.2750					
----	EQU	INEQU41	10.0000	11.0922	+INF
.					
----	EQU	INEQU42	-404.6000	-335.7490	+INF
.					
----	EQU	INEQU43	-404.6000	-335.7490	+INF
.					
----	EQU	INEQU44	10.0000	10.3539	+INF
EPS					
----	EQU	INEQU45	300.0000	301.2561	+INF
.					
----	EQU	INEQU46	10.0000	19.4755	+INF
.					
----	EQU	INEQU47	300.0000	317.9181	+INF
.					
----	EQU	INEQU48	10.0000	10.2264	+INF
.					
----	EQU	INEQU49	300.0000	300.0000	+INF
-0.0015					

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	LOWER	LEVEL	UPPER
MARGINAL			
---- EQU INEQU50 89.8349	-INF	0.0001	0.0001
---- EQU OBJNAME 1.0000	.	.	.

	LOWER	LEVEL	UPPER
MARGINAL			
---- VAR FAC02 27.2041	0.0900	0.1600	0.1600
---- VAR FAC12 .	0.0100	0.1600	0.9000
---- VAR FAC23 .	0.0100	0.1600	0.9000
---- VAR FAC34 .	0.0100	0.1600	0.9000
---- VAR FAC45 .	0.0100	0.1600	0.9000
---- VAR FC308 .	1.0000	3.1032	6.0000
---- VAR FC316 2.3165	0.1000	1.8000	1.8000
---- VAR FC320 .	0.0100	0.1496	1.5000
---- VAR FC322 .	0.1000	1.5619	1.6000
---- VAR FC328 .	0.0100	0.0535	1.0000
---- VAR FC329 .	0.1000	0.7491	3.0000
---- VAR FC403 .	0.1000	2.2834	5.0000
---- VAR FC407 .	0.7500	0.9145	5.0000
---- VAR FC412 .	0.0100	0.0418	1.0000
---- VAR FC417 .	0.1000	0.2748	2.0000
---- VAR FHC01 .	0.7950	0.8513	1.5000
---- VAR FHC32 .	0.5000	1.8690	5.0000
---- VAR FSC402 .	0.1000	0.4943	4.0000
---- VAR FSC405 .	.	0.3463	3.0000
---- VAR FSC411 .	0.1000	1.3525	3.2000

----	VAR FSC413	0.1000	0.1480	0.5000
.				
----	VAR FSTME612	0.0500	0.0889	1.0000
.				
----	VAR PC302	101.0000	102.1638	187.0000
.				
----	VAR PC310	230.0000	264.5758	360.0000
.				
----	VAR PC601	600.0000	625.0000	625.0000
0.0001				
----	VAR PC603	1600.0000	1694.5255	1800.0000
.				
----	VAR QHC07	0.1000	1.8842	5.0000
.				
----	VAR QHC11	0.1000	1.7391	5.0000
.				
----	VAR QHC14	0.1000	1.7391	5.0000
.				
----	VAR QHC16	0.1000	1.7391	5.0000
.				
----	VAR QHC34	0.1000	0.9505	5.0000
.				
----	VAR QHC38	0.1000	0.5790	5.0000
.				
----	VAR QHC41	0.1000	0.8489	5.0000
.				
----	VAR QHC45	0.1000	0.8719	5.0000
.				
----	VAR TAC09	280.0000	282.0713	300.0000
.				
----	VAR TAC12	280.0000	282.0713	300.0000
.				
----	VAR TAC23	280.0000	281.4793	300.0000
.				
----	VAR TAC31	280.0000	281.4267	300.0000
EPS				
----	VAR TAC34	280.0000	281.4267	300.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR TAC42	280.0000	284.2594	300.0000
.			
---- VAR TAC45	280.0000	284.2594	300.0000
.			
---- VAR TC303	260.0000	281.4996	300.0000
.			
---- VAR TC306	320.0000	349.8897	368.0000
.			
---- VAR TC307	300.0000	328.9195	330.0000
.			
---- VAR TC308	270.0000	328.9195	350.0000
.			
---- VAR TC315	300.0000	308.6556	320.0000
.			
---- VAR TC316	335.0000	345.1528	370.0000
.			
---- VAR TC317	300.0000	359.0000	420.0000
.			
---- VAR TC321	250.0000	301.1193	350.0000
.			
---- VAR TC324	359.0000	359.0000	385.0000
-0.2540			
---- VAR TC325	300.0000	322.6859	360.0000
.			
---- VAR TC404	305.0000	307.0948	325.0000
.			
---- VAR TC405	410.0000	410.0000	440.0000
-0.0218			
---- VAR TC407	298.0000	302.9500	350.0000
.			
---- VAR TC408	405.0000	405.0000	440.0000
-0.4343			
---- VAR TC410	345.0000	363.0366	369.0000
.			
---- VAR TC414	300.0000	336.7774	368.0000
.			
---- VAR TC418	301.0000	308.4341	350.0000
.			
---- VAR TC419	298.0000	305.9727	310.0000
.			
---- VAR THC32	250.0000	256.4405	310.0000
.			
---- VAR TSC402	310.0000	324.6567	340.0000
.			
---- VAR TSC403	320.0000	335.7490	350.0000
.			
---- VAR TSC405	300.0000	301.2561	360.0000
.			

----	VAR TSC408	300.0000	317.9181	330.0000
.				
----	VAR TSC413	295.0000	300.0000	350.0000
.				
----	VAR X11AC12	0.8800	0.9695	0.9990
.				
----	VAR X11AC23	0.8800	0.9432	0.9990
.				
----	VAR X11AC34	0.8800	0.9169	0.9990
.				
----	VAR X11AC45	0.8800	0.8906	0.9990
.				
----	VAR X1C316	0.0100	0.1178	0.5000
.				
----	VAR X1C325	0.5000	1.0000	1.0000
.				
----	VAR X1C417	0.0200	0.0255	0.2000
.				
----	VAR X1HC32	.	0.0233	0.1000
.				
----	VAR X1SC402	.	0.0142	0.1000
.				
----	VAR X1SC403	.	2.0267481E-6	0.1000
.				
----	VAR X1SC408	.	0.0474	0.1000
.				
----	VAR X2SC402	.	0.0084	0.1000
.				
----	VAR X2SC403	.	0.0119	0.1000
.				
----	VAR X2SC408	.	0.0002	0.1000
.				
----	VAR X3C316	0.5000	0.7886	1.0000
.				
----	VAR X3C325	.	1.5412413E-6	0.1000
.				
----	VAR X3C417	0.3500	0.8141	1.0000
.				
----	VAR X3HC32	0.1000	0.7708	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3SC402	0.2000	0.2973	0.4200
.			
---- VAR X3SC403	.	0.0212	0.1000
.			
---- VAR X3SC408	0.5000	0.9436	1.0000
.			
---- VAR X4C316	0.0010	0.0796	0.2000
.			
---- VAR X4C417	0.0010	0.0509	0.4000
.			
---- VAR X4HC32	.	0.1256	0.5000
.			
---- VAR X4SC402	0.4800	0.5587	0.7000
.			
---- VAR X4SC403	0.5000	0.7936	1.0000
.			
---- VAR X4SC408	.	0.0088	0.1000
.			
---- VAR X5C316	.	0.0060	0.0100
.			
---- VAR X5C417	.	0.0295	0.1500
.			
---- VAR X5HC32	.	0.0306	2.5000
.			
---- VAR X5SC402	.	0.0516	0.1000
.			
---- VAR X5SC403	.	0.0736	0.1000
.			
---- VAR X5SC408	.	.	0.1000
.			
---- VAR X6SC402	.	0.0666	0.1000
.			
---- VAR X6SC403	.	0.0950	0.1200
.			
---- VAR X6SC408	.	.	0.1000
.			
---- VAR X7HC32	.	0.0496	2.0000
.			
---- VAR X7SC402	.	0.0032	0.1000
.			
---- VAR X7SC403	.	0.0046	0.1000
.			
---- VAR X7SC408	.	.	0.1000
.			
---- VAR XX1C322	.	0.1166	0.1200
.			
---- VAR XX1C414	.	0.0800	0.0800
35.3282			

----	VAR	XX1HC01	.	0.1099	0.5000
.					
----	VAR	XX2HC01	0.1000	0.1290	0.6000
.					
----	VAR	XX3C317	0.5000	0.7930	1.0000
.					
----	VAR	XX3C322	0.5000	0.7930	1.0000
.					
----	VAR	XX3C407	.	2.9814995E-5	0.1000
.					
----	VAR	XX3C412	.	0.0027	0.1500
.					
----	VAR	XX3C414	0.5000	0.8196	1.0000
.					
----	VAR	XX3HC01	.	0.0125	0.5500
.					
----	VAR	XX4C317	.	0.0800	0.2000
.					
----	VAR	XX4C322	.	0.0800	0.2000
.					
----	VAR	XX4C407	0.0100	0.0853	0.3000
.					
----	VAR	XX4C412	0.5000	0.8549	1.0000
.					
----	VAR	XX4C414	.	0.0914	0.2000
.					
----	VAR	XX4HC01	.	0.1067	0.3000
.					
----	VAR	XX5C407	0.0100	0.1506	0.5000
.					
----	VAR	XX5C412	.	0.0581	0.1000
.					
----	VAR	XX5C414	.	0.0011	0.1000
.					
----	VAR	XX7C414	.	0.0080	0.0080
190.9910					
----	VAR	C10PC623	.	5.4748851E-5	0.5000
.					
----	VAR	C10PC625	.	0.0001	0.5000
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR C10PC627	.	0.0003	0.5000
.			
---- VAR C10PC629	.	0.0002	0.5000
.			
---- VAR C2C623	.	0.0173	0.1000
.			
---- VAR C2C625	.	0.0162	0.1000
.			
---- VAR C2C627	.	0.0159	0.1000
.			
---- VAR C2C629	.	0.0162	0.1000
.			
---- VAR C3C623	.	3.3271	6.0000
.			
---- VAR C3C625	.	2.2452	6.0000
.			
---- VAR C3C627	.	1.3514	6.0000
.			
---- VAR C3C629	.	1.5028	6.0000
.			
---- VAR C3PC623	.	1.1615	10.0000
.			
---- VAR C3PC625	.	1.1343	10.0000
.			
---- VAR C3PC627	.	1.1502	10.0000
.			
---- VAR C3PC629	.	1.1303	10.0000
.			
---- VAR C4PC623	.	0.0306	1.0000
.			
---- VAR C4PC625	.	0.0443	1.0000
.			
---- VAR C4PC627	.	0.0747	1.0000
.			
---- VAR C4PC629	.	0.0660	1.0000
.			
---- VAR C5PC623	.	0.0006	0.1000
.			
---- VAR C5PC625	.	0.0012	0.1000
.			
---- VAR C5PC627	.	0.0033	0.1000
.			
---- VAR C5PC629	.	0.0027	0.1000
.			
---- VAR C7PC623	.	8.2048710E-5	0.1000
.			
---- VAR C7PC625	.	0.0003	0.1000
.			

----	VAR C7PC627	.	0.0024	0.1000
.				
----	VAR C7PC629	.	0.0016	0.1000
.				
----	VAR C8PC623	.	0.0022	0.1000
.				
----	VAR C8PC625	.	0.0043	0.1000
.				
----	VAR C8PC627	.	0.0117	0.1000
.				
----	VAR C8PC629	.	0.0095	0.1000
.				
----	VAR C9PC623	.	0.5284	10.0000
.				
----	VAR C9PC625	.	0.7223	10.0000
.				
----	VAR C9PC627	.	1.1985	10.0000
.				
----	VAR C9PC629	.	1.0781	10.0000
.				
----	VAR CHXC623	2.5000	12.0225	15.0000
.				
----	VAR CHXC625	2.5000	12.5543	15.0000
.				
----	VAR CHXC627	2.5000	12.9504	15.0000
.				
----	VAR CHXC629	2.5000	12.4625	15.0000
.				
----	VAR CIC10PC623	.	.	1.0000
.				
----	VAR CIC10PC625	.	.	1.0000
.				
----	VAR CIC10PC627	.	.	1.0000
.				
----	VAR CIC10PC629	.	.	1.0000
.				
----	VAR CIC11PC623	.	2.4727028E-5	0.1000
.				
----	VAR CIC11PC625	.	6.8086418E-5	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR CIC11PC627	.	0.0003	0.1000
.			
---- VAR CIC11PC629	.	0.0002	0.1000
.			
---- VAR CIC4EC623	.	0.0031	0.1000
.			
---- VAR CIC4EC625	.	0.0031	0.1000
.			
---- VAR CIC4EC627	.	0.0031	0.1000
.			
---- VAR CIC4EC629	.	0.0031	0.1000
.			
---- VAR CIC5EC623	.	0.0008	0.1000
.			
---- VAR CIC5EC625	.	0.0011	0.1000
.			
---- VAR CIC5EC627	.	0.0018	0.1000
.			
---- VAR CIC5EC629	.	0.0017	0.1000
.			
---- VAR CIC8EC623	.	0.0226	0.3000
.			
---- VAR CIC8EC625	.	0.0316	0.3000
.			
---- VAR CIC8EC627	.	0.0518	0.3000
.			
---- VAR CIC8EC629	.	0.0474	0.3000
.			
---- VAR COST	-10000.0000	157.5527	10000.0000
.			
---- VAR DTE601	5.0000	10.5367	50.0000
.			
---- VAR DTE602	5.0000	78.8510	90.0000
.			
---- VAR DTE603	5.0000	10.7987	50.0000
.			
---- VAR DTE605	5.0000	23.6968	50.0000
.			
---- VAR DTE609A	5.0000	10.1128	20.0000
.			
---- VAR DTE610	5.0000	14.0245	50.0000
.			
---- VAR DTE611	5.0000	17.6569	50.0000
.			
---- VAR DTE612	10.0000	55.6000	90.0000
.			
---- VAR DTE613	4.0000	26.7618	30.0000
.			

----	VAR DTE616	10.0000	97.0844	120.0000
.				
----	VAR DTE617	5.0000	33.8993	50.0000
.				
----	VAR DTE621A	5.0000	28.7407	50.0000
.				
----	VAR DTE621B	5.0000	24.4988	40.0000
.				
----	VAR DTE626	5.0000	12.7533	50.0000
.				
----	VAR DTE627A	5.0000	55.0000	55.0000
0.1808				
----	VAR DTE627B	5.0000	32.3202	50.0000
.				
----	VAR DTE628	5.0000	10.8247	60.0000
.				
----	VAR DTE629	5.0000	16.6352	80.0000
.				
----	VAR DTE633	5.0000	11.9613	50.0000
.				
----	VAR DTE634	5.0000	19.4026	20.0000
.				
----	VAR DTE640	5.0000	29.9347	50.0000
.				
----	VAR DTE641	5.0000	16.8847	50.0000
.				
----	VAR DTE695A	5.0000	76.0000	90.0000
.				
----	VAR DTE695B	5.0000	48.0000	60.0000
.				
----	VAR DTE696A	10.0000	51.5634	90.0000
.				
----	VAR DTE696B	10.0000	31.2012	90.0000
.				
----	VAR DTE6XX	1.0000	1.0000	50.0000
-7.4888				
----	VAR EARNINGS	-10000.0000	177.6641	10000.0000
.				
----	VAR F1C601	.	0.0001	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR F1C603	.	0.7476	1.0000
.			
---- VAR F1C606A	.	0.0119	1.0000
.			
---- VAR F2C601	0.5000	0.9924	1.0000
.			
---- VAR F3C601	0.0500	0.0500	1.0000
-4.7133			
---- VAR F3C603	.	1.0000	1.0000
.			
---- VAR F3C606A	.	0.0030	1.0000
.			
---- VAR F4C601	0.9500	0.9953	1.0000
.			
---- VAR F4C603	.	1.0000	1.0000
.			
---- VAR F4C606A	.	0.8968	1.0000
.			
---- VAR F5C601	0.5000	1.0000	1.0000
.			
---- VAR F5C603	0.5000	1.0000	1.0000
.			
---- VAR F5C606A	0.5000	0.9876	1.0000
.			
---- VAR F6C601	0.5000	1.0000	1.0000
.			
---- VAR F7C601	0.5000	1.0000	1.0000
.			
---- VAR F7C603	0.5000	1.0000	1.0000
.			
---- VAR F7C606A	0.5000	0.9983	1.0000
.			
---- VAR FAC05	0.1000	6.7965	20.0000
.			
---- VAR FAC07	0.1000	6.9565	20.0000
.			
---- VAR FAC09	0.0100	8.5865	20.0000
.			
---- VAR FAC15	0.1000	8.7289	20.0000
.			
---- VAR FAC18	0.1000	8.8889	20.0000
.			
---- VAR FAC20	0.0100	10.2218	20.0000
.			
---- VAR FAC26	0.1000	17.6178	20.0000
.			
---- VAR FAC29	0.1000	17.7778	20.0000
.			

----	VAR FAC31	0.0100	19.2659	20.0000
.				
----	VAR FAC37	0.1000	15.8400	20.0000
.				
----	VAR FAC40	0.1000	16.0000	20.0000
.				
----	VAR FAC42	0.0100	17.5014	20.0000
.				
----	VAR FC301	1.0000	3.6690	6.0000
.				
----	VAR FC302	0.1000	0.4743	5.0000
.				
----	VAR FC303	2.0000	4.1432	6.0000
.				
----	VAR FC306	0.1000	4.9032	15.0000
.				
----	VAR FC307	0.0001	4.9032	15.0000
.				
----	VAR FC309	0.0001	3.1032	10.0000
.				
----	VAR FC310	0.0001	0.7600	3.0000
.				
----	VAR FC311	.	2.3432	8.0000
.				
----	VAR FC312	0.0001	1.8000	5.0000
.				
----	VAR FC315	0.0001	1.8000	5.0000
.				
----	VAR FC317	0.1000	1.7465	3.0000
.				
----	VAR FC318	0.0001	1.7465	3.0000
.				
----	VAR FC319	0.0001	1.7465	3.0000
.				
----	VAR FC321	.	0.0349	5.0000
.				
----	VAR FC323	0.5000	0.8026	3.0000
.				
----	VAR FC324	0.5000	0.8026	3.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR FC325	0.5000	0.8026	3.0000
.			
---- VAR FC326	0.0100	0.8026	3.0000
.			
---- VAR FC401	0.1000	2.2834	5.0000
.			
---- VAR FC402	0.1000	2.2834	5.0000
.			
---- VAR FC404	.	2.2834	5.0000
.			
---- VAR FC405	0.1000	0.9145	2.0000
.			
---- VAR FC406	.	0.9145	5.0000
.			
---- VAR FC408	.	3.2414	10.0000
.			
---- VAR FC409	.	3.2414	10.0000
.			
---- VAR FC410	0.1000	0.8520	10.0000
.			
---- VAR FC411	.	0.8520	10.0000
.			
---- VAR FC413	.	0.0418	1.0000
.			
---- VAR FC414	0.1000	2.9225	5.0000
.			
---- VAR FC415	.	2.9225	10.0000
.			
---- VAR FC418	0.1000	3.1972	5.0000
.			
---- VAR FC419	0.0001	3.1972	10.0000
.			
---- VAR FC425	1.0000	3.7468	10.0000
.			
---- VAR FC426	.	2.8948	5.0000
.			
---- VAR FC427	.	2.8323	10.0000
.			
---- VAR FC428	.	1.9803	5.0000
.			
---- VAR FC430	1.0000	3.7468	10.0000
.			
---- VAR FC431	.	2.8323	10.0000
.			
---- VAR FC432	1.0000	2.7906	5.0000
.			
---- VAR FCWE603	0.1000	0.1995	20.0000
.			

----	VAR FCWE605	0.1000	12.8804	15.0000
.				
----	VAR FCWE609A	0.0100	0.0899	1.0000
.				
----	VAR FCWE611	0.1000	3.5612	20.0000
.				
----	VAR FCWE613	0.1000	4.6398	15.0000
.				
----	VAR FCWE617	1.0000	1.6101	25.0000
.				
----	VAR FCWE621A	0.1000	5.4062	10.0000
.				
----	VAR FCWE621B	0.1000	3.6479	20.0000
.				
----	VAR FCWE626	0.1000	0.5548	20.0000
.				
----	VAR FCWE627A	0.1000	0.5504	10.0000
.				
----	VAR FCWE627B	0.1000	0.5262	30.0000
.				
----	VAR FCWE634	4.0000	7.1470	60.0000
.				
----	VAR FCWE640	0.4000	0.8090	50.0000
1.3175242E-8				
----	VAR FCWE641A	0.1000	4.3100	30.0000
.				
----	VAR FCWE641B	0.1000	0.9543	10.0000
.				
----	VAR FHC02	0.0100	0.8513	5.0000
.				
----	VAR FHC03	1.0000	3.2322	10.0000
.				
----	VAR FHC04	1.0000	3.2322	10.0000
.				
----	VAR FHC05	1.0000	3.2322	10.0000
.				
----	VAR FHC06	1.0000	4.0834	12.0000
.				
----	VAR FHC07	1.0000	1.0834	5.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR FHC08	1.0000	3.0000	5.0000
.			
---- VAR FHC11	1.0000	1.0000	5.0000
-0.9256			
---- VAR FHC14	1.0000	1.0000	5.0000
-3.8897			
---- VAR FHC15	1.0000	2.0000	5.0000
.			
---- VAR FHC16	1.0000	1.0000	5.0000
-2.0990			
---- VAR FHC22	1.0000	1.5014	6.0000
.			
---- VAR FHC23	1.0000	1.4881	6.0000
.			
---- VAR FHC24	1.0000	2.9895	6.0000
.			
---- VAR FHC25	1.0000	1.3330	6.0000
.			
---- VAR FHC26	1.0000	4.3225	6.0000
.			
---- VAR FHC27	1.0000	1.6300	10.0000
.			
---- VAR FHC28	1.0000	5.9524	12.0000
.			
---- VAR FHC29	.	0.4869	12.0000
.			
---- VAR FHC30	.	0.4869	12.0000
.			
---- VAR FHC31	.	5.9524	12.0000
.			
---- VAR FHC33	.	0.8795	1.0000
.			
---- VAR FHC34	.	0.5465	1.0000
.			
---- VAR FHC38	.	0.3330	1.0000
.			
---- VAR FHC40	.	0.9895	1.0000
.			
---- VAR FHC41	.	0.4881	1.0000
.			
---- VAR FHC45	.	0.5014	1.0000
.			
---- VAR FLHC28	1.0000	3.0154	10.0000
.			
---- VAR FLHC29	.	0.2466	12.0000
.			
---- VAR FLHC30	.	0.0926	12.0000
.			

----	VAR FLHC31	.	2.2834	12.0000
.				
----	VAR FLR1	.	2.7688	10.0000
.				
----	VAR FLR29	.	2.1908	12.0000
.				
----	VAR FMC302	.	0.0076	0.1000
.				
----	VAR FMC308	0.0001	0.0527	0.5000
.				
----	VAR FMC310	.	0.0134	0.8000
.				
----	VAR FMC311	.	0.0393	0.5000
.				
----	VAR FMC312	.	0.0320	0.1000
.				
----	VAR FMC317	0.0010	0.0308	0.1000
.				
----	VAR FMC322	.	0.0276	1.0000
.				
----	VAR FMC323	.	0.0142	0.4000
.				
----	VAR FMC325	0.0100	0.0182	1.0000
.				
----	VAR FMC405	.	0.0112	0.1000
.				
----	VAR FMC407	.	0.0112	0.1000
.				
----	VAR FMC408	.	0.0397	2.0000
.				
----	VAR FMC409	.	0.0397	0.2000
.				
----	VAR FMC412	.	0.0007	0.1000
.				
----	VAR FMC414	0.0001	0.0511	0.1000
.				
----	VAR FMC425	.	0.0553	2.0000
.				
----	VAR FMC427	.	0.0441	0.2000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FMC428	.	0.0315	0.1000
.			
---- VAR FMC430	.	0.0575	0.2000
.			
---- VAR FMC431	.	0.0463	1.0000
.			
---- VAR FMC432	.	0.0456	0.1000
.			
---- VAR FMHC01	.	0.0118	0.1000
.			
---- VAR FMHC32	.	0.0317	0.1000
.			
---- VAR FMLHC28	0.0100	0.0473	0.2000
.			
---- VAR FMLHC29	.	0.0039	0.1000
.			
---- VAR FMLHC30	.	0.0013	0.1000
.			
---- VAR FMLR1	.	0.0435	0.2000
.			
---- VAR FMLR29	.	0.0337	0.1000
.			
---- VAR FMSC403	0.0010	0.0058	0.1000
.			
---- VAR FMSC406	.	0.0250	0.1000
.			
---- VAR FMSC408	.	0.0262	1.0000
.			
---- VAR FMVHC28	.	0.0514	0.2000
.			
---- VAR FMVHC29	.	0.0042	0.1000
.			
---- VAR FMVHC30	.	0.0068	0.1000
.			
---- VAR FMVR1	.	0.0472	0.2000
.			
---- VAR FMVR29	.	0.0570	0.1000
.			
---- VAR FR1	.	5.4655	12.0000
.			
---- VAR FR29	.	5.4655	12.0000
.			
---- VAR FSC401	0.1000	0.4943	5.0000
.			
---- VAR FSC403	0.1000	0.3463	3.0000
.			
---- VAR FSC404	0.1000	0.3463	3.0000
.			

----	VAR FSC406	.	1.5004	3.0000
.				
----	VAR FSC407	.	1.5004	3.0000
.				
----	VAR FSC408	0.0500	1.5004	3.2000
.				
----	VAR FSC409	0.0500	1.5004	3.2000
.				
----	VAR FSC412	0.1020	0.1480	1.0000
.				
----	VAR FSC414	.	0.1268	0.5000
.				
----	VAR FSTME602	0.1000	0.2147	1.0000
.				
----	VAR FSTME695A	.	0.4049	10.0000
.				
----	VAR FSTME695B	0.1000	0.1004	10.0000
.				
----	VAR FSTME696A	0.0100	0.1134	10.0000
.				
----	VAR FSTME696B	0.0100	0.0191	10.0000
.				
----	VAR FVHC28	.	2.9370	8.0000
.				
----	VAR FVHC29	.	0.2402	12.0000
.				
----	VAR FVHC30	.	0.3943	12.0000
.				
----	VAR FVHC31	.	3.6690	12.0000
.				
----	VAR FVR1	.	2.6968	12.0000
.				
----	VAR FVR29	.	3.2747	12.0000
.				
----	VAR H1C601	0.8000	1.0729	2.0000
.				
----	VAR H1C603	-3.0000	-0.3389	1.0000
.				
----	VAR H1C606A	.	1.0073	10.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR H2C601	0.3950	0.6314	5.0000
.			
---- VAR H3C601	0.5000	2.6188	6.0000
.			
---- VAR H3C603	.	0.2532	1.0000
.			
---- VAR H3C606A	-65.0000	-65.0000	-35.0000
-0.0003			
---- VAR H4C601	0.4500	0.6499	2.0000
.			
---- VAR H4C603	.	0.3218	1.0000
.			
---- VAR H4C606A	-10.0000	.	1.0000
.			
---- VAR H5C601	0.5000	0.9219	1.5000
.			
---- VAR H5C603	.	0.4216	1.5000
.			
---- VAR H5C606A	-5.0000	0.4939	2.0000
.			
---- VAR H6C601	0.5000	0.9464	3.0000
.			
---- VAR H7C601	0.5000	0.9881	1.5000
.			
---- VAR H7C603	.	0.4903	1.5000
.			
---- VAR H7C606A	.	0.5599	1.0000
.			
---- VAR HAC02	.	9.6649	10000.0000
.			
---- VAR HAC05	10.0000	354.5592	10000.0000
.			
---- VAR HAC07	10.0000	364.2241	10000.0000
.			
---- VAR HAC09	10.0000	1261.8513	10000.0000
.			
---- VAR HAC12	.	8.3468	10000.0000
.			
---- VAR HAC15	10.0000	391.0516	10000.0000
.			
---- VAR HAC18	10.0000	399.3985	10000.0000
EPS			
---- VAR HAC20	10.0000	1106.6875	10000.0000
.			
---- VAR HAC23	.	7.1680	10000.0000
.			
---- VAR HAC26	10.0000	702.2034	10000.0000
.			

----	VAR HAC29	10.0000	709.3714	10000.0000
.				
----	VAR HAC31	10.0000	1494.5846	10000.0000
.				
----	VAR HAC34	.	6.3719	10000.0000
.				
----	VAR HAC37	10.0000	601.3344	10000.0000
.				
----	VAR HAC40	10.0000	607.7062	10000.0000
EPS				
----	VAR HAC42	10.0000	1530.3964	10000.0000
EPS				
----	VAR HACAC09	10.0000	410.5019	10000.0000
.				
----	VAR HACAC20	10.0000	412.6221	10000.0000
.				
----	VAR HACAC31	10.0000	719.5659	10000.0000
.				
----	VAR HACAC42	10.0000	738.5854	10000.0000
.				
----	VAR HC301	10.0000	3234.1617	10000.0000
.				
----	VAR HC302	.	397.8455	5000.0000
.				
----	VAR HC303	0.0001	3632.0072	10000.0000
.				
----	VAR HC306	0.0001	4705.8186	10000.0000
.				
----	VAR HC307	0.0001	3149.3420	10000.0000
.				
----	VAR HC308	0.0001	1986.2499	10000.0000
.				
----	VAR HC309	0.0001	1943.9791	10000.0000
.				
----	VAR HC310	0.0001	675.3616	5000.0000
.				
----	VAR HC311	0.0010	1268.6176	10000.0000
.				
----	VAR HC312	0.0001	1686.2188	10000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HC312LIQ	.	1163.0921	10000.0000
.			
---- VAR HC315	0.0001	1068.2071	10000.0000
.			
---- VAR HC316	0.0001	1243.3937	10000.0000
.			
---- VAR HC317	0.0001	1274.0806	10000.0000
.			
---- VAR HC318	0.0001	1098.8940	10000.0000
.			
---- VAR HC319	0.0001	1002.2713	10000.0000
.			
---- VAR HC321	.	20.0532	5000.0000
.			
---- VAR HC322	0.0001	896.3393	5000.0000
.			
---- VAR HC323	.	585.4902	10000.0000
.			
---- VAR HC324	0.0001	776.1937	10000.0000
.			
---- VAR HC325	0.0001	758.8604	10000.0000
.			
---- VAR HC326	0.0001	528.1363	5000.0000
.			
---- VAR HC329	0.0001	492.9273	5000.0000
.			
---- VAR HC401	.	1191.0974	5000.0000
.			
---- VAR HC402	10.0000	1195.8982	10000.0000
.			
---- VAR HC403	0.0001	1257.6981	10000.0000
.			
---- VAR HC404	0.0001	1309.1529	10000.0000
.			
---- VAR HC405	0.0001	735.0454	5000.0000
.			
---- VAR HC406	0.0001	683.5907	5000.0000
.			
---- VAR HC407	0.0001	496.7377	5000.0000
.			
---- VAR HC408	0.0001	2560.9232	10000.0000
.			
---- VAR HC408VAP	10.0000	3338.4032	10000.0000
.			
---- VAR HC409	0.0001	3531.2192	10000.0000
.			
---- VAR HC410	0.0001	601.5639	10000.0000
.			

----	VAR HC410VAP	10.0000	844.7368	10000.0000
.				
----	VAR HC411	10.0000	885.6103	10000.0000
.				
----	VAR HC412	0.0001	41.6704	5000.0000
.				
----	VAR HC412LIQ	1.0000	30.1204	1000.0000
.				
----	VAR HC413	0.0001	23.4948	5000.0000
.				
----	VAR HC414	0.0001	2763.0499	10000.0000
.				
----	VAR HC414LIQ	10.0000	1944.5546	10000.0000
.				
----	VAR HC415	0.0001	1724.8002	5000.0000
.				
----	VAR HC417	0.0001	160.6765	5000.0000
.				
----	VAR HC418	0.0001	1885.4767	10000.0000
.				
----	VAR HC419	0.0001	1865.8366	10000.0000
.				
----	VAR HC425	10.0000	2645.3748	10000.0000
.				
----	VAR HC426	10.0000	2043.8110	5000.0000
.				
----	VAR HC427	.	2865.6169	10000.0000
.				
----	VAR HC428	10.0000	1980.0066	10000.0000
.				
----	VAR HC430	10.0000	2625.2304	10000.0000
.				
----	VAR HC431	10.0000	2826.1989	10000.0000
.				
----	VAR HC432	10.0000	2784.5285	10000.0000
.				
----	VAR HC623	10.0000	55.6007	5000.0000
.				
----	VAR HC625	10.0000	10.0000	5000.0000
	-0.0002			

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HC627	10.0000	15.6251	5000.0000
.			
---- VAR HC629	10.0000	146.9342	5000.0000
.			
---- VAR HHC01	.	448.9507	5000.0000
.			
---- VAR HHC02	.	444.1499	5000.0000
.			
---- VAR HHC03	1.0000	1885.8898	10000.0000
.			
---- VAR HHC04	10.0000	1824.0899	10000.0000
.			
---- VAR HHC05	10.0000	1769.7377	10000.0000
.			
---- VAR HHC06	10.0000	2213.8876	10000.0000
.			
---- VAR HHC07	10.0000	587.3961	5000.0000
.			
---- VAR HHC11	10.0000	542.1638	5000.0000
.			
---- VAR HHC14	10.0000	542.1638	5000.0000
.			
---- VAR HHC16	10.0000	542.1638	5000.0000
.			
---- VAR HHC29	20.0000	338.8498	10000.0000
.			
---- VAR HHC30	20.0000	393.2020	10000.0000
.			
---- VAR HHC31	100.0000	4425.2591	10000.0000
.			
---- VAR HHC32	.	870.7720	5000.0000
.			
---- VAR HHC34	.	254.6304	5000.0000
.			
---- VAR HHC38	.	155.1252	5000.0000
.			
---- VAR HHC41	.	227.4243	5000.0000
.			
---- VAR HHC45	.	233.5922	5000.0000
.			
---- VAR HLHC29	.	127.7529	10000.0000
.			
---- VAR HLHC30	.	47.2640	10000.0000
.			
---- VAR HLHC31	20.0000	1191.0974	10000.0000
.			
---- VAR HLR1	.	1434.1421	10000.0000
.			

----	VAR HLR29	10.0000	1130.8094	10000.0000
.				
----	VAR HR1	.	3803.8971	10000.0000
.				
----	VAR HR29	20.0000	4032.0571	10000.0000
.				
----	VAR HSC401	10.0000	304.7472	10000.0000
.				
----	VAR HSC402	10.0000	308.1610	10000.0000
.				
----	VAR HSC403	10.0000	224.2918	10000.0000
.				
----	VAR HSC404	10.0000	220.8780	10000.0000
.				
----	VAR HSC405	10.0000	194.4210	10000.0000
EPS				
----	VAR HSC406	0.1000	971.7135	10000.0000
.				
----	VAR HSC407	10.0000	1432.2035	10000.0000
.				
----	VAR HSC408	10.0000	1380.8077	10000.0000
.				
----	VAR HSC409	10.0000	924.4077	5000.0000
.				
----	VAR HSC411	10.0000	833.2522	5000.0000
.				
----	VAR HSC412	10.0000	91.1555	10000.0000
.				
----	VAR HSC413	10.0000	84.4810	10000.0000
.				
----	VAR HSC414	.	76.1954	500.0000
EPS				
----	VAR HVHC29	10.0000	211.0969	10000.0000
.				
----	VAR HVHC30	10.0000	345.9380	10000.0000
.				
----	VAR HVHC31	20.0000	3234.1617	10000.0000
.				
----	VAR HVR1	.	2369.7550	10000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HVR29	10.0000	2901.2477	10000.0000
.			
---- VAR K1C323	1.0000	2.0292	3.0000
.			
---- VAR K1C325	0.5000	1.0000	2.0000
.			
---- VAR K1C408	1.0000	7.9557	15.0000
.			
---- VAR K1C414	1.0000	2.5207	4.0000
.			
---- VAR K1C428	.	4.2870	10.0000
.			
---- VAR K1C430	1.0000	3.8216	6.0000
.			
---- VAR K1C601	1.5000	2.6303	3.0000
.			
---- VAR K1C603	1.0000	1.2643	3.0000
.			
---- VAR K1C606A	1.0000	1.8525	3.0000
.			
---- VAR K1C606C	1.0000	4.1459	7.0000
.			
---- VAR K1C614B	2.0000	2.6947	3.5000
.			
---- VAR K1C615_A	0.5000	2.4443	4.0000
.			
---- VAR K1C616_A	0.5000	2.9023	5.0000
.			
---- VAR K1E633	1.0000	5.1986	5.5000
.			
---- VAR K1E6XX	1.0000	3.9804	5.5000
.			
---- VAR K1SC406	2.0000	3.5562	5.0000
.			
---- VAR K1SC408	1.5000	2.4423	3.5000
.			
---- VAR K2C601	0.5000	0.7714	1.0000
.			
---- VAR K2E633	0.2000	1.4713	1.5000
.			
---- VAR K2E6XX	0.2000	1.1265	1.5000
.			
---- VAR K2SC406	0.5000	1.1140	1.2000
.			
---- VAR K2SC408	0.5000	0.7044	1.0000
.			
---- VAR K3C323	0.5000	0.8915	1.5000
.			

----	VAR K3C325	0.0100	0.4012	1.5000
.				
----	VAR K3C408	1.0000	3.8360	6.0000
.				
----	VAR K3C414	0.5000	1.0505	3.0000
.				
----	VAR K3C428	.	1.9110	5.0000
.				
----	VAR K3C430	1.0000	1.6791	5.0000
.				
----	VAR K3C601	0.5000	1.0510	2.0000
.				
----	VAR K3C603	0.5000	0.5230	1.0000
.				
----	VAR K3C606A	0.5000	0.7416	3.0000
.				
----	VAR K3C606C	1.0000	1.8377	5.0000
.				
----	VAR K3C614B	0.6000	0.8273	1.5000
.				
----	VAR K3C615_A	0.1000	0.9978	2.0000
.				
----	VAR K3C616_A	0.1000	1.0436	2.0000
.				
----	VAR K3E633	0.3000	1.7516	2.0000
.				
----	VAR K3E6XX	0.3000	1.3411	3.0000
.				
----	VAR K3SC406	1.0000	1.4781	2.0000
.				
----	VAR K3SC408	0.7000	0.9663	1.5000
.				
----	VAR K4C323	0.5000	0.6771	1.0000
.				
----	VAR K4C325	0.0300	0.2895	1.0000
.				
----	VAR K4C408	1.0000	3.0229	5.0000
.				
----	VAR K4C414	0.5000	0.7751	2.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR K4C428	.	1.4618	5.0000
.			
---- VAR K4C430	0.5000	1.2753	3.0000
.			
---- VAR K4C601	0.2000	0.7566	1.0000
.			
---- VAR K4C603	0.1000	0.3843	1.0000
.			
---- VAR K4C606A	0.1000	0.5344	3.0000
.			
---- VAR K4C606C	1.0000	1.4019	4.0000
.			
---- VAR K4C614B	0.5000	0.5121	1.0000
.			
---- VAR K4C615_A	0.0500	0.7208	1.5000
.			
---- VAR K4C616_A	0.0500	0.7032	1.5000
.			
---- VAR K4E633	0.2000	1.1490	1.5000
.			
---- VAR K4E6XX	0.2000	0.8798	1.5000
.			
---- VAR K4SC406	0.8000	1.0890	1.5000
.			
---- VAR K4SC408	0.5000	0.6915	1.0000
.			
---- VAR K5C323	0.1000	0.3098	0.6000
.			
---- VAR K5C325	0.1000	0.1195	0.6000
.			
---- VAR K5C408	0.5000	1.5088	3.0000
.			
---- VAR K5C414	0.1000	0.3344	2.0000
.			
---- VAR K5C428	.	0.6790	2.0000
.			
---- VAR K5C430	0.2000	0.5834	1.5000
.			
---- VAR K5C601	0.1000	0.3109	0.5000
.			
---- VAR K5C603	0.0100	0.1644	0.5000
.			
---- VAR K5C606A	0.1000	0.2201	1.0000
.			
---- VAR K5C606C	0.1000	0.6474	1.2000
.			
---- VAR K5C614B	0.0500	0.1406	0.8000
.			

----	VAR K5C615_A	0.0020	0.2766	1.0000
.				
----	VAR K5C616_A	0.0020	0.2316	1.0000
.				
----	VAR K5E633	0.0500	0.3923	1.0000
.				
----	VAR K5E6XX	0.0500	0.3004	1.0000
.				
----	VAR K5SC406	0.1000	0.4684	0.6000
.				
----	VAR K5SC408	0.2000	0.2809	0.6000
.				
----	VAR K6C601	0.1000	0.2420	1.0000
.				
----	VAR K6SC406	.	0.3724	0.5000
.				
----	VAR K6SC408	0.1000	0.2174	0.5000
.				
----	VAR K7C323	0.1000	0.1208	0.3000
.				
----	VAR K7C325	0.0010	0.0399	0.2000
.				
----	VAR K7C408	0.1000	0.6737	1.0000
.				
----	VAR K7C414	0.0500	0.1194	1.0000
.				
----	VAR K7C428	.	0.2711	2.0000
.				
----	VAR K7C430	.	0.2276	1.0000
.				
----	VAR K7C601	0.0100	0.1031	0.5000
.				
----	VAR K7C603	0.0100	0.0579	0.5000
.				
----	VAR K7C606A	0.0500	0.0733	0.5000
.				
----	VAR K7C614B	0.0010	0.0328	0.1000
.				
----	VAR K7C615_A	0.0010	0.1055	1.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR K7C616_A	0.0110	0.0706	1.0000
.			
---- VAR K7E633	0.0100	0.0953	0.1000
.			
---- VAR K7E6XX	0.0100	0.0730	0.1000
.			
---- VAR K7SC406	0.1000	0.1665	0.3000
.			
---- VAR K7SC408	0.0500	0.0916	0.2000
.			
---- VAR KP1C601	1.0000	3.1774	5.0000
.			
---- VAR KP1C603	1.0000	1.7918	3.0000
.			
---- VAR KP1C606A	1.0000	2.3392	5.0000
.			
---- VAR KP1C606D	1.0000	6.1493	12.0000
.			
---- VAR KP2C601	0.5000	0.9715	1.5000
.			
---- VAR KP3C601	1.0000	1.3016	2.0000
.			
---- VAR KP3C603	0.5000	0.7750	1.5000
.			
---- VAR KP3C606A	0.5000	0.9655	3.0000
.			
---- VAR KP3C606D	1.0000	2.8686	5.0000
.			
---- VAR KP4C601	0.5000	0.9508	1.5000
.			
---- VAR KP4C603	0.2000	0.5838	1.0000
.			
---- VAR KP4C606A	0.1000	0.7084	3.0000
.			
---- VAR KP4C606D	1.0000	2.2374	5.0000
.			
---- VAR KP5C601	0.1000	0.4022	1.0000
.			
---- VAR KP5C603	0.1000	0.2626	0.5000
.			
---- VAR KP5C606A	0.1000	0.3023	1.0000
.			
---- VAR KP5C606D	1.0000	1.0860	5.0000
.			
---- VAR KP6C601	0.1000	0.3173	1.0000
.			
---- VAR KP7C601	0.0100	0.1393	1.0000
.			

----	VAR KP7C603	0.0100	0.0998	0.3000	
.					
----	VAR KP7C606A	0.0500	0.1061	0.5000	
.					
----	VAR KP7C606D	0.1000	0.4641	5.0000	
.					
----	VAR KWAD1	50.0000	175.1032	300.0000	
EPS					
----	VAR KWAD2	105.0000	284.8968	355.0000	
.					
----	VAR LPC601	1.0000	1.8467	5.0000	
.					
----	VAR LPC603	1.0000	2.5491	10.0000	
.					
----	VAR LPC606A	0.5000	2.7036	5.0000	
.					
----	VAR PC303	101.0000	102.1210	140.0000	-
1.913317E-9					
----	VAR PC306	650.0000	861.1277	900.0000	
.					
----	VAR PC307	600.0000	791.1277	850.0000	
.					
----	VAR PC308	600.0000	791.1277	800.0000	
.					
----	VAR PC309	580.0000	771.1277	780.0000	
.					
----	VAR PC311	260.0000	264.5758	400.0000	
.					
----	VAR PC312	600.0000	791.1277	850.0000	
.					
----	VAR PHC30	101.0000	103.4794	140.0000	
.					
----	VAR PHC32	101.0000	102.1638	200.0000	
.					
----	VAR PR29	101.0000	135.1481	140.0000	
.					
----	VAR PROFIT	10.0000	11.9034	10000.0000	
.					
----	VAR Q2HC07	.	0.0376	1.0000	
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR Q2HC11	.	0.0347	1.0000
.			
---- VAR Q2HC14	.	0.0347	1.0000
.			
---- VAR Q2HC16	.	0.0347	1.0000
.			
---- VAR QFP1C606A	.	0.0287	1.0000
.			
---- VAR QFP3C606A	.	0.0029	0.1000
.			
---- VAR QFP4C606A	.	0.8627	1.0000
.			
---- VAR QFP5C606A	.	0.5980	1.0000
.			
---- VAR QFP7C606A	.	0.3008	1.0000
.			
---- VAR QS1C606A	.	0.7772	1.0000
.			
---- VAR QS3C606A	.	0.5204	1.0000
.			
---- VAR QS4C606A	.	0.0488	0.5000
.			
---- VAR QS5C606A	.	0.0301	0.5500
.			
---- VAR QS7C606A	.	0.0123	0.1600
.			
---- VAR R10C623	.	.	0.1000
.			
---- VAR R10C625	.	1.0043770E-6	0.1000
.			
---- VAR R10C627	.	1.6427770E-6	0.1000
.			
---- VAR R10C629	.	1.5061231E-6	0.1000
.			
---- VAR R2C623	.	0.0095	0.8320
.			
---- VAR R2C625	.	0.0087	0.8320
.			
---- VAR R2C627	.	0.0087	0.8320
.			
---- VAR R2C629	.	0.0087	0.8320
.			
---- VAR R3C623	.	0.0109	0.1500
.			
---- VAR R3C625	.	0.0101	0.1500
.			
---- VAR R3C627	.	0.0101	0.1500
.			

----	VAR R3C629	.	0.0101	0.1500
.				
----	VAR R4C623	.	0.0014	0.0300
.				
----	VAR R4C625	.	0.0014	0.0300
.				
----	VAR R4C627	.	0.0014	0.0300
.				
----	VAR R4C629	.	0.0014	0.0300
.				
----	VAR R5C623	.	9.7772321E-6	0.3000
.				
----	VAR R5C625	.	1.3435953E-5	0.3000
.				
----	VAR R5C627	.	2.2356286E-5	0.3000
.				
----	VAR R5C629	.	2.0072543E-5	0.3000
.				
----	VAR R7C623	.	.	0.0500
.				
----	VAR R7C625	.	.	0.0500
.				
----	VAR R7C627	.	.	0.0500
.				
----	VAR R7C629	.	.	0.0500
.				
----	VAR R8C623	.	1.0237150E-5	0.1000
.				
----	VAR R8C625	.	1.3833374E-5	0.1000
.				
----	VAR R8C627	.	2.2370992E-5	0.1000
.				
----	VAR R8C629	.	2.0231809E-5	0.1000
.				
----	VAR R9C623	.	0.0094	0.1000
.				
----	VAR R9C625	.	0.0087	0.1000
.				
----	VAR R9C627	.	0.0087	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER	
---- VAR R9C629 .	.	0.0087	0.1000	
---- VAR RHO2HC07 0.0078	610.0000	650.0000	650.0000	
---- VAR RHO2HC11 0.0094	610.0000	650.0000	650.0000	
---- VAR RHO2HC14 0.0113	610.0000	650.0000	650.0000	
---- VAR RHO2HC16 0.0134	610.0000	650.0000	650.0000	
---- VAR RHOAC09 3.908424E-6	1500.0000	1500.0000	1700.0000	-
---- VAR RHOAC20 3.804801E-6	1500.0000	1500.0000	1700.0000	-
---- VAR RHOAC31 3.781184E-6	1500.0000	1500.0000	1700.0000	-
---- VAR RHOAC42 3.737389E-6	1500.0000	1500.0000	1700.0000	-
---- VAR RIC10C623 .	.	.	0.3000	
---- VAR RIC10C625 .	.	.	0.3000	
---- VAR RIC10C627 .	.	.	0.3000	
---- VAR RIC10C629 .	.	.	0.3000	
---- VAR RIC11C623 .	.	.	0.1000	
---- VAR RIC11C625 .	.	.	0.1000	
---- VAR RIC11C627 .	.	1.5023518E-6	0.1000	
---- VAR RIC11C629 .	.	1.2525982E-6	0.1000	
---- VAR SF1S34 .	0.0001	0.0857	1.0000	
---- VAR SF2S34 .	.	0.0200	1.0000	
---- VAR SFS11 .	0.1000	0.5000	0.8000	
---- VAR SFS19 .	0.1000	0.4706	0.8000	
---- VAR SFS2 .	0.1000	0.9182	1.0000	
---- VAR SFS23 .	0.1000	0.6214	0.8000	
---- VAR SFS27 .	0.1000	0.4933	0.8000	

----	VAR SFS41	0.0001	0.9853	1.0000
.				
----	VAR SFS42	0.0001	0.7726	1.0000
.				
----	VAR SFS5	0.1000	0.2653	0.5000
.				
----	VAR SFS7	0.1000	0.3333	0.8000
.				
----	VAR SM1C601	1.0000	2.5815	5.0000
.				
----	VAR SM1C603	0.0500	0.5642	1.0000
.				
----	VAR SM1C606A	0.1000	2.4144	5.0000
.				
----	VAR SM1C606D	1.0000	2.9326	5.0000
.				
----	VAR SM2C601	0.5000	0.7893	1.0000
.				
----	VAR SM3C601	0.5000	1.0575	2.0000
.				
----	VAR SM3C603	0.0010	0.2440	0.5000
.				
----	VAR SM3C606A	0.1000	0.9966	5.0000
.				
----	VAR SM3C606D	1.0000	1.3073	10.0000
.				
----	VAR SM4C601	0.4000	0.7725	1.5000
.				
----	VAR SM4C603	0.0100	0.1838	0.5000
.				
----	VAR SM4C606A	0.1000	0.7312	5.0000
.				
----	VAR SM4C606D	0.5000	1.0000	5.0000
.				
----	VAR SM5C601	0.1000	0.3267	0.6000
.				
----	VAR SM5C603	0.0100	0.0827	0.5000
.				
----	VAR SM5C606A	0.0500	0.3120	5.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR SM5C606D	0.1000	0.4645	5.0000
.			
---- VAR SM6C601	0.1000	0.2578	1.0000
.			
---- VAR SM7C601	0.0100	0.1132	0.2000
.			
---- VAR SM7C603	0.0010	0.0314	0.2000
.			
---- VAR SM7C606A	0.0010	0.1095	5.0000
.			
---- VAR SM7C606D	0.1000	0.1854	5.0000
.			
---- VAR SN1C601	1.0000	2.9180	5.0000
.			
---- VAR SN1C603	1.0000	1.3546	3.0000
.			
---- VAR SN1C606A	1.0000	3.4662	20.0000
.			
---- VAR SN2C601	0.5000	0.8558	1.5000
.			
---- VAR SN3C601	0.5000	1.1660	1.5000
.			
---- VAR SN3C603	0.5000	0.5604	1.5000
.			
---- VAR SN3C606A	1.0000	1.3876	15.0000
.			
---- VAR SN4C601	0.5000	0.8393	1.0000
.			
---- VAR SN4C603	0.2000	0.4117	1.0000
.			
---- VAR SN4C606A	0.8000	1.0000	10.0000
.			
---- VAR SN5C601	0.1000	0.3449	0.8000
.			
---- VAR SN5C603	0.1000	0.1761	0.4000
.			
---- VAR SN5C606A	0.3000	0.4118	10.0000
.			
---- VAR SN6C601	0.1000	0.2685	1.0000
.			
---- VAR SN7C601	0.0100	0.1144	0.5000
.			
---- VAR SN7C603	0.0100	0.0621	0.5000
.			
---- VAR SN7C606A	0.1000	0.1371	5.0000
.			
---- VAR TAC02	276.0000	276.0000	290.0000
-0.0007			

----	VAR TAC05	273.0000	282.0713	300.0000
.				
----	VAR TAC07	273.0000	282.0181	300.0000
.				
----	VAR TAC15	273.0000	281.4793	300.0000
.				
----	VAR TAC18	273.0000	281.5499	300.0000
.				
----	VAR TAC20	280.0000	281.4793	300.0000
.				
----	VAR TAC26	273.0000	281.4267	300.0000
.				
----	VAR TAC29	273.0000	281.5607	300.0000
.				
----	VAR TAC37	273.0000	284.2594	300.0000
.				
----	VAR TAC40	273.0000	284.2647	300.0000
.				
----	VAR TC301	200.0000	284.8461	300.0000
.				
----	VAR TC302	250.0000	256.4405	290.0000
.				
----	VAR TC309	270.0000	323.6899	350.0000
.				
----	VAR TC310	200.0000	289.8230	310.0000
.				
----	VAR TC311	270.0000	289.8230	310.0000
.				
----	VAR TC312	300.0000	328.9195	369.0000
.				
----	VAR TC318	250.0000	322.8589	365.0000
.				
----	VAR TC319	250.0000	301.1193	400.0000
.				
----	VAR TC320	250.0000	301.1193	400.0000
.				
----	VAR TC322	250.0000	301.1193	400.0000
.				
----	VAR TC323	300.0000	359.0000	420.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR TC326	300.0000	322.6859	360.0000
.			
---- VAR TC328	300.0000	322.6859	360.0000
.			
---- VAR TC329	300.0000	322.6859	375.0000
.			
---- VAR TC401	260.0000	284.8461	300.0000
.			
---- VAR TC402	270.0000	285.7707	305.0000
.			
---- VAR TC403	280.0000	297.5240	320.0000
6.1200524E-8			
---- VAR TC406	298.0000	389.0114	400.0000
.			
---- VAR TC409	400.0000	461.0000	461.0000
0.0520			
---- VAR TC411	300.0000	403.7611	418.0000
.			
---- VAR TC412	330.0000	363.0366	405.0000
.			
---- VAR TC413	250.0000	301.7833	350.0000
.			
---- VAR TC415	250.0000	307.9904	400.0000
.			
---- VAR TC417	275.0000	307.5144	350.0000
.			
---- VAR TC425	300.0000	363.0366	410.0000
.			
---- VAR TC426	300.0000	363.0366	410.0000
.			
---- VAR TC427	360.0000	376.0197	405.0000
.			
---- VAR TC428	300.0000	365.6322	405.0000
.			
---- VAR TC430	300.0000	359.0164	400.0000
.			
---- VAR TC431	300.0000	363.0366	405.0000
.			
---- VAR TC432	350.0000	363.0366	400.0000
.			
---- VAR TCWOTE609A	298.0000	307.6917	320.0000
.			
---- VAR TCWOTE621A	298.0000	326.0732	355.0000
.			
---- VAR TCWOTE621B	298.0000	304.3532	325.0000
1.769760E-8			
---- VAR TCWOTE627A	295.0000	295.0000	360.0000
EPS			

----	VAR	TCWOTE627B	293.0000	293.0000	310.0000
	EPS				
----	VAR	TCWOTE641A	295.0000	318.9195	360.0000
	.				
----	VAR	TCWOTE641B	295.0000	313.6899	325.0000
	.				
----	VAR	TCWOUTE603	296.8360	321.5995	350.0000
	.				
----	VAR	TCWOUTE605	298.0000	298.4426	320.0000
	.				
----	VAR	TCWOUTE611	295.0000	296.4646	350.0000
	EPS				
----	VAR	TCWOUTE613	298.0000	301.8483	320.0000
	.				
----	VAR	TCWOUTE617	295.0000	317.6514	350.0000
	EPS				
----	VAR	TCWOUTE626	295.0000	298.4341	310.0000
	.				
----	VAR	TCWOUTE634	295.0000	341.8897	360.0000
	.				
----	VAR	TCWOUTE640	295.0000	302.4498	330.0000
	.				
----	VAR	THC01	295.0000	297.4643	370.0000
	.				
----	VAR	THC02	275.0000	294.8461	302.0000
	.				
----	VAR	THC03	290.0000	305.5240	360.0000
	.				
----	VAR	THC04	280.0000	297.7648	310.0000
	.				
----	VAR	THC05	270.0000	290.8168	300.0000
	.				
----	VAR	THC06	273.0000	291.5836	300.0000
	.				
----	VAR	THC07	273.0000	291.5836	300.0000
	.				
----	VAR	THC11	273.0000	291.5836	300.0000
	.				
----	VAR	THC14	273.0000	291.5836	300.0000
	.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR THC16	273.0000	291.5836	300.0000
.			
---- VAR THC22	273.0000	284.2594	290.0000
.			
---- VAR THC23	273.0000	281.4267	290.0000
.			
---- VAR THC24	273.0000	282.8493	290.0000
.			
---- VAR THC25	273.0000	281.4793	290.0000
.			
---- VAR THC26	273.0000	282.4268	290.0000
.			
---- VAR THC27	273.0000	282.0713	290.0000
.			
---- VAR THC28	270.0000	282.3295	290.0000
.			
---- VAR THC29	270.0000	282.3295	290.0000
.			
---- VAR THC30	250.0000	282.3295	300.0000
.			
---- VAR THC31	260.0000	284.8461	310.0000
.			
---- VAR THC34	250.0000	256.4405	310.0000
.			
---- VAR THC38	250.0000	256.4405	310.0000
.			
---- VAR THC41	250.0000	256.4405	310.0000
.			
---- VAR THC45	250.0000	256.4405	310.0000
.			
---- VAR TMC601	315.0000	330.2029	360.0000
.			
---- VAR TMC603	350.0000	352.0764	375.0000
.			
---- VAR TMC606A	327.0000	333.0556	370.0000
.			
---- VAR TMC606D	370.0000	387.8161	400.0000
.			
---- VAR TMK601	273.0000	308.3319	333.0000
.			
---- VAR TNC601	310.0000	321.2874	340.0000
.			
---- VAR TNC603	320.0000	333.9194	375.0000
.			
---- VAR TNC606A	310.0000	321.9361	370.0000
.			
---- VAR TR1	270.0000	282.3295	290.0000
.			

----	VAR TR29	260.0000	282.3295	300.0000
.				
----	VAR TSC401	280.0000	321.9534	350.0000
.				
----	VAR TSC404	310.0000	331.9534	365.0000
.				
----	VAR TSC406	320.0000	335.7490	360.0000
.				
----	VAR TSC407	320.0000	335.7490	400.0000
.				
----	VAR TSC409	308.0000	317.9181	360.0000
.				
----	VAR TSC411	308.0000	317.9181	375.0000
.				
----	VAR TSC412	308.0000	317.9181	360.0000
.				
----	VAR TSC414	275.0000	320.0000	320.0000
EPS				
----	VAR UTILITIES	-10000.0000	8.2079	10000.0000
.				
----	VAR VFC614B	0.1000	0.2024	0.8000
.				
----	VAR VFC615	0.0010	0.3671	0.6000
.				
----	VAR VFC616	0.0500	0.2449	1.0000
.				
----	VAR VFM3	.	0.4934	0.5500
.				
----	VAR VPC601	1.0000	1.5004	5.0000
.				
----	VAR VPC603	0.0100	0.8026	3.0000
.				
----	VAR VPC606A	0.1000	2.7906	10.0000
.				
----	VAR X10AC09	.	.	0.1000
.				
----	VAR X10AC20	.	.	0.1000
.				
----	VAR X10AC31	.	.	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X10AC42	.	.	0.1000
.			
---- VAR X11AC02	0.9700	0.9980	0.9980
178.0145			
---- VAR X11AC05	0.8900	0.9695	0.9990
.			
---- VAR X11AC07	0.8900	0.9702	0.9990
.			
---- VAR X11AC09	.	0.7855	1.0000
.			
---- VAR X11AC15	0.8900	0.9432	0.9990
.			
---- VAR X11AC18	0.8900	0.9437	0.9990
.			
---- VAR X11AC20	.	0.8202	1.0000
.			
---- VAR X11AC26	0.8900	0.9169	0.9990
.			
---- VAR X11AC29	0.8900	0.9172	0.9990
.			
---- VAR X11AC31	.	0.8461	1.0000
.			
---- VAR X11AC37	0.8900	0.8906	0.9990
.			
---- VAR X11AC40	0.8900	0.8909	0.9990
.			
---- VAR X11AC42	.	0.8142	1.0000
.			
---- VAR X12AC02	0.0020	0.0020	0.0300
.			
---- VAR X12AC05	0.0010	0.0305	0.1100
.			
---- VAR X12AC07	0.0010	0.0298	0.1100
.			
---- VAR X12AC09	.	0.0247	0.1000
.			
---- VAR X12AC12	0.0010	0.0305	0.1200
.			
---- VAR X12AC15	0.0010	0.0568	0.1100
.			
---- VAR X12AC18	0.0010	0.0563	0.1100
.			
---- VAR X12AC20	.	0.0494	0.1000
.			
---- VAR X12AC23	0.0010	0.0568	0.1200
.			
---- VAR X12AC26	0.0010	0.0831	0.1100
.			

----	VAR X12AC29	0.0010	0.0828	0.1100
.				
----	VAR X12AC31	.	0.0767	0.1000
.				
----	VAR X12AC34	0.0010	0.0831	0.1200
.				
----	VAR X12AC37	0.0010	0.1094	0.1100
.				
----	VAR X12AC40	0.0010	0.1091	0.1100
.				
----	VAR X12AC42	.	0.1000	0.1000
416.1267				
----	VAR X12AC45	0.0010	0.1094	0.1200
.				
----	VAR X1AC09	.	0.0091	0.1000
.				
----	VAR X1AC20	.	0.0067	0.1000
.				
----	VAR X1AC31	.	0.0037	0.1000
.				
----	VAR X1AC42	.	0.0041	0.1000
.				
----	VAR X1C301	.	0.0697	0.2000
.				
----	VAR X1C302	.	0.0592	0.2000
.				
----	VAR X1C303	0.0500	0.0685	0.2200
.				
----	VAR X1C306	.	0.0723	0.5000
.				
----	VAR X1C307	.	0.0723	0.5000
.				
----	VAR X1C308	.	0.0460	0.4000
.				
----	VAR X1C309	.	0.0460	0.5000
.				
----	VAR X1C310	.	0.0935	0.5000
.				
----	VAR X1C311	.	0.0306	0.2000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1C312	.	0.1178	1.0000
.			
---- VAR X1C315	0.0001	0.1178	1.0000
.			
---- VAR X1C317	.	0.0907	0.3000
.			
---- VAR X1C318	0.0001	0.0907	0.3000
.			
---- VAR X1C319	0.0001	0.0907	0.1000
.			
---- VAR X1C320	.	0.0907	0.1000
.			
---- VAR X1C321	0.0001	0.0907	0.1000
.			
---- VAR X1C322	.	0.0907	0.1500
.			
---- VAR X1C323	.	0.0907	0.2000
.			
---- VAR X1C324	.	0.0907	0.3000
.			
---- VAR X1C326	0.4000	1.0000	1.0000
.			
---- VAR X1C328	0.4000	1.0000	1.0000
.			
---- VAR X1C329	0.4000	1.0000	1.0000
.			
---- VAR X1C401	.	0.0155	0.2000
.			
---- VAR X1C402	.	0.0155	0.2000
.			
---- VAR X1C403	.	0.0155	0.2000
.			
---- VAR X1C404	.	0.0155	0.2000
.			
---- VAR X1C405	.	.	0.0100
.			
---- VAR X1C406	.	.	0.0100
.			
---- VAR X1C407	.	.	0.0100
.			
---- VAR X1C408	.	.	1.0000
.			
---- VAR X1C409	.	.	0.0100
.			
---- VAR X1C410	0.0001	0.0004	1.0000
.			
---- VAR X1C411	.	0.0004	0.1000
.			

----	VAR X1C412	.	0.0019	0.0500
.				
----	VAR X1C413	.	0.0019	0.1000
.				
----	VAR X1C414	.	0.0617	0.2500
.				
----	VAR X1C415	.	0.0617	0.2000
.				
----	VAR X1C418	.	0.0586	0.3000
.				
----	VAR X1C419	0.0001	0.0586	0.2000
.				
----	VAR X1C425	.	0.0004	0.1000
.				
----	VAR X1C426	.	0.0004	0.1000
.				
----	VAR X1C427	.	0.0005	1.0000
.				
----	VAR X1C428	.	0.0006	0.1000
.				
----	VAR X1C430	.	0.0006	0.1000
.				
----	VAR X1C431	.	0.0019	0.1000
.				
----	VAR X1C432	.	0.0019	0.1000
.				
----	VAR X1HC01	0.0010	0.0670	0.3000
.				
----	VAR X1HC02	.	0.0670	0.3000
.				
----	VAR X1HC03	0.0001	0.0589	0.2000
.				
----	VAR X1HC04	.	0.0589	0.2000
.				
----	VAR X1HC05	.	0.0589	0.2000
.				
----	VAR X1HC06	.	0.0606	0.2000
.				
----	VAR X1HC07	.	0.0606	0.2000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1HC08	.	0.0606	0.2000
.			
---- VAR X1HC11	.	0.0606	0.2000
.			
---- VAR X1HC14	.	0.0606	0.2000
.			
---- VAR X1HC15	.	0.0606	0.2000
.			
---- VAR X1HC16	.	0.0606	0.2000
.			
---- VAR X1HC22	.	0.0481	0.5000
.			
---- VAR X1HC23	.	0.0484	0.5000
.			
---- VAR X1HC24	.	0.0482	0.5000
.			
---- VAR X1HC25	.	0.0513	0.5000
.			
---- VAR X1HC26	.	0.0492	0.5000
.			
---- VAR X1HC27	.	0.0481	0.5000
.			
---- VAR X1HC28	.	0.0192	0.2000
.			
---- VAR X1HC29	.	0.0192	0.2000
.			
---- VAR X1HC30	.	0.0093	0.2000
.			
---- VAR X1HC31	.	0.0155	0.1000
.			
---- VAR X1HC33	.	0.0233	0.1000
.			
---- VAR X1HC34	.	0.0233	0.1000
.			
---- VAR X1HC38	.	0.0233	0.1000
.			
---- VAR X1HC40	.	0.0233	0.1000
.			
---- VAR X1HC41	.	0.0233	0.1000
.			
---- VAR X1HC45	.	0.0233	0.1000
.			
---- VAR X1R1	.	0.0192	0.1000
.			
---- VAR X1R29	.	0.0158	0.2000
.			
---- VAR X1SC401	.	0.0142	0.1000
.			

----	VAR	X1SC404	.	2.0267481E-6	0.1000	
.						
----	VAR	X1SC405	.	2.0267481E-6	0.1000	
.						
----	VAR	X1SC406	.	2.0267481E-6	0.1000	
.						
----	VAR	X1SC407	.	2.0267481E-6	0.1000	
.						
----	VAR	X1SC409	.	0.0474	0.1000	
.						
----	VAR	X1SC411	.	0.0474	0.1000	
.						
----	VAR	X1SC412	.	0.0474	0.1000	
.						
----	VAR	X1SC413	.	0.0474	0.1000	
.						
----	VAR	X1SC414	.	.	0.1000	
-17.9065						
----	VAR	X2AC09	.	.	1.0000	
.						
----	VAR	X2AC20	.	.	1.0000	
.						
----	VAR	X2AC31	.	.	1.0000	
.						
----	VAR	X2AC42	.	.	1.0000	
.						
----	VAR	X2C301	.	.	0.0100	
.						
----	VAR	X2C417	.	0.0435	0.1000	
2.1346531E-7	NOPT					
----	VAR	X2C418	.	0.0022	0.1000	
.						
----	VAR	X2C419	.	0.0022	0.1000	
.						
----	VAR	X2HC01	0.1000	0.1000	0.7000	-
186.2924						
----	VAR	X2HC02	0.1000	0.1000	1.0000	
.						
----	VAR	X2HC03	.	0.0022	0.1000	
.						

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X2HC04	.	0.0022	0.1000
.			
---- VAR X2HC05	.	0.0022	0.1000
.			
---- VAR X2HC06	.	0.0226	0.1500
.			
---- VAR X2HC07	.	0.0226	0.1500
.			
---- VAR X2HC08	.	0.0226	0.1500
.			
---- VAR X2HC11	.	0.0226	0.1500
.			
---- VAR X2HC14	.	0.0226	0.1500
.			
---- VAR X2HC15	.	0.0226	0.1500
.			
---- VAR X2HC16	.	0.0226	0.1500
.			
---- VAR X2HC22	.	.	0.1000
.			
---- VAR X2HC23	.	.	0.1000
.			
---- VAR X2HC24	.	.	0.1000
.			
---- VAR X2HC25	.	.	0.1000
.			
---- VAR X2HC26	.	.	0.1000
.			
---- VAR X2HC27	.	.	0.1000
.			
---- VAR X2HC28	.	.	0.1000
.			
---- VAR X2HC29	.	.	0.1000
.			
---- VAR X2HC30	.	.	0.1000
.			
---- VAR X2HC31	.	.	0.1000
.			
---- VAR X2R1	.	.	0.1000
.			
---- VAR X2R29	.	.	0.1000
-15.3658			
---- VAR X2SC401	.	0.0084	0.1000
.			
---- VAR X2SC404	.	0.0119	0.1000
.			
---- VAR X2SC405	.	0.0119	0.1000
8.011779E-8			

----	VAR X2SC406	.	0.0119	0.1000
.				
----	VAR X2SC407	.	0.0119	0.1000
.				
----	VAR X2SC409	.	0.0002	0.1000
.				
----	VAR X2SC411	.	0.0002	0.1000
.				
----	VAR X2SC412	.	0.0002	0.1000
.				
----	VAR X2SC413	.	0.0002	0.1000
.				
----	VAR X2SC414	.	0.0940	0.1000
.				
----	VAR X3AC09	.	0.1289	0.7000
.				
----	VAR X3AC20	.	0.0870	0.7000
.				
----	VAR X3AC31	.	0.0523	0.7000
.				
----	VAR X3AC42	.	0.0582	0.7000
.				
----	VAR X3C301	0.5000	0.7795	1.0000
.				
----	VAR X3C302	0.4500	0.6007	1.0000
.				
----	VAR X3C303	0.5000	0.7590	0.8000
.				
----	VAR X3C306	.	0.7669	1.0000
.				
----	VAR X3C307	.	0.7669	1.0000
.				
----	VAR X3C308	.	0.7543	1.0000
.				
----	VAR X3C309	0.2000	0.7543	0.8000
.				
----	VAR X3C310	.	0.8099	1.0000
.				
----	VAR X3C311	.	0.7363	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3C312	.	0.7886	1.0000
.			
---- VAR X3C315	0.0001	0.7886	1.0000
.			
---- VAR X3C317	0.5000	0.8127	1.0000
.			
---- VAR X3C318	0.0001	0.8127	1.0000
.			
---- VAR X3C319	0.0001	0.8127	1.0000
.			
---- VAR X3C320	0.0001	0.8127	1.0000
.			
---- VAR X3C321	0.0001	0.8127	1.0000
.			
---- VAR X3C322	.	0.8127	1.0000
.			
---- VAR X3C323	0.5000	0.8127	0.9500
.			
---- VAR X3C324	0.5000	0.8127	0.9500
.			
---- VAR X3C326	.	1.5412413E-6	0.5000
.			
---- VAR X3C328	.	1.5415552E-6	0.5000
.			
---- VAR X3C329	.	1.5412413E-6	0.5000
.			
---- VAR X3C401	.	0.5092	1.0000
.			
---- VAR X3C402	.	0.5092	0.8000
.			
---- VAR X3C403	0.0001	0.5092	1.0000
.			
---- VAR X3C404	0.0001	0.5092	1.0000
.			
---- VAR X3C405	.	2.1208203E-5	0.1000
.			
---- VAR X3C406	.	2.1208203E-5	0.0100
.			
---- VAR X3C407	.	2.1208203E-5	0.0100
.			
---- VAR X3C408	.	2.1208203E-5	1.0000
.			
---- VAR X3C409	.	2.1208203E-5	0.0100
.			
---- VAR X3C410	0.0001	0.0013	0.1000
.			
---- VAR X3C411	0.0001	0.0013	0.2000
.			

----	VAR X3C412	.	0.0025	0.1000
.				
----	VAR X3C413	.	0.0025	0.1000
.				
----	VAR X3C414	0.5000	0.8322	1.0000
.				
----	VAR X3C415	.	0.8322	1.0000
.				
----	VAR X3C418	0.0001	0.8306	1.0000
.				
----	VAR X3C419	0.0001	0.8306	1.0000
.				
----	VAR X3C425	.	0.0013	0.1000
.				
----	VAR X3C426	0.0001	0.0013	0.1000
.				
----	VAR X3C427	.	0.0016	1.0000
.				
----	VAR X3C428	.	0.0018	0.3000
.				
----	VAR X3C430	.	0.0019	0.1000
.				
----	VAR X3C431	.	0.0025	0.1000
.				
----	VAR X3C432	.	0.0025	0.1000
.				
----	VAR X3HC01	0.0100	0.0100	0.6000
-15.6655				
----	VAR X3HC02	.	0.0100	0.5000
.				
----	VAR X3HC03	0.1000	0.8304	1.0000
.				
----	VAR X3HC04	0.1000	0.8304	1.0000
.				
----	VAR X3HC05	0.1000	0.8304	1.0000
.				
----	VAR X3HC06	0.3000	0.6594	1.0000
.				
----	VAR X3HC07	0.3000	0.6594	1.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3HC08	0.3000	0.6594	1.0000
.			
---- VAR X3HC11	0.3000	0.6594	1.0000
.			
---- VAR X3HC14	0.3000	0.6594	1.0000
.			
---- VAR X3HC15	0.3000	0.6594	1.0000
.			
---- VAR X3HC16	0.3000	0.6594	1.0000
.			
---- VAR X3HC22	0.1000	0.6785	0.9000
.			
---- VAR X3HC23	0.1000	0.6777	0.9000
.			
---- VAR X3HC24	0.1000	0.6781	0.9000
.			
---- VAR X3HC25	0.1000	0.6669	0.9000
.			
---- VAR X3HC26	0.1000	0.6746	0.9000
.			
---- VAR X3HC27	0.1000	0.6789	0.9000
.			
---- VAR X3HC28	0.1000	0.5662	0.6000
.			
---- VAR X3HC29	0.1000	0.5662	0.6000
.			
---- VAR X3HC30	0.1000	0.3572	0.6000
.			
---- VAR X3HC31	0.1000	0.5092	0.6000
.			
---- VAR X3HC33	0.1000	0.7708	1.0000
.			
---- VAR X3HC34	0.1000	0.7708	1.0000
.			
---- VAR X3HC38	0.1000	0.7708	1.0000
.			
---- VAR X3HC40	0.1000	0.7708	1.0000
.			
---- VAR X3HC41	0.1000	0.7708	1.0000
.			
---- VAR X3HC45	0.1000	0.7708	1.0000
.			
---- VAR X3R1	.	0.5662	0.6000
.			
---- VAR X3R29	0.1000	0.5156	0.6000
.			
---- VAR X3SC401	0.2000	0.2973	0.4000
.			

----	VAR X3SC404	.	0.0212	0.1000
.				
----	VAR X3SC405	.	0.0212	0.1000
.				
----	VAR X3SC406	.	0.0212	0.1000
.				
----	VAR X3SC407	.	0.0212	0.1000
.				
----	VAR X3SC409	0.5000	0.9436	1.0000
.				
----	VAR X3SC411	0.5000	0.9436	1.0000
.				
----	VAR X3SC412	0.5000	0.9436	1.0000
.				
----	VAR X3SC413	0.5000	0.9436	1.0000
.				
----	VAR X3SC414	0.5000	0.6630	1.0000
.				
----	VAR X4AC09	.	0.0196	0.2000
.				
----	VAR X4AC20	.	0.0131	0.2000
.				
----	VAR X4AC31	.	0.0080	0.2000
.				
----	VAR X4AC42	.	0.0089	0.2000
.				
----	VAR X4C301	.	0.1030	0.5000
.				
----	VAR X4C302	.	0.0606	0.5000
.				
----	VAR X4C303	0.0500	0.0982	0.2000
.				
----	VAR X4C306	.	0.0959	0.8000
.				
----	VAR X4C307	.	0.0959	0.8000
.				
----	VAR X4C308	.	0.1054	0.5000
.				
----	VAR X4C309	.	0.1054	0.4000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4C310	.	0.0834	0.3000
.			
---- VAR X4C311	.	0.1125	0.5000
.			
---- VAR X4C312	.	0.0796	1.0000
.			
---- VAR X4C315	0.0001	0.0796	0.3000
.			
---- VAR X4C317	.	0.0820	0.2000
.			
---- VAR X4C318	0.0001	0.0820	0.3000
.			
---- VAR X4C319	0.0001	0.0820	0.3000
.			
---- VAR X4C320	0.0001	0.0820	0.3000
.			
---- VAR X4C321	0.0001	0.0820	0.3000
.			
---- VAR X4C322	.	0.0820	0.4000
.			
---- VAR X4C323	0.0100	0.0820	0.2500
.			
---- VAR X4C324	0.0100	0.0820	0.2500
.			
---- VAR X4C325	.	.	0.1000
.			
---- VAR X4C326	.	.	0.1000
.			
---- VAR X4C328	.	.	0.1000
.			
---- VAR X4C329	.	.	0.1000
.			
---- VAR X4C401	0.0010	0.1018	0.5000
.			
---- VAR X4C402	0.0010	0.1018	0.5000
.			
---- VAR X4C403	0.0001	0.1018	0.3000
.			
---- VAR X4C404	0.0001	0.1018	0.3000
.			
---- VAR X4C405	0.0001	0.0607	0.2000
.			
---- VAR X4C406	.	0.0607	0.2000
.			
---- VAR X4C407	0.0100	0.0607	0.3000
.			
---- VAR X4C408	.	0.0607	0.2000
.			

----	VAR	X4C409	.	0.0607	0.3000
.					
----	VAR	X4C410	0.0001	0.5231	1.0000
.					
----	VAR	X4C411	.	0.5231	1.0000
.					
----	VAR	X4C412	0.5000	0.8119	1.0000
.					
----	VAR	X4C413	0.0001	0.8119	1.0000
.					
----	VAR	X4C414	0.0100	0.0928	0.2500
.					
----	VAR	X4C415	0.0001	0.0928	0.3000
.					
----	VAR	X4C418	0.0001	0.0892	0.3000
.					
----	VAR	X4C419	0.0001	0.0892	0.3000
.					
----	VAR	X4C425	.	0.5231	1.0000
.					
----	VAR	X4C426	0.0001	0.5231	1.0000
.					
----	VAR	X4C427	.	0.6724	1.0000
.					
----	VAR	X4C428	.	0.7366	1.0000
.					
----	VAR	X4C430	0.5000	0.6286	1.0000
.					
----	VAR	X4C431	0.0001	0.8119	1.0000
.					
----	VAR	X4C432	0.5000	0.8119	1.0000
.					
----	VAR	X4HC01	.	0.0856	0.2500
.					
----	VAR	X4HC02	.	0.0856	0.2500
.					
----	VAR	X4HC03	.	0.0891	0.3000
.					
----	VAR	X4HC04	.	0.0891	0.5000
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4HC05	.	0.0891	0.5000
.			
---- VAR X4HC06	.	0.0884	0.4000
.			
---- VAR X4HC07	.	0.0884	0.4000
.			
---- VAR X4HC08	.	0.0884	0.4000
.			
---- VAR X4HC11	.	0.0884	0.4000
.			
---- VAR X4HC14	.	0.0884	0.4000
.			
---- VAR X4HC15	.	0.0884	0.4000
.			
---- VAR X4HC16	.	0.0884	0.4000
.			
---- VAR X4HC22	.	0.1033	0.5000
.			
---- VAR X4HC23	.	0.1031	0.5000
.			
---- VAR X4HC24	.	0.1032	0.5000
.			
---- VAR X4HC25	.	0.1004	0.5000
.			
---- VAR X4HC26	.	0.1023	0.5000
.			
---- VAR X4HC27	.	0.1032	0.5000
.			
---- VAR X4HC28	.	0.1072	0.5000
.			
---- VAR X4HC29	.	0.1072	0.3000
.			
---- VAR X4HC30	.	0.0785	0.3000
.			
---- VAR X4HC31	.	0.1018	0.3000
.			
---- VAR X4HC33	.	0.1256	0.5000
.			
---- VAR X4HC34	.	0.1256	0.5000
.			
---- VAR X4HC38	.	0.1256	0.5000
.			
---- VAR X4HC40	.	0.1256	0.5000
.			
---- VAR X4HC41	.	0.1256	0.5000
.			
---- VAR X4HC45	.	0.1256	0.5000
.			

----	VAR X4R1	.	0.1072	0.3000
.				
----	VAR X4R29	0.0100	0.1028	0.3000
.				
----	VAR X4SC401	0.5000	0.5587	0.7000
.				
----	VAR X4SC404	0.4800	0.7936	1.0000
.				
----	VAR X4SC405	0.4800	0.7936	1.0000
.				
----	VAR X4SC406	0.7000	0.7936	1.0000
.				
----	VAR X4SC407	0.7000	0.7936	1.0000
.				
----	VAR X4SC409	.	0.0088	0.1000
.				
----	VAR X4SC411	.	0.0088	0.1000
.				
----	VAR X4SC412	.	0.0088	0.1000
.				
----	VAR X4SC413	.	0.0088	0.1000
.				
----	VAR X4SC414	.	0.1000	0.1000
19.6073				
----	VAR X5AC09	.	0.0059	0.1000
.				
----	VAR X5AC20	.	0.0041	0.1000
.				
----	VAR X5AC31	.	0.0024	0.1000
.				
----	VAR X5AC42	.	0.0027	0.1000
.				
----	VAR X5C301	.	0.0185	0.2000
.				
----	VAR X5C302	.	0.0041	0.1000
.				
----	VAR X5C303	.	0.0169	0.1000
.				
----	VAR X5C306	.	0.0152	0.6000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5C307	.	0.0152	0.6000
.			
---- VAR X5C308	.	0.0206	0.2000
.			
---- VAR X5C309	.	0.0206	0.2000
.			
---- VAR X5C310	.	0.0062	0.1000
.			
---- VAR X5C311	.	0.0253	0.2000
.			
---- VAR X5C312	.	0.0060	0.4000
.			
---- VAR X5C315	0.0001	0.0060	0.1000
.			
---- VAR X5C317	.	0.0061	0.1000
.			
---- VAR X5C318	0.0001	0.0061	0.1000
.			
---- VAR X5C319	0.0001	0.0061	0.1000
.			
---- VAR X5C320	.	0.0061	0.1000
.			
---- VAR X5C321	0.0001	0.0061	0.1000
.			
---- VAR X5C322	.	0.0061	0.1000
.			
---- VAR X5C323	0.0020	0.0061	0.1000
.			
---- VAR X5C324	0.0020	0.0061	0.1000
.			
---- VAR X5C325	.	.	0.0100
.			
---- VAR X5C326	.	.	0.0100
.			
---- VAR X5C328	.	.	0.0100
.			
---- VAR X5C329	.	.	0.0100
.			
---- VAR X5C401	.	0.0520	0.5000
.			
---- VAR X5C402	.	0.0520	0.5000
.			
---- VAR X5C403	0.0001	0.0520	0.2000
.			
---- VAR X5C404	.	0.0520	0.2000
.			
---- VAR X5C405	.	0.1329	0.2000
.			

----	VAR	X5C406	.	0.1329	0.2000
.					
----	VAR	X5C407	.	0.1329	0.2000
.					
----	VAR	X5C408	.	0.1329	0.2000
.					
----	VAR	X5C409	.	0.1329	0.3000
.					
----	VAR	X5C410	0.0001	0.0954	1.0000
.					
----	VAR	X5C411	.	0.0954	1.0000
.					
----	VAR	X5C412	.	0.0684	0.1000
.					
----	VAR	X5C413	.	0.0684	0.3000
.					
----	VAR	X5C414	.	0.0014	0.1000
.					
----	VAR	X5C415	.	0.0014	0.1000
.					
----	VAR	X5C418	.	0.0038	0.1000
.					
----	VAR	X5C419	0.0001	0.0038	0.1000
.					
----	VAR	X5C425	.	0.0954	1.0000
.					
----	VAR	X5C426	0.0001	0.0954	1.0000
.					
----	VAR	X5C427	.	0.0834	1.0000
.					
----	VAR	X5C428	.	0.0782	0.4000
.					
----	VAR	X5C430	.	0.0842	0.1000
.					
----	VAR	X5C431	.	0.0684	0.2000
.					
----	VAR	X5C432	.	0.0684	0.1000
.					
----	VAR	X5HC01	.	0.1374	0.1500
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5HC02	.	0.1374	0.1500
.			
---- VAR X5HC03	.	0.0038	0.1000
.			
---- VAR X5HC04	.	0.0038	0.3000
.			
---- VAR X5HC05	.	0.0038	0.3000
.			
---- VAR X5HC06	.	0.0317	0.3000
.			
---- VAR X5HC07	.	0.0317	0.3000
.			
---- VAR X5HC08	.	0.0317	0.3000
.			
---- VAR X5HC11	.	0.0317	0.3000
.			
---- VAR X5HC14	.	0.0317	0.3000
.			
---- VAR X5HC15	.	0.0317	0.3000
.			
---- VAR X5HC16	.	0.0317	0.3000
.			
---- VAR X5HC22	.	0.0314	0.5000
.			
---- VAR X5HC23	.	0.0314	0.5000
.			
---- VAR X5HC24	.	0.0314	0.5000
.			
---- VAR X5HC25	.	0.0314	0.5000
.			
---- VAR X5HC26	.	0.0314	0.5000
.			
---- VAR X5HC27	.	0.0313	0.5000
.			
---- VAR X5HC28	.	0.0475	0.5000
.			
---- VAR X5HC29	0.0100	0.0475	0.3000
.			
---- VAR X5HC30	.	0.0549	0.3000
.			
---- VAR X5HC31	.	0.0520	0.3000
.			
---- VAR X5HC33	.	0.0306	2.5000
.			
---- VAR X5HC34	.	0.0306	2.5000
.			
---- VAR X5HC38	.	0.0306	2.5000
.			

----	VAR X5HC40	.	0.0306	2.5000	
.					
----	VAR X5HC41	.	0.0306	2.5000	
.					
----	VAR X5HC45	.	0.0306	2.5000	
.					
----	VAR X5R1	.	0.0475	0.3000	
.					
----	VAR X5R29	0.0100	0.0519	0.4000	
.					
----	VAR X5SC401	0.0080	0.0516	0.1000	
.					
----	VAR X5SC404	.	0.0736	0.1000	
.					
----	VAR X5SC405	.	0.0736	0.1000	-
6.795752E-7	NOPT				
----	VAR X5SC406	0.0100	0.0736	0.1000	
.					
----	VAR X5SC407	0.0100	0.0736	0.1000	
.					
----	VAR X5SC409	.	.	0.1000	
.					
----	VAR X5SC411	.	.	0.1000	
.					
----	VAR X5SC412	.	.	0.1000	
.					
----	VAR X5SC413	.	.	0.1000	
.					
----	VAR X5SC414	.	0.0639	0.1000	
.					
----	VAR X6SC401	.	0.0666	0.1000	
.					
----	VAR X6SC404	.	0.0950	0.1200	
.					
----	VAR X6SC405	.	0.0950	0.1000	-
7.806990E-7	NOPT				
----	VAR X6SC406	.	0.0950	0.1000	
.					
----	VAR X6SC407	.	0.0950	0.1000	
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X6SC409	.	.	0.1000
.			
---- VAR X6SC411	.	.	0.1000
.			
---- VAR X6SC412	.	.	0.1000
.			
---- VAR X6SC413	.	.	0.1000
.			
---- VAR X6SC414	.	0.0436	0.1000
1.346477E-8			
---- VAR X7AC09	.	0.0205	0.1000
.			
---- VAR X7AC20	.	0.0151	0.1000
.			
---- VAR X7AC31	.	0.0084	0.1000
.			
---- VAR X7AC42	.	0.0093	0.1000
.			
---- VAR X7C301	.	0.0293	0.1000
.			
---- VAR X7C302	.	0.2754	0.3000
.			
---- VAR X7C303	.	0.0575	0.1000
.			
---- VAR X7C306	.	0.0497	0.8000
1.7055912E-6 NOPT			
---- VAR X7C307	.	0.0497	0.8000
.			
---- VAR X7C308	.	0.0737	0.3000
.			
---- VAR X7C309	.	0.0737	0.3000
.			
---- VAR X7C310	.	0.0071	0.2000
.			
---- VAR X7C311	.	0.0953	1.0000
.			
---- VAR X7C312	.	0.0081	0.5000
.			
---- VAR X7C315	.	0.0081	0.0100
.			
---- VAR X7C316	.	0.0081	0.0100
.			
---- VAR X7C317	.	0.0084	0.1000
.			
---- VAR X7C318	.	0.0084	0.1500
.			
---- VAR X7C319	.	0.0084	0.1500
.			

----	VAR X7C320	.	0.0084	0.1000
.				
----	VAR X7C321	.	0.0084	0.1000
.				
----	VAR X7C322	.	0.0084	0.1000
.				
----	VAR X7C323	.	0.0084	0.0200
.				
----	VAR X7C324	.	0.0084	0.1000
.				
----	VAR X7C325	.	.	0.2000
.				
----	VAR X7C326	.	.	0.2000
.				
----	VAR X7C328	.	.	0.2000
.				
----	VAR X7C329	.	.	0.1000
.				
----	VAR X7C401	.	0.3215	1.0000
.				
----	VAR X7C402	.	0.3215	0.6000
.				
----	VAR X7C403	0.0001	0.3215	1.0000
.				
----	VAR X7C404	0.0001	0.3215	1.0000
.				
----	VAR X7C405	0.0001	0.8064	1.0000
.				
----	VAR X7C406	0.0010	0.8064	1.0000
.				
----	VAR X7C407	0.0100	0.8064	1.0000
.				
----	VAR X7C408	.	0.8064	1.0000
.				
----	VAR X7C409	.	0.8064	1.0000
.				
----	VAR X7C410	0.0001	0.3798	1.0000
.				
----	VAR X7C411	.	0.3798	1.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7C412	.	0.1152	0.2000
.			
---- VAR X7C413	.	0.1152	0.3000
.			
---- VAR X7C414	.	0.0121	0.1000
.			
---- VAR X7C415	.	0.0121	0.1000
.			
---- VAR X7C417	0.0001	0.0800	0.0800
7.7877			
---- VAR X7C418	0.0001	0.0157	0.1000
.			
---- VAR X7C419	.	0.0157	0.1000
.			
---- VAR X7C425	0.2000	0.3798	1.0000
.			
---- VAR X7C426	0.0001	0.3798	1.0000
.			
---- VAR X7C427	.	0.2421	1.0000
.			
---- VAR X7C428	.	0.1828	0.5000
.			
---- VAR X7C430	.	0.2848	0.3500
.			
---- VAR X7C431	.	0.1152	0.3000
.			
---- VAR X7C432	.	0.1152	0.3000
.			
---- VAR X7HC01	.	0.6000	0.6000
24.2086			
---- VAR X7HC02	.	0.6000	0.6000
.			
---- VAR X7HC03	.	0.0156	0.1000
.			
---- VAR X7HC04	.	0.0156	0.2500
.			
---- VAR X7HC05	.	0.0156	0.2500
.			
---- VAR X7HC06	.	0.1374	0.3000
.			
---- VAR X7HC07	.	0.1374	0.3000
.			
---- VAR X7HC08	.	0.1374	0.3000
.			
---- VAR X7HC11	.	0.1374	0.3000
.			
---- VAR X7HC14	.	0.1374	0.3000
.			

----	VAR X7HC15	.	0.1374	0.3000
.				
----	VAR X7HC16	.	0.1374	0.3000
.				
----	VAR X7HC22	.	0.1387	0.5000
.				
----	VAR X7HC23	.	0.1395	0.5000
.				
----	VAR X7HC24	.	0.1391	0.5000
.				
----	VAR X7HC25	.	0.1500	0.5000
.				
----	VAR X7HC26	.	0.1425	0.5000
.				
----	VAR X7HC27	.	0.1385	0.5000
.				
----	VAR X7HC28	.	0.2599	0.5000
.				
----	VAR X7HC29	0.1000	0.2599	0.5000
.				
----	VAR X7HC30	0.1000	0.5000	0.5000
1.3259				
----	VAR X7HC31	0.1000	0.3215	0.6000
.				
----	VAR X7HC33	.	0.0496	2.0000
.				
----	VAR X7HC34	.	0.0496	2.0000
.				
----	VAR X7HC38	.	0.0496	2.0000
.				
----	VAR X7HC40	.	0.0496	2.0000
.				
----	VAR X7HC41	.	0.0496	2.0000
.				
----	VAR X7HC45	.	0.0496	2.0000
.				
----	VAR X7R1	.	0.2599	0.5000
.				
----	VAR X7R29	0.1000	0.3139	0.6000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7SC401	.	0.0032	0.1000
.			
---- VAR X7SC404	.	0.0046	0.1200
.			
---- VAR X7SC405	.	0.0046	0.1200
.			
---- VAR X7SC406	.	0.0046	0.0100
.			
---- VAR X7SC407	.	0.0046	0.1000
.			
---- VAR X7SC409	.	.	0.1000
.			
---- VAR X7SC411	.	.	0.1000
.			
---- VAR X7SC412	.	.	0.1000
.			
---- VAR X7SC413	.	.	0.1000
.			
---- VAR X7SC414	.	0.0356	0.1000
.			
---- VAR X8AC09	.	5.5072231E-6	0.1000
.			
---- VAR X8AC20	.	6.2512600E-6	0.1000
.			
---- VAR X8AC31	.	5.3636973E-6	0.1000
.			
---- VAR X8AC42	.	5.3398759E-6	0.1000
.			
---- VAR X9AC09	.	0.0058	0.3000
.			
---- VAR X9AC20	.	0.0045	0.3000
.			
---- VAR X9AC31	.	0.0024	0.3000
.			
---- VAR X9AC42	.	0.0026	0.3000
.			
---- VAR XAC02	0.4000	0.4999	1.0000
.			
---- VAR XAC05	0.4000	0.4979	1.0000
.			
---- VAR XAC07	0.4000	0.4979	1.0000
.			
---- VAR XAC09	0.4000	0.4821	1.0000
.			
---- VAR XAC12	0.4000	0.4979	1.0000
.			
---- VAR XAC15	0.4000	0.4959	1.0000
.			

----	VAR XAC18	0.4000	0.4960	1.0000
.				
----	VAR XAC20	0.4000	0.4855	1.0000
.				
----	VAR XAC23	0.4000	0.4959	1.0000
.				
----	VAR XAC26	0.4000	0.4939	1.0000
.				
----	VAR XAC29	0.4000	0.4939	1.0000
.				
----	VAR XAC31	0.4000	0.4879	1.0000
.				
----	VAR XAC34	0.4000	0.4939	1.0000
.				
----	VAR XAC37	0.4000	0.4918	1.0000
.				
----	VAR XAC40	0.4000	0.4918	1.0000
.				
----	VAR XAC42	0.4000	0.4849	1.0000
.				
----	VAR XIC10AC09	.	.	1.0000
.				
----	VAR XIC10AC20	.	.	1.0000
.				
----	VAR XIC10AC31	.	.	1.0000
.				
----	VAR XIC10AC42	.	.	1.0000
.				
----	VAR XIC11AC09	.	.	1.0000
.				
----	VAR XIC11AC20	.	.	1.0000
.				
----	VAR XIC11AC31	.	.	1.0000
.				
----	VAR XIC11AC42	.	.	1.0000
.				
----	VAR XM1C606D	.	0.0002	0.5000
.				
----	VAR XM3C606D	.	0.0010	0.5000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XM4C606D	.	0.5445	0.6500
.			
---- VAR XM5C606D	.	0.1002	0.5000
.			
---- VAR XM7C606D	.	0.3540	1.0000
.			
---- VAR XX1C302	.	0.0840	0.2500
.			
---- VAR XX1C308	.	0.0614	0.5000
.			
---- VAR XX1C310	.	0.1201	0.5000
.			
---- VAR XX1C311	.	0.0414	0.3000
.			
---- VAR XX1C312	.	0.1501	1.0000
.			
---- VAR XX1C323	.	0.1166	0.2000
.			
---- VAR XX1C325	0.4000	1.0000	1.0000
.			
---- VAR XX1C405	.	.	0.0100
.			
---- VAR XX1C408	.	.	1.0000
.			
---- VAR XX1C425	.	0.0006	1.0000
.			
---- VAR XX1C428	.	0.0008	1.0000
.			
---- VAR XX1C430	.	0.0009	0.5000
.			
---- VAR XX1C431	.	0.0026	0.1000
.			
---- VAR XX1HC28	0.0100	0.0277	0.2000
.			
---- VAR XX1HC29	.	0.0277	0.2000
.			
---- VAR XX1HC30	0.0100	0.0148	0.2000
.			
---- VAR XX1HC32	.	0.0312	0.1000
.			
---- VAR XX1R1	.	0.0277	0.2000
.			
---- VAR XX1R29	.	0.0233	0.1000
.			
---- VAR XX1SC406	.	2.7636138E-6	0.2000
.			
---- VAR XX1SC408	.	0.0616	0.1000
.			

----	VAR XX2HC28	.	.	0.1000
.				
----	VAR XX2HC29	.	.	0.1000
.				
----	VAR XX2HC30	.	.	0.1000
.				
----	VAR XX2R1	.	.	0.1000
.				
----	VAR XX2R29	.	.	0.1000
.				
----	VAR XX2SC406	.	0.0128	0.1000
.				
----	VAR XX2SC408	.	0.0002	1.0000
.				
----	VAR XX3C302	0.5000	0.6472	1.0000
.				
----	VAR XX3C308	.	0.7646	1.0000
.				
----	VAR XX3C310	.	0.7892	1.0000
.				
----	VAR XX3C311	.	0.7562	1.0000
.				
----	VAR XX3C312	.	0.7630	1.0000
.				
----	VAR XX3C323	0.5000	0.7930	0.9200
.				
----	VAR XX3C325	.	1.1698583E-6	0.5000
.				
----	VAR XX3C405	.	2.9814995E-5	0.1000
.				
----	VAR XX3C408	.	2.9814995E-5	1.0000
.				
----	VAR XX3C425	.	0.0015	1.0000
.				
----	VAR XX3C428	.	0.0020	1.0000
.				
----	VAR XX3C430	.	0.0022	0.1000
.				
----	VAR XX3C431	.	0.0027	0.5000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX3C432	.	0.0027	0.1500
.			
---- VAR XX3HC28	0.2000	0.6208	0.8000
.			
---- VAR XX3HC29	0.1000	0.6208	0.8000
.			
---- VAR XX3HC30	0.1000	0.4308	0.6000
.			
---- VAR XX3HC32	0.3000	0.7823	1.0000
.			
---- VAR XX3R1	0.1000	0.6208	0.8000
.			
---- VAR XX3R29	0.1000	0.5777	0.6000
.			
---- VAR XX3SC406	.	0.0220	0.1000
.			
---- VAR XX3SC408	0.5000	0.9296	1.0000
.			
---- VAR XX4C302	.	0.0653	0.5000
.			
---- VAR XX4C308	.	0.1068	0.5000
.			
---- VAR XX4C310	.	0.0812	0.3000
.			
---- VAR XX4C311	.	0.1155	0.5000
.			
---- VAR XX4C312	.	0.0770	0.1500
.			
---- VAR XX4C323	0.0800	0.0800	0.2800
155.6164			
---- VAR XX4C325	.	.	0.0500
.			
---- VAR XX4C405	0.0001	0.0853	0.2000
.			
---- VAR XX4C408	.	0.0853	0.3000
.			
---- VAR XX4C409	0.0001	0.0853	0.3000
.			
---- VAR XX4C425	.	0.6098	1.0000
.			
---- VAR XX4C427	.	0.7429	1.0000
.			
---- VAR XX4C428	.	0.7960	1.0000
.			
---- VAR XX4C430	0.5000	0.7055	1.0000
.			
---- VAR XX4C431	0.0001	0.8549	1.0000
.			

----	VAR XX4C432	0.5000	0.8549	1.0000
.				
----	VAR XX4HC28	0.0100	0.1175	0.3000
.				
----	VAR XX4HC29	0.0100	0.1175	0.3000
.				
----	VAR XX4HC30	0.0100	0.0947	0.3000
.				
----	VAR XX4HC32	.	0.1275	0.5000
.				
----	VAR XX4R1	.	0.1175	0.3000
.				
----	VAR XX4R29	0.0100	0.1152	0.3000
.				
----	VAR XX4SC406	0.6000	0.8214	1.0000
.				
----	VAR XX4SC408	.	0.0086	0.0500
.				
----	VAR XX5C302	.	0.0035	0.1000
.				
----	VAR XX5C308	.	0.0168	0.8000
.				
----	VAR XX5C310	.	0.0048	0.1000
.				
----	VAR XX5C311	.	0.0209	0.1000
.				
----	VAR XX5C312	.	0.0046	0.3000
.				
----	VAR XX5C323	0.0010	0.0048	0.1500
.				
----	VAR XX5C325	.	.	0.0010
.				
----	VAR XX5C405	0.0001	0.1506	0.2000
.				
----	VAR XX5C408	.	0.1506	0.3000
.				
----	VAR XX5C425	.	0.0897	1.0000
.				
----	VAR XX5C428	.	0.0681	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX5C430	.	0.0761	1.0000
.			
---- VAR XX5C431	.	0.0581	1.0000
.			
---- VAR XX5HC28	0.0100	0.0420	0.3000
.			
---- VAR XX5HC29	.	0.0420	0.3000
.			
---- VAR XX5HC30	.	0.0534	0.3000
.			
---- VAR XX5HC32	.	0.0251	0.2000
.			
---- VAR XX5R1	.	0.0420	0.3000
.			
---- VAR XX5R29	.	0.0468	0.3000
.			
---- VAR XX5SC406	.	0.0614	0.1500
.			
---- VAR XX5SC408	.	.	0.1000
.			
---- VAR XX6SC406	.	0.0792	0.1000
.			
---- VAR XX6SC408	.	.	1.0000
.			
---- VAR XX7C302	.	0.2000	0.2000
0.9045			
---- VAR XX7C308	.	0.0504	0.1000
.			
---- VAR XX7C310	.	0.0047	0.1000
.			
---- VAR XX7C311	.	0.0660	0.3000
.			
---- VAR XX7C312	.	0.0053	0.1000
.			
---- VAR XX7C323	0.0020	0.0055	0.1000
.			
---- VAR XX7C325	.	.	0.1000
.			
---- VAR XX7C405	0.0001	0.7641	1.0000
.			
---- VAR XX7C408	.	0.7641	1.0000
.			
---- VAR XX7C425	.	0.2985	1.0000
.			
---- VAR XX7C428	.	0.1332	1.0000
.			
---- VAR XX7C430	.	0.2154	1.0000
.			

----	VAR XX7C431	.	0.0818	1.0000
.				
----	VAR XX7HC28	0.1000	0.1921	0.4000
.				
----	VAR XX7HC29	.	0.1921	0.5000
.				
----	VAR XX7HC30	0.1000	0.4064	0.5000
.				
----	VAR XX7HC32	.	0.0340	0.2000
.				
----	VAR XX7R1	0.1000	0.1921	0.5000
.				
----	VAR XX7R29	0.1000	0.2371	0.5000
.				
----	VAR XX7SC406	.	0.0032	0.1000
.				
----	VAR XX7SC408	.	.	0.1000
.				
----	VAR Y1HC28	0.0500	0.0793	0.5000
.				
----	VAR Y1HC29	0.0500	0.0793	0.5000
.				
----	VAR Y1HC30	0.0500	0.0582	0.5000
.				
----	VAR Y1HC31	0.0500	0.0697	0.4000
.				
----	VAR Y1R1	.	0.0793	0.5000
.				
----	VAR Y1R29	0.0500	0.0710	0.5000
.				
----	VAR Y2HC28	.	.	0.1000
.				
----	VAR Y2HC29	.	.	0.1000
.				
----	VAR Y2HC30	.	.	0.1000
.				
----	VAR Y2HC31	.	.	0.1000
.				
----	VAR Y2R1	.	.	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR Y2R29	.	.	0.1000
.			
---- VAR Y3HC28	0.2000	0.7883	0.9000
.			
---- VAR Y3HC29	0.1000	0.7883	0.9000
.			
---- VAR Y3HC30	0.1000	0.7506	0.8500
.			
---- VAR Y3HC31	0.1000	0.7795	0.8500
.			
---- VAR Y3R1	0.1000	0.7883	0.9000
.			
---- VAR Y3R29	0.1000	0.7830	0.8500
.			
---- VAR Y4HC28	.	0.0979	0.5000
.			
---- VAR Y4HC29	.	0.0979	0.3000
.			
---- VAR Y4HC30	0.0100	0.1082	0.4000
.			
---- VAR Y4HC31	.	0.1030	0.3000
.			
---- VAR Y4R1	.	0.0979	0.3000
.			
---- VAR Y4R29	.	0.1024	0.5000
.			
---- VAR Y5HC28	.	0.0148	0.2000
.			
---- VAR Y5HC29	.	0.0148	0.2000
.			
---- VAR Y5HC30	.	0.0258	0.2000
.			
---- VAR Y5HC31	.	0.0185	0.2000
.			
---- VAR Y5R1	.	0.0148	0.2000
.			
---- VAR Y5R29	.	0.0177	0.2000
.			
---- VAR Y7HC28	0.0100	0.0197	0.5000
.			
---- VAR Y7HC29	.	0.0197	0.1000
.			
---- VAR Y7HC30	.	0.0572	0.1000
.			
---- VAR Y7HC31	.	0.0293	0.2000
.			
---- VAR Y7R1	.	0.0197	0.1000
.			

----	VAR Y7R29	.	0.0259	0.2000
.				
----	VAR YY1HC28	0.1000	0.1029	0.5000
.				
----	VAR YY1HC29	0.1000	0.1029	0.6000
.				
----	VAR YY1HC30	0.0500	0.0770	0.6000
.				
----	VAR YY1R1	0.1000	0.1029	0.6000
.				
----	VAR YY1R29	0.0500	0.0926	0.6000
.				
----	VAR YY2HC28	.	.	0.1000
.				
----	VAR YY2HC29	.	.	0.1000
.				
----	VAR YY2HC30	.	.	0.1000
.				
----	VAR YY2R1	.	.	0.1000
.				
----	VAR YY2R29	.	.	0.1000
.				
----	VAR YY3HC28	0.1000	0.7760	0.9000
.				
----	VAR YY3HC29	0.1000	0.7760	0.8000
.				
----	VAR YY3HC30	0.1000	0.7545	0.8000
.				
----	VAR YY3R1	0.1000	0.7760	0.8000
.				
----	VAR YY3R29	0.1000	0.7747	0.8000
.				
----	VAR YY4HC28	0.0100	0.0963	0.3000
.				
----	VAR YY4HC29	0.0100	0.0963	0.3000
.				
----	VAR YY4HC30	0.0100	0.1088	0.3000
.				
----	VAR YY4R1	.	0.0963	0.3000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR YY4R29	0.0100	0.1013	0.3000
.			
---- VAR YY5HC28	0.0010	0.0118	0.2000
.			
---- VAR YY5HC29	.	0.0118	0.2000
.			
---- VAR YY5HC30	.	0.0209	0.1000
.			
---- VAR YY5R1	.	0.0118	0.2000
.			
---- VAR YY5R29	.	0.0141	0.2000
.			
---- VAR YY7HC28	.	0.0131	0.2000
.			
---- VAR YY7HC29	.	0.0131	0.2000
.			
---- VAR YY7HC30	.	0.0387	0.1000
.			
---- VAR YY7R1	.	0.0131	0.1000
.			
---- VAR YY7R29	.	0.0173	0.2000
.			
---- VAR OBJVAR	-INF	78.7615	+INF
.			

- FAC02
- FAC12
- FAC23
- FAC34
- FAC45
- FC308
- FC316
- FC320
- FC322
- FC328
- FC329
- FC403
- FC407
- FC412
- FC417
- FHC01
- FHC32
- FSC402
- FSC405
- FSC411
- FSC413
- FSTME612
- PC302

PC310
PC601
PC603
QHC07
QHC11
QHC14
QHC16
QHC34

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QHC38
QHC41
QHC45
TAC09
TAC12
TAC23
TAC31
TAC34
TAC42
TAC45
TC303
TC306
TC307
TC308
TC315
TC316
TC317
TC321
TC324
TC325
TC404
TC405
TC407
TC408
TC410
TC414
TC418
TC419
THC32
TSC402
TSC403
TSC405
TSC408
TSC413
X11AC12
X11AC23
X11AC34
X11AC45
X1C316
X1C325
X1C417
X1HC32
X1SC402
X1SC403
X1SC408
X2SC402

GAMS 2.50A Windows NT/95/98

X2SC403
X2SC408
X3C316
X3C325
X3C417
X3HC32
X3SC402
X3SC403
X3SC408
X4C316
X4C417
X4HC32
X4SC402
X4SC403
X4SC408
X5C316
X5C417
X5HC32
X5SC402
X5SC403
X5SC408
X6SC402
X6SC403
X6SC408
X7HC32
X7SC402
X7SC403
X7SC408
XX1C322
XX1C414
XX1HC01
XX2HC01
XX3C317
XX3C322
XX3C407
XX3C412
XX3C414
XX3HC01
XX4C317
XX4C322
XX4C407
XX4C412
XX4C414
XX4HC01
XX5C407
XX5C412

GAMS 2.50A Windows NT/95/98

XX5C414
XX7C414
C10PC623
C10PC625
C10PC627
C10PC629
C2C623
C2C625
C2C627
C2C629
C3C623
C3C625
C3C627
C3C629
C3PC623
C3PC625
C3PC627
C3PC629
C4PC623
C4PC625
C4PC627
C4PC629
C5PC623
C5PC625
C5PC627
C5PC629
C7PC623
C7PC625
C7PC627
C7PC629
C8PC623
C8PC625
C8PC627
C8PC629
C9PC623
C9PC625
C9PC627
C9PC629
CHXC623
CHXC625
CHXC627
CHXC629
CIC10PC623
CIC10PC625
CIC10PC627
CIC10PC629

GAMS 2.50A Windows NT/95/98

CIC11PC623
CIC11PC625
CIC11PC627
CIC11PC629
CIC4EC623
CIC4EC625
CIC4EC627
CIC4EC629
CIC5EC623
CIC5EC625
CIC5EC627
CIC5EC629
CIC8EC623
CIC8EC625
CIC8EC627
CIC8EC629
COST
DTE601
DTE602
DTE603
DTE605
DTE609A
DTE610
DTE611
DTE612
DTE613
DTE616
DTE617
DTE621A
DTE621B
DTE626
DTE627A
DTE627B
DTE628
DTE629
DTE633
DTE634
DTE640
DTE641
DTE695A
DTE695B
DTE696A
DTE696B
DTE6XX
EARNINGS
F1C601

GAMS 2.50A Windows NT/95/98

F1C603
F1C606A
F2C601
F3C601
F3C603
F3C606A
F4C601
F4C603
F4C606A
F5C601
F5C603
F5C606A
F6C601
F7C601
F7C603
F7C606A
FAC05
FAC07
FAC09
FAC15
FAC18
FAC20
FAC26
FAC29
FAC31
FAC37
FAC40
FAC42
FC301
FC302
FC303
FC306
FC307
FC309
FC310
FC311
FC312
FC315
FC317
FC318
FC319
FC321
FC323
FC324
FC325
FC326

GAMS 2.50A Windows NT/95/98

FC401
FC402
FC404
FC405
FC406
FC408
FC409
FC410
FC411
FC413
FC414
FC415
FC418
FC419
FC425
FC426
FC427
FC428
FC430
FC431
FC432
FCWE603
FCWE605
FCWE609A
FCWE611
FCWE613
FCWE617
FCWE621A
FCWE621B
FCWE626
FCWE627A
FCWE627B
FCWE634
FCWE640
FCWE641A
FCWE641B
FHC02
FHC03
FHC04
FHC05
FHC06
FHC07
FHC08
FHC11
FHC14
FHC15

GAMS 2.50A Windows NT/95/98

FHC16
FHC22
FHC23
FHC24
FHC25
FHC26
FHC27
FHC28
FHC29
FHC30
FHC31
FHC33
FHC34
FHC38
FHC40
FHC41
FHC45
FLHC28
FLHC29
FLHC30
FLHC31
FLR1
FLR29
FMC302
FMC308
FMC310
FMC311
FMC312
FMC317
FMC322
FMC323
FMC325
FMC405
FMC407
FMC408
FMC409
FMC412
FMC414
FMC425
FMC427
FMC428
FMC430
FMC431
FMC432
FMHC01
FMHC32

GAMS 2.50A Windows NT/95/98

FMLHC28
FMLHC29
FMLHC30
FMLR1
FMLR29
FMSC403
FMSC406
FMSC408
FMVHC28
FMVHC29
FMVHC30
FMVR1
FMVR29
FR1
FR29
FSC401
FSC403
FSC404
FSC406
FSC407
FSC408
FSC409
FSC412
FSC414
FSTME602
FSTME695A
FSTME695B
FSTME696A
FSTME696B
FVHC28
FVHC29
FVHC30
FVHC31
FVR1
FVR29
H1C601
H1C603
H1C606A
H2C601
H3C601
H3C603
H3C606A
H4C601
H4C603
H4C606A
H5C601

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H5C603
H5C606A
H6C601
H7C601
H7C603
H7C606A
HAC02
HAC05
HAC07
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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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OBJVAR Objective function using ' ' algorithm

**** REPORT SUMMARY : 4 NONOPT (NOPT)
 0 INFEASIBLE
 0 UNBOUNDED
 0 ERRORS

Data Validation Program
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GAMS 2.50A Windows NT/95/98

EXECUTION TIME = 0.280 SECONDS 1.3 Mb WIN-18-097

USER: Ralph W. Pike G990726:1450AP-WIN
Louisiana State University, Department of Chemical EngineeriDC267

**** FILE SUMMARY

INPUT C:\PROGRAM FILES\GAMSIDE\DO_DATA
OUTPUT C:\PROGRAM FILES\GAMSIDE\DO_DATA.LST
SAVE C:\PROGRAM FILES\GAMSIDE\PUT_DATA.G0?

Appendix H.2 : Parameter Estimation Program (Do_para.lst)

Parameter Estimation Program
05/15/01 16:46:37 PAGE 1

GAMS 2.50A Windows NT/95/98

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6 SCALARS
7 MW1 / 44.1 /
8 MW2 / 56.1 /
9 MW3 / 58.1 /
10 MW4 / 58.1 /
11 MW5 / 72.1 /
12 MW6 / 72.1 /
13 MW7 / 86.2 /
14 MW8 / 100.2 /
15 MW9 / 114.2 /
16 MW10 / 128.2 /
17 MW11 / 98 /
18 MWiC10 / 142 /
19 MWiC11 / 156 /
20 ;
21
22 SCALARS
23 klav / 120000 /
24 Vr / 87.06 /
25 k1 / 6770 /
26 k2 / 13797000000 /
27 k3 / 4970000000 /
28 k4 / 1929700000 /
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38 k14 / 96770000 /
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40 k16 / 8.006E+16 /
41 k17 / 213740000 /
42 k18 / 3780100000 /
43 k19 / 1.231E+15 /
44 VaC623 / 46.1 /
45 Ha / 0.53 /
46 ;
47 SCALARS
48 AE601 / 81 /
49 AE602 / 365 /
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50 AE603 / 98 /
51 AE605 / 428 /
52 AE609A / 33 /
53 AE610 / 150.5 /
54 AE611 / 110.55 /
55 AE612 / 263.84 /
56 AE613 / 431.07 /
57 AE616 / 106 /
58 AE617 / 106 /
59 AE621A / 346 /
60 AE626 / 308 /
61 AE627A / 42 /
62 AE628 / 88.7 /
63 AE629 / 743 /
64 AE633 / 284 /
65 AE634 / 3820 /
66 AE640 / 282.42 /
67 AE641 / 133.8 /
68 AE695A / 310 /
69 AE696A / 393 /
70 ContrA / 2.2 /
71 AE6XX / 7360 /
72 AE621B / 115 /
73 AE627B / 41 /
74 AE696B / 131 /
75 AE695B / 103 /
76 ;
77 SCALARS
78 E01MTD / 40.2 /
79 E02MTD / 114.5 /
80 E03MTD / 24.3 /
81 E05MTD / 27.1 /
82 E09MTD / 19.9 /
83 E10MTD / 35.8 /
84 E11MTD / 19.8 /
85 E12MTD / 75.5 /
86 E13MTD / 21.5 /
87 E16MTD / 140.2 /
88 E17MTD / 29.1 /
89 E21MTD / 25.6 /
90 E26MTD / 15.4 /
91 E27MTD / 44.5 /
92 E28MTD / 36.1 /
93 E29MTD / 16.4 /
94 E33MTD / 20.4 /
95 E34MTD / 19.3 /
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96 E40MTD / 13.6 /
97 E41MTD / 15.7 /
98 E95MTD / 59.2 /
99 E96MTD / 70.4 /
100 ;
101 SCALARS
102 C06AN / 9 /
103 C06BN / 34 /
104 C06CN / 2 /
105 C06DN / 9 /
106 C03N / 40 /
107 C03M / 21 /
108 C01N / 60 /
109 C01M / 41 /
110 ;
111 SCALARS
112 R / 0.0083144 /
113 H298_1 /-12590 /
114 H298_2 /-64.95 /
115 H298_3 /-16240 /
116 H298_4 /-15130 /
117 H298_5 /-18490 /
118 H298_6 /-17650 /
119 H298_7 / 28980 /
120 H298_8 / 33220 /
121 H298_9 /-26940 /
122 H298_10 /-4454 /
123 b_1 /-14380 /
124 b_2 /-2115 /
125 b_3 /-18460 /
126 b_4 /-17590 /
127 b_5 /-20810 /
128 b_6 /-20090 /
129 b_7 /-542.63 /
130 b_8 /-26770 /
131 b_9 /-30480 /
132 b_10 /-8684 /
133 kK601 / 1.12 /
134 WK601 / 460 /
135 hsteam / 1946.60928 /
136 hwatin / 112 /
137 hsteam397 / 1736 /
138 ;
139 SCALARS
140 C03Kn1 / 1.3 /
141 C03Kn2 / 0.65 /
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142 C03Kn3 / 0.62 /
143 C03Kn4 / 0.46 /
144 C03Kn5 / 0.22 /
145 C03Kn6 / 0.18 /
146 C03Kn7 / 0.1 /
147 C03Kn8 / 0.045 /
148 C03Kn9 / 0.02 /
149 C03Kn10 / 0.005 /
150 C03Km1 / 1.75 /
151 C03Km2 / 0.93 /
152 C03Km3 / 0.9 /
153 C03Km4 / 0.7 /
154 C03Km5 / 0.35 /
155 C03Km6 / 0.3 /
156 C03Km7 / 0.18 /
157 C03Km8 / 0.07 /
158 C03Km9 / 0.035 /
159 C03Km10 / 0.012 /
160 C01Kn1 / 1.8 /
161 C01Kn2 / 0.75 /
162 C01Kn3 / 0.8 /
163 C01Kn4 / 0.6 /
164 C01Kn5 / 0.26 /
165 C01Kn6 / 0.22 /
166 C01Kn7 / 0.09 /
167 C01Kn8 / 0.04 /
168 C01Kn9 / 0.018 /
169 C01Kn10 / 0.005 /
170 C01Km1 / 2.1 /
171 C01Km2 / 0.85 /
172 C01Km3 / 1 /
173 C01Km4 / 0.7 /
174 C01Km5 / 0.35 /
175 C01Km6 / 0.28 /
176 C01Km7 / 0.15 /
177 C01Km8 / 0.05 /
178 C01Km9 / 0.025 /
179 C01Km10 / 0.008 /
180 K1C616 / 3.5 /
181 K2C616 / 1.7 /
182 K3C616 / 1.4 /
183 K4C616 / 0.95 /
184 K5C616 / 0.4 /
185 K6C616 / 0.3 /
186 K7C616 / 0.13 /
187 K8C616 / 0.04 /

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188 K9C616 / 0.015 /
189 K10C616 / 0.0045 /
190 C14K1 / 3.4 /
191 C14K2 / 1.2 /
192 C14K3 / 1.1 /
193 C14K4 / 0.75 /
194 C14K5 / 0.23 /
195 C14K6 / 0.16 /
196 C14K7 / 0.05 /
197 C14K8 / 0.011 /
198 C14K9 / 0.004 /
199 C14K10 / 0.0008 /
200 K1C615 / 2.2 /
201 K2C615 / 1.2 /
202 K3C615 / 1 /
203 K4C615 / 0.7 /
204 K5C615 / 0.3 /
205 K6C615 / 0.25 /
206 K7C615 / 0.13 /
207 K8C615 / 0.045 /
208 K9C615 / 0.02 /
209 K10C615 / 0.006 /
210 RK1 / 5 /
211 RK2 / 2 /
212 RK3 / 1.7 /
213 RK4 / 1.35 /
214 RK5 / 0.41 /
215 RK6 / 0.3 /
216 RK7 / 0.1 /
217 RK8 / 0.03 /
218 RK9 / 0.01 /
219 RK10 / 0.003 /
220 K1M3 / 3.71 /
221 K2M3 / 1.05 /
222 K3M3 / 1.25 /
223 K4M3 / 0.82 /
224 K5M3 / 0.28 /
225 K6M3 / 0.24 /
226 K7M3 / 0.068 /
227 K8M3 / 0.025 /
228 K9M3 / 0.0075 /
229 K10M3 / 0.0025 /
230 C06Am / 0.9 /
231 C06Bm / 1.2 /
232 C06Cm / 1.1 /
233 C06Dm / 2.9 /

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234 ;
235 SCALARS
236 AC07dens / 115.37 /
237 AC08dens / 115.37 /
238 AC18dens / 115.05 /
239 AC19dens / 115.05 /
240 AC29dens / 114.6 /
241 AC30dens / 114.6 /
242 AC40dens / 114.3 /
243 AC41dens / 114.3 /
244 HCdens1 / 0.002055 /
245 HCdens2 / 0.002543 /
246 HCdens3 / 0.002301 /
247 HCdens4 / 0.002389 /
248 HCdens5 / 0.002568 /
249 HCdens6 / 0.002589 /
250 HCdens7 / 0.002702 /
251 HCdens8 / 0.00281 /
252 HCdens9 / 0.002902 /
253 HCdens10 / 0.00296 /
254 ;
255 SCALARS
256 wat1 / 1.0861707 /
257 wat2 / 0.000563134 /
258 wat3 / 0.000000834491 /
259 wat4 / 11426.6 /
260 wat5 / 1018240 /
261 ;
262 SCALARS
263 Kdic4 / 0.0007 /
264 Kdic5 / 0.00056 /
265 Kdic6 / 0.00047 /
266 Kdic7 / 0.000407 /
267 Kdic8 / 0.000356 /
268 Kdic9 / 0.000317 /
269 ;
270
271 * The following are the Measured Variables
272 VARIABLES
273 FAC02, FAC12, FAC23, FAC34, FAC45, FC308, FC316, FC320,
274 FC322, FC328, FC329, FC403, FC407, FC412, FC417, FHC01,
275 FHC32, FSC402, FSC405, FSC411, FSC413, FstmE612, PC302, PC310,
276 PC601, PC603, QHC07, QHC11, QHC14, QHC16, QHC34, QHC38,
277 QHC41, QHC45, TAC09, TAC12, TAC23, TAC31, TAC34, TAC42,
278 TAC45, TC303, TC306, TC307, TC308, TC315, TC316, TC317,
279 TC321, TC324, TC325, TC404, TC405, TC407, TC408, TC410,
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280 TC414, TC418, TC419, THC32, TSC402, TSC403, TSC405, TSC408,
281 TSC413, x11AC12, x11AC23, x11AC34, x11AC45, x1C316, x1C325,
x1C417,
282 x1HC32, x1SC402, x1SC403, x1SC408, x2SC402, x2SC403, x2SC408,
x3C316,
283 x3C325, x3C417, x3HC32, x3SC402, x3SC403, x3SC408, x4C316,
x4C417,
284 x4HC32, x4SC402, x4SC403, x4SC408, x5C316, x5C417, x5HC32,
x5SC402,
285 x5SC403, x5SC408, x6SC402, x6SC403, x6SC408, x7HC32, x7SC402,
x7SC403,
286 x7SC408, xx1C322, xx1C414, xx1HC01, xx2HC01, xx3C317, xx3C322,
xx3C407,
287 xx3C412, xx3C414, xx3HC01, xx4C317, xx4C322, xx4C407, xx4C412,
xx4C414,
288 xx4HC01, xx5C407, xx5C412, xx5C414, xx7C414;
289
290 * The following are the Unmeasured Variables
291 VARIABLES
292 C10pC623, C10pC625, C10pC627, C10pC629, C2C623, C2C625, C2C627,
C2C629,
293 C3C623, C3C625, C3C627, C3C629, C3pC623, C3pC625, C3pC627,
C3pC629,
294 C4pC623, C4pC625, C4pC627, C4pC629, C5pC623, C5pC625, C5pC627,
C5pC629,
295 C7pC623, C7pC625, C7pC627, C7pC629, C8pC623, C8pC625, C8pC627,
C8pC629,
296 C9pC623, C9pC625, C9pC627, C9pC629, CHXC623, CHXC625, CHXC627,
CHXC629,
297 CiC10pC623, CiC10pC625, CiC10pC627, CiC10pC629, CiC11pC623,
CiC11pC625, CiC11pC627, CiC11pC629,
298 CiC4eC623, CiC4eC625, CiC4eC627, CiC4eC629, CiC5eC623, CiC5eC625,
CiC5eC627, CiC5eC629,
299 CiC8eC623, CiC8eC625, CiC8eC627, CiC8eC629, Cost, dTE601, dTE602,
dTE603,
300 dTE605, dTE609A, dTE610, dTE611, dTE612, dTE613, dTE616, dTE617,
301 dTE621A, dTE621B, dTE626, dTE627A, dTE627B, dTE628, dTE629,
dTE633,
302 dTE634, dTE640, dTE641, dTE695A, dTE695B, dTE696A, dTE696B,
dTE6XX,
303 Earnings, f1C601, f1C603, f1C606A, f2C601, f3C601, f3C603,
f3C606A,
304 f4C601, f4C603, f4C606A, f5C601, f5C603, f5C606A, f6C601, f7C601,
305 f7C603, f7C606A, FAC05, FAC07, FAC09, FAC15, FAC18, FAC20,
306 FAC26, FAC29, FAC31, FAC37, FAC40, FAC42, FC301, FC302,
307 FC303, FC306, FC307, FC309, FC310, FC311, FC312, FC315,
308 FC317, FC318, FC319, FC321, FC323, FC324, FC325, FC326,
309 FC401, FC402, FC404, FC405, FC406, FC408, FC409, FC410,
310 FC411, FC413, FC414, FC415, FC418, FC419, FC425, FC426,
311 FC427, FC428, FC430, FC431, FC432, FcweE603, FcweE605, FcweE609A,

312 Fcwe611, Fcwe613, Fcwe617, Fcwe621A, Fcwe621B, Fcwe626, Fcwe627A,
Fcwe627B,
313 Fcwe634, Fcwe640, Fcwe641A, Fcwe641B, FHC02, FHC03, FHC04, FHC05,
314 FHC06, FHC07, FHC08, FHC11, FHC14, FHC15, FHC16, FHC22,
315 FHC23, FHC24, FHC25, FHC26, FHC27, FHC28, FHC29, FHC30,
316 FHC31, FHC33, FHC34, FHC38, FHC40, FHC41, FHC45, FlHC28,
317 FlHC29, FlHC30, FlHC31, FlR1, FlR29, FmC302, FmC308, FmC310,
318 FmC311, FmC312, FmC317, FmC322, FmC323, FmC325, FmC405, FmC407,
319 FmC408, FmC409, FmC412, FmC414, FmC425, FmC427, FmC428, FmC430,
320 FmC431, FmC432, FmHC01, FmHC32, FmlHC28, FmlHC29, FmlHC30, FmlR1,
321 FmlR29, FmSC403, FmSC406, FmSC408, FmvHC28, FmvHC29, FmvHC30,
FmvR1,
322 FmvR29, FR1, FR29, FSC401, FSC403, FSC404, FSC406, FSC407,
323 FSC408, FSC409, FSC412, FSC414, FstmE602, FstmE695A, FstmE695B,
FstmE696A,
324 FstmE696B, FvHC28, FvHC29, FvHC30, FvHC31, FvR1, FvR29, h1C601,
325 h1C603, h1C606A, h2C601, h3C601, h3C603, h3C606A, h4C601, h4C603,

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326 h4C606A, h5C601, h5C603, h5C606A, h6C601, h7C601, h7C603,
h7C606A,
327 hAC02, hAC05, hAC07, hAC09, hAC12, hAC15, hAC18, hAC20,
328 hAC23, hAC26, hAC29, hAC31, hAC34, hAC37, hAC40, hAC42,
329 hacAC09, hacAC20, hacAC31, hacAC42, hc301, hc302, hc303, hc306,
330 hc307, hc308, hc309, hc310, hc311, hc312, hc312liq, hc315,
331 hc316, hc317, hc318, hc319, hc321, hc322, hc323, hc324,
332 hc325, hc326, hc329, hc401, hc402, hc403, hc404, hc405,
333 hc406, hc407, hc408, hc408vap, hc409, hc410, hc410vap, hc411,
334 hc412, hc412liq, hc413, hc414, hc414liq, hc415, hc417, hc418,
335 hc419, hc425, hc426, hc427, hc428, hc430, hc431, hc432,
336 hc623, hc625, hc627, hc629, hHC01, hHC02, hHC03, hHC04,
337 hHC05, hHC06, hHC07, hHC11, hHC14, hHC16, hHC29, hHC30,
338 hHC31, hHC32, hHC34, hHC38, hHC41, hHC45, hlHC29, hlHC30,
339 hlHC31, hlR1, hlR29, hr1, hr29, hSC401, hSC402, hSC403,
340 hSC404, hSC405, hSC406, hSC407, hSC408, hSC409, hSC411, hSC412,
341 hSC413, hSC414, hvHC29, hvHC30, hvHC31, hvR1, hvR29, K1C323,
342 K1C325, K1C408, K1C414, K1C428, K1C430, K1C601, K1C603, K1C606A,
343 K1C606C, K1C614B, K1C615_A, K1C616_A, K1E633, K1E6XX, K1SC406,
K1SC408,
344 K2C601, K2E633, K2E6XX, K2SC406, K2SC408, K3C323, K3C325, K3C408,
345 K3C414, K3C428, K3C430, K3C601, K3C603, K3C606A, K3C606C,
K3C614B,
346 K3C615_A, K3C616_A, K3E633, K3E6XX, K3SC406, K3SC408, K4C323,
K4C325,
347 K4C408, K4C414, K4C428, K4C430, K4C601, K4C603, K4C606A, K4C606C,
348 K4C614B, K4C615_A, K4C616_A, K4E633, K4E6XX, K4SC406, K4SC408,
K5C323,
349 K5C325, K5C408, K5C414, K5C428, K5C430, K5C601, K5C603, K5C606A,
350 K5C606C, K5C614B, K5C615_A, K5C616_A, K5E633, K5E6XX, K5SC406,
K5SC408,
351 K6C601, K6SC406, K6SC408, K7C323, K7C325, K7C408, K7C414, K7C428,
352 K7C430, K7C601, K7C603, K7C606A, K7C614B, K7C615_A, K7C616_A,
K7E633,
353 K7E6XX, K7SC406, K7SC408, Kp1C601, Kp1C603, Kp1C606A, Kp1C606D,
Kp2C601,
354 Kp3C601, Kp3C603, Kp3C606A, Kp3C606D, Kp4C601, Kp4C603, Kp4C606A,
Kp4C606D,
355 Kp5C601, Kp5C603, Kp5C606A, Kp5C606D, Kp6C601, Kp7C601, Kp7C603,
Kp7C606A,
356 Kp7C606D, kWad1, kWad2, LpC601, LpC603, LpC606A, PC303, PC306,
357 PC307, PC308, PC309, PC311, PC312, PHC30, PHC32, PR29,
358 Profit, Q2HC07, Q2HC11, Q2HC14, Q2HC16, qFp1C606A, qFp3C606A,
qFp4C606A,
359 qFp5C606A, qFp7C606A, qS1C606A, qS3C606A, qS4C606A, qS5C606A,
qS7C606A, r10C623,
360 r10C625, r10C627, r10C629, r2C623, r2C625, r2C627, r2C629,
r3C623,
361 r3C625, r3C627, r3C629, r4C623, r4C625, r4C627, r4C629, r5C623,
362 r5C625, r5C627, r5C629, r7C623, r7C625, r7C627, r7C629, r8C623,
363 r8C625, r8C627, r8C629, r9C623, r9C625, r9C627, r9C629, rho2HC07,

364 rho2HC11, rho2HC14, rho2HC16, rhoAC09, rhoAC20, rhoAC31, rhoAC42,
riC10C623,
365 riC10C625, riC10C627, riC10C629, riC11C623, riC11C625, riC11C627,
riC11C629, sf1S34,
366 sf2S34, sfS11, sfS19, sfS2, sfS23, sfS27, sfS41, sfS42,
367 sfS5, sfS7, Sm1C601, Sm1C603, Sm1C606A, Sm1C606D, Sm2C601,
Sm3C601,
368 Sm3C603, Sm3C606A, Sm3C606D, Sm4C601, Sm4C603, Sm4C606A,
Sm4C606D, Sm5C601,
369 Sm5C603, Sm5C606A, Sm5C606D, Sm6C601, Sm7C601, Sm7C603, Sm7C606A,
Sm7C606D,
370 Sn1C601, Sn1C603, Sn1C606A, Sn2C601, Sn3C601, Sn3C603, Sn3C606A,
Sn4C601,
371 Sn4C603, Sn4C606A, Sn5C601, Sn5C603, Sn5C606A, Sn6C601, Sn7C601,
Sn7C603,

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372 Sn7C606A, TAC02, TAC05, TAC07, TAC15, TAC18, TAC20, TAC26,
373 TAC29, TAC37, TAC40, TC301, TC302, TC309, TC310, TC311,
374 TC312, TC318, TC319, TC320, TC322, TC323, TC326, TC328,
375 TC329, TC401, TC402, TC403, TC406, TC409, TC411, TC412,
376 TC413, TC415, TC417, TC425, TC426, TC427, TC428, TC430,
377 TC431, TC432, TcwotE609A, TcwotE621A, TcwotE621B, TcwotE627A,
TcwotE627B, TcwotE641A,
378 TcwotE641B, TcwoutE603, TcwoutE605, TcwoutE611, TcwoutE613,
TcwoutE617, TcwoutE626, TcwoutE634,
379 TcwoutE640, THC01, THC02, THC03, THC04, THC05, THC06, THC07,
380 THC11, THC14, THC16, THC22, THC23, THC24, THC25, THC26,
381 THC27, THC28, THC29, THC30, THC31, THC34, THC38, THC41,
382 THC45, TmC601, TmC603, TmC606A, TmC606D, TmK601, TnC601, TnC603,
383 TnC606A, TR1, TR29, TSC401, TSC404, TSC406, TSC407, TSC409,
384 TSC411, TSC412, TSC414, Utilities, VFC614B, VFC615, VFC616, VFM3,
385 VpC601, VpC603, VpC606A, x10AC09, x10AC20, x10AC31, x10AC42,
x11AC02,
386 x11AC05, x11AC07, x11AC09, x11AC15, x11AC18, x11AC20, x11AC26,
x11AC29,
387 x11AC31, x11AC37, x11AC40, x11AC42, x12AC02, x12AC05, x12AC07,
x12AC09,
388 x12AC12, x12AC15, x12AC18, x12AC20, x12AC23, x12AC26, x12AC29,
x12AC31,
389 x12AC34, x12AC37, x12AC40, x12AC42, x12AC45, x1AC09, x1AC20,
x1AC31,
390 x1AC42, x1C301, x1C302, x1C303, x1C306, x1C307, x1C308, x1C309,
391 x1C310, x1C311, x1C312, x1C315, x1C317, x1C318, x1C319, x1C320,
392 x1C321, x1C322, x1C323, x1C324, x1C326, x1C328, x1C329, x1C401,
393 x1C402, x1C403, x1C404, x1C405, x1C406, x1C407, x1C408, x1C409,
394 x1C410, x1C411, x1C412, x1C413, x1C414, x1C415, x1C418, x1C419,
395 x1C425, x1C426, x1C427, x1C428, x1C430, x1C431, x1C432, x1HC01,
396 x1HC02, x1HC03, x1HC04, x1HC05, x1HC06, x1HC07, x1HC08, x1HC11,
397 x1HC14, x1HC15, x1HC16, x1HC22, x1HC23, x1HC24, x1HC25, x1HC26,
398 x1HC27, x1HC28, x1HC29, x1HC30, x1HC31, x1HC33, x1HC34, x1HC38,
399 x1HC40, x1HC41, x1HC45, x1R1, x1R29, x1SC401, x1SC404, x1SC405,
400 x1SC406, x1SC407, x1SC409, x1SC411, x1SC412, x1SC413, x1SC414,
x2AC09,
401 x2AC20, x2AC31, x2AC42, x2C301, x2C417, x2C418, x2C419, x2HC01,
402 x2HC02, x2HC03, x2HC04, x2HC05, x2HC06, x2HC07, x2HC08, x2HC11,
403 x2HC14, x2HC15, x2HC16, x2HC22, x2HC23, x2HC24, x2HC25, x2HC26,
404 x2HC27, x2HC28, x2HC29, x2HC30, x2HC31, x2R1, x2R29, x2SC401,
405 x2SC404, x2SC405, x2SC406, x2SC407, x2SC409, x2SC411, x2SC412,
x2SC413,
406 x2SC414, x3AC09, x3AC20, x3AC31, x3AC42, x3C301, x3C302, x3C303,
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412 x3C430, x3C431, x3C432, x3HC01, x3HC02, x3HC03, x3HC04, x3HC05,
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415 x3HC31, x3HC33, x3HC34, x3HC38, x3HC40, x3HC41, x3HC45, x3R1,
416 x3R29, x3SC401, x3SC404, x3SC405, x3SC406, x3SC407, x3SC409,
x3SC411,
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x4C301,

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426 x4HC28, x4HC29, x4HC30, x4HC31, x4HC33, x4HC34, x4HC38, x4HC40,
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454 xAC02, xAC05, xAC07, xAC09, xAC12, xAC15, xAC18, xAC20,
455 xAC23, xAC26, xAC29, xAC31, xAC34, xAC37, xAC40, xAC42,
456 xiC10AC09, xiC10AC20, xiC10AC31, xiC10AC42, xiC11AC09, xiC11AC20,
xiC11AC31, xiC11AC42,
457 xM1C606D, xM3C606D, xM4C606D, xM5C606D, xM7C606D, xx1C302,
xx1C308, xx1C310,
458 xx1C311, xx1C312, xx1C323, xx1C325, xx1C405, xx1C408, xx1C425,
xx1C428,
459 xx1C430, xx1C431, xx1HC28, xx1HC29, xx1HC30, xx1HC32, xx1R1,
xx1R29,

460 xx1SC406, xx1SC408, xx2HC28, xx2HC29, xx2HC30, xx2R1, xx2R29,
xx2SC406,
461 xx2SC408, xx3C302, xx3C308, xx3C310, xx3C311, xx3C312, xx3C323,
xx3C325,
462 xx3C405, xx3C408, xx3C425, xx3C428, xx3C430, xx3C431, xx3C432,
xx3HC28,
463 xx3HC29, xx3HC30, xx3HC32, xx3R1, xx3R29, xx3SC406, xx3SC408,
xx4C302,

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464 xx4C308, xx4C310, xx4C311, xx4C312, xx4C323, xx4C325, xx4C405,
xx4C408,
465 xx4C409, xx4C425, xx4C427, xx4C428, xx4C430, xx4C431, xx4C432,
xx4HC28,
466 xx4HC29, xx4HC30, xx4HC32, xx4R1, xx4R29, xx4SC406, xx4SC408,
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xx5C408,
468 xx5C425, xx5C428, xx5C430, xx5C431, xx5HC28, xx5HC29, xx5HC30,
xx5HC32,
469 xx5R1, xx5R29, xx5SC406, xx5SC408, xx6SC406, xx6SC408, xx7C302,
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xx7C425,
471 xx7C428, xx7C430, xx7C431, xx7HC28, xx7HC29, xx7HC30, xx7HC32,
xx7R1,
472 xx7R29, xx7SC406, xx7SC408, y1HC28, y1HC29, y1HC30, y1HC31, y1R1,
473 y1R29, y2HC28, y2HC29, y2HC30, y2HC31, y2R1, y2R29, y3HC28,
474 y3HC29, y3HC30, y3HC31, y3R1, y3R29, y4HC28, y4HC29, y4HC30,
475 y4HC31, y4R1, y4R29, y5HC28, y5HC29, y5HC30, y5HC31, y5R1,
476 y5R29, y7HC28, y7HC29, y7HC30, y7HC31, y7R1, y7R29, yy1HC28,
477 yy1HC29, yy1HC30, yy1R1, yy1R29, yy2HC28, yy2HC29, yy2HC30,
yy2R1,
478 yy2R29, yy3HC28, yy3HC29, yy3HC30, yy3R1, yy3R29, yy4HC28,
yy4HC29,
479 yy4HC30, yy4R1, yy4R29, yy5HC28, yy5HC29, yy5HC30, yy5R1, yy5R29,
480 yy7HC28, yy7HC29, yy7HC30, yy7R1, yy7R29;
481
482 VARIABLE ObjVar Objective function using ' ' algorithm
483 sfC632, FE641, FE610, FE611, sfC633, sfC634, UE621B, FE621A,
484 FE621B, UE627B, FE627A, FE627B, hstmE696, UE696B, FE626, FE617,
485 FE616, hstmE695, UE695A, FE628, UE628, FE629, UE629, qC606A,
486 PC606A, PC606D, UE633, PE633, UE6XX, PC606C, FE601, UE601,
487 FE603, UE603, FE609A, UE609A, hstmE602, UE602, qC601, RC601,
488 UE605, UE610, UE634, UE641, UE611, UE612, UE613, UE640,
489 UE621A, UE627A, UE616, UE617, UE696A, UE695B, UE626, deltaPE634,
490 Tcwin, FE634, deltaPE640, FE640, hstmE612, RC603, qC603, sfC631;
491
492 SETS
493 Coeff /a1,a2,a3,a4,a5/
494 Comp /1, 2, 3, 4, 5, 6, 7, 8, 9, 10/
495 ;
496 TABLE Enth_Coe(Comp,Coeff)
497           a1           a2           a3           a4
498 1           4.211           1.716e-03           7.062e-05           -
9.196e-08
499 2           4.4267           6.6394e-03           6.8065e-05           -
9.2875e-08
500 3           4.455           8.261e-03           8.299e-05           -
1.146e-07
```

501	4	6.147	1.559e-04	9.679e-05	-
1.255e-07					
502	5	1.083	4.457e-02	8.239e-06	-
3.526e-08					
503	6	1.898	4.12e-02	1.231e-05	-
3.659e-08					
504	7	8.763	2.162e-03	1.317e-04	-
1.738e-07					
505	8	1.115e01	-9.494e-03	1.956e-04	-
2.498e-07					
506	9	8.157e-01	7.326e-02	1.783e-05	-
6.936e-08					
507	10	2.876	7.579e-02	1.346e-05	-
6.409e-08					
508	+	a5			
509	1	3.644e-11			

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510	2	3.7347e-11			
511	3	4.646e-11			
512	4	4.978e-11			
513	5	1.579e-11			
514	6	1.504e-11			
515	7	6.925e-11			
516	8	9.489e-11			
517	9	3.216e-11			
518	10	2.869e-11			
519	TABLE Enth_Form(Comp,Coeff)				
520		a1	a2	a3	
521	1	-80.697	-9.05e-02	4.2104e-05	
522	2	21.822	-8.5458e-02	3.8902e-05	
523	3	-106.746	-1.0929e-01	5.2693e-05	
524	4	-98.186	-1.0974e-01	5.2254e-05	
525	5	-121.118	-1.3184e-01	6.5174e-05	
526	6	-113.399	-1.3001e-01	6.2902e-05	
527	7	-137.114	-1.4707e-01	7.2785e-05	
528	8	-151.825	-1.7028e-01	8.4061e-05	
529	9	-167.368	-1.9025e-01	9.4496e-05	
530	10	-184.627	-2.0407e-01	1.0198e-04	
531	TABLE Enth_gas(Comp,Coeff)				
532		a1	a2	a3	a4
533	1	28.277	1.16e-01	1.9597e-04	-
2.3271e-07					
534	2	30.11	1.71e-01	1.01e-04	-
1.812e-07					
535	3	6.772	3.4147e-01	-1.0271e-04	-
3.685e-08					
536	4	20.056	2.815e-01	-1.314e-05	-
9.4571e-08					
537	5	-0.881	4.75e-01	-2.479e-04	
6.751e-08					
538	6	26.671	3.234e-01	4.282e-05	-
1.664e-07					
539	7	-7.197	6.009e-01	-3.409e-04	
9.521e-08					
540	8	-3.249	6.663e-01	-3.383e-04	
6.0489e-08					
541	9	-3.367	7.5824e-01	-3.8216e-04	
5.736e-08					
542	10	51.299	5.356e-01	1.696e-04	-
4.023e-07					
543	+	a5			
544	1	6.867e-11			
545	2	5.732e-11			
546	3	2.043e-11			
547	4	3.415e-11			
548	5	-8.534e-12			
549	6	5.604e-11			
550	7	-1.029e-11			

551	8	2.5385e-12				
552	9	8.0178e-12				
553	10	1.3567e-10				
554	TABLE	Enth_liq(Comp,Coeff)				
555		a1	a2	a3		a4

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556	1	59.642	3.283e-1	-1.5377e-03
3.6539e-06				
557	2	50	5.1e-01	-2.02e-03
2.56e-06				
558	3	71.791	4.8472e-01	-2.0519e-03
4.0634e-06				
559	4	62.873	5.8913e-01	-2.3558e-03
4.2257e-06				
560	5	91.474	4.4852e-01	-1.6859e-03
3.1342e-06				
561	6	80.641	6.2195e-01	-2.2682e-03
3.7423e-06				
562	7	110.129	5.0521e-01	-1.7675e-03
3.066e-06				
563	8	118.184	7.1284e-01	-2.3129e-03
3.4493e-06				
564	9	134.965	8.1458e-01	-2.5182e-03
3.5416e-06				
565	10	129.481	1.1045	-3.2083e-03
4.0849e-06				

566 TABLE Enth_Vap(Comp,Coeff)

567		a1	a2	a3
568	1	26.89	369.82	0.365
569	2	33.39	419.59	0.393
570	3	31.954	408.14	0.392
571	4	33.02	425.18	0.377
572	5	37.692	460.43	0.395
573	6	39.854	469.65	0.398
574	7	42.78	497.5	0.384
575	8	49.917	530.37	0.408
576	9	59.503	559.64	0.481
577	10	59.521	586.75	0.397

578

579 EQUATIONS

580 * The Constraints

581 EQU1, EQU2, EQU3, EQU4, EQU5, EQU6,
 582 EQU7, EQU8, EQU9, EQU10, EQU11, EQU12,
 583 EQU13, EQU14, EQU15, EQU16, EQU17, EQU18,
 584 EQU19, EQU20, EQU21, EQU22, EQU23, EQU24,
 585 EQU25, EQU26, EQU27, EQU28, EQU29, EQU30,
 586 EQU31, EQU32, EQU33, EQU34, EQU35, EQU36,
 587 EQU37, EQU38, EQU39, EQU40, EQU41, EQU42,
 588 EQU43, EQU44, EQU45, EQU46, EQU47, EQU48,
 589 EQU49, EQU50, EQU51, EQU52, EQU53, EQU54,
 590 EQU55, EQU56, EQU57, EQU58, EQU59, EQU60,
 591 EQU61, EQU62, EQU63, EQU64, EQU65, EQU66,
 592 EQU67, EQU68, EQU69, EQU70, EQU71, EQU72,
 593 EQU73, EQU74, EQU75, EQU76, EQU77, EQU78,
 594 EQU79, EQU80, EQU81, EQU82, EQU83, EQU84,
 595 EQU85, EQU86, EQU87, EQU88, EQU89, EQU90,
 596 EQU91, EQU92, EQU93, EQU94, EQU95, EQU96,

597 EQU97, EQU98, EQU99, EQU100, EQU101, EQU102,
598 EQU103, EQU104, EQU105, EQU106, EQU107, EQU108,
599 EQU109, EQU110, EQU111, EQU112, EQU113, EQU114,
600 EQU115, EQU116, EQU117, EQU118, EQU119, EQU120,
601 EQU121, EQU122, EQU123, EQU124, EQU125, EQU126,

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602 EQU127, EQU128, EQU129, EQU130, EQU131, EQU132,
603 EQU133, EQU134, EQU135, EQU136, EQU137, EQU138,
604 EQU139, EQU140, EQU141, EQU142, EQU143, EQU144,
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606 EQU151, EQU152, EQU153, EQU154, EQU155, EQU156,
607 EQU157, EQU158, EQU159, EQU160, EQU161, EQU162,
608 EQU163, EQU164, EQU165, EQU166, EQU167, EQU168,
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618 EQU223, EQU224, EQU225, EQU226, EQU227, EQU228,
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645 EQU385, EQU386, EQU387, EQU388, EQU389, EQU390,
646 EQU391, EQU392, EQU393, EQU394, EQU395, EQU396,
647 EQU397, EQU398, EQU399, EQU400, EQU401, EQU402,

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648 EQU403, EQU404, EQU405, EQU406, EQU407, EQU408,
649 EQU409, EQU410, EQU411, EQU412, EQU413, EQU414,
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667 EQU517, EQU518, EQU519, EQU520, EQU521, EQU522,
668 EQU523, EQU524, EQU525, EQU526, EQU527, EQU528,
669 EQU529, EQU530, EQU531, EQU532, EQU533, EQU534,
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924 $1/(1+0.5*\text{SQR}((\text{xx2HC01}-(0.12905))/0.045251))+$
925 $1/(1+0.5*\text{SQR}((\text{xx1HC01}-(0.10881))/0.010881))+$
926 $1/(1+0.5*\text{SQR}((\text{xx3C322}-(0.94295))/0.094295))+$
927 $1/(1+0.5*\text{SQR}((\text{xx4C322}-(0.0671))/0.00671))+$
928 $1/(1+0.5*\text{SQR}((\text{TC306}-(341.9278))/34.19278))+$
929 $1/(1+0.5*\text{SQR}((\text{PC310}-(264.5339))/26.45339))+$
930 $1/(1+0.5*\text{SQR}((\text{PC603}-(1635.372))/163.5372))+$
931 $1/(1+0.5*\text{SQR}((\text{TC303}-(264.0644))/26.40644))+$
932 $1/(1+0.5*\text{SQR}((\text{x1C325}-(0.971981))/0.0971981))+$
933 $1/(1+0.5*\text{SQR}((\text{x3C325}-(0))/0.0001744))+$
934 $1/(1+0.5*\text{SQR}((\text{TAC09}-(284.18))/28.418))+$
935 $1/(1+0.5*\text{SQR}((\text{TAC42}-(287.1733))/28.71733))+$
936 $1/(1+0.5*\text{SQR}((\text{TC407}-(302.95))/30.295))+$
937 $1/(1+0.5*\text{SQR}((\text{TC317}-(363.4556))/36.34556))+$
938 $1/(1+0.5*\text{SQR}((\text{TC419}-(301.6367))/30.16367))+$
939 $1/(1+0.5*\text{SQR}((\text{TC404}-(318.67))/31.867))+$
940 $1/(1+0.5*\text{SQR}((\text{TC405}-(426.12))/42.612))+$
941 $1/(1+0.5*\text{SQR}((\text{TC410}-(356.2411))/35.62411))+$
942 $1/(1+0.5*\text{SQR}((\text{TC414}-(324.4561))/32.44561))+$
943 $1/(1+0.5*\text{SQR}((\text{TC418}-(305.9128))/30.59128))+$
944 $1/(1+0.5*\text{SQR}((\text{TAC31}-(282.9628))/28.29628))+$
945 $1/(1+0.5*\text{SQR}((\text{TAC12}-(284.5783))/28.45783))+$
946 $1/(1+0.5*\text{SQR}((\text{TAC23}-(284.7406))/28.47406))+$
947 $1/(1+0.5*\text{SQR}((\text{TAC34}-(284.925))/28.4925))+$
948 $1/(1+0.5*\text{SQR}((\text{TAC45}-(284.9372))/28.49372))+$
949 $1/(1+0.5*\text{SQR}((\text{PC302}-(102.3615))/10.23615))+$
950 $1/(1+0.5*\text{SQR}((\text{FC403}-(2.28343))/0.38766))+$
951 $1/(1+0.5*\text{SQR}((\text{FC308}-(3.10323))/0.2199))+$
952 $1/(1+0.5*\text{SQR}((\text{FSC405}-(0.3344))/0.03344))+$
953 $1/(1+0.5*\text{SQR}((\text{TC308}-(315.8461))/31.58461))+$
954 $1/(1+0.5*\text{SQR}((\text{TC307}-(315.5806))/31.55806))+$
955 $1/(1+0.5*\text{SQR}((\text{TC321}-(301.045))/30.1045))+$
956 $1/(1+0.5*\text{SQR}((\text{TC316}-(344.0172))/34.40172))+$
957 $1/(1+0.5*\text{SQR}((\text{TC324}-(365.0522))/36.50522))+$
958 $1/(1+0.5*\text{SQR}((\text{TC315}-(308.2378))/30.82378))+$
959 $1/(1+0.5*\text{SQR}((\text{TC325}-(319.6617))/31.96617))+$
960 $1/(1+0.5*\text{SQR}((\text{FstmE612}-(0.08891))/0.01425))+$
961 $1/(1+0.5*\text{SQR}((\text{FC316}-(1.8))/0.06581))+$
962 $1/(1+0.5*\text{SQR}((\text{FC328}-(0.05351))/0.01543))+$
963 $1/(1+0.5*\text{SQR}((\text{x4SC408}-(0.00877))/0.003306358))+$
964 $1/(1+0.5*\text{SQR}((\text{x6SC408}-(0.0001))/0.0001))+$
965 $1/(1+0.5*\text{SQR}((\text{x5SC408}-(0.0001))/0.0001))+$
966 $1/(1+0.5*\text{SQR}((\text{x7SC408}-(0))/0.00021927))+$
967 $1/(1+0.5*\text{SQR}((\text{TSC408}-(319.29))/31.929))+$
968 $1/(1+0.5*\text{SQR}((\text{x1SC408}-(0.047500089))/0.004750009))+$
969 $1/(1+0.5*\text{SQR}((\text{x3SC408}-(0.876121817))/0.087612182))+$

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970 1/(1+0.5*SQR((FC412-(0.04176))/0.003238))+
971 1/(1+0.5*SQR((FC407-(1.107))/0.1107))+
972 1/(1+0.5*SQR((FC417-(0.2799))/0.02799))+
973 1/(1+0.5*SQR((x2SC408-(0.00021))/0.002205343))+
974 1/(1+0.5*SQR((FSC411-(1.35246))/0.27287))+
975 1/(1+0.5*SQR((TSC413-(298.6916667))/29.86916667))+
976 1/(1+0.5*SQR((FSC413-(0.1445))/0.0186))+
977 1/(1+0.5*SQR((FC320-(0.1468))/0.01468))+
978 1/(1+0.5*SQR((FC322-(1.5619))/0.04427))+
979 1/(1+0.5*SQR((FC329-(0.7724))/0.07724))+
980 1/(1+0.5*SQR((TC408-(426.12))/42.612));
981
982 EQU1..x7C308 - x7C309 =e= 0;
983 EQU2..x3C308 - x3C309 =e= 0;
984 EQU3..TC317 - TC323 =e= 0;
985 EQU4..RC603*FC328 - FC329 =e= 0;
986 EQU5..FC323 - FC324 =e= 0;
987 EQU6..x1C323 - x1C324 =e= 0;
988 EQU7..x3C323 - x3C324 =e= 0;
989 EQU8..x4C323 - x4C324 =e= 0;
990 EQU9..x5C323 - x5C324 =e= 0;
991 EQU10..hHC03 - FHC03 * ((x1HC03/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC03,ORD(Coeff))))
992 +(x2HC03/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC03,ORD(Coeff))))
993 +(x3HC03/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC03,ORD(Coeff))))
994 +(x4HC03/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC03,ORD(Coeff))))
995 +(x5HC03/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC03,ORD(Coeff))))
996 +(x7HC03/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC03,ORD(Coeff)))) =e= 0;
997 EQU11..x1HC03 + x2HC03 + x3HC03 + x4HC03 + x5HC03 + x7HC03 =e= 1;
998 EQU12..FC319 * sf2S34 - FC321 =e= 0;
999 EQU13..x7C306 - x7C307 =e= 0;
1000 EQU14..kWad1+KWad2 =e= WK601;
1001 EQU15..TmK601 *FC306 =e= FC303*(TC303*(PC310/PC303)**((kK601-
1)/kK601)) + FC310*TC310;
1002 EQU16..TC306 =e= TmK601*(PC306/PC310)**((kK601-1)/kK601);
1003 EQU17..x3C306 - x3C307 =e= 0;
1004 EQU18..PC307=e=PC306-deltaPE634;
1005 EQU19..dTE634**3 =e= ((TC306-TcwoutE634)*(TC307-Tcwin)*
1006 ((TC306-TcwoutE634)+(TC307-Tcwin))/2);
1007 EQU20..xx1C312 + xx3C312 + xx4C312 + xx5C312 + xx7C312 =e= 1;
1008 EQU21..K3C615_A * xx3C308 - xx3C312 =e= 0;
1009 EQU22..FC312 =e= VFC615*FC307;
1010 EQU23..(hC308 - hC309) - UE640*AE640*FE640*dTE640 =e= 0;
1011 EQU24..x4C308 - x4C309 =e= 0;
1012 EQU25..x5C308 - x5C309 =e= 0;
1013 EQU26..TC310 - TC311 =e= 0;
```



```
1014 EQU27..K4C616_A=e=0.13332*EXP(15.6782-2154.90/(TC310-  
34.42))/PC310;  
1015 EQU28..PC310 -PC311 =e= 0;
```

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1016 EQU29..K5C616_A=e=0.13332*EXP(15.5338-2348.67/(TC310-
40.05))/PC310;
1017 EQU30..K7C616_A=e=0.13332*EXP(15.7588-2633.90/(TC310-
46.30))/PC310;
1018 EQU31..PC307 - PC312 =e= 0;
1019 EQU32..PC307 - PC308 =e= 0;
1020 EQU33..x7C317 - x7C323 =e= 0;
1021 EQU34..LpC603=e=FC329 + qC603*FC316;
1022 EQU35..VpC603=e=LpC603 - FC317;
1023 EQU36..TnC603=e=(TC325+TC316)/2;
1024 EQU37..x1C326 - x1C329 =e= 0;
1025 EQU38..x3C326 - x3C329 =e= 0;
1026 EQU39..x4C326 - x4C329 =e= 0;
1027 EQU40..x5C326 - x5C329 =e= 0;
1028 EQU41..x7C326 -x7C329 =e= 0;
1029 EQU42..x1C403 + x3C403 + x4C403 + x5C403 + x7C403 =e= 1;
1030 EQU43..x1C404 + x3C404 + x4C404 + x5C404 + x7C404 =e= 1;
1031 EQU44..x1C405 + x3C405 + x4C405 + x5C405 + x7C405 =e= 1;
1032 EQU45..x1C406 + x3C406 + x4C406 + x5C406 + x7C406 =e= 1;
1033 EQU46..x1C407 + x3C407 + x4C407 + x5C407 + x7C407 =e= 1;
1034 EQU47..x1C408 + x3C408 + x4C408 + x5C408 + x7C408 =e= 1;
1035 EQU48..x1C409 + x3C409 + x4C409 + x5C409 + x7C409 =e= 1;
1036 EQU49..x1C410 + x3C410 + x4C410 + x5C410 + x7C410 =e= 1;
1037 EQU50..x1C411 + x3C411 + x4C411 + x5C411 + x7C411 =e= 1;
1038 EQU51..x1C412 + x3C412 + x4C412 + x5C412 + x7C412 =e= 1;
1039 EQU52..x1C413 + x3C413 + x4C413 + x5C413 + x7C413 =e= 1;
1040 EQU53..x1C414 + x3C414 + x4C414 + x5C414 + x7C414 =e= 1;
1041 EQU54..x1C415 + x3C415 + x4C415 + x5C415 + x7C415 =e= 1;
1042 EQU55..x1C417+ x3C417 + x4C417 + x5C417 + x7C417 =e= 1;
1043 EQU56..x1C418 + x2C418 + x3C418 + x4C418 + x5C418 + x7C418 =e= 1;
1044 EQU57..x1C419 + x2C419 + x3C419 + x4C419 + x5C419 + x7C419 =e= 1;
1045 EQU58..x1C303 + x3C303 + x4C303 + x5C303 + x7C303 =e= 1;
1046 EQU59..x1C306 + x3C306 + x4C306 + x5C306 + x7C306 =e= 1;
1047 EQU60..x1C307 + x3C307 + x4C307 + x5C307 + x7C307 =e= 1;
1048 EQU61..x1C308 + x3C308 + x4C308 +x5C308 + x7C308=e= 1;
1049 EQU62..x1C309 + x3C309 + x4C309 + x5C309 + x7C309 =e= 1;
1050 EQU63..x1C310 + x3C310 + x4C310 + x5C310 + x7C310 =e= 1;
1051 EQU64..x1C311 + x3C311 + x4C311 + x5C311 + x7C311 =e= 1;
1052 EQU65..x1C312 + x3C312 + x4C312 + x5C312 + x7C312 =e= 1;
1053 EQU66..x1C315 + x3C315 + x4C315 + x5C315 + x7C315 =e= 1;
1054 EQU67..x1C316 + x3C316 + x4C316 + x5C316 + x7C316 =e= 1;
1055 EQU68..x1C317 + x3C317 + x4C317 + x5C317 + x7C317 =e= 1;
1056 EQU69..x1C318 + x3C318 + x4C318 + x5C318 + x7C318 =e= 1;
1057 EQU70..x1C319 + x3C319 + x4C319 + x5C319 + x7C319 =e= 1;
1058 EQU71..x1C320 + x3C320 + x4C320 + x5C320 + x7C320 =e= 1;
1059 EQU72..x1C321 + x3C321 + x4C321 + x5C321 + x7C321 =e= 1;
1060 EQU73..x1C322 + x3C322 + x4C322 + x5C322 + x7C322 =e= 1;
1061 EQU74..x1C323 + x3C323 + x4C323 + x5C323 + x7C323 =e= 1;
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1062 EQU75..x1C324 + x3C324 + x4C324 + x5C324 + x7C324 =e= 1;
1063 EQU76..(hC406 - hC407) - FcweE617*4.197*(TcwoutE617 - Tcwin) =e=
0;
1064 EQU77..(hC406 - hC407) - UE617*AE617*FE617*dTE617 =e= 0;
1065 EQU78..(hC405 - hC406) - (hC404 - hC403) =e= 0;
1066 EQU79..(hC405 - hC406) - UE616*AE616*dTE616*FE616 =e= 0;
1067 EQU80..(hC408vap - hC408) - FstmE695A * hstmE695 =e= 0;
1068 EQU81..(hC408vap - hC408) - UE695A*AE695A*dTE695A =e= 0;
1069 EQU82..(hC410vap - hC410) - FstmE696A * hstmE696 =e= 0;
1070 EQU83..(hC410vap - hC410) - UE696A*AE696A*dTE696A =e= 0;
1071 EQU84..(hC412 - hC412liq) - FcweE627A*4.197*(TcwoteE627A - Tcwin)
=e= 0;
1072 EQU85..(hC412 - hC412liq) - UE627A*FE627A*AE627A*dTE627A =e= 0;
1073 EQU86..(hC414 - hC414liq) - FcweE621A*4.197*(TcwoteE621A - Tcwin)
=e= 0;
1074 EQU87..(hC414 - hC414liq) - UE621A*FE621A*AE621A*dTE621A =e= 0;
1075 EQU88..(hC418 - hC419) - FcweE626*4.197*(TcwoutE626 - Tcwin) =e=
0;
1076 EQU89..(hC418 - hC419) - UE626*AE626*FE626*dTE626 =e= 0;
1077 EQU90..FC306 - FC307 =e= 0;
1078 EQU91..x1C306 - x1C307 =e= 0;
1079 EQU92..FC414 - FC415 =e= 0;
1080 EQU93..x1C414 - x1C415 =e= 0;
1081 EQU94..x3C414 - x3C415 =e= 0;
1082 EQU95..x4C414 - x4C415 =e= 0;
1083 EQU96..x5C414 - x5C415 =e= 0;
1084 EQU97..FC418 - FC419 =e= 0;
1085 EQU98..x1C418 - x1C419 =e= 0;
1086 EQU99..x3C418 - x3C419 =e= 0;
1087 EQU100..x4C418 - x4C419 =e= 0;
1088 EQU101..x5C418 - x5C419 =e= 0;
1089 EQU102..hC431 - FC431*
1090 ((x3C431/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC431,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
((1-TC431/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1091 +(x4C431/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *
((1-TC431/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1092 +(x5C431/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *
((1-TC431/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1093 +(x7C431/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *
((1-TC431/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1094 EQU103..hC412 - FC412 *
1095 ((x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
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((1-TC412/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1096 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC412/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1097 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC412/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1098 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC412/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1099 EQU104..TmC603=e=(TC317+TC316)/2;

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1100 EQU105..K1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TnC603-
5.261*LOG10(TnC603)+3.282E-11*TnC603+3.7349E-6*TnC603**2);
1101 EQU106..Kp1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TmC603-
5.261*LOG10(TmC603)+3.282E-11*TmC603+3.7349E-6*TmC603**2);
1102 EQU107..K3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TnC603-
8.806*LOG10(TnC603)+8.9246E-11*TnC603+5.7501E-6*TnC603**2);
1103 EQU108..Kp3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TmC603-
8.806*LOG10(TmC603)+8.9246E-11*TmC603+5.7501E-6*TmC603**2);
1104 EQU109..K4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TnC603-
7.1805*LOG10(TnC603)-6.6845E-11*TnC603+4.219E-6*TnC603**2);
1105 EQU110..Kp4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TmC603-
7.1805*LOG10(TmC603)-6.6845E-11*TmC603+4.219E-6*TmC603**2);
1106 EQU111..K5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TnC603-
7.883*LOG10(TnC603)-4.6512E-11*TnC603+3.8997E-6*TnC603**2);
1107 EQU112..Kp5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TmC603-
7.883*LOG10(TmC603)-4.6512E-11*TmC603+3.8997E-6*TmC603**2);
1108 EQU113..K7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TnC603-
9.042*LOG10(TnC603)-1.371E-12*TnC603+3.634E-6*TnC603**2);
1109 EQU114..Kp7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TmC603-
9.042*LOG10(TmC603)-1.371E-12*TmC603+3.634E-6*TmC603**2);
1110 EQU115..Sn1C603 *FC329 =e= K1C603*FC325;
1111 EQU116..Sm1C603*LpC603=e= Kp1C603*VpC603;
1112 EQU117..Sn3C603 *FC329 =e= K3C603*FC325;
1113 EQU118..Sm3C603*LpC603=e= Kp3C603*VpC603;
1114 EQU119..Sn4C603 *FC329 =e= K4C603*FC325;
1115 EQU120..(hC306 - hC307) - FcwE634*4.197*(TcwoutE634 - Tcwin) =e=
0;
1116 EQU121..(hC306 - hC307) - UE634*AE634*FE634*dTE634 =e= 0;
1117 EQU122..(hC312liq - hC315) - FcwE641B*4.197*(TcwotE641B - Tcwin)
=e= 0;
1118 EQU123..(hC312liq - hC315) - UE641*AE641*FE641*dTE641 =e= 0;
1119 EQU124..(hC325 - hC326) - FcwE613*4.197*(TcwoutE613 - Tcwin) =e=
0;
1120 EQU125..(hC325 - hC326) - UE613*AE613*dTE613 =e= 0;
1121 EQU126..(hC324 - hC323) - FstmE612 * hstmE612 =e= 0;
1122 EQU127..(hC324 - hC323) - UE612*AE612*dTE612 =e= 0;
1123 EQU128..FC325 - FC326 =e= 0;
1124 EQU129..FC405 - FC406 =e= 0;
1125 EQU130..hC409 - FC409 *
1126 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1127 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1128 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1129 +(x5C409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC409,ORD(Coeff))))
1130 +(x7C409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC409,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC409/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
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1131 EQU131..hC428 - FC428 *
1132 ((x3C428/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC428,ORD(Coeff))))
1133 +(x4C428/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC428/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1134 +(x5C428/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC428/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1135 +(x7C428/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC428/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1136 EQU132..Sm4C603*LpC603=e= Kp4C603*VpC603;
1137 EQU133..Sn5C603 *FC329 =e= K5C603*FC325;
1138 EQU134..Sm5C603*LpC603=e= Kp5C603*VpC603;
1139 EQU135..Sn7C603 *FC329 =e= K7C603*FC325;
1140 EQU136..Sm7C603*LpC603=e= Kp7C603*VpC603;
1141 EQU137..f1C603*((1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603) /1E2+
h1C603*Sn1C603**(40-17)*(1-Sm1C603**(17+1))/1E2) =e=

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(1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603)/1E2;  
1142 EQU138..f3C603*((1-Sn3C603**(40-17))+ RC603*(1-Sn3C603) +  
h3C603*Sn3C603**(40-17)*(1-Sm3C603**(17+1))) =e= (1-Sn3C603**(40-1  
7))+ RC603*(1-Sn3C603);  
1143 EQU139..f4C603*((1-Sn4C603**(40-17))+ RC603*(1-Sn4C603) +  
h4C603*Sn4C603**(40-17)*(1-Sm4C603**(17+1))) =e= (1-Sn4C603**(40-1  
7))+ RC603*(1-Sn4C603);  
1144 EQU140..f5C603*((1-Sn5C603**(40-17))+ RC603*(1-Sn5C603) +  
h5C603*Sn5C603**(40-17)*(1-Sm5C603**(17+1))) =e= (1-Sn5C603**(40-1  
7))+ RC603*(1-Sn5C603);  
1145 EQU141..f7C603*((1-Sn7C603**(40-17))+ RC603*(1-Sn7C603) +  
h7C603*Sn7C603**(40-17)*(1-Sm7C603**(17+1))) =e= (1-Sn7C603**(40-1  
7))+ RC603*(1-Sn7C603);  
1146 EQU142..f1C603 * x1C316 * FC316 =e= x1C317 * FC317;  
1147 EQU143..f3C603 * x3C316 * FC316 =e= x3C317 * FC317;  
1148 EQU144..f4C603 * x4C316 * FC316 =e= x4C317 * FC317;  
1149 EQU145..f5C603 * x5C316 * FC316 =e= x5C317 * FC317;  
1150 EQU146..f7C603 * x7C316 * FC316 =e= x7C317 * FC317;  
1151 EQU147..h1C603*K1C603*LpC603*(1-Sm1C603) =e= Kp1C603*FC329*(1-  
Sn1C603);  
1152 EQU148..h3C603*K3C603*LpC603*(1-Sm3C603) =e= Kp3C603*FC329*(1-  
Sn3C603);  
1153 EQU149..h4C603*K4C603*LpC603*(1-Sm4C603) =e= Kp4C603*FC329*(1-  
Sn4C603);  
1154 EQU150..h5C603*K5C603*LpC603*(1-Sm5C603) =e= Kp5C603*FC329*(1-  
Sn5C603);  
1155 EQU151..h7C603*K7C603*LpC603*(1-Sm7C603) =e= Kp7C603*FC329*(1-  
Sn7C603);  
1156 EQU152..K1C323*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC323-  
5.261*LOG10(TC323)+3.282E-11*TC323+3.7349E-6*TC323**2);  
1157 EQU153..K3C323*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC323-  
8.806*LOG10(TC323)+8.9246E-11*TC323+5.7501E-6*TC323**2);  
1158 EQU154..K4C323*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC323-  
7.1805*LOG10(TC323)-6.6845E-11*TC323+4.219E-6*TC323**2);  
1159 EQU155..K5C323*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC323-  
7.883*LOG10(TC323)-4.6512E-11*TC323+3.8997E-6*TC323**2);  
1160 EQU156..K7C323*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC323-  
9.042*LOG10(TC323)-1.371E-12*TC323+3.634E-6*TC323**2);  
1161  
EQU157..K1C323*xx1C323+K3C323*xx3C323+K4C323*xx4C323+K5C323*xx5C323+K7C  
323*xx7C323 =e= 1;  
1162 EQU158..FmC323 - FC323 * (x1C323/MW1 + x3C323/MW3 + x4C323/MW4 +  
x5C323/MW5 + x7C323/MW7)=e= 0;  
1163 EQU159..xx1C323 * MW1 * FmC323 - FC323 *x1C323=e= 0;  
1164 EQU160..xx3C323 * MW3 * FmC323 - FC323 *x3C323=e= 0;  
1165 EQU161..xx4C323 * MW4 * FmC323 - FC323 *x4C323=e= 0;
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1166 EQU162..xx5C323 * MW5 * FmC323 - FC323 *x5C323=e= 0;
1167 EQU163..xx1C323+xx3C323+xx4C323+xx5C323+xx7C323 =e= 1;
1168 EQU164..dTE613*2 =e=
1169 (TC325-TcwoutE613) + (TC326-Tcwin);
1170 EQU165..x1C325 -x1C326 =e=0;
1171 EQU166..x3C325 -x3C326 =e=0;
1172 EQU167..x4C325 -x4C326 =e=0;
1173 EQU168..FC418 - FC417 - FC415 =e= 0;
1174 EQU169..(hC317 - hC318) - (hC316 - hC315) =e= 0;
1175 EQU170..(hC317 - hC318) - UE610*AE610*dTE610*FE610 =e= 0;
1176 EQU171..(hC318 - hC319) - Fcwe611*4.197*(TcwoutE611 - Tcwin) =e=
0;
1177 EQU172..(hC318 - hC319) - UE611*AE611*FE611*dTE611 =e= 0;
1178 EQU173..FC317 - FC318 =e= 0;
1179 EQU174..FC318 - FC319 =e= 0;
1180 EQU175..x1C318 - x1C319 =e= 0;
1181 EQU176..x3C318 - x3C319 =e= 0;
1182 EQU177..x4C318 - x4C319 =e= 0;

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1183 EQU178..x5C318 - x5C319 =e= 0;
1184 EQU179..x1C405 - x1C406 =e= 0;
1185 EQU180..x5C325 -x5C326 =e=0;
1186 EQU181..x1C325 + x3C325 +x4C325 +x5C325 +x7C325 =e= 1;
1187 EQU182..x1C326 + x3C326 +x4C326 +x5C326 +x7C326 =e= 1;
1188 EQU183..TC325-TC326 =e= 0;
1189 EQU184..x1C326 -x1C328 =e= 0;
1190 EQU185..x3C326 -x3C328 =e= 0;
1191 EQU186..x4C326 -x4C328 =e= 0;
1192 EQU187..x5C326 -x5C328 =e= 0;
1193 EQU188..x7C326 -x7C328 =e= 0;
1194 EQU189..K1C325*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC325-
5.261*LOG10(TC325)+3.282E-11*TC325+3.7349E-6*TC325**2);
1195 EQU190..K3C325*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC325-
8.806*LOG10(TC325)+8.9246E-11*TC325+5.7501E-6*TC325**2);
1196 EQU191..K4C325*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC325-
7.1805*LOG10(TC325)-6.6845E-11*TC325+4.219E-6*TC325**2);
1197 EQU192..K5C325*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC325-
7.883*LOG10(TC325)-4.6512E-11*TC325+3.8997E-6*TC325**2);
1198 EQU193..K7C325*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC325-
9.042*LOG10(TC325)-1.371E-12*TC325+3.634E-6*TC325**2);
1199
EQU194..xx1C325/K1C325+xx3C325/K3C325+xx4C325/K4C325+xx5C325/K5C325+xx7
C325/K7C325 =e= 1;
1200 EQU195..FmC325 - FC325 * (x1C325/MW1 + x3C325/MW3 + x4C325/MW4 +
x5C325/MW5 + x7C325/MW7)=e= 0;
1201 EQU196..xx1C325 * MW1 * FmC325 - FC325 *x1C325=e= 0;
1202 EQU197..xx3C325 * MW3 * FmC325 - FC325 *x3C325=e= 0;
1203 EQU198..xx4C325 * MW4 * FmC325 - FC325 *x4C325=e= 0;
1204 EQU199..xx5C325 * MW5 * FmC325 - FC325 *x5C325=e= 0;
1205 EQU200..xx1C325+xx3C325+xx4C325+xx5C325+xx7C325 =e= 1;
1206 EQU201..hc309-hc310-hc311=e=0;
1207 EQU202..FAC07*x11AC07 - FAC09*x11AC09 -
0.06*2.02*FHC07*x2HC07/(rho2HC07/1000) =e= 0;
1208 EQU203..1000*FAC09*xiC11AC09 -riC11C623 * VaC623 * MWiC11 =e= 0;
1209 EQU204..1000*FAC09*xiC10AC09 - riC10C623*VaC623*MWiC10 =e= 0;
1210 EQU205..FHC07 +FHC34 + FAC07 =e= FAC09;
1211 EQU206..1000*FAC09*x10AC09 - r10C623*VaC623*MW10 =e= 0;
1212 EQU207..1000*FAC09*x9AC09 - r9C623*VaC623*MW9 =e= 0;
1213 EQU208..1000*FAC09*x8AC09 - r8C623*VaC623*MW8 =e= 0;
1214 EQU209..1000*(FHC07*x7HC07 + FHC34*x7HC34 - FAC09*x7AC09) +
r7C623*VaC623*MW7 =e= 0;
1215 EQU210..FC326 - FC328 - FC329 =e= 0;
1216 EQU211..TC326 - TC328 =e= 0;
1217 EQU212..TC326 - TC329 =e= 0;
1218 EQU213..1000*(FHC07*x5HC07 + FHC34*x5HC34 - FAC09*x5AC09) +
r5C623*VaC623*MW5 =e= 0;
1219 EQU214..1000*(FHC07*x4HC07 + FHC34*x4HC34 - FAC09*x4AC09) +
r4C623*VaC623*MW4 =e= 0;
1220 EQU215..1000*(FHC07*x3HC07 + FHC34*x3HC34 - FAC09*x3AC09) -
r3C623*VaC623*MW3 =e= 0;

1221 EQU216..FHC07*x1HC07 + FHC34*x1HC34 - FAC09*x1AC09 =e= 0;
1222 EQU217..r4C623 =e= k2/1E12*C4pC623*C3C623;
1223 EQU218..r5C623 =e= k3/1E12*C5pC623*C3C623;
1224 EQU219..r7C623 =e= k4/1E14*C7pC623 * C3C623;
1225 EQU220..r9C623 =e= k6/1E12*C9pC623 * C3C623;
1226 EQU221..r10C623 =e= k7/1E12*C10pC623 * C3C623;
1227 EQU222..riC10C623 =e= k8/1E12* CiC10pC623 * C3C623;
1228 EQU223..r8C623 =e= k5/1E12*C8pC623*C3C623;

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1229 EQU224..riC11C623 =e=k18/1E12*CiC11pC623*C3C623;
1230 EQU225..-r3C623 + r4C623 + r5C623 + r7C623 + r8C623 + r9C623 +
r10C623 + riC10C623+ riC11C623 =e= 0;
1231 EQU226..1000*(FHC07*x2HC07 - FAC09*x2AC09) - r2C623*VaC623*MW2
=e= 0;
1232 EQU227..-r2C623 + k1/1E6*C2C623*CHXC623 + k11/(1E9*1E6)*C3pC623
*C2C623 + k15/(1E12*1E6)*C8pC623*C2C623 + k19/(1E14*1E6)

*C7pC623*C2C623=e=0;
1233 EQU228..k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623 =e= 0;
1234 EQU229..k13/(1E11*1E9)*CiC8eC623*C3pC623 +k17/1E12*CiC11pC623 -
k14/1E11*CiC5eC623*CHXC623 - k16/(1E11*1E9)*CiC5eC623*C3pC623

=e= 0;
1235 EQU230..k12/1E12*C9pC623 - k13/(1E11*1E9)*CiC8eC623*C3pC623 =e=0;
1236 EQU231..k1/1E6*C2C623*CHXC623 - k2/1E12*C4pC623*C3C623 =e= 0;
1237 EQU232..r3C623 - k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623
- k11/(1E6*1E9)*C3pC623*C2C623 - k13/(1E11*1E9)

*CiC8eC623*C3pC623 - k16/(1E11*1E9) * CiC5eC623*C3pC623 =e= 0;
1238 EQU233..k14/1E11*CiC5eC623*CHXC623 - k3/1E12*C5pC623*C3C623 =e=0;
1239 EQU234..k17/1E12*CiC11pC623 - k4/1E14*C7pC623*C3C623 -
k19/(1E6*1E14)*C7pC623*C2C623 =e= 0;
1240 EQU235..C2C623 /1E6=e= rhoAC09*x2AC09/MW2;
1241 EQU236..C3C623 =e= rhoAC09*x3AC09/MW3;
1242 EQU237..CHXC623 =e= rhoAC09*x11AC09/MW11;
1243 EQU238..FAC09*x1AC09 - FHC27*x1HC27 =e=0;
1244 EQU239..FAC09*x2AC09 - FHC27*x2HC27 =e=0;
1245 EQU240..FAC09*x3AC09 - FHC27*x3HC27 =e=0;
1246 EQU241..FAC09*x4AC09 - FHC27*x4HC27 =e=0;
1247 EQU242..FAC09*x5AC09 - FHC27*x5HC27 =e=0;
1248 EQU243..x11AC05 - x11AC12 =e=0;
1249 EQU244..FAC05*x11AC05 - sFC631*FAC09*x11AC09 =e=0;
1250 EQU245..FAC05*x12AC05 - sFC631*FAC09*x12AC09 =e=0;
1251 EQU246..FAC09*(x11AC09 + x12AC09) - FAC05 - FAC12 =e=0;
1252 EQU247..FAC09*(x7AC09+x8AC09+x9AC09+x10AC09+xiC10AC09+xiC11AC09)
- FHC27*x7HC27 =e= 0;
1253 EQU248..x11AC07 + x12AC07 =e= 1;
1254 EQU249..K3C616_A * xx3C311 - xx3C310 =e= 0;
1255 EQU250..FC310 =e= VFC616*FC309;
1256 EQU251..FC309 - FC310 - FC311 =e= 0;
1257 EQU252..FC309 * x1C309 - FC311 * x1C311 - FC310 * x1C310 =e= 0;
1258 EQU253..FC309 * x3C309 - FC310 * x3C310 - FC311 * x3C311 =e= 0;
1259 EQU254..FC309 * x4C309 - FC310 * x4C310 - FC311 * x4C311 =e= 0;
1260 EQU255..FC309 * x5C309 - FC310 * x5C310 - FC311 * x5C311 =e= 0;
1261 EQU256..K1C616_A* xx1C311 - xx1C310 =e= 0;
1262 EQU257..K7C616_A * xx7C311 - xx7C310 =e= 0;
1263 EQU258..K4C616_A * xx4C311 - xx4C310 =e= 0;
1264 EQU259..x1AC09 + x2AC09 + x3AC09 + x4AC09 + x5AC09 +x7AC09 +
x8AC09 + x9AC09 + x10AC09 + x11AC09 + x12AC09 + xiC10AC09 +
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xiC11AC09 =e= 1;
1265 EQU260..FAC07 -FAC05 - FAC02 =e= 0;
1266 EQU261..FAC07*x11AC07 -FAC05*x11AC05 - FAC02*x11AC02 =e= 0;
1267 EQU262..x11AC05+x12AC05 =e=1;
1268 EQU263..x11AC02+x12AC02 =e=1;
1269 EQU264..k13/(1E11*1E9)*C3pC623*Ci8eC623 - k5/1E12*C8pC623*C3C623
-k15/(1E6*1E12)*C8pC623*C2C623 =e= 0;
1270 EQU265..k11/(1E6*1E9)*C2C623*C3pC623 +
k10/(1E6*1E9)*C3pC623*Ci4eC623 - k6/1E12*C9pC623*C3C623 -
k12/1E12*C9pC623 =e= 0;

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1271 EQU266..k16/(1E11*1E9)*Ci5eC623*C3pC623 -
k7/1E12*C10pC623*C3C623 =e= 0;
1272 EQU267..k19/(1E6*1E14)*C7pC623*C2C623 - k8/1E12*Ci10pC623*C3C623
=e= 0;
1273 EQU268..k15/(1E6*1E12)*C8pC623*C2C623 -
k18/1E12*Ci11pC623*C3C623 - k17/1E12*Ci11pC623 =e= 0;
1274 EQU269..x7C325 -x7C326 =e=0;
1275 EQU270..TC323 - TC324 =e= 0;
1276 EQU271..dTE612 =e= 414.6 - TC323;
1277 EQU272..K1C615_A*PC308 =e= 0.1333*10**(21.4469-1.4627E3/TC308-
5.261*LOG10(TC308)+3.282E-11*TC308+3.7349E-6*TC308**2);
1278 EQU273..K3C615_A*PC308 =e= 0.1333*10**(31.2541-1.9532E3/TC308-
8.806*LOG10(TC308)+8.9246E-11*TC308+5.7501E-6*TC308**2);
1279 EQU274..K4C615_A=e=0.13332*EXP(15.6782-2154.90/(TC308-
34.42))/PC308;
1280 EQU275..K5C615_A=e=0.13332*EXP(15.5338-2348.67/(TC308-
40.05))/PC308;
1281 EQU276..K7C615_A=e=0.13332*EXP(15.7588-2633.90/(TC308-
46.30))/PC308;
1282 EQU277..K1C616_A*PC310 =e= 0.1333*10**(21.4469-1.4627E3/TC310-
5.261*LOG10(TC310)+3.282E-11*TC310+3.7349E-6*TC310**2);
1283 EQU278..K3C616_A*PC310 =e= 0.1333*10**(31.2541-1.9532E3/TC310-
8.806*LOG10(TC310)+8.9246E-11*TC310+5.7501E-6*TC310**2);
1284 EQU279..x11AC12+x12AC12 =e=1;
1285 EQU280..FAC18 -FAC12 - FAC15 =e= 0;
1286 EQU281..FAC18*x11AC18 -FAC12*x11AC12 - FAC15*x11AC15 =e= 0;
1287 EQU282..x11AC15+x12AC15 =e=1;
1288 EQU283..x11AC18 + x12AC18 =e= 1;
1289 EQU284..1000*(FHC11*x7HC11 + FHC38*x7HC38 - FAC20*x7AC20) +
r7C625*VaC623*MW7 =e= 0;
1290 EQU285..r10C625 =e= k7/1E12*C10pC625 * C3C625;
1291 EQU286..r9C625 =e= k6/1E12*C9pC625 * C3C625;
1292 EQU287..r7C625 =e= k4/1E14*C7pC625 * C3C625;
1293 EQU288..r5C625 =e= k3/1E12*C5pC625*C3C625;
1294 EQU289..K5C616_A * xx5C311 - xx5C310 =e= 0;
1295 EQU290..FmC310 - FC310 * (x1C310/MW1 + x3C310/MW3 +x4C310/MW4 +
x5C310/MW5 + x7C310/MW7)=e= 0;
1296 EQU291..xx1C310*MW1*FmC310 - FC310 * x1C310 =e= 0;
1297 EQU292..xx3C310 * MW3 * FmC310 - FC310 * x3C310 =e= 0;
1298 EQU293..xx4C310 * MW4 * FmC310 - FC310 * x4C310 =e= 0;
1299 EQU294..xx5C310 * MW5 * FmC310 - FC310 * x5C310 =e= 0;
1300 EQU295..xx1C310 + xx3C310 + xx4C310 + xx5C310 + xx7C310 =e=1
1301 ;
1302 EQU296..FmC311 - FC311 * (x1C311/MW1 + x3C311/MW3 + x4C311/MW4 +
x5C311/MW5 + x7C311/MW7)=e= 0;
1303 EQU297..xx1C311 * MW1 * FmC311 - FC311 * x1C311 =e= 0;
1304 EQU298..xx3C311 * MW3 * FmC311 - FC311 * x3C311 =e= 0;
1305 EQU299..xx4C311 * MW4 * FmC311 - FC311 * x4C311 =e= 0;
1306 EQU300..xx5C311 * MW5 * FmC311 - FC311 * x5C311 =e= 0;
1307 EQU301..xx1C311+ xx3C311 + xx4C311 + xx5C311 + xx7C311 =e= 1;
1308 EQU302..FC306 * x1C306 - FC303 * x1C303 - FC310 * x1C310 =e= 0;

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1309 EQU303..FC306 * x3C306 - FC303 * x3C303 - FC310 * x3C310 =e= 0;
1310 EQU304..FC306 * x4C306 - FC303 * x4C303 - FC310 * x4C310 =e= 0;
1311 EQU305..FC306 * x5C306 - FC303 * x5C303 - FC310 * x5C310 =e= 0;
1312 EQU306..r4C625 =e= k2/1E12*C4pC625*C3C625;
1313 EQU307..FHC11*x1HC11 + FHC38*x1HC38 - FAC20*x1AC20 =e= 0;
1314 EQU308..1000*(FHC11*x3HC11 + FHC38*x3HC38 - FAC20*x3AC20) -
r3C625*VaC623*MW3 =e= 0;
1315 EQU309..FAC18*x11AC18 - FAC20*x11AC20 -
0.06*2.02*FHC11*x2HC11/(rho2HC11/1000) =e= 0;
1316 EQU310..1000*(FHC11*x5HC11 + FHC38*x5HC38 - FAC20*x5AC20) +
r5C625*VaC623*MW5 =e= 0;

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1317 EQU311..riC11C625 =e=k18/1E12*CiC11pC625*C3C625;
1318 EQU312..1000*FAC20*x8AC20 - r8C625*VaC623*MW8 =e= 0;
1319 EQU313..1000*FAC20*x9AC20 - r9C625*VaC623*MW9 =e= 0;
1320 EQU314..1000*FAC20*x10AC20 - r10C625*VaC623*MW10 =e= 0;
1321 EQU315..FHC11 +FHC38 + FAC18 =e= FAC20;
1322 EQU316..1000*FAC20*xiC10AC20 - riC10C625*VaC623*MWiC10 =e= 0;
1323 EQU317..1000*FAC20*xiC11AC20 -riC11C625 * VaC623 * MWiC11 =e= 0;
1324 EQU318..1000*(FHC11*x4HC11 + FHC38*x4HC38 - FAC20*x4AC20) +
r4C625*VaC623*MW4 =e= 0;
1325 EQU319..r3C625 - k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625
- k11/(1E6*1E9)*C3pC625*C2C625 - k13/(1E11*1E9)

*CiC8eC625*C3pC625 - k16/(1E11*1E9) * CiC5eC625*C3pC625 =e= 0;
1326 EQU320..k19/(1E6*1E14)*C7pC625*C2C625 - k8/1E12*CiC10pC625*C3C625
=e= 0;
1327 EQU321..k16/(1E11*1E9)*CiC5eC625*C3pC625 -
k7/1E12*C10pC625*C3C625 =e= 0;
1328 EQU322..k11/(1E6*1E9)*C2C625*C3pC625 +
k10/(1E6*1E9)*C3pC625*CiC4eC625 - k6/1E12*C9pC625*C3C625 -
k12/1E12*C9pC625 =e= 0;
1329 EQU323..k13/(1E11*1E9)*C3pC625*CiC8eC625 - k5/1E12*C8pC625*C3C625
-k15/(1E6*1E12)*C8pC625*C2C625 =e= 0;
1330 EQU324..CHXC625 =e= rhoAC20*x11AC20/MW11;
1331 EQU325..C3C625 =e= rhoAC20*x3AC20/MW3;
1332 EQU326..C2C625/1E6 =e= rhoAC20*x2AC20/MW2;
1333 EQU327..riC10C625 =e= k8/1E12* CiC10pC625 * C3C625;
1334 EQU328..k14/1E11*CiC5eC625*CHXC625 - k3/1E12*C5pC625*C3C625 =e=0;
1335 EQU329..r8C625 =e= k5/1E12*C8pC625*C3C625;
1336 EQU330..k1/1E6*C2C625*CHXC625 - k2/1E12*C4pC625*C3C625 =e= 0;
1337 EQU331..k12/1E12*C9pC625 - k13/(1E11*1E9)*CiC8eC625*C3pC625 =e=0;
1338 EQU332..k13/(1E11*1E9)*CiC8eC625*C3pC625 +k17/1E12*CiC11pC625 -
k14/1E11*CiC5eC625*CHXC625 - k16/(1E11*1E9)*CiC5eC625*C3pC625

=e= 0;
1339 EQU333..k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625 =e= 0;
1340 EQU334..-r2C625 + k1/1E6*C2C625*CHXC625 + k11/(1E9*1E6)*C3pC625
*C2C625 + k15/(1E12*1E6)*C8pC625*C2C625 + k19/(1E14*1E6)

*C7pC625*C2C625=e=0;
1341 EQU335..1000*(FHC11*x2HC11 - FAC20*x2AC20) - r2C625*VaC623*MW2
=e= 0;
1342 EQU336..-r3C625 + r4C625 + r5C625 + r7C625 + r8C625 + r9C625 +
r10C625 + riC10C625+ riC11C625 =e= 0;
1343 EQU337..k15/(1E6*1E12)*C8pC625*C2C625 -
k18/1E12*CiC11pC625*C3C625 - k17/1E12*CiC11pC625 =e= 0;
1344 EQU338..k17/1E12*CiC11pC625 - k4/1E14*C7pC625*C3C625 -
k19/(1E6*1E14)*C7pC625*C2C625 =e= 0;
1345 EQU339..x1HC08 + x2HC08 + x3HC08 + x4HC08 + x5HC08 + x7HC08 =e=
1;
1346 EQU340..FC307 - FC308 - FC312 =e= 0;
1347 EQU341..FC307 * x1C307 - FC308 * x1C308 - FC312 * x1C312 =e= 0;

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1348 EQU342..FC307 * x3C307 - FC308 * x3C308 - FC312 * x3C312 =e= 0;
1349 EQU343..FC307 * x4C307 - FC308 * x4C308 - FC312 * x4C312 =e= 0;
1350 EQU344..FC307 * x5C307 - FC308 * x5C308 - FC312 * x5C312 =e= 0;
1351 EQU345..x1AC20 + x2AC20 + x3AC20 + x4AC20 + x5AC20 +x7AC20 +
x8AC20 + x9AC20 + x10AC20 + x11AC20 + x12AC20 + xiC10AC20 +

xiC11AC20 =e= 1;
1352 EQU346..FAC20*(x7AC20+x8AC20+x9AC20+x10AC20+xiC10AC20+xiC11AC20)
- FHC25*x7HC25 =e= 0;
1353 EQU347..FAC20*(x11AC20 + x12AC20) - FAC15 - FAC23 =e=0;
1354 EQU348..FAC15*x12AC15 - sfc632*FAC20*x12AC20 =e=0;
1355 EQU349..FAC15*x11AC15 - sfc632*FAC20*x11AC20 =e=0;
1356 EQU350..x11AC15 - x11AC23 =e=0;
1357 EQU351..FAC20*x5AC20 - FHC25*x5HC25 =e=0;
1358 EQU352..FAC20*x4AC20 - FHC25*x4HC25 =e=0;

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```
1359 EQU353..FAC20*x3AC20 - FHC25*x3HC25 =e=0;
1360 EQU354..FAC20*x2AC20 - FHC25*x2HC25 =e=0;
1361 EQU355..FAC20*x1AC20 - FHC25*x1HC25 =e=0;
1362 EQU356..dTE641**3 - ((TC312-TcwotE641B)*(TC315-Tcwin)*
1363 ((TC312-TcwotE641B)+(TC315-Tcwin))/2) =e= 0;
1364 EQU357..dTE611**3 =e= ((TC318-TcwoutE611)*(TC319-Tcwin)*
1365 ((TC318-TcwoutE611)+(TC319-Tcwin))/2);
1366 EQU358..dTE610**3 =e= ((TC317-TC316)*(TC318-TC315)*
1367 ((TC317-TC316)+(TC318-TC315))/2);
1368 EQU359..x11AC23+x12AC23 =e=1;
1369 EQU360..x11AC29 + x12AC29 =e= 1;
1370 EQU361..x11AC26+x12AC26 =e=1;
1371 EQU362..x1AC31 + x2AC31 + x3AC31 + x4AC31 + x5AC31 +x7AC31 +
x8AC31 + x9AC31 + x10AC31 + x11AC31 + x12AC31 + xiC10AC31 +
xiC11AC31 =e= 1;
1372 EQU363..Q2HC14 - FHC14 * x2HC14/(rho2HC14/1000) =e= 0;
1373 EQU364..QHC14 - FHC14/0.575 =e= 0;
1374 EQU365..x1HC14 + x2HC14 + x3HC14 + x4HC14 + x5HC14 + x7HC14 =e=
1;
1375 EQU366..QHC41 - FHC41/0.575 =e= 0;
1376 EQU367..x1HC41 +x3HC41 + x4HC41 + x5HC41 + x7HC41 =e= 1;
1377 EQU368..FAC29 -FAC23 - FAC26 =e= 0;
1378 EQU369..FAC29*x11AC29 -FAC23*x11AC23 - FAC26*x11AC26 =e= 0;
1379 EQU370..FAC31*x1AC31 - FHC23*x1HC23 =e=0;
1380 EQU371..FAC31*x2AC31 - FHC23*x2HC23 =e=0;
1381 EQU372..FAC31*x3AC31 - FHC23*x3HC23 =e=0;
1382 EQU373..FAC31*x4AC31 - FHC23*x4HC23 =e=0;
1383 EQU374..K1C615_A * xx1C308 - xx1C312 =e= 0;
1384 EQU375..K7C615_A * xx7C308 - xx7C312 =e= 0;
1385 EQU376..K4C615_A * xx4C308 - xx4C312 =e= 0;
1386 EQU377..K5C615_A * xx5C308 - xx5C312 =e= 0;
1387 EQU378..TC312 - TC308 =e= 0;
1388 EQU379..TC312 - TC307 =e= 0;
1389 EQU380..FmC312 - FC312 * (x1C312/MW1 + x3C312/MW3 + x4C312/MW4 +
x5C312/MW5 + x7C312/MW7)=e= 0;
1390 EQU381..xx1C312 * MW1 * FmC312 - FC312 * x1C312 =e= 0 ;
1391 EQU382..xx3C312 * MW3 * FmC312 - FC312 * x3C312 =e= 0 ;
1392 EQU383..xx4C312 * MW4 * FmC312 - FC312 * x4C312 =e= 0 ;
1393 EQU384..xx5C312 * MW5 * FmC312 - FC312 * x5C312 =e= 0 ;
1394 EQU385..FmC308 - FC308 * (x1C308/MW1 + x3C308/MW3 + x4C308/MW4 +
x5C308/MW5 + x7C308/MW7)=e= 0;
1395 EQU386..xx1C308 * MW1 * FmC308 - FC308 *x1C308=e= 0;
1396 EQU387..xx3C308 * MW3 * FmC308 - FC308 *x3C308=e= 0;
1397 EQU388..xx4C308 * MW4 * FmC308 - FC308 *x4C308=e= 0;
1398 EQU389..xx5C308 * MW5 * FmC308 - FC308 *x5C308=e= 0;
1399 EQU390..xx1C308+ xx3C308+ xx4C308+ xx5C308+ xx7C308=e=1;
1400 EQU391..FC306 - FC303 - FC310 =e= 0;
1401 EQU392..1000*kWad1=e= kK601/(kK601 -
1)*FC303*8314/55.5*TC303*((PC310/PC303)**((kK601 -1)/kK601) -1);
```

```
1402 EQU393..1000*kWad2=e= kK601/(kK601 -  
1)*FC306*8314/55.5*TmK601*((PC306/PC310)**((kK601 -1)/kK601) -1);  
1403 EQU394..hC307 - FC307 * ((x1C307/MW1)*(SUM(Coeff,1/ORD(Coeff))*  
Enth_liq("1",Coeff) *POWER(TC307,ORD(Coeff))))
```

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```
1404 +(x3C307/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC307,ORD(Coeff))))
1405 +(x4C307/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC307,ORD(Coeff))))
1406 +(x5C307/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC307,ORD(Coeff))))
1407 +(x7C307/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC307,ORD(Coeff)))) =e= 0;
1408 EQU395..x4C306 - x4C307 =e= 0;
1409 EQU396..x5C306 - x5C307 =e= 0;
1410 EQU397..FC312 - FC315 =e= 0;
1411 EQU398..x1C312 - x1C315 =e= 0;
1412 EQU399..FC315 - FC316 =e= 0;
1413 EQU400..x1C315 - x1C316 =e= 0;
1414 EQU401..x3C315 - x3C316 =e= 0;
1415 EQU402..PC309=e=PC308-deltaPE640;
1416 EQU403..dTE640**3=e= ((TC308-TcwoutE640)*(TC309-Tcwin)*
1417 ((TC308-TcwoutE640)+(TC309-Tcwin))/2);
1418 EQU404..x3C405 - x3C406 =e= 0;
1419 EQU405..FC406 - FC407 =e= 0;
1420 EQU406..x1C406 - x1C407 =e= 0;
1421 EQU407..FC410 - FC411 =e= 0;
1422 EQU408..x3C312 - x3C315 =e= 0;
1423 EQU409..x4C312 - x4C315 =e= 0;
1424 EQU410..x5C312 - x5C315 =e= 0;
1425 EQU411..FAC31*x5AC31 - FHC23*x5HC23 =e=0;
1426 EQU412..x11AC26 - x11AC34 =e=0;
1427 EQU413..FAC26*x11AC26 - sfC633*FAC31*x11AC31 =e=0;
1428 EQU414..FAC26*x12AC26 - sfC633*FAC31*x12AC31 =e=0;
1429 EQU415..FAC31*(x11AC31 + x12AC31) - FAC26 - FAC34 =e=0;
1430 EQU416..FAC31*(x7AC31+x8AC31+x9AC31+x10AC31+xiC10AC31+xiC11AC31)
- FHC23*x7HC23 =e= 0;
1431 EQU417..FAC29*x11AC29 - FAC31*x11AC31 -
0.06*2.02*FHC14*x2HC14/(rho2HC14/1000) =e= 0;
1432 EQU418..1000*(FHC14*x7HC14 + FHC41*x7HC41 - FAC31*x7AC31) +
r7C627*VaC623*MW7 =e= 0;
1433 EQU419..1000*FAC31*xiC11AC31 -riC11C627 * VaC623 * MWiC11 =e= 0;
1434 EQU420..1000*FAC31*xiC10AC31 - riC10C627*VaC623*MWiC10 =e= 0;
1435 EQU421..FHC14 +FHC41 + FAC29 =e= FAC31;
1436 EQU422..1000*FAC31*x10AC31 - r10C627*VaC623*MW10 =e= 0;
1437 EQU423..1000*FAC31*x9AC31 - r9C627*VaC623*MW9 =e= 0;
1438 EQU424..1000*FAC31*x8AC31 - r8C627*VaC623*MW8 =e= 0;
1439 EQU425..r3C627 - k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627
- k11/(1E6*1E9)*C3pC627*C2C627 - k13/(1E11*1E9)
*CiC8eC627*C3pC627 - k16/(1E11*1E9) * CiC5eC627*C3pC627 =e= 0;
1440 EQU426..1000*(FHC14*x5HC14 + FHC41*x5HC41 - FAC31*x5AC31) +
r5C627*VaC623*MW5 =e= 0;
1441 EQU427..k19/(1E6*1E14)*C7pC627*C2C627 - k8/1E12*CiC10pC627*C3C627
=e= 0;
```

1442 EQU428..1000*(FHC14*x3HC14 + FHC41*x3HC41 - FAC31*x3AC31) -
r3C627*VaC623*MW3 =e= 0;
1443 EQU429..FHC14*x1HC14 + FHC41*x1HC41 - FAC31*x1AC31 =e= 0;
1444 EQU430..r4C627 =e= k2/1E12*C4pC627*C3C627;
1445 EQU431..r5C627 =e= k3/1E12*C5pC627*C3C627;
1446 EQU432..r7C627 =e= k4/1E14*C7pC627 * C3C627;
1447 EQU433..r9C627 =e= k6/1E12*C9pC627 * C3C627;
1448 EQU434..r10C627 =e= k7/1E12*C10pC627 * C3C627;

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1449 EQU435..riC11C627 =e=k18/1E12*CiC11pC627*C3C627;
1450 EQU436..k14/1E11*CiC5eC627*CHXC627 - k3/1E12*C5pC627*C3C627 =e=0;
1451 EQU437..k15/(1E6*1E12)*C8pC627*C2C627 -
k18/1E12*CiC11pC627*C3C627 - k17/1E12*CiC11pC627 =e= 0;
1452 EQU438..-r3C627 + r4C627 + r5C627 + r7C627 + r8C627 + r9C627 +
r10C627 + riC10C627+ riC11C627 =e= 0;
1453 EQU439..1000*(FHC14*x2HC14 - FAC31*x2AC31) - r2C627*VaC623*MW2
=e= 0;
1454 EQU440..-r2C627 + k1/1E6*C2C627*CHXC627 + k11/(1E9*1E6)*C3pC627
*C2C627 + k15/(1E12*1E6)*C8pC627*C2C627 + k19/(1E14*1E6)
*C7pC627*C2C627=e=0;
1455 EQU441..k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627 =e= 0;
1456 EQU442..k13/(1E11*1E9)*CiC8eC627*C3pC627 +k17/1E12*CiC11pC627 -
k14/1E11*CiC5eC627*CHXC627 - k16/(1E11*1E9)*CiC5eC627*C3pC627
=e= 0;
1457 EQU443..k12/1E12*C9pC627 - k13/(1E11*1E9)*CiC8eC627*C3pC627 =e=0;
1458 EQU444..1000*(FHC14*x4HC14 + FHC41*x4HC41 - FAC31*x4AC31) +
r4C627*VaC623*MW4 =e= 0;
1459 EQU445..r8C627 =e= k5/1E12*C8pC627*C3C627;
1460 EQU446..k17/1E12*CiC11pC627 - k4/1E14*C7pC627*C3C627 -
k19/(1E6*1E14)*C7pC627*C2C627 =e= 0;
1461 EQU447..riC10C627 =e= k8/1E12* CiC10pC627 * C3C627;
1462 EQU448..C2C627/1E6 =e= rhoAC31*x2AC31/MW2;
1463 EQU449..C3C627 =e= rhoAC31*x3AC31/MW3;
1464 EQU450..CHXC627 =e= rhoAC31*x11AC31/MW11;
1465 EQU451..k13/(1E11*1E9)*C3pC627*CiC8eC627 - k5/1E12*C8pC627*C3C627
-k15/(1E6*1E12)*C8pC627*C2C627 =e= 0;
1466 EQU452..k11/(1E6*1E9)*C2C627*C3pC627 +
k10/(1E6*1E9)*C3pC627*CiC4eC627 - k6/1E12*C9pC627*C3C627 -
k12/1E12*C9pC627 =e= 0;
1467 EQU453..x4C315 - x4C316 =e= 0;
1468 EQU454..x5C315 - x5C316 =e= 0;
1469 EQU455..x1C317 - x1C318 =e= 0;
1470 EQU456..x3C317 - x3C318 =e= 0;
1471 EQU457..x4C317 - x4C318 =e= 0;
1472 EQU458..x5C317 - x5C318 =e= 0;
1473 EQU459..FC319 - FC320 - FC321 - FC322 =e= 0;
1474 EQU460..FC319 * x1C319 - FC320 * x1C320 - FC321 * x1C321 - FC322
* x1C322 =e= 0;
1475 EQU461..FC319 * x3C319 - FC320 * x3C320 - FC321 * x3C321 - FC322
* x3C322 =e= 0;
1476 EQU462..FC319 * x4C319 - FC320 * x4C320 - FC321 * x4C321 - FC322
* x4C322 =e= 0;
1477 EQU463..FC319 * x5C319 - FC320 * x5C320 - FC321 * x5C321 - FC322
* x5C322 =e= 0;
1478 EQU464..FC319 * sf1S34 - FC320 =e= 0;
1479 EQU465..x1C319 - x1C320 =e= 0;
1480 EQU466..x3C319 - x3C320 =e= 0;
1481 EQU467..x4C319 - x4C320 =e= 0;

1482 EQU468..k16/(1E11*1E9)*CiC5eC627*C3pC627 -
k7/1E12*C10pC627*C3C627 =e= 0;
1483 EQU469..k1/1E6*C2C627*CHXC627 - k2/1E12*C4pC627*C3C627 =e= 0;
1484 EQU470..x1HC23+x2HC23+x3HC23+x4HC23+x5HC23+x7HC23 =e=1;
1485 EQU471..x11AC34+x12AC34 =e=1;
1486 EQU472..x1HC22+x2HC22+x3HC22+x4HC22+x5HC22+x7HC22 =e=1;
1487 EQU473..x11AC37+x12AC37 =e=1;
1488 EQU474..x11AC40 + x12AC40 =e= 1;
1489 EQU475..x1AC42 + x2AC42 + x3AC42 + x4AC42 + x5AC42 +x7AC42 +
x8AC42 + x9AC42 + x10AC42 + x11AC42 + x12AC42 + xiC10AC42 +
xiC11AC42 =e= 1;
1490 EQU476..x11AC45+x12AC45 =e=1;
1491 EQU477..Q2HC16 - FHC16 * x2HC16/(rho2HC16/1000) =e= 0;

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1492 EQU478..QHC16 - FHC16/0.575 =e= 0;
1493 EQU479..x1HC16 + x2HC16 + x3HC16 + x4HC16 + x5HC16 + x7HC16 =e=
1;
1494 EQU480..FAC40 -FAC34 - FAC37 =e= 0;
1495 EQU481..FAC40*x11AC40 -FAC34*x11AC34 - FAC37*x11AC37 =e= 0;
1496 EQU482..FAC42*(x7AC42+x8AC42+x9AC42+x10AC42+xiC10AC42+xiC11AC42)
- FHC22*x7HC22 =e= 0;
1497 EQU483..FAC42*(x11AC42 + x12AC42) - FAC37 - FAC45 =e=0;
1498 EQU484..FAC37*x12AC37 - sfC634*FAC42*x12AC42 =e=0;
1499 EQU485..FAC37*x11AC37 - sfC634*FAC42*x11AC42 =e=0;
1500 EQU486..x11AC37 - x11AC45 =e=0;
1501 EQU487..FAC42*x5AC42 - FHC22*x5HC22 =e=0;
1502 EQU488..FAC42*x4AC42 - FHC22*x4HC22 =e=0;
1503 EQU489..FAC42*x3AC42 - FHC22*x3HC22 =e=0;
1504 EQU490..FAC42*x2AC42 - FHC22*x2HC22 =e=0;
1505 EQU491..FAC42*x1AC42 - FHC22*x1HC22 =e=0;
1506 EQU492..r3C629 - k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629
- k11/(1E6*1E9)*C3pC629*C2C629 - k13/(1E11*1E9)

*CiC8eC629*C3pC629 - k16/(1E11*1E9) * CiC5eC629*C3pC629 =e= 0;
1507 EQU493..FAC40*x11AC40 - FAC42*x11AC42 -
0.06*2.02*FHC16*x2HC16/(rho2HC16/1000) =e= 0;
1508 EQU494..r9C629 =e= k6/1E12*C9pC629 * C3C629;
1509 EQU495..r7C629 =e= k4/1E14*C7pC629 * C3C629;
1510 EQU496..x5C319 - x5C320 =e= 0;
1511 EQU497..x1C319 - x1C321 =e= 0;
1512 EQU498..x3C319 - x3C321 =e= 0;
1513 EQU499..x4C319 - x4C321 =e= 0;
1514 EQU500..x5C319 - x5C321 =e= 0;
1515 EQU501..FC308 - FC309 =e= 0;
1516 EQU502..x1C308 - x1C309 =e= 0;
1517 EQU503..(hc308 - hc309) - FcweE640*4.197*(TcwoutE640 - Tcwin) =e=
0;
1518 EQU504..FC316 + FC329 - FC317 - FC325 =e= 0;
1519 EQU505..FC316 * x1C316 + FC329*x1C329 - FC317 * x1C317 -
FC325*x1C325 =e= 0;
1520 EQU506..r5C629 =e= k3/1E12*C5pC629*C3C629;
1521 EQU507..r4C629 =e= k2/1E12*C4pC629*C3C629;
1522 EQU508..FHC16*x1HC16 + FHC45*x1HC45 - FAC42*x1AC42 =e= 0;
1523 EQU509..1000*(FHC16*x3HC16 + FHC45*x3HC45 - FAC42*x3AC42) -
r3C629*VaC623*MW3 =e= 0;
1524 EQU510..riC11C629 =e=k18/1E12*CiC11pC629*C3C629;
1525 EQU511..1000*(FHC16*x5HC16 + FHC45*x5HC45 - FAC42*x5AC42) +
r5C629*VaC623*MW5 =e= 0;
1526 EQU512..k14/1E11*CiC5eC629*CHXC629 - k3/1E12*C5pC629*C3C629 =e=0;
1527 EQU513..1000*FAC42*x8AC42 - r8C629*VaC623*MW8 =e= 0;
1528 EQU514..1000*FAC42*x9AC42 - r9C629*VaC623*MW9 =e= 0;
1529 EQU515..1000*FAC42*x10AC42 - r10C629*VaC623*MW10 =e= 0;
1530 EQU516..FHC16 +FHC45 + FAC40 =e= FAC42;
1531 EQU517..1000*FAC42*xiC10AC42 - riC10C629*VaC623*MWiC10 =e= 0;
1532 EQU518..1000*FAC42*xiC11AC42 -riC11C629 * VaC623 * MWiC11 =e= 0;

1533 EQU519..1000*(FHC16*x7HC16 + FHC45*x7HC45 - FAC42*x7AC42) +
r7C629*VaC623*MW7 =e= 0;
1534 EQU520..k19/(1E14*1E6)*C7pC629*C2C629 - k8/1E12*CiC10pC629*C3C629
=e= 0;
1535 EQU521..1000*(FHC16*x4HC16 + FHC45*x4HC45 - FAC42*x4AC42) +
r4C629*VaC623*MW4 =e= 0;
1536 EQU522..k16/(1E11*1E9)*CiC5eC629*C3pC629 -
k7/1E12*C10pC629*C3C629 =e= 0;

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1537 EQU523..k11/(1E6*1E9)*C2C629*C3pC629 +
k10/(1E6*1E9)*C3pC629*CiC4eC629 - k6/1E12*C9pC629*C3C629 -
k12/1E12*C9pC629 =e= 0;
1538 EQU524..k13/(1E11*1E9)*C3pC629*CiC8eC629 - k5/1E12*C8pC629*C3C629
-k15/(1E6*1E12)*C8pC629*C2C629 =e= 0;
1539 EQU525..CHXC629 =e= rhoAC42*x11AC42/MW11;
1540 EQU526..C3C629 =e= rhoAC42*x3AC42/MW3;
1541 EQU527..C2C629/1E6 =e= rhoAC42*x2AC42/MW2;
1542 EQU528..riC10C629 =e= k8/1E12* CiC10pC629 * C3C629;
1543 EQU529..r10C629 =e= k7/1E12*C10pC629 * C3C629;
1544 EQU530..r8C629 =e= k5/1E12*C8pC629*C3C629;
1545 EQU531..k1/1E6*C2C629*CHXC629 - k2/1E12*C4pC629*C3C629 =e= 0;
1546 EQU532..k12/1E12*C9pC629 - k13/(1E11*1E9)*CiC8eC629*C3pC629 =e=0;
1547 EQU533..k13/(1E11*1E9)*CiC8eC629*C3pC629 +k17/1E12*CiC11pC629 -
k14/1E11*CiC5eC629*CHXC629 - k16/(1E11*1E9)*CiC5eC629*C3pC629

=e= 0;
1548 EQU534..k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629 =e= 0;
1549 EQU535..-r2C629 + k1/1E6*C2C629*CHXC629 + k11/(1E9*1E6)*C3pC629
*C2C629 + k15/(1E12*1E6)*C8pC629*C2C629 + k19/(1E14*1E6)

*C7pC629*C2C629=e=0;
1550 EQU536..1000*(FHC16*x2HC16 - FAC42*x2AC42) - r2C629*VaC623*MW2
=e= 0;
1551 EQU537..-r3C629 + r4C629 + r5C629 + r7C629 + r8C629 + r9C629 +
r10C629 + riC10C629+ riC11C629 =e= 0;
1552 EQU538..k15/(1E6*1E12)*C8pC629*C2C629 -
k18/1E12*CiC11pC629*C3C629 - k17/1E12*CiC11pC629 =e= 0;
1553 EQU539..k17/1E12*CiC11pC629 - k4/1E14*C7pC629*C3C629 -
k19/(1E6*1E14)*C7pC629*C2C629 =e= 0;
1554 EQU540..FC316 * x3C316 + FC329*x3C329 - FC317 * x3C317 -
FC325*x3C325 =e= 0;
1555 EQU541..FC316 * x4C316 + FC329*x4C329 - FC317 * x4C317 -
FC325*x4C325 =e= 0;
1556 EQU542..FC316 * x5C316 + FC329*x5C329 - FC317 * x5C317 -
FC325*x5C325 =e= 0;
1557 EQU543..x1C317 - x1C323 =e= 0;
1558 EQU544..x3C317 - x3C323 =e= 0;
1559 EQU545..x4C317 - x4C323 =e= 0;
1560 EQU546..x5C317 - x5C323 =e= 0;
1561 EQU547..FHC03 - FC419 - FC321 =e= 0;
1562 EQU548..FHC03 * x1HC03 - FC419 * x1C419 - FC321 * x1C321 =e= 0;
1563 EQU549..FHC03 * x3HC03 - FC419 * x3C419 - FC321 * x3C321 =e= 0;
1564 EQU550..FHC03 * x4HC03 - FC419 * x4C419 - FC321 * x4C321 =e= 0;
1565 EQU551..FHC03 * x5HC03 - FC419 * x5C419 - FC321 * x5C321 =e= 0;
1566 EQU552..hHC03 - hC419 - hC321 =e= 0;
1567 EQU553..FHC24 -FHC23 - FHC22 =e= 0;
1568 EQU554..FHC24*x1HC24 -FHC23*x1HC23 - FHC22*x1HC22 =e= 0;
1569 EQU555..FHC24*x3HC24 -FHC23*x3HC23 - FHC22*x3HC22 =e= 0;
1570 EQU556..FHC24*x4HC24 -FHC23*x4HC23 - FHC22*x4HC22 =e= 0;
1571 EQU557..FHC24*x5HC24 -FHC23*x5HC23 - FHC22*x5HC22 =e= 0;

1572 EQU558..FHC24*x7HC24 -FHC23*x7HC23 - FHC22*x7HC22 =e= 0;
1573 EQU559..x1HC24+x2HC24+x3HC24+x4HC24+x5HC24+x7HC24 =e=1;
1574 EQU560..x1HC25+x2HC25+x3HC25+x4HC25+x5HC25+x7HC25 =e=1;
1575 EQU561..FHC26 -FHC25 - FHC24 =e= 0;
1576 EQU562..FHC26*x1HC26 -FHC25*x1HC25 - FHC24*x1HC24 =e= 0;
1577 EQU563..FHC26*x3HC26 -FHC25*x3HC25 - FHC24*x3HC24 =e= 0;
1578 EQU564..FHC26*x4HC26 -FHC25*x4HC25 - FHC24*x4HC24 =e= 0;
1579 EQU565..FHC26*x5HC26 -FHC25*x5HC25 - FHC24*x5HC24 =e= 0;
1580 EQU566..FHC26*x7HC26 -FHC25*x7HC25 - FHC24*x7HC24 =e= 0;

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1581 EQU567..x1HC26+x2HC26+x3HC26+x4HC26+x5HC26+x7HC26 =e=1;
1582 EQU568..x1HC27+x2HC27+x3HC27+x4HC27+x5HC27+x7HC27 =e=1;
1583 EQU569..FHC28 -FHC27 - FHC26 =e= 0;
1584 EQU570..FlHC28*x1HC28 + FvHC28*y1HC28 - FHC27*x1HC27 -
FHC26*x1HC26 =e= 0;
1585 EQU571..FlHC28*x3HC28 + FvHC28*y3HC28 - FHC27*x3HC27 -
FHC26*x3HC26 =e= 0;
1586 EQU572..FlHC28*x4HC28 + FvHC28*y4HC28 - FHC27*x4HC27 -
FHC26*x4HC26 =e= 0;
1587 EQU573..FlHC28*x5HC28 + FvHC28*y5HC28 - FHC27*x5HC27 -
FHC26*x5HC26 =e= 0;
1588 EQU574..FlHC28*x7HC28 + FvHC28*y7HC28 - FHC27*x7HC27 -
FHC26*x7HC26 =e= 0;
1589 EQU575..x1HC28+x2HC28+x3HC28+x4HC28+x5HC28+x7HC28 =e=1;
1590 EQU576..FHC28 - FHC29 - FR1 =e= 0;
1591 EQU577..FR1 - FHC28*sfs2 =e=0;
1592 EQU578..FlHC28 - FlHC29 - FlR1 =e= 0;
1593 EQU579..FvHC28 - FvHC29 - FvR1 =e= 0;
1594 EQU580..FlR1 - FlHC28*sfs2 =e=0;
1595 EQU581..FvR1 - FvHC28*sfs2 =e=0;
1596 EQU582..FHC15 - FHC14 - FHC16 =e= 0;
1597 EQU583..FHC15*sfs11 - FHC14 =e= 0;
1598 EQU584..x1HC15 - x1HC14 =e= 0;
1599 EQU585..x2HC15 - x2HC16 =e= 0;
1600 EQU586..x2HC15 - x2HC14 =e= 0;
1601 EQU587..LpC606A=e=FC322 + qC606A*FC404;
1602 EQU588..VpC606A=e=FC432;
1603 EQU589..TnC606A=e=(TC414+TC404)/2;
1604 EQU590..TmC606A=e=(TC430+TC404)/2;
1605 EQU591..FC418 * x1C418 - FC417 * x1C417 - FC415 * x1C415 =e= 0;
1606 EQU592..FC418 * x3C418 - FC417 * x3C417 - FC415 * x3C415 =e= 0;
1607 EQU593..FC418 * x4C418 - FC417 * x4C417 - FC415 * x4C415 =e= 0;
1608 EQU594..FC418 * x5C418 - FC417 * x5C417 - FC415 * x5C415 =e= 0;
1609 EQU595..hC418 - hC417 - hC415 =e= 0;
1610 EQU596..x4C405 - x4C406 =e= 0;
1611 EQU597..x5C405 - x5C406 =e= 0;
1612 EQU598..FC403 - FC404 =e= 0;
1613 EQU599..x1C403 - x1C404 =e= 0;
1614 EQU600..x3C403 - x3C404 =e= 0;
1615 EQU601..x4C403 - x4C404 =e= 0;
1616 EQU602..x5C403 - x5C404 =e= 0;
1617 EQU603..x3C406 - x3C407 =e= 0;
1618 EQU604..x4C406 - x4C407 =e= 0;
1619 EQU605..x5C406 - x5C407 =e= 0;
1620 EQU606..FC431 - FC412 - FC432 =e= 0;
1621 EQU607..FC432 - sfs41 * FC431 =e= 0;
1622 EQU608..x1C431 - x1C412 =e= 0;
1623 EQU609..x3C431 - x3C412 =e= 0;
1624 EQU610..x4C431 - x4C412 =e= 0;
1625 EQU611..x5C431 - x5C412 =e= 0;
1626 EQU612..TC319 - TC320 =e= 0;

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1627 EQU613..TC319 - TC321 =e= 0;
1628 EQU614..TC319 - TC322 =e= 0;
1629 EQU615..x1C431 - x1C432 =e= 0;
1630 EQU616..x3C431 - x3C432 =e= 0;
1631 EQU617..x4C431 - x4C432 =e= 0;
1632 EQU618..x5C431 - x5C432 =e= 0;
1633 EQU619..FC430 + FC427 - FC431 - FC425 =e= 0;
1634 EQU620..FC430 * x1C430 + FC427 * x3C427 - FC431 * x1C431 - FC425
* x1C425 =e= 0;
1635 EQU621..FC430 * x3C430 + FC427 * x3C427 - FC431 * x3C431 - FC425
* x3C425 =e= 0;
1636 EQU622..FC430 * x4C430 + FC427 * x4C427 - FC431 * x4C431 - FC425
* x4C425 =e= 0;
1637 EQU623..FC430 * x5C430 + FC427 * x5C427 - FC431 * x5C431 - FC425
* x5C425 =e= 0;
1638 EQU624..x3HC15 - x3HC14 =e= 0;
1639 EQU625..x4HC15 - x4HC14 =e= 0;
1640 EQU626..x5HC15 - x5HC14 =e= 0;
1641 EQU627..x3HC15 - x3HC16 =e= 0;
1642 EQU628..x4HC15 - x4HC16 =e= 0;
1643 EQU629..x5HC15 - x5HC16 =e= 0;
1644 EQU630..x1HC15 - x1HC16 =e= 0;
1645 EQU631..x1HC15 + x2HC15 + x3HC15 + x4HC15 + x5HC15 + x7HC15 =e=
1;
1646 EQU632..FHC08 - FHC11 - FHC15 =e= 0;
1647 EQU633..FHC08*sfS7 - FHC11 =e= 0;
1648 EQU634..x1HC08 - x1HC11 =e= 0;
1649 EQU635..x2HC08 - x2HC11 =e= 0;
1650 EQU636..x3HC08 - x3HC11 =e= 0;
1651 EQU637..x4HC08 - x4HC11 =e= 0;
1652 EQU638..x5HC08 - x5HC11 =e= 0;
1653 EQU639..x1HC08 - x1HC15 =e= 0;
1654 EQU640..x2HC08 - x2HC15 =e= 0;
1655 EQU641..x3HC08 - x3HC15 =e= 0;
1656 EQU642..x4HC08 - x4HC15 =e= 0;
1657 EQU643..x5HC08 - x5HC15 =e= 0;
1658 EQU644..Q2HC11 - FHC11 * x2HC11/(rho2HC11/1000) =e= 0;
1659 EQU645..QHC11 - FHC11/0.575 =e= 0;
1660 EQU646..x1HC11 + x2HC11 + x3HC11 + x4HC11 + x5HC11 + x7HC11 =e=
1;
1661 EQU647..FHC06 - FHC07 - FHC08 =e= 0;
1662 EQU648..FHC06*sfS5 - FHC07 =e= 0;
1663 EQU649..x1HC06 - x1HC07 =e= 0;
1664 EQU650..FC425 - FC410 - FC426 =e= 0;
1665 EQU651..FC426 - sfS42 * FC425 =e= 0;
1666 EQU652..x1C425 - x1C410 =e= 0;
1667 EQU653..x3C425 - x3C410 =e= 0;
1668 EQU654..x4C425 - x4C410 =e= 0;
1669 EQU655..x5C425 - x5C410 =e= 0;
1670 EQU656..x1C425 - x1C426 =e= 0;
1671 EQU657..x3C425 - x3C426 =e= 0;

1672 EQU658..x4C425 - x4C426 =e= 0;

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1673 EQU659..x5C425 - x5C426 =e= 0;
1674 EQU660..x1C410 - x1C411 =e= 0;
1675 EQU661..x3C410 - x3C411 =e= 0;
1676 EQU662..x4C410 - x4C411 =e= 0;
1677 EQU663..x5C410 - x5C411 =e= 0;
1678 EQU664..hc427 - hc428 - hc411 =e= 0;
1679 EQU665..FC427 * x1C427 - FC428 * x1C428 - FC411 * x1C411 =e= 0;
1680 EQU666..FC427 * x3C427 - FC428 * x3C428 - FC411 * x3C411 =e= 0;
1681 EQU667..FC427 * x4C427 - FC428 * x4C428 - FC411 * x4C411 =e= 0;
1682 EQU668..FC427 * x5C427 - FC428 * x5C428 - FC411 * x5C411 =e= 0;
1683 EQU669..FC426 - FC428 - FC405 =e= 0;
1684 EQU670..x2HC06 - x2HC07 =e= 0;
1685 EQU671..x3HC06 - x3HC07 =e= 0;
1686 EQU672..x4HC06 - x4HC07 =e= 0;
1687 EQU673..x5HC06 - x5HC07 =e= 0;
1688 EQU674..x1HC06 - x1HC08 =e= 0;
1689 EQU675..x2HC06 - x2HC08 =e= 0;
1690 EQU676..x3HC06 - x3HC08 =e= 0;
1691 EQU677..x4HC06 - x4HC08 =e= 0;
1692 EQU678..x5HC06 - x5HC08 =e= 0;
1693 EQU679..x1HC07 + x2HC07 + x3HC07 + x4HC07 + x5HC07 + x7HC07 =e=
1;
1694 EQU680..QHC07 - FHC07/0.575 =e= 0;
1695 EQU681..Q2HC07 - FHC07 * x2HC07/(rho2HC07/1000) =e= 0;
1696 EQU682..x1HC06 + x2HC06 + x3HC06 + x4HC06 + x5HC06 + x7HC06 =e=
1;
1697 EQU683..FHC06 -FHC02 - FHC05 =e= 0;
1698 EQU684..FHC06*x1HC06 - FHC02*x1HC02 - FHC05*x1HC05 =e= 0;
1699 EQU685..FHC06*x2HC06 - FHC02*x2HC02 - FHC05*x2HC05 =e= 0;
1700 EQU686..FHC06*x3HC06 - FHC02*x3HC02 - FHC05*x3HC05 =e= 0;
1701 EQU687..FHC06*x4HC06 - FHC02*x4HC02 - FHC05*x4HC05 =e= 0;
1702 EQU688..FHC06*x5HC06 - FHC02*x5HC02 - FHC05*x5HC05 =e= 0;
1703 EQU689..FHC40 - FHC41 - FHC45 =e= 0;
1704 EQU690..FHC40*sfS27 - FHC41 =e= 0;
1705 EQU691..x1HC40 - x1HC41 =e= 0;
1706 EQU692..x3HC40 - x3HC41 =e= 0;
1707 EQU693..x4HC40 - x4HC41 =e= 0;
1708 EQU694..x5HC40 - x5HC41 =e= 0;
1709 EQU695..x1HC40 - x1HC45 =e= 0;
1710 EQU696..x3HC40 - x3HC45 =e= 0;
1711 EQU697..x4HC40 - x4HC45 =e= 0;
1712 EQU698..x1HC32 - x1HC33 =e= 0;
1713 EQU699..FC426 * x1C426- FC428 * x1C428 - FC405 * x1C405 =e= 0;
1714 EQU700..FC426 * x3C426- FC428 * x3C428 - FC405 * x3C405 =e= 0;
1715 EQU701..FC426 * x4C426- FC428 * x4C428 - FC405 * x4C405 =e= 0;
1716 EQU702..FC426 * x5C426- FC428 * x5C428 - FC405 * x5C405 =e= 0;
1717 EQU703..FC408 - FC409 =e= 0;
1718 EQU704..x1C408 - x1C409 =e= 0;

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1719 EQU705..x3C408 - x3C409 =e= 0;
1720 EQU706..x4C408 - x4C409 =e= 0;
1721 EQU707..x5C408 - x5C409 =e= 0;
1722 EQU708..x5HC40 - x5HC45 =e= 0;
1723 EQU709..FHC32 - FHC33 - FHC40 =e= 0;
1724 EQU710..x1HC45 +x3HC45 + x4HC45 + x5HC45 + x7HC45 =e= 1;
1725 EQU711..QHC45 - FHC45/0.575 =e= 0;
1726 EQU712..x1HC40 +x3HC40 + x4HC40 + x5HC40 + x7HC40 =e= 1;
1727 EQU713..FHC32*sfS19 - FHC33 =e= 0;
1728 EQU714..x3HC32 - x3HC33 =e= 0;
1729 EQU715..x4HC32 - x4HC33 =e= 0;
1730 EQU716..x5HC32 - x5HC33 =e= 0;
1731 EQU717..x1HC32 - x1HC40 =e= 0;
1732 EQU718..x3HC32 - x3HC40 =e= 0;
1733 EQU719..x4HC32 - x4HC40 =e= 0;
1734 EQU720..x5HC32 - x5HC40 =e= 0;
1735 EQU721..x1HC33 +x3HC33 + x4HC33 + x5HC33 + x7HC33 =e= 1;
1736 EQU722..FHC33 - FHC34 - FHC38 =e= 0;
1737 EQU723..FHC33*sfS23 - FHC34 =e= 0;
1738 EQU724..x1HC33 - x1HC34 =e= 0;
1739 EQU725..x3HC33 - x3HC34 =e= 0;
1740 EQU726..x4HC33 - x4HC34 =e= 0;
1741 EQU727..x5HC33 - x5HC34 =e= 0;
1742 EQU728..x1HC33 - x1HC38 =e= 0;
1743 EQU729..x3HC33 - x3HC38 =e= 0;
1744 EQU730..x4HC33 - x4HC38 =e= 0;
1745 EQU731..x5HC33 - x5HC38 =e= 0;
1746 EQU732..x1HC34 +x3HC34 + x4HC34 + x5HC34 + x7HC34 =e= 1;
1747 EQU733..QHC34 - FHC34/0.575 =e= 0;
1748 EQU734..QHC38 - FHC38/0.575 =e= 0;
1749 EQU735..x1HC38 +x3HC38 + x4HC38 + x5HC38 + x7HC38 =e= 1;
1750 EQU736..FC412 - FC413 =e= 0;
1751 EQU737..x1C412 - x1C413 =e= 0;
1752 EQU738..x3C412 - x3C413 =e= 0;
1753 EQU739..x4C412 - x4C413 =e= 0;
1754 EQU740..x5C412 - x5C413 =e= 0;
1755 EQU741..x1C319 - x1C322 =e= 0;
1756 EQU742..x3C319 - x3C322 =e= 0;
1757 EQU743..x4C319 - x4C322 =e= 0;
1758 EQU744..x5C319 - x5C322 =e= 0;
1759 EQU745..hc414liq - FC414 *
((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff))))
1760 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff))))
1761 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff))))
1762 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff))))
1763 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff)))) =e= 0;
```

1764 EQU746..dTE621A*2 =e=

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```
1765 (TC414-TcwotE621A) + (TC414-Tcwin);
1766 EQU747..(hC414liq - hC415) - Fcwe621B*4.197*(TcwotE621B - Tcwin)
=e= 0;
1767 EQU748..(hC414liq - hC415) - UE621B*FE621B*AE621B*dTE621B =e= 0;
1768 EQU749..dTE621B**3 =e= ((TC414-TcwotE621B)*(TC415-Tcwin)*
1769 ((TC414-TcwotE621B)+(TC415-Tcwin))/2);
1770 EQU750..hC412liq - FC412 *
((x1C412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC412,ORD(Coeff))))
1771 +(x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff))))
1772 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff))))
1773 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff))))
1774 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff)))) =e= 0;
1775 EQU751..dTE627A*2 =e=
1776 (TC412-TcwotE621A) + (TC412-Tcwin);
1777 EQU752..(hC412liq - hC413) - Fcwe627B*4.197*(TcwotE627B - Tcwin)
=e= 0;
1778 EQU753..(hC412liq - hC413) - UE627B*FE627B*AE627B*dTE627B =e= 0;
1779 EQU754..dTE627B **3 =e= ((TC412-TcwotE627B)*(TC413-Tcwin)*
1780 ((TC412-TcwotE627B)+(TC413-Tcwin))/2);
1781 EQU755..hC411 - FC411 *
1782 ((x1C411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC411,ORD(Coeff))))
1783 +(x3C411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC411,ORD(Coeff))))
1784 +(x4C411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC411/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1785 +(x5C411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC411/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1786 +(x7C411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC411/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1787 EQU756..hC410vap - FC410 *
1788 ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC410/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1789 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC410/Enth_Vap("3","a2"))**Enth_Vap("3","a3"))))
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1790 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC410/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1791 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC410/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1792 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC410/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1793 EQU757..dTTE696A =e= 414.6 - TC410;
1794 EQU758..(hC411 - hC410vap) - FstmE696B * hstmE696 =e= 0;
1795 EQU759..(hC411 - hC410vap) - UE696B*AE696B*dTE696B =e= 0;
1796 EQU760..dTTE696B*2 =e=
1797 (414.6-TC410) + (414.6-TC411);
1798 EQU761..dTTE626**3 =e= ((TC418-TcwoutE626)*(TC419-Tcwin)*
1799 ((TC418-TcwoutE626)+(TC419-Tcwin))/2);
1800 EQU762..dTTE617 **3=e= ((TC406-TcwoutE617)*(TC407-Tcwin)*
1801 ((TC406-TcwoutE617)+(TC407-Tcwin))/2);
1802 EQU763..dTTE616**3 =e= ((TC405-TC404)*(TC406-TC403)*

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1803 ((TC405-TC404)+(TC406-TC403))/2);
1804 EQU764..hC408vap - FC408 *
1805 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1806 )
1807 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1808 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1809 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1810 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1811 EQU765..dTE695A =e= 481 - TC408;
1812 EQU766..(hC409 - hC408vap) - FstmE695B * hstmE695 =e= 0;
1813 EQU767..(hC409 - hC408vap) - UE695B*AE695B*dTE695B =e= 0;
1814 EQU768..dTE695B*2 =e=
1815 (481-TC408) + (481-TC409);
1816 EQU769..hvR1 - FvR1*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff)))+ Enth_Vap("1","a1")
*1000 * ((1-TR1/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1817 +(y3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR1/Enth_Vap("
"3","a2"))**Enth_Vap("3","a3")))
1818 +(y4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR1/Enth_Vap("
4","a2"))**Enth_Vap("4","a3")))
1819 +(y5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR1/Enth_Vap("
5","a2"))**Enth_Vap("5","a3")))
1820 +(y7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR1/Enth_Vap("
7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1821 EQU770..y1R1 + y2R1 + y3R1 + y4R1 + y5R1 + y7R1 =e= 1;
1822 EQU771..h1R1 - F1R1*((x1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff))))
1823 +(x3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff))))
1824 +(x4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff))))
1825 +(x5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff))))
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1826 +(x7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff)))) =e= 0;
1827 EQU772..x1R1 + x2R1 + x3R1 + x4R1 + x5R1 + x7R1 =e= 1;
1828 EQU773..hR1 - h1R1 - hvR1 =e= 0;
1829 EQU774..hvHC29 - FvHC29*((y1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1830 +(y3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC29/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1831 +(y4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC29/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1832 +(y5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC29/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1833 +(y7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC29/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1834 EQU775..hHC29 - h1HC29 - hvHC29 =e= 0;
1835 EQU776..FHC29 - F1HC29 - FvHC29 =e= 0;
1836 EQU777..h1HC29 - F1HC29*((x1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff))))

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1837 +(x3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff))))
1838 +(x4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff))))
1839 +(x5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff))))
1840 +(x7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff)))) =e= 0;
1841 EQU778..xx7HC32 * MW7 * FmHC32 - FHC32 * x7HC32 =e= 0;
1842 EQU779..xx5HC32 * MW5 * FmHC32 - FHC32 * x5HC32 =e= 0;
1843 EQU780..FR1 - Flr1 -FvR1 =e= 0;
1844 EQU781..hc303 - FC303 *
1845 ((x1C303/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC303/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1846 +(x3C303/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC303,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC303/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1847 +(x4C303/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC303/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1848 +(x5C303/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC303/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1849 +(x7C303/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC303/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1850 EQU782..hc306 - FC306 *
1851 ((x1C306/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC306/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1852 +(x3C306/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC306,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC306/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1853 +(x4C306/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC306/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1854 +(x5C306/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC306/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1855 +(x7C306/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
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((1-TC306/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1856 EQU783..hC308 - FC308* ((x1C308/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC308,ORD(Coeff))))
1857 +(x3C308/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC308,ORD(Coeff))))
1858 +(x4C308/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC308,ORD(Coeff))))
1859 +(x5C308/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC308,ORD(Coeff))))
1860 +(x7C308/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC308,ORD(Coeff)))) =e= 0;
1861 EQU784..hC310 - FC310 *
1862 ((x1C310/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC310,ORD(Coeff))))+ Enth_Vap("1","a1")*1000 *

((1-TC310/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1863 +(x3C310/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC310,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TC310/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1864 +(x4C310/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC310,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TC310/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1865 +(x5C310/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC310,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *

((1-TC310/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1866 +(x7C310/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC310,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *

((1-TC310/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1867 EQU785..hC311 - FC311 * ((x1C311/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC311,ORD(Coeff))))

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1868 +(x3C311/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC311,ORD(Coeff))))
1869 +(x4C311/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC311,ORD(Coeff))))
1870 +(x5C311/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC311,ORD(Coeff))))
1871 +(x7C311/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC311,ORD(Coeff)))) =e= 0;
1872 EQU786..hC312 - FC312*
1873 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC312/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1874 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC312/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1875 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC312/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1876 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC312/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1877 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC312/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1878 EQU787..hC315 - FC315 * ((x1C315/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC315,ORD(Coeff))))
1879 +(x3C315/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC315,ORD(Coeff))))
1880 +(x4C315/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC315,ORD(Coeff))))
1881 +(x5C315/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC315,ORD(Coeff))))
1882 +(x7C315/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC315,ORD(Coeff)))) =e= 0;
1883 EQU788..hC316 - FC316 * ((x1C316/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC316,ORD(Coeff))))
1884 +(x3C316/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC316,ORD(Coeff))))
1885 +(x4C316/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC316,ORD(Coeff))))
1886 +(x5C316/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC316,ORD(Coeff))))
1887 +(x7C316/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC316,ORD(Coeff)))) =e= 0;
1888 EQU789..hC317 - FC317 * ((x1C317/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC317,ORD(Coeff))))
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1889 +(x3C317/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC317,ORD(Coeff))))
1890 +(x4C317/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC317,ORD(Coeff))))
1891 +(x5C317/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC317,ORD(Coeff))))
1892 +(x7C317/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC317,ORD(Coeff)))) =e= 0;
1893 EQU790..hc318 - FC318 * ((x1C318/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC318,ORD(Coeff))))
1894 +(x3C318/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC318,ORD(Coeff))))
1895 +(x4C318/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC318,ORD(Coeff))))
1896 +(x5C318/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC318,ORD(Coeff))))
1897 +(x7C318/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC318,ORD(Coeff)))) =e= 0;
1898 EQU791..hc319 - FC319 * ((x1C319/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC319,ORD(Coeff))))
1899 +(x3C319/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC319,ORD(Coeff))))
1900 +(x4C319/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC319,ORD(Coeff))))
1901 +(x5C319/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC319,ORD(Coeff))))
1902 +(x7C319/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC319,ORD(Coeff)))) =e= 0;
1903 EQU792..hc403 - FC403 * ((x1C403/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC403,ORD(Coeff))))
1904 +(x3C403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC403,ORD(Coeff))))
1905 +(x4C403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC403,ORD(Coeff))))
1906 +(x5C403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC403,ORD(Coeff))))
1907 +(x7C403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC403,ORD(Coeff)))) =e= 0;
1908 EQU793..xx4HC32 * MW4 * FmHC32 - FHC32 * x4HC32 =e= 0;

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1909 EQU794..xx3HC32 * MW3 * FmHC32 - FHC32 * x3HC32 =e= 0;
1910 EQU795..FmHC32 - FHC32 * (x1HC32/MW1 + x3HC32/MW3 + x4HC32/MW4 +
x5HC32/MW5 + x7HC32/MW7) =e= 0;
1911 EQU796..hHC32 - FHC32 * ((x1HC32/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC32,ORD(Coeff))))
1912 +(x3HC32/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC32,ORD(Coeff))))
1913 +(x4HC32/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC32,ORD(Coeff))))
1914 +(x5HC32/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC32,ORD(Coeff))))
1915 +(x7HC32/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC32,ORD(Coeff)))) =e= 0;
1916 EQU797..x1HC32 + x3HC32 + x4HC32 + x5HC32 + x7HC32 =e= 1;
1917 EQU798..xx1HC32 + xx3HC32 + xx4HC32 + xx5HC32 + xx7HC32 =e= 1;
1918 EQU799..hC302 - FC302 *
1919 ((x1C302/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC302/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1920 +(x3C302/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC302,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC302/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1921 +(x4C302/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC302/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1922 +(x5C302/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC302/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1923 +(x7C302/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC302/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1924 EQU800..xx7C302 * MW7 * FmC302 - FC302 * x7C302 =e= 0;
1925 EQU801..xx5C302 * MW5 * FmC302 - FC302 * x5C302 =e= 0;
1926 EQU802..xx4C302 * MW4 * FmC302 - FC302 * x4C302 =e= 0;
1927 EQU803..xx3C302 * MW3 * FmC302 - FC302 * x3C302 =e= 0;
1928 EQU804..FmC302 - FC302 * (x1C302/MW1 + x3C302/MW3 + x4C302/MW4 +
x5C302/MW5 + x7C302/MW7) =e= 0;
1929 EQU805..x1C302 + x3C302 + x4C302 + x5C302 + x7C302 =e= 1;
1930 EQU806..xx1C302 + xx3C302 + xx4C302 + xx5C302 + xx7C302 =e= 1;
1931 EQU807..x1C301 + x2C301 + x3C301 + x4C301 + x5C301 + x7C301 =e=
1;
1932 EQU808..hC301 - FC301 *
1933 ((x1C301/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC301/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
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1934 +(x3C301/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC301,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC301/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1935 +(x4C301/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC301/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1936 +(x5C301/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC301/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1937 +(x7C301/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC301/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1938 EQU809..hC303 - hC302 - hC301 =e= 0;
1939 EQU810..FC303 * x5C303 - FC302 * x5C302 - FC301 * x5C301 =e= 0;
1940 EQU811..FC303 * x4C303 - FC302 * x4C302 - FC301 * x4C301 =e= 0;
1941 EQU812..FC303 * x3C303 - FC302 * x3C302 - FC301 * x3C301 =e= 0;
1942 EQU813..FC303 * x1C303 - FC302 * x1C302 - FC301 * x1C301 =e= 0;
1943 EQU814..FC303 - FC302 - FC301 =e= 0;
1944 EQU815..x1HC02 + x2HC02 + x3HC02 + x4HC02 + x5HC02 + x7HC02 =e=
1;

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1945 EQU816..hHC02 - FHC02 * ((x1HC02/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC02,ORD(Coeff))))
1946 +(x2HC02/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC02,ORD(Coeff))))
1947 +(x3HC02/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC02,ORD(Coeff))))
1948 +(x4HC02/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC02,ORD(Coeff))))
1949 +(x5HC02/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC02,ORD(Coeff))))
1950 +(x7HC02/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC02,ORD(Coeff)))) =e= 0;
1951 EQU817..x1HC05 + x2HC05 + x3HC05 + x4HC05 + x5HC05 + x7HC05 =e=
1;
1952 EQU818..hHC05 - FHC05 * ((x1HC05/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC05,ORD(Coeff))))
1953 +(x2HC05/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC05,ORD(Coeff))))
1954 +(x3HC05/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC05,ORD(Coeff))))
1955 +(x4HC05/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC05,ORD(Coeff))))
1956 +(x5HC05/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC05,ORD(Coeff))))
1957 +(x7HC05/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC05,ORD(Coeff)))) =e= 0;
1958 EQU819..x1HC04 + x2HC04 + x3HC04 + x4HC04 + x5HC04 + x7HC04 =e=
1;
1959 EQU820..hHC04 - FHC04 * ((x1HC04/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC04,ORD(Coeff))))
1960 +(x2HC04/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC04,ORD(Coeff))))
1961 +(x3HC04/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC04,ORD(Coeff))))
1962 +(x4HC04/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC04,ORD(Coeff))))
1963 +(x5HC04/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC04,ORD(Coeff))))
1964 +(x7HC04/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC04,ORD(Coeff)))) =e= 0;
1965 EQU821..hc402 - FC402 * ((x1C402/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC402,ORD(Coeff))))
1966 +(x3C402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC402,ORD(Coeff))))
1967 +(x4C402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC402,ORD(Coeff))))
1968 +(x5C402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC402,ORD(Coeff))))
1969 +(x7C402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC402,ORD(Coeff)))) =e= 0;
1970 EQU822..x1C402 + x3C402 + x4C402 + x5C402 + x7C402 =e= 1;
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1971 EQU823..FHC01 - FHC02 =e= 0;
1972 EQU824..FC401 - FC402 =e= 0;
1973 EQU825..(hHC02 - hHC01) - (hC401 - hC402) =e= 0;
1974 EQU826..(hHC01 - hHC02) - UE628*AE628*FE628*dTE628 =e= 0;
1975 EQU827..x1HC01 - x1HC02 =e= 0;
1976 EQU828..x2HC01 - x2HC02 =e= 0;
1977 EQU829..x3HC01 - x3HC02 =e= 0;
1978 EQU830..x4HC01 - x4HC02 =e= 0;
1979 EQU831..x5HC01 - x5HC02 =e= 0;
1980 EQU832..hC321 - FC321 * ((x1C321/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC321,ORD(Coeff))))
1981 +(x3C321/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC321,ORD(Coeff))))
1982 +(x4C321/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC321,ORD(Coeff))))
1983 +(x5C321/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC321,ORD(Coeff))))
1984 +(x7C321/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC321,ORD(Coeff)))) =e= 0;
1985 EQU833..FmC322 - FC322 * (x1C322/MW1 + x3C322/MW3 + x4C322/MW4 +
x5C322/MW5 + x7C322/MW7)=e= 0;
1986 EQU834..hC323 - FC323 * ((x1C323/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC323,ORD(Coeff))))
1987 +(x3C323/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC323,ORD(Coeff))))
1988 +(x4C323/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC323,ORD(Coeff))))
1989 +(x5C323/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC323,ORD(Coeff))))
1990 +(x7C323/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC323,ORD(Coeff)))) =e= 0;

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1991 EQU835..hC326 - (FC326/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC326,ORD(Coeff))))
1992 =e= 0;
1993 EQU836..hC329 - (FC329/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC329,ORD(Coeff))))
1994 =e= 0;
1995 EQU837..x1C401 - x1C402 =e= 0;
1996 EQU838..x3C401 - x3C402 =e= 0;
1997 EQU839..x4C401 - x4C402 =e= 0;
1998 EQU840..x5C401 - x5C402 =e= 0;
1999 EQU841..(hC403 - hC402) - UE629*AE629*FE629*dTE629 =e= 0;
2000 EQU842..(hC402 - hC403) - (hHC04 - hHC03) =e= 0;
2001 EQU843..FHC03 - FHC04 =e= 0;
2002 EQU844..FC402 - FC403 =e= 0;
2003 EQU845..x5C402 - x5C403 =e= 0;
2004 EQU846..x4C402 - x4C403 =e= 0;
2005 EQU847..x3C402 - x3C403 =e= 0;
2006 EQU848..x1C402 - x1C403 =e= 0;
2007 EQU849..x5HC03 - x5HC04 =e= 0;
2008 EQU850..x4HC03 - x4HC04 =e= 0;
2009 EQU851..x3HC03 - x3HC04 =e= 0;
2010 EQU852..x2HC03 - x2HC04 =e= 0;
2011 EQU853..x1HC03 - x1HC04 =e= 0;
2012 EQU854..FHC04 - FHC05 =e= 0;
2013 EQU855..THC29 - THC30 =e= 0;
2014 EQU856..(FlHC29*x5HC29 + FvHC29*y5HC29) - (FlHC30*x5HC30 +
FvHC30*y5HC30) =e= 0;
2015 EQU857..(FlHC29*x4HC29 + FvHC29*y4HC29) - (FlHC30*x4HC30 +
FvHC30*y4HC30) =e= 0;
2016 EQU858..(FlHC29*x3HC29 + FvHC29*y3HC29) - (FlHC30*x3HC30 +
FvHC30*y3HC30) =e= 0;
2017 EQU859..(FlHC29*x1HC29 + FvHC29*y1HC29) - (FlHC30*x1HC30 +
FvHC30*y1HC30) =e= 0;
2018 EQU860..(hHC04 - hHC05) - UE633*AE633*dTE633 =e= 0;
2019 EQU861..(hHC04 - hHC05) - (hHC30 - hHC29) =e= 0;
2020 EQU862..(FlHC29 + FvHC29) - (FlHC30 + FvHC30) =e= 0;
2021 EQU863..x5HC04 - x5HC05 =e= 0;
2022 EQU864..x4HC04 - x4HC05 =e= 0;
2023 EQU865..x3HC04 - x3HC05 =e= 0;
2024 EQU866..x2HC04 - x2HC05 =e= 0;
2025 EQU867..x1HC04 - x1HC05 =e= 0;
2026 EQU868..dTE628 **3=e= ((THC02-TC401)*(THC01-TC402)*
2027 ((THC02-TC401)+(THC01-TC402))/2);
2028 EQU869..dTE629 **3=e= ((THC03-TC403)*(THC04-TC402)*
2029 ((THC03-TC403)*(THC04-TC402))/2);
2030 EQU870..hC309 - FC309 * ((x1C309/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC309,ORD(Coeff))))
2031 +(x3C309/MW3)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("3",Coeff) *
POWER(TC309,ORD(Coeff))))
2032 +(x4C309/MW4)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("4",Coeff)
*POWER(TC309,ORD(Coeff))))
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2033 +(x5C309/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC309,ORD(Coeff))))
2034 +(x7C309/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC309,ORD(Coeff)))) =e= 0;
2035 EQU871..THC34 - THC32 =e=0;
2036 EQU872..hHC34 - FHC34 * ((x1HC34/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC34,ORD(Coeff))))

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2037 +(x3HC34/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC34,ORD(Coeff))))
2038 +(x4HC34/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC34,ORD(Coeff))))
2039 +(x5HC34/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC34,ORD(Coeff))))
2040 +(x7HC34/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC34,ORD(Coeff)))) =e= 0;
2041 EQU873..hHC38 - FHC38 * ((x1HC38/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC38,ORD(Coeff))))
2042 +(x3HC38/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC38,ORD(Coeff))))
2043 +(x4HC38/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC38,ORD(Coeff))))
2044 +(x5HC38/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC38,ORD(Coeff))))
2045 +(x7HC38/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC38,ORD(Coeff)))) =e= 0;
2046 EQU874..THC38 - THC32 =e=0;
2047 EQU875..THC32 - THC41 =e= 0;
2048 EQU876..hHC41 - FHC41 * ((x1HC41/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC41,ORD(Coeff))))
2049 +(x3HC41/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC41,ORD(Coeff))))
2050 +(x4HC41/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC41,ORD(Coeff))))
2051 +(x5HC41/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC41,ORD(Coeff))))
2052 +(x7HC41/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC41,ORD(Coeff)))) =e= 0;
2053 EQU877..THC32 - THC45 =e=0;
2054 EQU878..hHC45 - FHC45 * ((x1HC45/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC45,ORD(Coeff))))
2055 +(x3HC45/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC45,ORD(Coeff))))
2056 +(x4HC45/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC45,ORD(Coeff))))
2057 +(x5HC45/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC45,ORD(Coeff))))
2058 +(x7HC45/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC45,ORD(Coeff)))) =e= 0;
2059 EQU879..hHC06 - FHC06 * ((x1HC06/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC06,ORD(Coeff))))
2060 +(x2HC06/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC06,ORD(Coeff))))
2061 +(x3HC06/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC06,ORD(Coeff))))
2062 +(x4HC06/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC06,ORD(Coeff))))
2063 +(x5HC06/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC06,ORD(Coeff))))
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2064 +(x7HC06/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC06,ORD(Coeff)))) =e= 0;
2065 EQU880..hHC06 -hHC02 - hHC05 =e= 0;
2066 EQU881..THC06 - THC07 =e= 0;
2067 EQU882..hHC07 - FHC07 * ((x1HC07/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC07,ORD(Coeff))))
2068 +(x2HC07/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC07,ORD(Coeff))))
2069 +(x3HC07/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC07,ORD(Coeff))))
2070 +(x4HC07/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC07,ORD(Coeff))))
2071 +(x5HC07/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC07,ORD(Coeff))))
2072 +(x7HC07/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC07,ORD(Coeff)))) =e= 0;
2073 EQU883..THC06 -THC11 =e=0;
2074 EQU884..hHC11 - FHC11 * ((x1HC11/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC11,ORD(Coeff))))
2075 +(x2HC11/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC11,ORD(Coeff))))
2076 +(x3HC11/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC11,ORD(Coeff))))
2077 +(x4HC11/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC11,ORD(Coeff))))
2078 +(x5HC11/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC11,ORD(Coeff))))
2079 +(x7HC11/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC11,ORD(Coeff)))) =e= 0;
2080 EQU885..THC06 -THC14 =e=0;
2081 EQU886..hHC14 - FHC14 * ((x1HC14/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC14,ORD(Coeff))))
2082 +(x2HC14/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC14,ORD(Coeff))))

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2083 +(x3HC14/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC14,ORD(Coeff))))
2084 +(x4HC14/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC14,ORD(Coeff))))
2085 +(x5HC14/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC14,ORD(Coeff))))
2086 +(x7HC14/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC14,ORD(Coeff)))) =e= 0;
2087 EQU887..THC06 -THC16 =e=0;
2088 EQU888..hHC16 - FHC16 * ((x1HC16/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC16,ORD(Coeff))))
2089 +(x2HC16/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC16,ORD(Coeff))))
2090 +(x3HC16/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC16,ORD(Coeff))))
2091 +(x4HC16/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC16,ORD(Coeff))))
2092 +(x5HC16/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC16,ORD(Coeff))))
2093 +(x7HC16/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC16,ORD(Coeff)))) =e= 0;
2094 EQU889..hc432 - FC432 *
2095 ((x3C432/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC432,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC432/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2096 +(x4C432/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC432,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC432/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2097 +(x5C432/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC432,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC432/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2098 +(x7C432/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC432,ORD(Coeff)))+Enth_Vap("7","a1")*1000 *
((1-TC432/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2099 EQU890..x1C432 + x3C432 + x4C432 + x5C432 + x7C432 =e= 1;
2100 EQU891..FmC432 - FC432 * (x1C432/MW1 + x3C432/MW3 + x4C432/MW4 +
x5C432/MW5 + x7C432/MW7)=e= 0;
2101 EQU892..xx3C432 * FmC432 * MW3 - FC432 * x3C432 =e= 0;
2102 EQU893..xx4C432 * FmC432 * MW4 - FC432 * x4C432 =e= 0;
2103 EQU894..x1C430 + x3C430 + x4C430 + x5C430 + x7C430 =e= 1;
2104 EQU895..FmC430 - FC430 * (x1C430/MW1 + x3C430/MW3 + x4C430/MW4 +
x5C430/MW5 + x7C430/MW7)=e= 0;
2105 EQU896..xx3C430 * FmC430 * MW3 - FC430 * x3C430 =e= 0;
2106 EQU897..hc430 - FC430 * ((x1C430/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC430,ORD(Coeff))))
2107 +(x3C430/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC430,ORD(Coeff))))
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2108 +(x4C430/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC430,ORD(Coeff))))
2109 +(x5C430/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC430,ORD(Coeff))))
2110 +(x7C430/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC430,ORD(Coeff)))) =e= 0;
2111 EQU898..xx4C430 * FmC430 * MW4 - FC430 * x4C430 =e= 0;
2112 EQU899..xx1HC28 + xx2HC28 + xx3HC28 + xx4HC28 + xx5HC28 + xx7HC28
=e= 1;
2113 EQU900..FmlHC28 - FlHC28 * (x1HC28/MW1 + x2HC28/MW2 + x3HC28/MW3
+ x4HC28/MW4 + x5HC28/MW5 + x7HC28/MW7)=e= 0;
2114 EQU901..yy1HC28 + yy2HC28 + yy3HC28 + yy4HC28 + yy5HC28 + yy7HC28
=e= 1;
2115 EQU902..FmvHC28 - FvHC28 * (y1HC28/MW1 + y2HC28/MW2 + y3HC28/MW3
+ y4HC28/MW4 + y5HC28/MW5 + y7HC28/MW7)=e= 0;
2116 EQU903..y1HC28+y2HC28+y3HC28+y4HC28+y5HC28+y7HC28 =e=1;
2117 EQU904..xx1HC28 * MW1 * FmlHC28 - FlHC28 * x1HC28 =e= 0 ;
2118 EQU905..xx3HC28 * MW3 * FmlHC28 - FlHC28 * x3HC28 =e= 0 ;
2119 EQU906..xx4HC28 * MW4 * FmlHC28 - FlHC28 * x4HC28 =e= 0;
2120 EQU907..xx5HC28 * MW5 * FmlHC28 - FlHC28 * x5HC28 =e= 0;
2121 EQU908..xx7HC28 * MW7 * FmlHC28 - FlHC28 * x7HC28 =e= 0;
2122 EQU909..yy7HC28 * MW7 * FmvHC28 - FvHC28 * y7HC28 =e= 0;
2123 EQU910..yy5HC28 * MW5 * FmvHC28 - FvHC28 * y5HC28 =e= 0;
2124 EQU911..yy4HC28 * MW4 * FmvHC28 - FvHC28 * y4HC28 =e= 0;

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2125 EQU912..yy3HC28 * MW3 * FmvHC28 - FvHC28 * y3HC28 =e= 0;
2126 EQU913..yy1HC28 * MW1 * FmvHC28 - FvHC28 * y1HC28 =e= 0;
2127 EQU914..FHC28 - FlHC28 - FvHC28 =e= 0;
2128 EQU915..FvHC28 - VFM3* FHC28 =e= 0;
2129 EQU916..xx1HC28 * K1M3 =e= yy1HC28;
2130 EQU917..K1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TnC606A-
5.261*LOG10(TnC606A)+3.282E-11*TnC606A+3.7349E-6*TnC606A**2);
2131 EQU918..xx2HC28 * K2M3 =e= yy2HC28;
2132 EQU919..xx3HC28 * K3M3 =e= yy3HC28;
2133 EQU920..xx4HC28 * K4M3 =e= yy4HC28;
2134 EQU921..xx5HC28 * K5M3 =e= yy5HC28;
2135 EQU922..xx7HC28 * K7M3 =e= yy7HC28;
2136 EQU923..hc427 - FC427 *
2137 ((x3C427/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC427,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
((1-TC427/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2138 +(x4C427/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC427,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *
((1-TC427/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2139 +(x5C427/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC427,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *
((1-TC427/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2140 +(x7C427/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC427,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *
((1-TC427/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2141 EQU924..x1C427 + x3C427 + x4C427 + x5C427 + x7C427 =e= 1;
2142 EQU925..FmC427 - FC427 * (x1C427/MW1 + x3C427/MW3 + x4C427/MW4 +
x5C427/MW5 + x7C427/MW7)=e= 0;
2143 EQU926..xx4C427 * FmC427 * MW4 - FC427 * x4C427 =e= 0;
2144 EQU927..K3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TnC606A-
8.806*LOG10(TnC606A)+8.9246E-11*TnC606A+5.7501E-6*TnC606A**2);
2145 EQU928..Kp3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TmC606A-
8.806*LOG10(TmC606A)+8.9246E-11*TmC606A+5.7501E-6*TmC606A**2)
;
2146 EQU929..K4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TnC606A-
7.1805*LOG10(TnC606A)-6.6845E-11*TnC606A+4.219E-6*TnC606A**2);
2147 EQU930..Kp4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TmC606A-
7.1805*LOG10(TmC606A)-6.6845E-11*TmC606A+4.219E-6*TmC606A**2)
;
2148 EQU931..K5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TnC606A-
7.883*LOG10(TnC606A)-4.6512E-11*TnC606A+3.8997E-6*TnC606A**2);
2149 EQU932..Kp5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TmC606A-
7.883*LOG10(TmC606A)-4.6512E-11*TmC606A+3.8997E-6*TmC606A**2)
;
```

2150 EQU933..K7C606A*PC606A =e= $0.1333 \cdot 10^{**}(33.0162 - 2.583E3/TnC606A - 9.042 \cdot \text{LOG}10(TnC606A) - 1.371E-12 \cdot TnC606A + 3.634E-6 \cdot TnC606A^{**2})$;
2151 EQU934..Kp7C606A*PC606A =e= $0.1333 \cdot 10^{**}(33.0162 - 2.583E3/TmC606A - 9.042 \cdot \text{LOG}10(TmC606A) - 1.371E-12 \cdot TmC606A + 3.634E-6 \cdot TmC606A^{**2})$;
2152 EQU935..Sn1C606A *FC322 =e= K1C606A*FC414;
2153 EQU936..Sm1C606A*LpC606A=e= Kp1C606A*VpC606A;
2154 EQU937..Sn3C606A *FC322 =e= K3C606A*FC414;
2155 EQU938..Sm3C606A*LpC606A=e= Kp3C606A*VpC606A;
2156 EQU939..Sn4C606A *FC322 =e= K4C606A*FC414;
2157 EQU940..Sm4C606A*LpC606A=e= Kp4C606A*VpC606A;
2158 EQU941..Sn5C606A *FC322 =e= K5C606A*FC414;
2159 EQU942..Sm5C606A*LpC606A=e= Kp5C606A*VpC606A;
2160 EQU943..Sn7C606A *FC322 =e= K7C606A*FC414;
2161 EQU944..Sm7C606A*LpC606A=e= Kp7C606A*VpC606A;
2162 EQU945..f1C606A*((1-Sn1C606A**(56-47))/1E20+ h1C606A*Sn1C606A**(56-47)*(1-Sm1C606A**(47+1))/1E20) =e= (1-Sn1C606A**(56-47))
/1E20+ qS1C606A*(Sn1C606A**(56-47)-
Sn1C606A)/1E20+qFp1C606A*h1C606A*Sn1C606A**(56-47)*(1-Sm1C606A**(47))/1E20

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2163 ;
2164 EQU946..f3C606A*((1-Sn3C606A**(56-47))/1E10+
h3C606A*Sn3C606A**(56-47)*(1-Sm3C606A**(47+1))/1E10) =e= (1-
Sn3C606A**(56-47))
/1E10+ qS3C606A*(Sn3C606A**(56-47)-
Sn3C606A)/1E10+qFp3C606A*h3C606A*Sn3C606A**(56-47)*(1-
Sm3C606A**47)/1E10
2165 ;
2166 EQU947..f4C606A*((1-Sn4C606A**(56-47))+ h4C606A*Sn4C606A**(56-
47)*(1-Sm4C606A**(47+1))) =e= (1-Sn4C606A**(56-47))+
qS4C606A*(Sn4C606A**(56-47)-
Sn4C606A)+qFp4C606A*h4C606A*Sn4C606A**(56-47)*(1-Sm4C606A**47)
2167 ;
2168 EQU948..f5C606A*((1-Sn5C606A**(56-47))+ h5C606A*Sn5C606A**(56-
47)*(1-Sm5C606A**(47+1))) =e= (1-Sn5C606A**(56-47))+
qS5C606A*(Sn5C606A**(56-47)-
Sn5C606A)+qFp5C606A*h5C606A*Sn5C606A**(56-47)*(1-Sm5C606A**47)
2169 ;
2170 EQU949..f7C606A*((1-Sn7C606A**(56-47))+ h7C606A*Sn7C606A**(56-
47)*(1-Sm7C606A**(47+1))) =e= (1-Sn7C606A**(56-47))+
qS7C606A*(Sn7C606A**(56-47)-
Sn7C606A)+qFp7C606A*h7C606A*Sn7C606A**(56-47)*(1-Sm7C606A**47)
2171 ;
2172 EQU950..f1C606A * (x1C404 * FC404 + x1C322 * FC322 + x1C432 *
FC432) =e= x1C430 * FC430;
2173 EQU951..f3C606A * (x3C404 * FC404 + x3C322 * FC322 + x3C432 *
FC432) =e= x3C430 * FC430;
2174 EQU952..f4C606A * (x4C404 * FC404 + x4C322 * FC322 + x4C432 *
FC432) =e= x4C430 * FC430;
2175 EQU953..f5C606A * (x5C404 * FC404 + x5C322 * FC322 + x5C432 *
FC432) =e= x5C430 * FC430;
2176 EQU954..f7C606A * (x7C404 * FC404 + x7C322 * FC322 + x7C432 *
FC432) =e= x7C430 * FC430;
2177 EQU955..h1C606A*LpC606A*(1-Sm1C606A) =e= FC322*(1-Sn1C606A);
2178 EQU956..h3C606A*LpC606A*(1-Sm3C606A) =e= FC322*(1-Sn3C606A);
2179 EQU957..h4C606A*LpC606A*(1-Sm4C606A) =e= FC322*(1-Sn4C606A);
2180 EQU958..Kp1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TmC606A-
5.261*LOG10(TmC606A)+3.282E-11*TmC606A+3.7349E-6*TmC606A**2);
2181 EQU959..FmC414 - FC414 * (x1C414/MW1 + x3C414/MW3 + x4C414/MW4 +
x5C414/MW5 + x7C414/MW7 )=e= 0;
2182 EQU960..xx3C414 * FmC414 * MW3 - FC414 * x3C414 =e= 0;
2183 EQU961..hC322 - FC322 * ((x1C322/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC322,ORD(Coeff))))
2184 +(x3C322/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC322,ORD(Coeff))))
2185 +(x4C322/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC322,ORD(Coeff))))
2186 +(x5C322/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC322,ORD(Coeff))))
2187 +(x7C322/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC322,ORD(Coeff)))) =e= 0;
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2188 EQU962..xx3C322 * FmC322 * MW3 - FC322 * x3C322 =e= 0;
 2189 EQU963..FC427 -FC431 =e= 0;
 2190 EQU964..TC431 - TC425 =e= 0;
 2191 EQU965..x1C428 + x3C428 + x4C428 + x5C428 + x7C428 =e= 1;
 2192 EQU966..FmC428 - FC428 * (x1C428/MW1 + x3C428/MW3 + x4C428/MW4 +
 x5C428/MW5 + x7C428/MW7)=e= 0;
 2193 EQU967..xx4C428 * FmC428 * MW4 - FC428 * x4C428 =e= 0;
 2194 EQU968..x1C425 + x3C425 + x4C425 + x5C425 + x7C425 =e= 1;
 2195 EQU969..FmC425 - FC425 * (x1C425/MW1 + x3C425/MW3 + x4C425/MW4 +
 x5C425/MW5 + x7C425/MW7)=e= 0;
 2196 EQU970..xx4C425 * FmC425 * MW4 - FC425 * x4C425 =e= 0;
 2197 EQU971..x1C408 - x1C405 =e= 0;
 2198 EQU972..x3C408 - x3C405 =e= 0;
 2199 EQU973..x4C408 - x4C405 =e= 0;
 2200 EQU974..x5C408 - x5C405 =e= 0;
 2201 EQU975..xM1C606D * FC426**2 *(Sm1C606D-1)=e= FC405 * x1C405 *
 (FC428*Kp1C606D*(Sm1C606D**(13-1)-1) + FC426*(Sm1C606D-1));
 2202 EQU976..h5C606A*LpC606A*(1-Sm5C606A) =e= FC322*(1-Sn5C606A);
 2203 EQU977..h7C606A*LpC606A*(1-Sm7C606A) =e= FC322*(1-Sn7C606A);
 2204 EQU978..FC404 * x1C404 + FC432*x1C432 + FC322*x1C322- FC414 *
 x1C414 - FC430*x1C430 =e= 0;

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2205 EQU979..FC404 * x3C404 + FC432*x3C432 + FC322*x3C322- FC414 *
x3C414 - FC430*x3C430 =e= 0;
2206 EQU980..FC404 * x4C404 + FC432*x4C432 + FC322*x4C322- FC414 *
x4C414 - FC430*x4C430 =e= 0;
2207 EQU981..FC404 * x5C404 + FC432*x5C432 + FC322*x5C322- FC414 *
x5C414 - FC430*x5C430 =e= 0;
2208 EQU982..qS1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
=e= FC322*x1C322;
2209 EQU983..qS3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
=e= FC322*x3C322;
2210 EQU984..qS5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
=e= FC322*x5C322;
2211 EQU985..qS4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
=e= FC322*x4C322;
2212 EQU986..xAC02 * (2* x11AC02/98.08 + (1-x11AC02)/360)*98.08 -
x11AC02 =e= 0;
2213 EQU987..hAC02*(80.06*xAC02 + 360*(1- xAC02)) /1E2- FAC02 *
4.184E3* (-145.8407 * x11AC02 /1E2+ 9.739e-03 * (TAC02-273) /1E2+
8.024e-03 * (TAC02-273) *
x11AC02 /1E2+ 83.615 * x11AC02 * x11AC02/1E2 + 65.3921/1E2) =e= 0;
2214 EQU988..xAC05 * (2* x11AC05/98.08 + (1-x11AC05)/360) -
x11AC05/98.08 =e= 0;
2215 EQU989..hAC05*(80.06*xAC05 + 360*(1- xAC05))/1E2 - FAC05 *
4.184E3* (-145.8407 * x11AC05/1E2 + 9.739e-03 * (TAC05-273)/1E2 +
8.024e-03 * (TAC05-273) *
x11AC05/1E2 + 83.615 * x11AC05 * x11AC05/1E2 + 65.3921/1E2) =e= 0;
2216 EQU990..hAC07*(80.06*xAC07 + 360*(1- xAC07))/1E2 - FAC07 *
4.184E3* (-145.8407 * x11AC07/1E2 + 9.739e-03 * (TAC07-273) /1E2+
8.024e-03 * (TAC07-273) *
x11AC07/1E2 + 83.615 * x11AC07 * x11AC07/1E2 + 65.3921/1E2) =e= 0;
2217 EQU991..xAC07 * (2* x11AC07/98.08 + (1-x11AC07)/360) -
x11AC07/98.08 =e= 0;
2218 EQU992..hAC09 - FAC09 * ((x1AC09/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC09,ORD(Coeff))))
2219 +(x3AC09/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC09,ORD(Coeff))))
2220 +(x4AC09/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC09,ORD(Coeff))))
2221 +(x5AC09/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC09,ORD(Coeff))))
2222 +(x7AC09/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC09,ORD(Coeff))))
2223 +(x8AC09/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC09,ORD(Coeff))))
2224 +(x9AC09/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC09,ORD(Coeff))))
2225 + 3 * (x10AC09/MW10)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("10",Coeff) *POWER(TAC09,ORD(Coeff)))) - hacAC09 =e= 0;
2226 EQU993..xAC09 * (2* x11AC09/98.08 + (1-x11AC09)/360) -
x11AC09/98.08 =e= 0;
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2227 EQU994..hacAC09*(80.06*xAC09 + 360*(1- xAC09))/1E2 - FAC09 *
4.184E3* (-145.8407 * x11AC09/1E2 + 9.739e-03 * (TAC09-273)
/1E2+ 8.024e-03 * (TAC09-273) *
x11AC09 /1E2+ 83.615 * x11AC09 * x11AC09 /1E2+ 65.3921/1E2) =e= 0;
2228 EQU995..xAC12 * (2* x11AC12/98.08 + (1-x11AC12)/360) -
x11AC12/98.08 =e= 0;
2229 EQU996..hAC12*(80.06*xAC12 + 360*(1- xAC12)) /1E2- FAC12 *
4.184E3* (-145.8407 * x11AC12 /1E2+ 9.739e-03 * (TAC12-273) /1E2+
8.024e-03 * (TAC12-273) *
x11AC12 /1E2+ 83.615 * x11AC12 * x11AC12 /1E2+ 65.3921/1E2) =e= 0;
2230 EQU997..hAC15*(80.06*xAC15 + 360*(1- xAC15))/1E2 - FAC15 *
4.184E3* (-145.8407 * x11AC15 /1E2+ 9.739e-03 * (TAC15-273) /1E2+
8.024e-03 * (TAC15-273) *
x11AC15 /1E2+ 83.615 * x11AC15 * x11AC15/1E2 + 65.3921/1E2) =e= 0;
2231 EQU998..xAC15 * (2* x11AC15/98.08 + (1-x11AC15)/360) -
x11AC15/98.08 =e= 0;
2232 EQU999..hAC18*(80.06*xAC18 + 360*(1- xAC18))/1E2 - FAC18 *
4.184E3* (-145.8407 * x11AC18 /1E2+ 9.739e-03 * (TAC18-273)/1E2 +
8.024e-03 * (TAC18-273) *
x11AC18/1E2 + 83.615 * x11AC18 * x11AC18/1E2 + 65.3921/1E2) =e= 0;
2233 EQU1000..xAC18 * (2* x11AC18/98.08 + (1-x11AC18)/360) -
x11AC18/98.08 =e= 0;
2234 EQU1001..hacAC20*(80.06*xAC20 + 360*(1- xAC20))/1E2 - FAC20 *
4.184E3* (-145.8407 * x11AC20/1E2 + 9.739e-03 * (TAC20-273)
/1E2+ 8.024e-03 * (TAC20-273) *
x11AC20 /1E2+ 83.615 * x11AC20 * x11AC20 /1E2+ 65.3921/1E2) =e= 0;
2235 EQU1002..hAC20 - FAC20 * ((x1AC20/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC20,ORD(Coeff))))
2236 +(x3AC20/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC20,ORD(Coeff))))
2237 +(x4AC20/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC20,ORD(Coeff))))
2238 +(x5AC20/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC20,ORD(Coeff))))
2239 +(x7AC20/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC20,ORD(Coeff))))
2240 +(x8AC20/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff) *
POWER(TAC20,ORD(Coeff))))
2241 +(x9AC20/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC20,ORD(Coeff))))
2242 + 3 * (x10AC20/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC20,ORD(Coeff)))) - hacAC20 =e= 0;

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2243 EQU1003..xAC20 * (2* x11AC20/98.08 + (1-x11AC20)/360) -
x11AC20/98.08 =e= 0;
2244 EQU1004..hAC23*(80.06*xAC23 + 360*(1- xAC23))/1E2 - FAC23 *
4.184E3* (-145.8407 * x11AC23 /1E2+ 9.739e-03 * (TAC23-273) /1E2+
8.024e-03 * (TAC23-273) *
x11AC23 /1E2+ 83.615 * x11AC23 * x11AC23 /1E2+ 65.3921/1E2) =e= 0;
2245 EQU1005..xAC23 * (2* x11AC23/98.08 + (1-x11AC23)/360) -
x11AC23/98.08 =e= 0;
2246 EQU1006..hAC26*(80.06*xAC26 + 360*(1- xAC26))/1E2 - FAC26 *
4.184E3* (-145.8407 * x11AC26 /1E2+ 9.739e-03 * (TAC26-273)/1E2 +
8.024e-03 * (TAC26-273) *
x11AC23 /1E2+ 83.615 * x11AC26 * x11AC26 /1E2+ 65.3921/1E2) =e= 0;
2247 EQU1007..xAC26 * (2* x11AC26/98.08 + (1-x11AC26)/360) -
x11AC26/98.08 =e= 0;
2248 EQU1008..hAC29*(80.06*xAC29 + 360*(1- xAC29))/1E2 - FAC29 *
4.184E3* (-145.8407 * x11AC29 /1E2+ 9.739e-03 * (TAC29-273) /1E2+
8.024e-03 * (TAC29-273) *
x11AC29/1E2 + 83.615 * x11AC29 * x11AC29 /1E2+ 65.3921/1E2) =e= 0;
2249 EQU1009..xAC29 * (2* x11AC29/98.08 + (1-x11AC29)/360) -
x11AC29/98.08 =e= 0;
2250 EQU1010..hacAC31*(80.06*xAC31 + 360*(1- xAC31))/1E2 - FAC31 *
4.184E3* (-145.8407 * x11AC31/1E2 + 9.739e-03 * (TAC31-273)
/1E2+ 8.024e-03 * (TAC31-273) *
x11AC31/1E2 + 83.615 * x11AC31 * x11AC31/1E2 + 65.3921/1E2) =e= 0;
2251 EQU1011..hAC31 - FAC31 * ((x1AC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC31,ORD(Coeff))))
2252 +(x3AC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC31,ORD(Coeff))))
2253 +(x4AC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC31,ORD(Coeff))))
2254 +(x5AC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC31,ORD(Coeff))))
2255 +(x7AC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC31,ORD(Coeff))))
2256 +(x8AC31/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC31,ORD(Coeff))))
2257 +(x9AC31/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC31,ORD(Coeff))))
2258 + 3 * (x10AC31/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC31,ORD(Coeff)))) - hacAC31 =e= 0;
2259 EQU1012..xAC31 * (2* x11AC31/98.08 + (1-x11AC31)/360) -
x11AC31/98.08 =e= 0;
2260 EQU1013..hAC34*(80.06*xAC34 + 360*(1- xAC34)) /1E2- FAC34 *
4.184E3* (-145.8407 * x11AC34 /1E2+ 9.739e-03 * (TAC34-273) /1E2+
8.024e-03 * (TAC34-273) *
x11AC34/1E2 + 83.615 * x11AC34 * x11AC34 /1E2+ 65.3921/1E2) =e= 0;
2261 EQU1014..xAC34 * (2* x11AC34/98.08 + (1-x11AC34)/360) -
x11AC34/98.08 =e= 0;
2262 EQU1015..qS7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC322*x7C322;
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2263 EQU1016..qFp1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
 =e= FC432*x1C432;
 2264 EQU1017..qFp3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
 =e= FC432*x3C432;
 2265 EQU1018..xM3C606D * FC426**2 * (Sm3C606D-1)=e= FC405 * x3C405 *
 (FC428*Kp3C606D*(Sm3C606D**(13-1)-1) + FC426*(Sm3C606D-1));
 2266 EQU1019..FmC409 - FC409 * (x1C409/MW1 + x3C409/MW3 + x4C409/MW4 +
 x5C409/MW5 + x7C409/MW7)=e= 0;
 2267 EQU1020..xx4C409 * FmC409 * MW4 - FC409 * x4C409 =e= 0;
 2268 EQU1021..FmC408 - FC408 * (x1C408/MW1 + x3C408/MW3 + x4C408/MW4 +
 x5C408/MW5 + x7C408/MW7)=e= 0;
 2269 EQU1022..xx1C408 * FmC408 * MW1 - FC408 * x1C408 =e= 0;
 2270 EQU1023..xx3C408 * FmC408 * MW3 - FC408 * x3C408 =e= 0;
 2271 EQU1024..xx4C408 * FmC408 * MW4 - FC408 * x4C408 =e= 0;
 2272 EQU1025..xx5C408 * FmC408 * MW5 - FC408 * x5C408 =e= 0;
 2273 EQU1026..xx1C408 + xx3C408 + xx4C408 + xx5C408 + xx7C408 =e= 1;
 2274 EQU1027..FmC405 - FC405 * (x1C405/MW1 + x3C405/MW3 + x4C405/MW4 +
 x5C405/MW5 + x7C405/MW7)=e= 0;
 2275 EQU1028..xx1C405 * FmC405 * MW1 - FC405 * x1C405 =e= 0;
 2276 EQU1029..xx3C405 * FmC405 * MW3 - FC405 * x3C405 =e= 0;
 2277 EQU1030..xx4C405 * FmC405 * MW4 - FC405 * x4C405 =e= 0;
 2278 EQU1031..xx5C405 * FmC405 * MW5 - FC405 * x5C405 =e= 0;
 2279 EQU1032..xx7C405 * FmC405 * MW7 - FC405 * x7C405 =e= 0;
 2280 EQU1033..FC427 - FC428 - FC411 =e= 0;
 2281 EQU1034..hAC37*(80.06*xAC37 + 360*(1- xAC37)) /1E2- FAC37 *
 4.184E3* (-145.8407 * x11AC37/1E2 + 9.739e-03 * (TAC37-273)/1E2 +
 8.024e-03 * (TAC37-273)) *
 x11AC37 /1E2+ 83.615 * x11AC37 * x11AC37/1E2 + 65.3921/1E2) =e= 0;
 2282 EQU1035..xAC37 * (2* x11AC37/98.08 + (1-x11AC37)/360) -
 x11AC37/98.08 =e= 0;

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2283 EQU1036..hacAC40*(80.06*xAC40 + 360*(1- xAC40))/1E2 - FAC40 *
4.184E3* (-145.8407 * x11AC40 /1E2+ 9.739e-03 * (TAC40-273)/1E2 +
8.024e-03 * (TAC40-273) *
x11AC40/1E2 + 83.615 * x11AC40 * x11AC40/1E2 + 65.3921/1E2) =e= 0;
2284 EQU1037..hacAC42*(80.06*xAC42 + 360*(1- xAC42))/1E2 - FAC42 *
4.184E3* (-145.8407 * x11AC42/1E2 + 9.739e-03 * (TAC42-273)/1E2
+ 8.024e-03 * (TAC42-273) *
x11AC42/1E2 + 83.615 * x11AC42 * x11AC42/1E2 + 65.3921/1E2) =e= 0;
2285 EQU1038..xAC40 * (2* x11AC40/98.08 + (1-x11AC40)/360) -
x11AC40/98.08 =e= 0;
2286 EQU1039..xAC42 * (2* x11AC42/98.08 + (1-x11AC42)/360) -
x11AC42/98.08 =e= 0;
2287 EQU1040..hacAC42 - FAC42 * ((x1AC42/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC42,ORD(Coeff))))
2288 +(x3AC42/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC42,ORD(Coeff))))
2289 +(x4AC42/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC42,ORD(Coeff))))
2290 +(x5AC42/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC42,ORD(Coeff))))
2291 +(x7AC42/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC42,ORD(Coeff))))
2292 +(x8AC42/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC42,ORD(Coeff))))
2293 +(x9AC42/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC42,ORD(Coeff))))
2294 + 3 * (x10AC42/MW10)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("10",Coeff) *POWER(TAC42,ORD(Coeff)))) - hacAC42 =e= 0;
2295 EQU1041..x1HC28 -x1HC29 =e= 0;
2296 EQU1042..x2HC28 -x2HC29 =e= 0;
2297 EQU1043..x3HC28 -x3HC29 =e= 0;
2298 EQU1044..x4HC28 -x4HC29 =e= 0;
2299 EQU1045..x5HC28 -x5HC29 =e= 0;
2300 EQU1046..x1HC28 -x1R1 =e= 0;
2301 EQU1047..x2HC28 -x2R1 =e= 0;
2302 EQU1048..x3HC28 -x3R1 =e= 0;
2303 EQU1049..x4HC28 -x4R1 =e= 0;
2304 EQU1050..x5HC28 -x5R1 =e= 0;
2305 EQU1051..y1HC28 -y1HC29 =e= 0;
2306 EQU1052..y2HC28 -y2HC29 =e= 0;
2307 EQU1053..y3HC28 -y3HC29 =e= 0;
2308 EQU1054..y4HC28 -y4HC29 =e= 0;
2309 EQU1055..y5HC28 -y5HC29 =e= 0;
2310 EQU1056..y1HC28 -y1R1 =e= 0;
2311 EQU1057..y2HC28 -y2R1 =e= 0;
2312 EQU1058..y3HC28 -y3R1 =e= 0;
2313 EQU1059..y4HC28 -y4R1 =e= 0;
2314 EQU1060..TC425 - TC410 =e= 0;
2315 EQU1061..TC425 - TC426 =e= 0;
2316 EQU1062..TC432 - TC431 =e= 0;
2317 EQU1063..TC431 - TC412 =e= 0;
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2318 EQU1064..y5HC28 -y5R1 =e= 0;
2319 EQU1065..THC28 -TR1 =e= 0;
2320 EQU1066..THC28 -THC29 =e= 0;
2321 EQU1067..x1HC29 + x2HC29 + x3HC29 + x4HC29 + x5HC29 + x7HC29 =e=
1;
2322 EQU1068..y1HC29 + y2HC29 + y3HC29 + y4HC29 + y5HC29 + y7HC29 =e=
1;
2323 EQU1069..hvHC30 - FvHC30*((y1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC30/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2324 +(y3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC30/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))

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2325 +(y4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC30/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2326 +(y5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC30/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2327 +(y7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC30/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2328 EQU1070..hHC30 - hlHC30 - hvHC30 =e= 0;
2329 EQU1071..FHC30 - FlHC30 - FvHC30 =e= 0;
2330 EQU1072..hlHC30 - FlHC30*((x1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff))))
2331 +(x3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff))))
2332 +(x4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff))))
2333 +(x5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff))))
2334 +(x7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff)))) =e= 0;
2335 EQU1073..x1HC30 + x2HC30 + x3HC30 + x4HC30 + x5HC30 + x7HC30 =e=
1;
2336 EQU1074..y1HC30 + y2HC30 + y3HC30 + y4HC30 + y5HC30 + y7HC30 =e=
1;
2337 EQU1075..hvr29 - Fvr29*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff)))+ Enth_Vap("1","a1")
*1000 * ((1-TR29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2338 +(y3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR29/Enth_Va
ap("3","a2"))**Enth_Vap("3","a3")))
2339 +(y4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR29/Enth_Va
p("4","a2"))**Enth_Vap("4","a3")))
2340 +(y5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR29/Enth_Va
p("5","a2"))**Enth_Vap("5","a3")))
2341 +(y7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR29/Enth_Va
p("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2342 EQU1076..y1R29 + y2R29 + y3R29 + y4R29 + y5R29 + y7R29 =e= 1;
2343 EQU1077..hlR29 - FlR29*((x1R29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff))))
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2344 +(x3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff))))
2345 +(x4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff))))
2346 +(x5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff))))
2347 +(x7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))) =e= 0;
2348 EQU1078..x1R29 + x2R29 + x3R29 + x4R29 + x5R29 + x7R29 =e= 1;
2349 EQU1079..hR29 - h1R29 - hvR29 =e= 0;
2350 EQU1080..FR29 - F1R29 -FvR29 =e= 0;
2351 EQU1081..hvHC31 - FvHC31*((y1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC31/Enth_Vap("1","a2"))**Enth_Vap("1","a3"))))
2352 +(y3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC31/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2353 +(y4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC31/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2354 +(y5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC31/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2355 +(y7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC31/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2356 EQU1082..hHC31 - h1HC31 - hvHC31 =e= 0;
2357 EQU1083..FHC31 - F1HC31 - FvHC31 =e= 0;

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2358 EQU1084..hlHC31 - FlHC31*((x1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff))))
2359 +(x3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff))))
2360 +(x4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff))))
2361 +(x5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff))))
2362 +(x7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))) =e= 0;
2363 EQU1085..x1HC31 + x2HC31 + x3HC31 + x4HC31 + x5HC31 + x7HC31 =e=
1;
2364 EQU1086..y1HC31 + y2HC31 + y3HC31 + y4HC31 + y5HC31 + y7HC31 =e=
1;
2365 EQU1087..qFp4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
=e= FC432*x4C432;
2366 EQU1088..qFp5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
=e= FC432*x5C432;
2367 EQU1089..qFp7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC432*x7C432;
2368 EQU1090..K1C430*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TC430-
5.261*LOG10(TC430)+3.282E-11*TC430+3.7349E-6*TC430**2);
2369 EQU1091..K3C430*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TC430-
8.806*LOG10(TC430)+8.9246E-11*TC430+5.7501E-6*TC430**2);
2370 EQU1092..K4C430*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TC430-
7.1805*LOG10(TC430)-6.6845E-11*TC430+4.219E-6*TC430**2);
2371 EQU1093..K5C430*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC430-
7.883*LOG10(TC430)-4.6512E-11*TC430+3.8997E-6*TC430**2);
2372 EQU1094..K7C430*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC430-
9.042*LOG10(TC430)-1.371E-12*TC430+3.634E-6*TC430**2);
2373
EQU1095..K1C430*xx1C430+K3C430*xx3C430+K4C430*xx4C430+K5C430*xx5C430+K7
C430*xx7C430 =e= 1;
2374 EQU1096..xx1C430+xx3C430+xx4C430+xx5C430+xx7C430 =e= 1;
2375 EQU1097..xx1C430 * FmC430 * MW1 - FC430 * x1C430 =e= 0;
2376 EQU1098..xx5C430 * FmC430 * MW5 - FC430 * x5C430 =e= 0;
2377 EQU1099..xx1C414+xx3C414+xx4C414+xx5C414+xx7C414 =e= 1;
2378 EQU1100..K1C414*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TC414-
5.261*LOG10(TC414)+3.282E-11*TC414+3.7349E-6*TC414**2);
2379 EQU1101..K3C414*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TC414-
8.806*LOG10(TC414)+8.9246E-11*TC414+5.7501E-6*TC414**2);
2380 EQU1102..K4C414*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TC414-
7.1805*LOG10(TC414)-6.6845E-11*TC414+4.219E-6*TC414**2);
2381 EQU1103..K5C414*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC414-
7.883*LOG10(TC414)-4.6512E-11*TC414+3.8997E-6*TC414**2);
2382 EQU1104..K7C414*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC414-
9.042*LOG10(TC414)-1.371E-12*TC414+3.634E-6*TC414**2);
2383
EQU1105..xx1C414/K1C414+xx3C414/K3C414+xx4C414/K4C414+xx5C414/K5C414+xx
7C414/K7C414 =e= 1;
2384 EQU1106..xx1C414 * FmC414 * MW1 - FC414 * x1C414 =e= 0;
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2385 EQU1107..xx4C414 * FmC414 * MW4 - FC414 * x4C414 =e= 0;
2386 EQU1108..xx7C414 * FmC414 * MW7 - FC414 * x7C414 =e= 0;
2387 EQU1109..FC425 - FC430 =e=0;
2388 EQU1110..x1C431 + x3C431 + x4C431 + x5C431 + x7C431 =e= 1;
2389 EQU1111..FmC431 - FC431 * (x1C431/MW1 + x3C431/MW3 + x4C431/MW4 +
x5C431/MW5 + x7C431/MW7)=e= 0;
2390 EQU1112..xx4C431 * FmC431 * MW4 - FC431 * x4C431 =e= 0;
2391 EQU1113..xx1C425*K1C606C =e= xx1C431;
2392 EQU1114..xx3C425*K3C606C =e= xx3C431;
2393 EQU1115..xx4C425*K4C606C =e= xx4C431;
2394 EQU1116..xx5C425*K5C606C =e= xx5C431;
2395 EQU1117..xx1C431 * FmC431 * MW1 - FC431 * x1C431 =e= 0;
2396 EQU1118..xx3C431 * FmC431 * MW3 - FC431 * x3C431 =e= 0;
2397 EQU1119..xx5C431 * FmC431 * MW5 - FC431 * x5C431 =e= 0;
2398 EQU1120..xx1C431+ xx3C431+ xx4C431+ xx5C431+ xx7C431 =e= 1;
2399 EQU1121..xx1C425 * FmC425 * MW1 - FC425 * x1C425 =e= 0;
2400 EQU1122..xx3C425 * FmC425 * MW3 - FC425 * x3C425 =e= 0;
2401 EQU1123..xx5C425 * FmC425 * MW5 - FC425 * x5C425 =e= 0;
2402 EQU1124..xx1C425 + xx3C425 +xx4C425 +xx5C425 +xx7C425 =e=1 ;
2403 EQU1125..K1C606C*PC606C =e= 0.1333*10**(21.4469-1.4627E3/TC425-
5.261*LOG10(TC425)+3.282E-11*TC425+3.7349E-6*TC425**2);

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2404 EQU1126..K3C606C*PC606C =e= 0.1333*10**(31.2541-1.9532E3/TC425-
8.806*LOG10(TC425)+8.9246E-11*TC425+5.7501E-6*TC425**2);
2405 EQU1127..K4C606C*PC606C =e= 0.1333*10**(27.0441-1.9049E3/TC425-
7.1805*LOG10(TC425)-6.6845E-11*TC425+4.219E-6*TC425**2);
2406 EQU1128..K5C606C*PC606C =e= 0.1333*10**(29.2963-2.1762E3/TC425-
7.883*LOG10(TC425)-4.6512E-11*TC425+3.8997E-6*TC425**2);
2407 EQU1129..xM4C606D * FC426**2 *(Sm4C606D-1)=e= FC405 * x4C405 *
(FC428*Kp4C606D*(Sm4C606D**(13-1)-1) + FC426*(Sm4C606D-1));
2408 EQU1130..xM5C606D * FC426**2 *(Sm5C606D-1)=e= FC405 * x5C405 *
(FC428*Kp5C606D*(Sm5C606D**(13-1)-1) + FC426*(Sm5C606D-1));
2409 EQU1131..xM7C606D * FC426**2 * (Sm7C606D-1)=e= FC405 * x7C405 *
(FC428*Kp7C606D*(Sm7C606D**(13-1)-1) + FC426*(Sm7C606D-1));
2410 EQU1132..xM1C606D + xM3C606D + xM4C606D + xM5C606D + xM7C606D
=e=1;
2411 EQU1133..xx3C428 * FmC428 * MW3 - FC428 * x3C428 =e= 0;
2412 EQU1134..xx1C428 * FmC428 * MW1 - FC428 * x1C428 =e= 0;
2413 EQU1135..xx5C428 * FmC428 * MW5 - FC428 * x5C428 =e= 0;
2414 EQU1136..xx1C428 + xx3C428 + xx4C428 + xx5C428 + xx7C428 =e=1;
2415 EQU1137..K1C428*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC428-
5.261*LOG10(TC428)+3.282E-11*TC428+3.7349E-6*TC428**2);
2416 EQU1138..K3C428*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC428-
8.806*LOG10(TC428)+8.9246E-11*TC428+5.7501E-6*TC428**2);
2417 EQU1139..K4C428*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC428-
7.1805*LOG10(TC428)-6.6845E-11*TC428+4.219E-6*TC428**2);
2418 EQU1140..K5C428*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC428-
7.883*LOG10(TC428)-4.6512E-11*TC428+3.8997E-6*TC428**2);
2419 EQU1141..K7C428*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC428-
9.042*LOG10(TC428)-1.371E-12*TC428+3.634E-6*TC428**2);
2420 EQU1142..xM1C606D*K1C428 =e= xx1C428;
2421 EQU1143..xM3C606D*K3C428 =e= xx3C428;
2422 EQU1144..xM4C606D*K4C428 =e= xx4C428;
2423 EQU1145..xM5C606D*K5C428 =e= xx5C428;
2424 EQU1146..Kp1C606D*PC606D =e= 0.1333*10**(21.4469-
1.4627E3/TmC606D-5.261*LOG10(TmC606D)+3.282E-11*TmC606D+3.7349E-
6*TmC606D**2)
;
2425 EQU1147..Kp3C606D*PC606D =e= 0.1333*10**(31.2541-
1.9532E3/TmC606D-8.806*LOG10(TmC606D)+8.9246E-11*TmC606D+5.7501E-
6*TmC606D**2)
);
2426 EQU1148..Kp4C606D*PC606D =e= 0.1333*10**(27.0441-
1.9049E3/TmC606D-7.1805*LOG10(TmC606D)-6.6845E-11*TmC606D+4.219E-
6*TmC606D**2)
);
2427 EQU1149..Kp5C606D*PC606D =e= 0.1333*10**(29.2963-
2.1762E3/TmC606D-7.883*LOG10(TmC606D)-4.6512E-11*TmC606D+3.8997E-
6*TmC606D**2)
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);
2428 EQU1150..Kp7C606D*PC606D =e= 0.1333*10**(33.0162-2.583E3/TmC606D-
9.042*LOG10(TmC606D)-1.371E-12*TmC606D+3.634E-6*TmC606D**2);
2429 EQU1151..TmC606D * 2 =e= TC428 + TC405;
2430 EQU1152..Sm1C606D*FC426 =e= K1C428 * FC428;
2431 EQU1153..Sm3C606D*FC426 =e= K3C428 * FC428;
2432 EQU1154..Sm4C606D*FC426 =e= K4C428 * FC428;
2433 EQU1155..Sm5C606D*FC426 =e= K5C428 * FC428;
2434 EQU1156..Sm7C606D*FC426 =e= K7C428 * FC428;
2435 EQU1157..K1C408*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC408-
5.261*LOG10(TC408)+3.282E-11*TC408+3.7349E-6*TC408**2);
2436 EQU1158..K3C408*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC408-
8.806*LOG10(TC408)+8.9246E-11*TC408+5.7501E-6*TC408**2);
2437 EQU1159..K4C408*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC408-
7.1805*LOG10(TC408)-6.6845E-11*TC408+4.219E-6*TC408**2);
2438 EQU1160..K2E6XX*PR29 =e=1.05*PE633;
2439 EQU1161..K3E6XX*PR29 =e= 1.25*PE633;
2440 EQU1162..K4E6XX*PR29 =e=0.82*PE633;
2441 EQU1163..K5E6XX*PR29 =e=0.28*PE633;
2442 EQU1164..K7E6XX*PR29 =e=0.068*PE633;
2443 EQU1165..hC623 =e= hAC09 - hAC07 - hHC07 - hHC34 ;
2444 EQU1166..hC625 =e= hAC20 - hAC18 - hHC11 - hHC38;
2445 EQU1167..hC627 =e= hAC31 - hAC29 - hHC14 - hHC41;

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2446 EQU1168..hC629 =e= hAC42 - hAC40 - hHC16 - hHC45;
2447 EQU1169..FHC30 + FR29 =e= FHC31;
2448 EQU1170..FvHC30 + FvR29 =e= FvHC31;
2449 EQU1171..FvHC30*y1HC30 + FvR29*y1R29 =e= FvHC31*y1HC31;
2450 EQU1172..FvHC30*y3HC30 + FvR29*y3R29 =e= FvHC31*y3HC31;
2451 EQU1173..FvHC30*y4HC30 + FvR29*y4R29 =e= FvHC31*y4HC31;
2452 EQU1174..FvHC30*y5HC30 + FvR29*y5R29 =e= FvHC31*y5HC31;
2453 EQU1175..FvHC30*y7HC30 + FvR29*y7R29 =e= FvHC31*y7HC31;
2454 EQU1176..FlHC30*x1HC30 + FlR29*x1R29 =e= FlHC31*x1HC31;
2455 EQU1177..FlHC30*x3HC30 + FlR29*x3R29 =e= FlHC31*x3HC31;
2456 EQU1178..FlHC30*x4HC30 + FlR29*x4R29 =e= FlHC31*x4HC31;
2457 EQU1179..FlHC30*x5HC30 + FlR29*x5R29 =e= FlHC31*x5HC31;
2458 EQU1180..FlHC30*x7HC30 + FlR29*x7R29 =e= FlHC31*x7HC31;
2459 EQU1181..FC301 - FvHC31 =e= 0;
2460 EQU1182..x1C301 - y1HC31 =e=0;
2461 EQU1183..x7C301 - y7HC31 =e=0;
2462 EQU1184..x3C301 - y3HC31 =e=0;
2463 EQU1185..x4C301 - y4HC31 =e=0;
2464 EQU1186..x5C301 - y5HC31 =e=0;
2465 EQU1187..FC401 - FlHC31 =e= 0;
2466 EQU1188..x1C401 - x1HC31 =e=0;
2467 EQU1189..x3C401 - x3HC31 =e=0;
2468 EQU1190..x4C401 - x4HC31 =e=0;
2469 EQU1191..x5C401 - x5HC31 =e=0;
2470 EQU1192..x7C401 - x7HC31 =e=0;
2471 EQU1193..THC32 - TC302 =e= 0;
2472 EQU1194..K4C614B=e=0.13332*EXP(15.6782-2154.90/(TC302-34.42))/PC302;
2473 EQU1195..PC302 -PHC32 =e= 0;
2474 EQU1196..K5C614B=e=0.13332*EXP(15.5338-2348.67/(TC302-40.05))/PC302;
2475 EQU1197..K7C614B=e=0.13332*EXP(15.7588-2633.90/(TC302-46.30))/PC302;
2476 EQU1198..hC311-hC302-hHC32=e=0;
2477 EQU1199..K3C614B * xx3HC32 - xx3C302 =e= 0;
2478 EQU1200..K1C614B * xx1HC32 - xx1C302 =e= 0;
2479 EQU1201..K4C614B * xx4HC32 - xx4C302 =e= 0;
2480 EQU1202..K5C614B * xx5HC32 - xx5C302 =e= 0;
2481 EQU1203..x1C426 + x3C426 + x4C426 + x5C426 + x7C426 =e= 1;
2482 EQU1204..K5C408*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC408-7.883*LOG10(TC408)-4.6512E-11*TC408+3.8997E-6*TC408**2);
2483 EQU1205..K7C408*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC408-9.042*LOG10(TC408)-1.371E-12*TC408+3.634E-6*TC408**2);
2484 EQU1206..K1C408*xx1C408+K3C408*xx3C408+K4C408*xx4C408+K5C408*xx5C408+K7C408*xx7C408 =e= 1;
2485 EQU1207..dTE633*2 =e= (THC05-THC30) + (THC04-THC29);
2486 EQU1208..xx1HC29 + xx2HC29 + xx3HC29 + xx4HC29 + xx5HC29 + xx7HC29 =e= 1;
2487 EQU1209..yy1HC29 + yy2HC29 + yy3HC29 + yy4HC29 + yy5HC29 + yy7HC29 =e= 1;

2488 EQU1210..FmlHC29 - FlHC29 * (x1HC29/MW1 + x2HC29/MW2 + x3HC29/MW3
+ x4HC29/MW4 + x5HC29/MW5 + x7HC29/MW7)=e= 0;
2489 EQU1211..FmvHC29 - FvHC29 * (y1HC29/MW1 + y2HC29/MW2 + y3HC29/MW3
+ y4HC29/MW4 + y5HC29/MW5 + y7HC29/MW7)=e= 0;
2490 EQU1212..xx1HC29 * MW1 * FmlHC29 - FlHC29 * x1HC29 =e= 0;
2491 EQU1213..xx3HC29 * MW3 * FmlHC29 - FlHC29 * x3HC29 =e= 0;

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2492 EQU1214..xx4HC29 * MW4 * FmlHC29 - FlHC29 * x4HC29 =e= 0;
2493 EQU1215..xx5HC29 * MW5 * FmlHC29 - FlHC29 * x5HC29 =e= 0;
2494 EQU1216..xx7HC29 * MW7 * FmlHC29 - FlHC29 * x7HC29 =e= 0;
2495 EQU1217..yy7HC29 * MW7 * FmvHC29 - FvHC29 * y7HC29 =e= 0;
2496 EQU1218..yy5HC29 * MW5 * FmvHC29 - FvHC29 * y5HC29 =e= 0;
2497 EQU1219..yy4HC29 * MW4 * FmvHC29 - FvHC29 * y4HC29 =e= 0;
2498 EQU1220..yy3HC29 * MW3 * FmvHC29 - FvHC29 * y3HC29 =e= 0;
2499 EQU1221..yy1HC29 * MW1 * FmvHC29 - FvHC29 * y1HC29 =e= 0;
2500 EQU1222..yy7R1 * MW7 * FmvR1 - FvR1 * y7R1 =e= 0;
2501 EQU1223..yy5R1 * MW5 * FmvR1 - FvR1 * y5R1 =e= 0;
2502 EQU1224..yy4R1 * MW4 * FmvR1 - FvR1 * y4R1 =e= 0;
2503 EQU1225..yy3R1 * MW3 * FmvR1 - FvR1 * y3R1 =e= 0;
2504 EQU1226..yy1R1 * MW1 * FmvR1 - FvR1 * y1R1 =e= 0;
2505 EQU1227..xx7R1 * MW7 * FmlR1 - FlR1 * x7R1 =e= 0;
2506 EQU1228..xx5R1 * MW5 * FmlR1 - FlR1 * x5R1 =e= 0;
2507 EQU1229..xx4R1 * MW4 * FmlR1 - FlR1 * x4R1 =e= 0;
2508 EQU1230..xx3R1 * MW3 * FmlR1 - FlR1 * x3R1 =e= 0;
2509 EQU1231..xx1R1 * MW1 * FmlR1 - FlR1 * x1R1 =e= 0;
2510 EQU1232..FmvR1 - FvR1 * (y1R1/MW1 + y2R1/MW2 + y3R1/MW3 +
y4R1/MW4 + y5R1/MW5 + y7R1/MW7)=e= 0;
2511 EQU1233..FmlR1 - FlR1 * (x1R1/MW1 + x2R1/MW2 + x3R1/MW3 +
x4R1/MW4 + x5R1/MW5 + x7R1/MW7)=e= 0;
2512 EQU1234..xx1R1 + xx2R1 + xx3R1 + xx4R1 + xx5R1 + xx7R1 =e= 1;
2513 EQU1235..yy1R1 + yy2R1 + yy3R1 + yy4R1 + yy5R1 + yy7R1 =e= 1;
2514 EQU1236..K1E633*PHC30 =e= 3.71*PE633;
2515 EQU1237..K2E633*PHC30 =e= 1.05*PE633;
2516 EQU1238..K3E633*PHC30 =e=1.25*PE633;
2517 EQU1239..K4E633*PHC30 =e=0.82*PE633;
2518 EQU1240..K5E633*PHC30 =e= 0.28*PE633;
2519 EQU1241..K7E633*PHC30 =e= 0.068*PE633;
2520 EQU1242..yy1HC30 * MW1 * FmvHC30 - FvHC30 * y1HC30 =e= 0;
2521 EQU1243..yy3HC30 * MW3 * FmvHC30 - FvHC30 * y3HC30 =e= 0;
2522 EQU1244..yy4HC30 * MW4 * FmvHC30 - FvHC30 * y4HC30 =e= 0;
2523 EQU1245..yy5HC30 * MW5 * FmvHC30 - FvHC30 * y5HC30 =e= 0;
2524 EQU1246..yy7HC30 * MW7 * FmvHC30 - FvHC30 * y7HC30 =e= 0;
2525 EQU1247..xx1HC30 * MW1 * FmlHC30 - FlHC30 * x1HC30 =e= 0;
2526 EQU1248..xx3HC30 * MW3 * FmlHC30 - FlHC30 * x3HC30 =e= 0;
2527 EQU1249..xx4HC30 * MW4 * FmlHC30 - FlHC30 * x4HC30 =e= 0;
2528 EQU1250..xx5HC30 * MW5 * FmlHC30 - FlHC30 * x5HC30 =e= 0;
2529 EQU1251..xx7HC30 * MW7 * FmlHC30 - FlHC30 * x7HC30 =e= 0;
2530 EQU1252..FmlHC30 - FlHC30 * (x1HC30/MW1 + x2HC30/MW2 + x3HC30/MW3
+ x4HC30/MW4 + x5HC30/MW5 + x7HC30/MW7)=e= 0;
2531 EQU1253..FmvHC30 - FvHC30 * (y1HC30/MW1 + y2HC30/MW2 + y3HC30/MW3
+ y4HC30/MW4 + y5HC30/MW5 + y7HC30/MW7)=e= 0;
2532 EQU1254..xx1HC30 + xx2HC30 + xx3HC30 + xx4HC30 + xx5HC30 +
xx7HC30 =e= 1;
2533 EQU1255..yy1HC30 + yy2HC30 + yy3HC30 + yy4HC30 + yy5HC30 +
yy7HC30 =e= 1;
2534 EQU1256..hc404 - FC404 * ((x1C404/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC404,ORD(Coeff))))
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2535 +(x3C404/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC404,ORD(Coeff))))
2536 +(x4C404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC404,ORD(Coeff))))
2537 +(x5C404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC404,ORD(Coeff))))

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2538 +(x7C404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC404,ORD(Coeff)))) =e= 0;
2539 EQU1257..hc405 - FC405 * ((x1C405/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC405,ORD(Coeff))))
2540 +(x3C405/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC405,ORD(Coeff))))
2541 +(x4C405/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC405,ORD(Coeff))))
2542 +(x5C405/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC405,ORD(Coeff))))
2543 +(x7C405/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC405,ORD(Coeff)))) =e= 0;
2544 EQU1258..hc406 - FC406 * ((x1C406/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC406,ORD(Coeff))))
2545 +(x3C406/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC406,ORD(Coeff))))
2546 +(x4C406/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC406,ORD(Coeff))))
2547 +(x5C406/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC406,ORD(Coeff))))
2548 +(x7C406/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC406,ORD(Coeff)))) =e= 0;
2549 EQU1259..hc407 - FC407 * ((x1C407/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC407,ORD(Coeff))))
2550 +(x3C407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC407,ORD(Coeff))))
2551 +(x4C407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC407,ORD(Coeff))))
2552 +(x5C407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC407,ORD(Coeff))))
2553 +(x7C407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC407,ORD(Coeff)))) =e= 0;
2554 EQU1260..hc408 - FC408 * ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC408,ORD(Coeff))))
2555 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
2556 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
2557 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff))))
2558 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))) =e= 0;
2559 EQU1261..hc410 - FC410 * ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC410,ORD(Coeff))))
2560 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff))))
2561 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff))))
2562 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff))))
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2563 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))) =e= 0;
2564 EQU1262..hc413 - FC413 * ((x1C413/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC413,ORD(Coeff))))
2565 +(x3C413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC413,ORD(Coeff))))
2566 +(x4C413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC413,ORD(Coeff))))
2567 +(x5C413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC413,ORD(Coeff))))
2568 +(x7C413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC413,ORD(Coeff)))) =e= 0;
2569 EQU1263..hc414 - FC414 *
2570 ((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC414/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2571 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC414/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2572 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC414/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2573 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC414/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2574 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC414/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2575 EQU1264..hc415 - FC415 * ((x1C415/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC415,ORD(Coeff))))
2576 +(x3C415/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC415,ORD(Coeff))))
2577 +(x4C415/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC415,ORD(Coeff))))
2578 +(x5C415/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC415,ORD(Coeff))))

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2579 +(x7C415/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC415,ORD(Coeff)))) =e= 0;
2580 EQU1265..hc417 - FC417 * ((x1C417/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC417,ORD(Coeff))))
2581 +(x3C417/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC417,ORD(Coeff))))
2582 +(x4C417/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC417,ORD(Coeff))))
2583 +(x5C417/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC417,ORD(Coeff))))
2584 +(x7C417/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC417,ORD(Coeff)))) =e= 0;
2585 EQU1266..hc418 - FC418 * ((x1C418/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC418,ORD(Coeff))))
2586 +(x3C418/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC418,ORD(Coeff))))
2587 +(x4C418/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC418,ORD(Coeff))))
2588 +(x5C418/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC418,ORD(Coeff))))
2589 +(x7C418/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC418,ORD(Coeff)))) =e= 0;
2590 EQU1267..hc419 - FC419 * ((x1C419/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC419,ORD(Coeff))))
2591 +(x3C419/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC419,ORD(Coeff))))
2592 +(x4C419/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC419,ORD(Coeff))))
2593 +(x5C419/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC419,ORD(Coeff))))
2594 +(x7C419/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC419,ORD(Coeff)))) =e= 0;
2595 EQU1268..hc425 - FC425 * ((x1C425/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC425,ORD(Coeff))))
2596 +(x3C425/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC425,ORD(Coeff))))
2597 +(x4C425/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC425,ORD(Coeff))))
2598 +(x5C425/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC425,ORD(Coeff))))
2599 +(x7C425/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC425,ORD(Coeff)))) =e= 0;
2600 EQU1269..hc426 - FC426 * ((x1C426/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC426,ORD(Coeff))))
2601 +(x3C426/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC426,ORD(Coeff))))
2602 +(x4C426/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC426,ORD(Coeff))))
2603 +(x5C426/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC426,ORD(Coeff))))
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2604  +(x7C426/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC426,ORD(Coeff)))) =e= 0;
2605  EQU1270..yy7R29 * MW7 * FmvR29 - FvR29 * y7R29 =e= 0;
2606  EQU1271..yy5R29 * MW5 * FmvR29 - FvR29 * y5R29 =e= 0;
2607  EQU1272..yy4R29 * MW4 * FmvR29 - FvR29 * y4R29 =e= 0;
2608  EQU1273..yy3R29 * MW3 * FmvR29 - FvR29 * y3R29 =e= 0;
2609  EQU1274..yy1R29 * MW1 * FmvR29 - FvR29 * y1R29 =e= 0;
2610  EQU1275..xx7R29 * MW7 * FmlR29 - FlR29 * x7R29 =e= 0;
2611  EQU1276..xx5R29 * MW5 * FmlR29 - FlR29 * x5R29 =e= 0;
2612  EQU1277..xx4R29 * MW4 * FmlR29 - FlR29 * x4R29 =e= 0;
2613  EQU1278..xx3R29 * MW3 * FmlR29 - FlR29 * x3R29 =e= 0;
2614  EQU1279..xx1R29 * MW1 * FmlR29 - FlR29 * x1R29 =e= 0;
2615  EQU1280..yy1R29 + yy2R29 + yy3R29 + yy4R29 + yy5R29 + yy7R29 =e=
1;
2616  EQU1281..xx1R29 + xx2R29 + xx3R29 + xx4R29 + xx5R29 + xx7R29 =e=
1;
2617  EQU1282..FmlR29 - FlR29 * (x1R29/MW1 + x2R29/MW2 + x3R29/MW3 +
x4R29/MW4 + x5R29/MW5 + x7R29/MW7)=e= 0;
2618  EQU1283..FmvR29 - FvR29 * (y1R29/MW1 + y2R29/MW2 + y3R29/MW3 +
y4R29/MW4 + y5R29/MW5 + y7R29/MW7)=e= 0;
2619  EQU1284..yy1HC30 =e= K1E633*xx1HC30;
2620  EQU1285..yy3HC30 =e= K3E633*xx3HC30;
2621  EQU1286..yy4HC30 =e= K4E633*xx4HC30;
2622  EQU1287..yy5HC30 =e= K5E633*xx5HC30;
2623  EQU1288..yy7HC30 =e= K7E633*xx7HC30;
2624  EQU1289..yy1R29 =e= K1E6XX*xx1R29;

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2625 EQU1290..yy3R29 =e= K3E6XX*xx3R29;
2626 EQU1291..yy4R29 =e= K4E6XX*xx4R29;
2627 EQU1292..yy5R29 =e= K5E6XX*xx5R29;
2628 EQU1293..yy7R29 =e= K7E6XX*xx7R29;
2629 EQU1294..TR1-TR29 =e= 0;
2630 EQU1295..(FlHC29*x7HC29 + FvHC29*y7HC29) - (FlHC30*x7HC30 +
FvHC30*y7HC30) =e= 0;
2631 EQU1296..(hC623+hC625+hC627+hC629) - (hR29 - hR1) =e= 0;
2632 EQU1297..(FlR1*x7R1 + FvR1*y7R1) - (FlR29*x7R29 + FvR29*y7R29)
=e= 0;
2633 EQU1298..(FlR1*x5R1 + FvR1*y5R1) - (FlR29*x5R29 + FvR29*y5R29)
=e= 0;
2634 EQU1299..(FlR1*x1R1 + FvR1*y1R1) - (FlR29*x1R29 + FvR29*y1R29)
=e= 0;
2635 EQU1300..(FlR1*x3R1 + FvR1*y3R1) - (FlR29*x3R29 + FvR29*y3R29)
=e= 0;
2636 EQU1301..(FlR1*x4R1 + FvR1*y4R1) - (FlR29 *x4R29+ FvR29*y4R29)
=e= 0;
2637 EQU1302..(FlR1 + FvR1) - (FlR29 + FvR29) =e= 0;
2638 EQU1303..(hC623+hC625+hC627+hC629) - UE6XX*AE6XX*dTE6XX =e= 0;
2639 EQU1304..K1E6XX*PR29 =e= 3.71*PE633;
2640 EQU1305..FC418 * x2C418 - FC417 * x1C417 =e= 0;
2641 EQU1306..FC302 =e= VFC614B*FC311;
2642 EQU1307..FC311 - FC302 - FHC32 =e= 0;
2643 EQU1308..K1C614B*PC302 =e= 0.1333*10**(21.4469-1.4627E3/TC302-
5.261*LOG10(TC302)+3.282E-11*TC302+3.7349E-6*TC302**2);
2644 EQU1309..K3C614B*PC302 =e= 0.1333*10**(31.2541-1.9532E3/TC302-
8.806*LOG10(TC302)+8.9246E-11*TC302+5.7501E-6*TC302**2);
2645 EQU1310..FC311*x1C311 - FC302*x1C302 - FHC32*x1HC32 =e= 0;
2646 EQU1311..FC311*x3C311 - FC302*x3C302 - FHC32*x3HC32 =e= 0;
2647 EQU1312..FC311*x4C311 - FC302*x4C302 - FHC32*x4HC32 =e= 0;
2648 EQU1313..FC311*x7C311 - FC302*x7C302 - FHC32*x7HC32 =e= 0;
2649 EQU1314..hHC01 - FHC01 * ((x1HC01/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff)*POWER(THC01,ORD(Coeff))))
2650 +(x2HC01/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC01,ORD(Coeff))))
2651 +(x3HC01/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC01,ORD(Coeff))))
2652 +(x4HC01/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC01,ORD(Coeff))))
2653 +(x5HC01/MW5)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("5",Coeff)*POWER(THC01,ORD(Coeff))))
2654 +(x7HC01/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC01,ORD(Coeff)))) =e= 0;
2655 EQU1315..x1HC01 + x2HC01 + x3HC01 + x4HC01 + x5HC01 + x7HC01
=e=1;
2656 EQU1316..hC401 - FC401 * ((x1C401/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC01,ORD(Coeff))))
2657 +(x3C401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC01,ORD(Coeff))))
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2658 +(x4C401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC401,ORD(Coeff))))
2659 +(x5C401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC401,ORD(Coeff))))
2660 +(x7C401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC401,ORD(Coeff)))) =e= 0;
2661 EQU1317..x1C401 + x3C401 + x4C401 + x5C401 + x7C401 =e= 1;
2662 EQU1318..TAC09=e=TAC05;
2663 EQU1319..TAC09=e=TAC12;
2664 EQU1320..TAC09=e=THC27;
2665 EQU1321..hAC02 + hAC05 =e= hAC07;
2666 EQU1322..FHC27*THC27 + FHC26*THC26 =e= FHC28*THC28;
2667 EQU1323..TAC20 - TAC15 =e= 0;
2668 EQU1324..TAC20 - TAC23 =e= 0;
2669 EQU1325..TAC20 - THC25 =e= 0;
2670 EQU1326..hAC12 + hAC15 - hAC18 =e=0;

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2671 EQU1327..FHC26*THC26 -FHC25 *THC25 - FHC24 *THC24 =e= 0;
2672 EQU1328..hAC23 + hAC26 - hAC29 =e= 0;
2673 EQU1329..TAC31 - TAC26 =e= 0;
2674 EQU1330..TAC31 - TAC34 =e= 0;
2675 EQU1331..TAC31 - THC23 =e= 0;
2676 EQU1332..FHC24*THC24 -FHC23 *THC23 - FHC22 *THC22 =e= 0;
2677 EQU1333..hAC34 + hAC37 - hAC40 =e= 0;
2678 EQU1334..TAC42 =e= TAC37;
2679 EQU1335..TAC42 =e= TAC45;
2680 EQU1336..TAC42 =e= THC22;
2681 EQU1337..hHC30 + hR29 =e= hHC31;
2682 EQU1338..(hC312 - hC312liq) - FcwE641A*4.197*(TcwotE641A - Tcwin)
=e= 0;
2683 EQU1339..hC312liq - FC312*
2684 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff))))
2685 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff))))
2686 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff))))
2687 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff))))
2688 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))) =e= 0;
2689 EQU1340..THC31 =e= TC401;
2690 EQU1341..THC31 - TC301 =e=0;
2691 EQU1342..xx4C407 * FmC407 * MW4 - FC407 * x4C407 =e= 0;
2692 EQU1343..FmC407 - FC407 * (x1C407/MW1 + x3C407/MW3 + x4C407/MW4 +
x5C407/MW5 + x7C407/MW7)=e= 0;
2693 EQU1344..xx5C407 * FmC407 * MW5 - FC407 * x5C407 =e= 0;
2694 EQU1345..xx3C407 * FmC407 * MW3 - FC407 * x3C407 =e= 0;
2695 EQU1346..FmC412 - FC412 * (x1C412/MW1 + x3C412/MW3 + x4C412/MW4 +
x5C412/MW5 + x7C412/MW7)=e= 0;
2696 EQU1347..xx4C412 * FmC412 * MW4 - FC412 * x4C412 =e= 0;
2697 EQU1348..xx3C412 * FmC412 * MW3 - FC412 * x3C412 =e= 0;
2698 EQU1349..xx5C412 * FmC412 * MW5 - FC412 * x5C412 =e= 0;
2699 EQU1350..xx4C322 * FmC322 * MW4 - FC322 * x4C322 =e= 0;
2700 EQU1351..xx1C322 * FmC322 * MW1 - FC322 * x1C322 =e= 0;
2701 EQU1352..FmC317 - FC317 * (x1C317/MW1 + x3C317/MW3 + x4C317/MW4 +
x5C317/MW5 + x7C317/MW7)=e= 0;
2702 EQU1353..xx4C317 * FmC317 * MW4 - FC317 * x4C317 =e= 0;
2703 EQU1354..xx3C317 * FmC317 * MW3 - FC317 * x3C317 =e= 0;
2704 EQU1355..FmHC01 - FHC01 * (x1HC01/MW1 + x2HC01/MW2+ x3HC01/MW3 +
x4HC01/MW4 + x5HC01/MW5 + x7HC01/MW7)=e= 0;
2705 EQU1356..xx1HC01 * MW1 * FmHC01 - FHC01 *x1HC01=e= 0;
2706 EQU1357..xx2HC01 * MW2 * FmHC01 - FHC01 *x2HC01=e= 0;
2707 EQU1358..xx3HC01 * MW3 * FmHC01 - FHC01 *x3HC01=e= 0;
2708 EQU1359..xx4HC01 * MW4 * FmHC01 - FHC01 *x4HC01=e= 0;
2709 EQU1360..x2C418 - x2C419 =e= 0;
2710 EQU1361..FHC03 * x2HC03 - FC419 * x2C419 =e= 0;
2711 EQU1362..FC417 - FSC414 - FSC413 =e= 0;

2712 EQU1363..FC417 * x1C417- FSC414* x1SC414 - FSC413* x1SC413 =e= 0;
2713 EQU1364..hc417 - hSC414 - hSC413 =e= 0;
2714 EQU1365..FC417 * x2C417- FSC414* x2SC414 - FSC413* x2SC413 =e= 0;
2715 EQU1366..FC417 * x3C417- FSC414* x3SC414 - FSC413* x3SC413 =e= 0;
2716 EQU1367..FC417 * x4C417- FSC414* x4SC414 - FSC413* x4SC413 =e= 0;

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2717 EQU1368..FC417 * x5C417- FSC414* x5SC414 - FSC413* x5SC413 =e= 0;
2718 EQU1369..(hSC404 - hSC405) - UE603*AE603*FE603*dTE603 =e= 0;
2719 EQU1370..x3SC409 - x3SC412 =e= 0;
2720 EQU1371..x6SC409 - x6SC412 =e= 0;
2721 EQU1372..x6SC409 - x6SC411 =e= 0;
2722 EQU1373..x2SC409 - x2SC411 =e= 0;
2723 EQU1374..x1SC409 - x1SC411 =e= 0;
2724 EQU1375..x3SC409 - x3SC411 =e= 0;
2725 EQU1376..x4SC409 - x4SC411 =e= 0;
2726 EQU1377..x2SC409 - x2SC412 =e= 0;
2727 EQU1378..x7SC409 - x7SC411 =e= 0;
2728 EQU1379..x1SC409 - x1SC412 =e= 0;
2729 EQU1380..x4SC409 - x4SC412 =e= 0;
2730 EQU1381..x5SC409 - x5SC412 =e= 0;
2731 EQU1382..FSC409 - FSC411 - FSC412 =e= 0;
2732 EQU1383..TSC409 - TSC412 =e= 0;
2733 EQU1384..TSC409 - TSC411 =e= 0;
2734 EQU1385..x7SC409 - x7SC412 =e= 0;
2735 EQU1386..x5SC409 - x5SC411 =e= 0;
2736 EQU1387..RC601*FSC412 - FSC411 =e= 0;
2737 EQU1388..x3SC412 - x3SC413 =e= 0;
2738 EQU1389..dTE609A**3 =e= ((TSC412-TcwotE609A)*(TSC413-Tcwin))*
2739 ((TSC412-TcwotE609A)+(TSC413-Tcwin))/2);
2740 EQU1390..x4SC412 - x4SC413 =e= 0;
2741 EQU1391..x1SC412 - x1SC413 =e= 0;
2742 EQU1392..x2SC412 - x2SC413 =e= 0;
2743 EQU1393..x6SC412 - x6SC413 =e= 0;
2744 EQU1394..FSC412 - FSC413 =e= 0;
2745 EQU1395..(hSC412 - hSC413) - UE609A*AE609A*FE609A*dTE609A =e= 0;
2746 EQU1396..(hSC412 - hSC413) - FcwE609A*4.197*(TcwotE609A - Tcwin)
=e= 0;
2747 EQU1397..x5SC412 - x5SC413 =e= 0;
2748 EQU1398..(hSC408 - hSC409) - FcwE605*4.197*(TcwoutE605 - Tcwin)
=e= 0;
2749 EQU1399..x3SC408 -x3SC409 =e=0;
2750 EQU1400..x7SC408 -x7SC409 =e=0;
2751 EQU1401..FSC408 - FSC409=e= 0;
2752 EQU1402..TSC408 - TSC409 =e=0;
2753 EQU1403..(hSC408 - hSC409) - UE605*AE605*dTE605 =e= 0;
2754 EQU1404..dTE605*2 =e=
2755 (TSC408-TcwoutE605) + (TSC409-Tcwin);
2756 EQU1405..x1SC408 -x1SC409 =e=0;
2757 EQU1406..x5SC408 -x5SC409 =e=0;
2758 EQU1407..x4SC408 -x4SC409 =e=0;
2759 EQU1408..x2SC408 -x2SC409 =e=0;
2760 EQU1409..x6SC408 -x6SC409 =e=0;
2761 EQU1410..x5SC404 - x5SC405 =e= 0;
2762 EQU1411..x6SC404 - x6SC405 =e= 0;
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2763 EQU1412..(hSC404 - hSC405) - FcweE603*4.197*(TcwoutE603 - Tcwin)*
=e= 0;
2764 EQU1413..x4SC404 - x4SC405 =e= 0;
2765 EQU1414..x3SC404 - x3SC405 =e= 0;
2766 EQU1415..x1SC404 - x1SC405 =e= 0;
2767 EQU1416..dTE603**3 =e= ((TSC404-TcwoutE603)*(TSC405-Tcwin)*
2768 ((TSC404-TcwoutE603)+(TSC405-Tcwin))/2);
2769 EQU1417..FSC404 - FSC405 =e= 0;
2770 EQU1418..x2SC404 - x2SC405 =e= 0;
2771 EQU1419..TSC407 - TSC406 =e= 0;
2772 EQU1420..x3SC407 - x3SC406 =e= 0;
2773 EQU1421..x4SC407 - x4SC406 =e= 0;
2774 EQU1422..dTE602 =e= 414.6 - TSC406;
2775 EQU1423..x6SC407 - x6SC406 =e= 0;
2776 EQU1424..x1SC407 - x1SC406 =e= 0;
2777 EQU1425..(hSC407 - hSC406) - UE602*AE602*dTE602 =e= 0;
2778 EQU1426..(hSC407 - hSC406) - FstmE602 * hstmE602 =e= 0;
2779 EQU1427..x2SC407 - x2SC406 =e= 0;
2780 EQU1428..FSC407 - FSC406 =e= 0;
2781 EQU1429..x5SC407 - x5SC406 =e= 0;
2782 EQU1430..x3SC401 - x3SC402 =e= 0;
2783 EQU1431..x4SC401 - x4SC402 =e= 0;
2784 EQU1432..x5SC403 - x5SC404 =e= 0;
2785 EQU1433..x3SC403 - x3SC404 =e= 0;
2786 EQU1434..x2SC403 - x2SC406 =e= 0;
2787 EQU1435..Sm4C601*LpC601=e= Kp4C601*VpC601;
2788 EQU1436..f4C601 * x4SC402 * FSC402 =e= x4SC403 * FSC403;
2789 EQU1437..x1SC403 - x1SC406 =e= 0;
2790 EQU1438..K3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TnC601-
8.806*LOG10(TnC601)+8.9246E-11*TnC601+5.7501E-6*TnC601**2);
2791 EQU1439..K6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TnC601-
9.2354*LOG10(TnC601)+9.0199E-11*TnC601+4.1050E-6*TnC601**2);
2792 EQU1440..K1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TnC601-
5.261*LOG10(TnC601)+3.282E-11*TnC601+3.7349E-6*TnC601**2);
2793 EQU1441..K2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TnC601-
10.048*LOG10(TnC601)+3.0198E-3*TnC601+2.9122E-6*TnC601**2);
2794 EQU1442..x5SC403 - x5SC406 =e= 0;
2795 EQU1443..Kp3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TmC601-
8.806*LOG10(TmC601)+8.9246E-11*TmC601+5.7501E-6*TmC601**2);
2796 EQU1444..x3SC403 - x3SC406 =e= 0;
2797 EQU1445..Kp1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TmC601-
5.261*LOG10(TmC601)+3.282E-11*TmC601+3.7349E-6*TmC601**2);
2798 EQU1446..FSC402 * x5SC402 + FSC411*x5SC411 - FSC403 * x5SC403 -
FSC408*x5SC408 =e= 0;
2799 EQU1447..Sn7C601 *FSC411 =e= K7C601*FSC408;
2800 EQU1448..FSC402 * x4SC402 + FSC411*x4SC411 - FSC403 * x4SC403 -
FSC408*x4SC408 =e= 0;
2801 EQU1449..FSC402 * x3SC402 + FSC411*x3SC411 - FSC403 * x3SC403 -
FSC408*x3SC408 =e= 0;
2802 EQU1450..FSC402 * x1SC402 + FSC411*x1SC411 - FSC403 * x1SC403 -
FSC408*x1SC408 =e= 0;
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2803 EQU1451..FSC402 + FSC411 - FSC403 - FSC408 =e= 0;
2804 EQU1452..x4SC403 - x4SC406 =e= 0;
2805 EQU1453..TSC403 - TSC406 =e= 0;
2806 EQU1454..Kp4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TmC601-
7.1805*LOG10(TmC601)-6.6845E-11*TmC601+4.219E-6*TmC601**2);
2807 EQU1455..K5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TnC601-
7.883*LOG10(TnC601)-4.6512E-11*TnC601+3.8997E-6*TnC601**2);
2808 EQU1456..Kp5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TmC601-
7.883*LOG10(TmC601)-4.6512E-11*TmC601+3.8997E-6*TmC601**2);

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2809 EQU1457..K7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TnC601-
9.042*LOG10(TnC601)-1.371E-12*TnC601+3.634E-6*TnC601**2);
2810 EQU1458..Kp2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TmC601-
10.048*LOG10(TmC601)+3.0198E-3*TmC601+2.9122E-6*TmC601**2);
2811 EQU1459..x6SC403 - x6SC406 =e= 0;
2812 EQU1460..x7SC403 - x7SC406 =e= 0;
2813 EQU1461..LpC601=e=FSC411 + qC601*FSC402;
2814 EQU1462..Sn1C601 *FSC411 =e= K1C601*FSC408;
2815 EQU1463..K4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TnC601-
7.1805*LOG10(TnC601)-6.6845E-11*TnC601+4.219E-6*TnC601**2);
2816 EQU1464..Kp7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TmC601-
9.042*LOG10(TmC601)-1.371E-12*TmC601+3.634E-6*TmC601**2);
2817 EQU1465..TmC601=e=(TSC403+TSC402)/2;
2818 EQU1466..TnC601=e=(TSC408+TSC402)/2;
2819 EQU1467..VpC601=e=LpC601 - FSC403;
2820 EQU1468..x1SC413 + x2SC413 + x3SC413 +x4SC413 +x5SC413 + x6SC413
+ x7SC413=e= 1;
2821 EQU1469..hSC413 - FSC413 *
((x1SC413/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC413,ORD(Coeff))))
2822 +(x2SC413/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC413,ORD(Coeff))))
2823 +(x3SC413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC413,ORD(Coeff))))
2824 +(x4SC413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC413,ORD(Coeff))))
2825 +(x5SC413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC413,ORD(Coeff))))
2826 +(x6SC413/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC413,ORD(Coeff))))
2827 +(x7SC413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC413,ORD(Coeff)))) =e= 0;
2828 EQU1470..hSC414 - FSC414 *
((x1SC414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC414,ORD(Coeff))))
2829 +(x2SC414/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC414,ORD(Coeff))))
2830 +(x3SC414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC414,ORD(Coeff))))
2831 +(x4SC414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC414,ORD(Coeff))))
2832 +(x5SC414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC414,ORD(Coeff))))
2833 +(x6SC414/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC414,ORD(Coeff))))
2834 +(x7SC414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC414,ORD(Coeff)))) =e= 0;
2835 EQU1471..x1SC414 + x2SC414 + x3SC414 +x4SC414 +x5SC414 + x6SC414
+ x7SC414=e= 1;
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2836 EQU1472..hSC412 - FSC412 *
((x1SC412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC412,ORD(Coeff))))
2837 +(x2SC412/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC412,ORD(Coeff))))
2838 +(x3SC412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC412,ORD(Coeff))))
2839 +(x4SC412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC412,ORD(Coeff))))
2840 +(x5SC412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC412,ORD(Coeff))))
2841 +(x6SC412/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC412,ORD(Coeff))))
2842 +(x7SC412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC412,ORD(Coeff)))) =e= 0;
2843 EQU1473..x1SC412 + x2SC412 + x3SC412 +x4SC412 +x5SC412 + x6SC412
+ x7SC412 =e= 1;
2844 EQU1474..hSC411 - FSC411 *
((x1SC411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC411,ORD(Coeff))))
2845 +(x2SC411/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC411,ORD(Coeff))))
2846 +(x3SC411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC411,ORD(Coeff))))
2847 +(x4SC411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC411,ORD(Coeff))))
2848 +(x5SC411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC411,ORD(Coeff))))
2849 +(x6SC411/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC411,ORD(Coeff))))
2850 +(x7SC411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC411,ORD(Coeff)))) =e= 0;
2851 EQU1475..hSC409 - FSC409 *
((x1SC409/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC409,ORD(Coeff))))
2852 +(x2SC409/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC409,ORD(Coeff))))
2853 +(x3SC409/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC409,ORD(Coeff))))
2854 +(x4SC409/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC409,ORD(Coeff))))

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2855 +(x5SC409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC409,ORD(Coeff))))
2856 +(x6SC409/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC409,ORD(Coeff))))
2857 +(x7SC409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC409,ORD(Coeff)))) =e= 0;
2858 EQU1476..x1SC409 + x2SC409 + x3SC409 +x4SC409 +x5SC409 + x6SC409
+x7SC409 =e= 1;
2859 EQU1477..xx1SC408 * MW1 * FmSC408 - FSC408 *x1SC408=e= 0;
2860 EQU1478..K6SC408*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC408-
9.2354*LOG10(TSC408)+9.0199E-11*TSC408+4.1050E-6*TSC408**2);
2861 EQU1479..xx6SC408 * MW6 * FmSC408 - FSC408 *x6SC408=e= 0;
2862 EQU1480..xx2SC408 * MW2 * FmSC408 - FSC408 *x2SC408=e= 0;
2863
EQU1481..xx1SC408+xx2SC408+xx3SC408+xx4SC408+xx5SC408+xx6SC408+xx7SC408
=e= 1;
2864 EQU1482..xx5SC408 * MW5 * FmSC408 - FSC408 *x5SC408=e= 0;
2865 EQU1483..K2SC408*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC408-
10.048*LOG10(TSC408)+3.0198E-3*TSC408+2.9122E-6*TSC408**2);
2866 EQU1484..xx3SC408 * MW3 * FmSC408 - FSC408 *x3SC408=e= 0;
2867 EQU1485..K3SC408*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC408-
8.806*LOG10(TSC408)+8.9246E-11*TSC408+5.7501E-6*TSC408**2);
2868 EQU1486..FmSC408 - FSC408 * (x1SC408/MW1 + x2SC408/MW2 +
x3SC408/MW3 + x4SC408/MW4 + x5SC408/MW5 + x6SC408/MW6 + x7SC408/MW7)
=e= 0;
2869
EQU1487..xx1SC408/K1SC408+xx2SC408/K2SC408+xx3SC408/K3SC408+xx4SC408/K4
SC408+xx5SC408/K5SC408+xx6SC408/K6SC408+xx7SC408/K7SC40

8 =e= 1;
2870 EQU1488..K7SC408*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC408-
9.042*LOG10(TSC408)-1.371E-12*TSC408+3.634E-6*TSC408**2);
2871 EQU1489..K5SC408*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC408-
7.883*LOG10(TSC408)-4.6512E-11*TSC408+3.8997E-6*TSC408**2);
2872 EQU1490..K4SC408*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC408-
7.1805*LOG10(TSC408)-6.6845E-11*TSC408+4.219E-6*TSC408**2);
2873 EQU1491..K1SC408*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC408-
5.261*LOG10(TSC408)+3.282E-11*TSC408+3.7349E-6*TSC408**2);
2874 EQU1492..x1SC408 + x2SC408 + x3SC408 +x4SC408 +x5SC408 + x6SC408
+x7SC408 =e= 1;
2875 EQU1493..xx4SC408 * MW4 * FmSC408 - FSC408 *x4SC408=e= 0;
2876 EQU1494..x1SC407 + x2SC407 + x3SC407 + x4SC407 + x5SC407 +
x6SC407 + x7SC407 =e= 1;
2877
EQU1495..xx1SC406+xx2SC406+xx3SC406+xx4SC406+xx5SC406+xx6SC406+xx7SC406
=e= 1;
2878 EQU1496..K7SC406*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC406-
9.042*LOG10(TSC406)-1.371E-12*TSC406+3.634E-6*TSC406**2);
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2879

EQU1497..K1SC406*xx1SC406+K2SC406*xx2SC406+K3SC406*xx3SC406+K4SC406*xx4
SC406+K5SC406*xx5SC406+K6SC406*xx6SC406+K7SC406*xx7SC40

6 =e= 1;

2880 EQU1498..FmSC406 - FSC406 * (x1SC406/MW1 + x2SC406/MW2 +
x3SC406/MW3 + x4SC406/MW4 + x5SC406/MW5 + x6SC406/MW6 + x7SC406/MW7)

=e= 0;

2881 EQU1499..xx2SC406 * MW2 * FmSC406 - FSC406 *x2SC406=e= 0;

2882 EQU1500..xx6SC406 * MW6 * FmSC406 - FSC406 *x6SC406=e= 0;

2883 EQU1501..K2SC406*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC406-
10.048*LOG10(TSC406)+3.0198E-3*TSC406+2.9122E-6*TSC406**2);

2884 EQU1502..K6SC406*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC406-
9.2354*LOG10(TSC406)+9.0199E-11*TSC406+4.1050E-6*TSC406**2);

2885 EQU1503..xx1SC406 * MW1 * FmSC406 - FSC406 *x1SC406=e= 0;

2886 EQU1504..xx3SC406 * MW3 * FmSC406 - FSC406 *x3SC406=e= 0;

2887 EQU1505..xx4SC406 * MW4 * FmSC406 - FSC406 *x4SC406=e= 0;

2888 EQU1506..K5SC406*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC406-
7.883*LOG10(TSC406)-4.6512E-11*TSC406+3.8997E-6*TSC406**2);

2889 EQU1507..xx5SC406 * MW5 * FmSC406 - FSC406 *x5SC406=e= 0;

2890 EQU1508..x1SC406 + x2SC406 + x3SC406 + x4SC406+ x5SC406 + x6SC406
+ x7SC406 =e= 1;

2891 EQU1509..K4SC406*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC406-
7.1805*LOG10(TSC406)-6.6845E-11*TSC406+4.219E-6*TSC406**2);

2892 EQU1510..K3SC406*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC406-
8.806*LOG10(TSC406)+8.9246E-11*TSC406+5.7501E-6*TSC406**2);

2893 EQU1511..K1SC406*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC406-
5.261*LOG10(TSC406)+3.282E-11*TSC406+3.7349E-6*TSC406**2);

2894 EQU1512..hSC406 - FSC406 *
((x1SC406/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff))
*POWER(TSC406,ORD(Coeff))))

2895 +(x2SC406/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff))
*POWER(TSC406,ORD(Coeff))))

2896 +(x3SC406/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC406,ORD(Coeff))))

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2897 +(x4SC406/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC406,ORD(Coeff))))
2898 +(x5SC406/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC406,ORD(Coeff))))
2899 +(x6SC406/MW6)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("6",Coeff)*POWER(TSC406,ORD(Coeff))))
2900 +(x7SC406/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC406,ORD(Coeff)))) =e= 0;
2901 EQU1513..x1SC405 + x2SC405 + x3SC405 + x4SC405 + x5SC405 +
x6SC405 + x7SC405 =e= 1;
2902 EQU1514..hSC405 - FSC405 *
((x1SC405/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff)*POWER(TSC405,ORD(Coeff))))
2903 +(x2SC405/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC405,ORD(Coeff))))
2904 +(x3SC405/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC405,ORD(Coeff))))
2905 +(x4SC405/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC405,ORD(Coeff))))
2906 +(x5SC405/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC405,ORD(Coeff))))
2907 +(x6SC405/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC405,ORD(Coeff))))
2908 +(x7SC405/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC405,ORD(Coeff)))) =e= 0;
2909 EQU1515..x1SC404 + x2SC404 + x3SC404 + x4SC404 + x5SC404 +
x6SC404 + x7SC404 =e= 1;
2910 EQU1516..hSC404 - FSC404 *
((x1SC404/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC404,ORD(Coeff))))
2911 +(x2SC404/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC404,ORD(Coeff))))
2912 +(x3SC404/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC404,ORD(Coeff))))
2913 +(x4SC404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC404,ORD(Coeff))))
2914 +(x5SC404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC404,ORD(Coeff))))
2915 +(x6SC404/MW6)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("6",Coeff)*POWER(TSC404,ORD(Coeff))))
2916 +(x7SC404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC404,ORD(Coeff)))) =e= 0;
2917 EQU1517..x1SC403 + x2SC403 + x3SC403 + x4SC403 + x5SC403 +
x6SC403 + x7SC403 =e= 1;
2918 EQU1518..FmSC403 - FSC403* (x1SC403/MW1 + x2SC403/MW2 +
x3SC403/MW3 + x4SC403/MW4 + x5SC403/MW5 + x6SC403/MW6 + x7SC403/MW7 )
=e= 0;
2919 EQU1519..hSC403 - FSC403 *
((x1SC403/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC403,ORD(Coeff))))
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2920 +(x2SC403/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC403,ORD(Coeff))))
2921 +(x3SC403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC403,ORD(Coeff))))
2922 +(x4SC403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC403,ORD(Coeff))))
2923 +(x5SC403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC403,ORD(Coeff))))
2924 +(x6SC403/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC403,ORD(Coeff))))
2925 +(x7SC403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC403,ORD(Coeff)))) =e= 0;
2926 EQU1520..x1SC402 + x2SC402 + x3SC402 + x4SC402 + x5SC402 +
x6SC402 + x7SC402 =e= 1;
2927 EQU1521..hSC402 - FSC402 *
((x1SC402/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC402,ORD(Coeff))))
2928 +(x2SC402/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC402,ORD(Coeff))))
2929 +(x3SC402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC402,ORD(Coeff))))
2930 +(x4SC402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC402,ORD(Coeff))))
2931 +(x5SC402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC402,ORD(Coeff))))
2932 +(x6SC402/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC402,ORD(Coeff))))
2933 +(x7SC402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC402,ORD(Coeff)))) =e= 0;
2934 EQU1522..x1SC401 + x2SC401 + x3SC401 + x4SC401 + x5SC401 +
x6SC401 + x7SC401 =e= 1;
2935 EQU1523..hSC401 - FSC401 *
((x1SC401/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC401,ORD(Coeff))))
2936 +(x2SC401/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC401,ORD(Coeff))))
2937 +(x3SC401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC401,ORD(Coeff))))
2938 +(x4SC401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC401,ORD(Coeff))))
2939 +(x5SC401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC401,ORD(Coeff))))
2940 +(x6SC401/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC401,ORD(Coeff))))
2941 +(x7SC401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC401,ORD(Coeff)))) =e= 0;

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2942 EQU1524..VpC601=e=FSC406;
2943 EQU1525..VpC603=e=FC323;
2944 EQU1526..Cost =e= FHC01 * 143.4402*0.9071847 + FSC414 *
160.4628*0.9071847 + FAC02 * 110*0.9071847 + FSC401 *25;
2945 EQU1527..Earnings =e= FC407 * 214.1463*0.9071847;
2946 EQU1528..Utilities =e= (FstmE612 +FstmE602+
(FstmE696A+FstmE696B)) * 1.25*0.9071847 + (FstmE695A+ FstmE695B)*
1.8*0.9071847 +
0.67e-3 *22.35* WK601;
2947 EQU1529..Profit =e= Earnings - Cost - Utilities;
2948 EQU1530..hSC408 - FSC408 *
2949 ((x1SC408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TSC408/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2950 +(x3SC408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC408,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TSC408/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2951 +(x4SC408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TSC408/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2952 +(x5SC408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TSC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2953 +(x7SC408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TSC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2954 EQU1531..hC325 - FC325 *
2955 ((x1C325/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC325/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2956 +(x3C325/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC325,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC325/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2957 +(x4C325/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC325/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2958 +(x5C325/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC325/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2959 +(x7C325/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
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((1-TC325/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2960 EQU1532..hSC407 - FSC407 *
2961 ((x1SC407/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC407,ORD(Coeff))))
2962 +(x2SC407/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC407,ORD(Coeff))))
2963 +(x3SC407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC407,ORD(Coeff))))
2964 +(x4SC407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TSC407/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2965 +(x5SC407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TSC407/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2966 +(x6SC407/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("6","a1")*1000 *

((1-TSC407/Enth_Vap("6","a2"))**Enth_Vap("6","a3")))
2967 +(x7SC407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TSC407/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2968 EQU1533..hC324 - FC324 *
2969 ((x1C324/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC324/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2970 +(x3C324/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC324,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC324/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))

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2971 +(x4C324/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC324/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2972 +(x5C324/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC324/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2973 +(x7C324/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC324/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2974 EQU1534..x1SC403 - x1SC404 =e= 0;
2975 EQU1535..FSC403 - FSC404 =e= 0;
2976 EQU1536..x1SC401 - x1SC402 =e= 0;
2977 EQU1537..FSC401 - FSC402 =e= 0;
2978 EQU1538..(hSC403 - hSC404) - (hSC402 - hSC401) =e= 0;
2979 EQU1539..(hSC403 - hSC404) - UE601*AE601*dTE601*FE601 =e= 0;
2980 EQU1540..dTE601**3 =e= ((TSC403-TSC402)*(TSC404-TSC401)*
2981 ((TSC403-TSC402)+(TSC404-TSC401))/2);
2982 EQU1541..x2SC401 - x2SC402 =e= 0;
2983 EQU1542..x6SC403 - x6SC404 =e= 0;
2984 EQU1543..x2SC403 - x2SC404 =e= 0;
2985 EQU1544..x6SC401 - x6SC402 =e= 0;
2986 EQU1545..x4SC403 - x4SC404 =e= 0;
2987 EQU1546..x5SC401 - x5SC402 =e= 0;
2988 EQU1547..FSC402 * x2SC402 + FSC411*x2SC411 - FSC403 * x2SC403 -
FSC408*x2SC408 =e= 0;
2989 EQU1548..h6C601*K6C601*LpC601*(1-Sm6C601) =e= Kp6C601*FSC411*(1-
Sn6C601);
2990 EQU1549..h2C601*K2C601*LpC601*(1-Sm2C601) =e= Kp2C601*FSC411*(1-
Sn2C601);
2991 EQU1550..f6C601 * x6SC402 * FSC402 =e= x6SC403 * FSC403;
2992 EQU1551..Sn4C601 *FSC411 =e= K4C601*FSC408;
2993 EQU1552..Sn2C601 *FSC411 =e= K2C601*FSC408;
2994 EQU1553..Sm1C601*LpC601=e= Kp1C601*VpC601;
2995 EQU1554..Sn3C601 *FSC411 =e= K3C601*FSC408;
2996 EQU1555..Sn6C601 *FSC411 =e= K6C601*FSC408;
2997 EQU1556..Sn5C601 *FSC411 =e= K5C601*FSC408;
2998 EQU1557..f2C601 * x2SC402 * FSC402 =e= x2SC403 * FSC403;
2999 EQU1558..f6C601*((1-Sn6C601)**(60-37))+ RC601*(1-Sn6C601) +
h6C601*Sn6C601**(60-37)*(1-Sm6C601**(37+1))) =e= (1-Sn6C601**(60-
37))+ RC601*(1-Sn6C601);
3000 EQU1559..f2C601*((1-Sn2C601)**(60-37))+ RC601*(1-Sn2C601) +
h2C601*Sn2C601**(60-37)*(1-Sm2C601**(37+1))) =e= (1-Sn2C601**(60-
37))+ RC601*(1-Sn2C601);
3001 EQU1560..Sm6C601*LpC601=e= Kp6C601*VpC601;
3002 EQU1561..Sm2C601*LpC601=e= Kp2C601*VpC601;
3003 EQU1562..Sm3C601*LpC601=e= Kp3C601*VpC601;
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3004 EQU1563..f7C601 * x7SC402 * FSC402 =e= x7SC403 * FSC403;
3005 EQU1564..Sm7C601*LpC601=e= Kp7C601*VpC601;
3006 EQU1565..f3C601*((1-Sn3C601**(60-37))+ RC601*(1-Sn3C601) +
h3C601*Sn3C601**(60-37)*(1-Sm3C601**(37+1))) =e= (1-Sn3C601**(60-
37))+ RC601*(1-Sn3C601);
3007 EQU1566..f4C601*((1-Sn4C601**(60-37))+ RC601*(1-Sn4C601) +
h4C601*Sn4C601**(60-37)*(1-Sm4C601**(37+1))) =e= (1-Sn4C601**(60-
37))+ RC601*(1-Sn4C601);
3008 EQU1567..f5C601*((1-Sn5C601**(60-37))+ RC601*(1-Sn5C601) +
h5C601*Sn5C601**(60-37)*(1-Sm5C601**(37+1))) =e= (1-Sn5C601**(60-
37))+ RC601*(1-Sn5C601);

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3009 EQU1568..f7C601*((1-Sn7C601**(60-37))+ RC601*(1-Sn7C601) +
h7C601*Sn7C601**(60-37)*(1-Sm7C601**(37+1))) =e= (1-Sn7C601**(60-
37))+ RC601*(1-Sn7C601);
3010 EQU1569..f1C601 * x1SC402 * FSC402 =e= x1SC403 * FSC403;
3011 EQU1570..f3C601 * x3SC402 * FSC402 =e= x3SC403 * FSC403;
3012 EQU1571..FSC402 * x6SC402 + FSC411*x6SC411 - FSC403 * x6SC403 -
FSC408*x6SC408 =e= 0;
3013 EQU1572..f5C601 * x5SC402 * FSC402 =e= x5SC403 * FSC403;
3014 EQU1573..Kp6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TmC601-
9.2354*LOG10(TmC601)+9.0199E-11*TmC601+4.1050E-6*TmC601**2);
3015 EQU1574..h1C601*K1C601*LpC601*(1-Sm1C601) =e= Kp1C601*FSC411*(1-
Sn1C601);
3016 EQU1575..h3C601*K3C601*LpC601*(1-Sm3C601) =e= Kp3C601*FSC411*(1-
Sn3C601);
3017 EQU1576..h4C601*K4C601*LpC601*(1-Sm4C601) =e= Kp4C601*FSC411*(1-
Sn4C601);
3018 EQU1577..h5C601*K5C601*LpC601*(1-Sm5C601) =e= Kp5C601*FSC411*(1-
Sn5C601);
3019 EQU1578..h7C601*K7C601*LpC601*(1-Sm7C601) =e= Kp7C601*FSC411*(1-
Sn7C601);
3020 EQU1579..Sm5C601*LpC601=e= Kp5C601*VpC601;
3021
3022 INEQU1..sf1S34 + sf2S34 =l= 1;
3023 INEQU2..TC306 - TcwoutE634 =g= 8;
3024 INEQU3..TC308 - TcwoutE640 =g= 10;
3025 INEQU4..TC317-TC316 =g=10;
3026 INEQU5..TC318-TC315 =g=10;
3027 INEQU6..TC319-Tcwin =g=10;
3028 INEQU7..TC318-TcwoutE611 =g=10;
3029 INEQU8..414.6-TC323 =g=10;
3030 INEQU9..414.6-TC324 =g=10;
3031 INEQU10..TC326-Tcwin =g=10;
3032 INEQU11..TC325-TcwoutE613 =g=10;
3033 INEQU12..TC405-TC404 =g=10;
3034 INEQU13..TC406-TC403 =g=10;
3035 INEQU14..TC407-Tcwin =g=10;
3036 INEQU15..TC406-TcwoutE617 =g=10;
3037 INEQU16..TC414-Tcwin =g=10;
3038 INEQU17..TC414-TcwotE621A =g=10;
3039 INEQU18..TC415-Tcwin =g=10;
3040 INEQU19..TC414-TcwotE621B =g=10;
3041 INEQU20..TC419-Tcwin =g=10;
3042 INEQU21..TC418-TcwoutE626 =g=10;
3043 INEQU22..THC01-TC402 =g=10;
3044 INEQU23..THC02-TC401 =g=10;
3045 INEQU24..TC412-Tcwin =g=8;
3046 INEQU25..TC412-TcwotE627A =g=8;
3047 INEQU26..TC413-TcwotE627B =g=8;
3048 INEQU27..THC04-TC402 =g=8;
3049 INEQU28..THC03-TC403 =g=8;
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3050 INEQU29..THC05-THC29 =g=8;
3051 INEQU30..THC04-THC30 =g=8;
3052 INEQU31..TC307-Tcwin =g=8;
3053 INEQU32..TC308-TcwoutE640 =g=10;

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3054 INEQU33..TC308-Tcwin =g=10;
3055 INEQU34..TC308-TcwotE641A =g=10;
3056 INEQU35..TC309-TcwotE641B =g=10;
3057 INEQU36..481-TC408 =g=10;
3058 INEQU37..481-TC409 =g=10;
3059 INEQU38..414.6-TC410 =g=10;
3060 INEQU39..414.6-TC411 =g=10;
3061 INEQU40..TSC404-TSC401 =g=10;
3062 INEQU41..TSC403-TSC402 =g=10;
3063 INEQU42..414.6-TSC407 =g=10;
3064 INEQU43..414.6-TSC406 =g=10;
3065 INEQU44..TSC404-TcwoutE603 =g=10;
3066 INEQU45..TSC405-Tcwin =g=10;
3067 INEQU46..TSC408-TcwoutE605 =g=10;
3068 INEQU47..TSC409-Tcwin =g=10;
3069 INEQU48..TSC412 - TcwotE609A =g= 10;
3070 INEQU49..TSC413 - Tcwin =g=10;
3071 INEQU50..f1C601=l=0.0001;
3072
3073 FAC02.L=0.155; FAC12.L=0.155; FAC23.L=0.155;
3074 FAC34.L=0.155; FAC45.L=0.155; FC308.L=3.196;
3075 FC316.L=1.7; FC320.L=0.043; FC322.L=1.5;
3076 FC328.L=0.047; FC329.L=0.665; FC403.L=2.302;
3077 FC407.L=0.911; FC412.L=0.042; FC417.L=0.139;
3078 FHC01.L=0.87; FHC32.L=1.943; FSC402.L=0.484;
3079 FSC405.L=0.344; FSC411.L=1.273; FSC413.L=0.139;
3080 FstmE612.L=0.142; PC302.L=101.847; PC310.L=261.214;
3081 PC601.L=625; PC603.L=1703.728; QHC07.L=1.739;
3082 QHC11.L=1.743; QHC14.L=1.739; QHC16.L=1.739;
3083 QHC34.L=1.079; QHC38.L=0.581; QHC41.L=0.857;
3084 QHC45.L=0.862; TAC09.L=280.004; TAC12.L=280.004;
3085 TAC23.L=280; TAC31.L=280.105; TAC34.L=280.105;
3086 TAC42.L=281.963; TAC45.L=281.963; TC303.L=280.411;
3087 TC306.L=349.007; TC307.L=328.661; TC308.L=328.661;
3088 TC315.L=308.238; TC316.L=345.659; TC317.L=359;
3089 TC321.L=301.113; TC324.L=359; TC325.L=322.937;
3090 TC404.L=305; TC405.L=410; TC407.L=302.95;
3091 TC408.L=405; TC410.L=363.414; TC414.L=336.829;
3092 TC418.L=305.918; TC419.L=303.525; THC32.L=259.254;
3093 TSC402.L=324.98; TSC403.L=336.03; TSC405.L=301.256;
3094 TSC408.L=318.852; TSC413.L=300; x11AC12.L=0.971;
3095 x11AC23.L=0.944; x11AC34.L=0.917; x11AC45.L=0.89;
3096 x1C316.L=0.119; x1C325.L=1; x1C417.L=0.02;
3097 x1HC32.L=0.023; x1SC402.L=0.006; x1SC403.L=0.0000081;
3098 x1SC408.L=0.02; x2SC402.L=0.009; x2SC403.L=0.012;
3099 x2SC408.L=0.00031; x3C316.L=0.79; x3C325.L=0.00000166;
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3100 x3C417.L=0.967; x3HC32.L=0.774; x3SC402.L=0.293;
3101 x3SC403.L=0.021; x3SC408.L=0.967; x4C316.L=0.08;
3102 x4C417.L=0.013; x4HC32.L=0.127; x4SC402.L=0.562;
3103 x4SC403.L=0.784; x4SC408.L=0.013; x5C316.L=0.006;
3104 x5C417.L=0; x5HC32.L=0.03; x5SC402.L=0.052;
3105 x5SC403.L=0.073; x5SC408.L=0; x6SC402.L=0.071;
3106 x6SC403.L=0.1; x6SC408.L=0; x7HC32.L=0.046;
3107 x7SC402.L=0.007; x7SC403.L=0.01; x7SC408.L=0;
3108 xx1C322.L=0.12; xx1C414.L=0.079; xx1HC01.L=0.09;
3109 xx2HC01.L=0.13; xx3C317.L=0.792; xx3C322.L=0.792;
3110 xx3C407.L=0.00000975; xx3C412.L=0.000875; xx3C414.L=0.818;
3111 xx3HC01.L=0.013; xx4C317.L=0.08; xx4C322.L=0.08;
3112 xx4C407.L=0.083; xx4C412.L=0.867; xx4C414.L=0.094;
3113 xx4HC01.L=0.107; xx5C407.L=0.158; xx5C412.L=0.061;
3114 xx5C414.L=0.001; xx7C414.L=0.008;
3115 FAC02.LO=0.09; FAC12.LO=0.01; FAC23.LO=0.01;
3116 FAC34.LO=0.01; FAC45.LO=0.01; FC308.LO=1;
3117 FC316.LO=0.1; FC320.LO=0.01; FC322.LO=0.1;
3118 FC328.LO=0.01; FC329.LO=0.1; FC403.LO=0.1;
3119 FC407.LO=0.75; FC412.LO=0.01; FC417.LO=0.1;
3120 FHC01.LO=0.795; FHC32.LO=0.5; FSC402.LO=0.1;
3121 FSC405.LO=0; FSC411.LO=0.1; FSC413.LO=0.1;
3122 FstmE612.LO=0.05; PC302.LO=101; PC310.LO=230;
3123 PC601.LO=600; PC603.LO=1600; QHC07.LO=0.1;
3124 QHC11.LO=0.1; QHC14.LO=0.1; QHC16.LO=0.1;
3125 QHC34.LO=0.1; QHC38.LO=0.1; QHC41.LO=0.1;
3126 QHC45.LO=0.1; TAC09.LO=280; TAC12.LO=280;
3127 TAC23.LO=280; TAC31.LO=280; TAC34.LO=280;
3128 TAC42.LO=280; TAC45.LO=280; TC303.LO=260;
3129 TC306.LO=320; TC307.LO=300; TC308.LO=270;
3130 TC315.LO=300; TC316.LO=335; TC317.LO=300;
3131 TC321.LO=250; TC324.LO=359; TC325.LO=300;
3132 TC404.LO=305; TC405.LO=410; TC407.LO=298;
3133 TC408.LO=405; TC410.LO=345; TC414.LO=300;
3134 TC418.LO=301; TC419.LO=298; THC32.LO=250;
3135 TSC402.LO=310; TSC403.LO=320; TSC405.LO=300;
3136 TSC408.LO=300; TSC413.LO=295; x11AC12.LO=0.88;
3137 x11AC23.LO=0.88; x11AC34.LO=0.88; x11AC45.LO=0.88;
3138 x1C316.LO=0.01; x1C325.LO=0.5; x1C417.LO=0.02;
3139 x1HC32.LO=0; x1SC402.LO=0; x1SC403.LO=0;
3140 x1SC408.LO=0; x2SC402.LO=0; x2SC403.LO=0;
3141 x2SC408.LO=0; x3C316.LO=0.5; x3C325.LO=0;
3142 x3C417.LO=0.35; x3HC32.LO=0.1; x3SC402.LO=0.2;
3143 x3SC403.LO=0; x3SC408.LO=0.5; x4C316.LO=0.001;
3144 x4C417.LO=0.001; x4HC32.LO=0; x4SC402.LO=0.48;
3145 x4SC403.LO=0.5; x4SC408.LO=0; x5C316.LO=0;

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3146 x5C417.LO=0; x5HC32.LO=0; x5SC402.LO=0;
3147 x5SC403.LO=0; x5SC408.LO=0; x6SC402.LO=0;
3148 x6SC403.LO=0; x6SC408.LO=0; x7HC32.LO=0;
3149 x7SC402.LO=0; x7SC403.LO=0; x7SC408.LO=0;
3150 xx1C322.LO=0; xx1C414.LO=0; xx1HC01.LO=0;
3151 xx2HC01.LO=0.1; xx3C317.LO=0.5; xx3C322.LO=0.5;
3152 xx3C407.LO=0; xx3C412.LO=0; xx3C414.LO=0.5;
3153 xx3HC01.LO=0; xx4C317.LO=0; xx4C322.LO=0;
3154 xx4C407.LO=0.01; xx4C412.LO=0.5; xx4C414.LO=0;
3155 xx4HC01.LO=0; xx5C407.LO=0.01; xx5C412.LO=0;
3156 xx5C414.LO=0; xx7C414.LO=0;
3157 FAC02.UP=0.16; FAC12.UP=0.9; FAC23.UP=0.9;
3158 FAC34.UP=0.9; FAC45.UP=0.9; FC308.UP=6;
3159 FC316.UP=1.8; FC320.UP=1.5; FC322.UP=1.6;
3160 FC328.UP=1; FC329.UP=3; FC403.UP=5;
3161 FC407.UP=5; FC412.UP=1; FC417.UP=2;
3162 FHC01.UP=1.5; FHC32.UP=5; FSC402.UP=4;
3163 FSC405.UP=3; FSC411.UP=3.2; FSC413.UP=0.5;
3164 FstmE612.UP=1; PC302.UP=187; PC310.UP=360;
3165 PC601.UP=625; PC603.UP=1800; QHC07.UP=5;
3166 QHC11.UP=5; QHC14.UP=5; QHC16.UP=5;
3167 QHC34.UP=5; QHC38.UP=5; QHC41.UP=5;
3168 QHC45.UP=5; TAC09.UP=300; TAC12.UP=300;
3169 TAC23.UP=300; TAC31.UP=300; TAC34.UP=300;
3170 TAC42.UP=300; TAC45.UP=300; TC303.UP=300;
3171 TC306.UP=368; TC307.UP=330; TC308.UP=350;
3172 TC315.UP=320; TC316.UP=370; TC317.UP=420;
3173 TC321.UP=350; TC324.UP=385; TC325.UP=360;
3174 TC404.UP=325; TC405.UP=440; TC407.UP=350;
3175 TC408.UP=440; TC410.UP=369; TC414.UP=368;
3176 TC418.UP=350; TC419.UP=310; THC32.UP=310;
3177 TSC402.UP=340; TSC403.UP=350; TSC405.UP=360;
3178 TSC408.UP=330; TSC413.UP=350; x11AC12.UP=0.999;
3179 x11AC23.UP=0.999; x11AC34.UP=0.999; x11AC45.UP=0.999;
3180 x1C316.UP=0.5; x1C325.UP=1; x1C417.UP=0.2;
3181 x1HC32.UP=0.1; x1SC402.UP=0.1; x1SC403.UP=0.1;
3182 x1SC408.UP=0.1; x2SC402.UP=0.1; x2SC403.UP=0.1;
3183 x2SC408.UP=0.1; x3C316.UP=1; x3C325.UP=0.1;
3184 x3C417.UP=1; x3HC32.UP=1; x3SC402.UP=0.42;
3185 x3SC403.UP=0.1; x3SC408.UP=1; x4C316.UP=0.2;
3186 x4C417.UP=0.4; x4HC32.UP=0.5; x4SC402.UP=0.7;
3187 x4SC403.UP=1; x4SC408.UP=0.1; x5C316.UP=0.01;
3188 x5C417.UP=0.15; x5HC32.UP=2.5; x5SC402.UP=0.1;
3189 x5SC403.UP=0.1; x5SC408.UP=0.1; x6SC402.UP=0.1;
3190 x6SC403.UP=0.12; x6SC408.UP=0.1; x7HC32.UP=2;
3191 x7SC402.UP=0.1; x7SC403.UP=0.1; x7SC408.UP=0.1;

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3192 xx1C322.UP=0.12; xx1C414.UP=0.08; xx1HC01.UP=0.5;
3193 xx2HC01.UP=0.6; xx3C317.UP=1; xx3C322.UP=1;
3194 xx3C407.UP=0.1; xx3C412.UP=0.15; xx3C414.UP=1;
3195 xx3HC01.UP=0.55; xx4C317.UP=0.2; xx4C322.UP=0.2;
3196 xx4C407.UP=0.3; xx4C412.UP=1; xx4C414.UP=0.2;
3197 xx4HC01.UP=0.3; xx5C407.UP=0.5; xx5C412.UP=0.1;
3198 xx5C414.UP=0.1; xx7C414.UP=0.008;
3199
3200 C10pC623.L=0.0000338; C10pC625.L=0.0000735; C10pC627.L=0.000214;
3201 C10pC629.L=0.000152; C2C623.L=0.015; C2C625.L=0.015;
3202 C2C627.L=0.015; C2C629.L=0.015; C3C623.L=3.85;
3203 C3C625.L=2.584; C3C627.L=1.5; C3C629.L=1.801;
3204 C3pC623.L=1.173; C3pC625.L=1.198; C3pC627.L=1.215;
3205 C3pC629.L=1.19; C4pC623.L=0.027; C4pC625.L=0.041;
3206 C4pC627.L=0.071; C4pC629.L=0.058; C5pC623.L=0.000408;
3207 C5pC625.L=0.00091; C5pC627.L=0.003; C5pC629.L=0.002;
3208 C7pC623.L=0.0000378; C7pC625.L=0.000179; C7pC627.L=0.001;
3209 C7pC629.L=0.000743; C8pC623.L=0.001; C8pC625.L=0.003;
3210 C8pC627.L=0.01; C8pC629.L=0.007; C9pC623.L=0.419;
3211 C9pC625.L=0.625; C9pC627.L=1.074; C9pC629.L=0.895;
3212 CHXC623.L=13.606; CHXC625.L=14.201; CHXC627.L=14.702;
3213 CHXC629.L=14.035; CiC10pC623.L=0; CiC10pC625.L=0;
3214 CiC10pC627.L=0; CiC10pC629.L=0; CiC11pC623.L=0.0000132;
3215 CiC11pC625.L=0.000042; CiC11pC627.L=0.000202;
CiC11pC629.L=0.000121;
3216 CiC4eC623.L=0.003; CiC4eC625.L=0.003; CiC4eC627.L=0.003;
3217 CiC4eC629.L=0.003; CiC5eC623.L=0.000594; CiC5eC625.L=0.00085;
3218 CiC5eC627.L=0.001; CiC5eC629.L=0.001; CiC8eC623.L=0.018;
3219 CiC8eC625.L=0.026; CiC8eC627.L=0.044; CiC8eC629.L=0.037;
3220 Cost.L=148.943; dTE601.L=10.516; dTE602.L=78.57;
3221 dTE603.L=10.825; dTE605.L=22.741; dTE609A.L=10;
3222 dTE610.L=13.533; dTE611.L=16.018; dTE612.L=55.6;
3223 dTE613.L=25; dTE616.L=98.994; dTE617.L=33.53;
3224 dTE621A.L=28.414; dTE621B.L=25.722; dTE626.L=11.674;
3225 dTE627A.L=55; dTE627B.L=31.592; dTE628.L=10.806;
3226 dTE629.L=16.246; dTE633.L=11.452; dTE634.L=19.324;
3227 dTE640.L=25.062; dTE641.L=16.152; dTE695A.L=76;
3228 dTE695B.L=48; dTE696A.L=51.186; dTE696B.L=30.593;
3229 dTE6XX.L=1; Earnings.L=176.97; f1C601.L=0.001;
3230 f1C603.L=0.765; f1C606A.L=0.001; f2C601.L=0.99;
3231 f3C601.L=0.05; f3C603.L=1; f3C606A.L=0.000997;
3232 f4C601.L=0.994; f4C603.L=1; f4C606A.L=0.898;
3233 f5C601.L=1; f5C603.L=1; f5C606A.L=0.989;
3234 f6C601.L=1; f7C601.L=1; f7C603.L=1;
3235 f7C606A.L=0.999; FAC05.L=6.653; FAC07.L=6.808;
3236 FAC09.L=8.428; FAC15.L=8.574; FAC18.L=8.729;
3237 FAC20.L=10.065; FAC26.L=18.057; FAC29.L=18.212;

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3238 FAC31.L=19.705; FAC37.L=14.803; FAC40.L=14.958;
3239 FAC42.L=16.454; FC301.L=3.643; FC302.L=0.428;
3240 FC303.L=4.071; FC306.L=4.896; FC307.L=4.896;
3241 FC309.L=3.196; FC310.L=0.825; FC311.L=2.371;
3242 FC312.L=1.7; FC315.L=1.7; FC317.L=1.653;
3243 FC318.L=1.653; FC319.L=1.653; FC321.L=0.11;
3244 FC323.L=0.712; FC324.L=0.712; FC325.L=0.712;
3245 FC326.L=0.712; FC401.L=2.302; FC402.L=2.302;
3246 FC404.L=2.302; FC405.L=0.911; FC406.L=0.911;
3247 FC408.L=3.271; FC409.L=3.271; FC410.L=0.833;
3248 FC411.L=0.833; FC413.L=0.042; FC414.L=2.883;
3249 FC415.L=2.883; FC418.L=3.023; FC419.L=3.023;
3250 FC425.L=3.767; FC426.L=2.934; FC427.L=2.856;
3251 FC428.L=2.023; FC430.L=3.767; FC431.L=2.856;
3252 FC432.L=2.814; Fcwe603.L=0.199; Fcwe605.L=0.949;
3253 Fcwe609A.L=0.083; Fcwe611.L=2.139; Fcwe613.L=1.618;
3254 Fcwe617.L=1.551; Fcwe621A.L=5.225; Fcwe621B.L=6.898;
3255 Fcwe626.L=0.724; Fcwe627A.L=0.55; Fcwe627B.L=0.536;
3256 Fcwe634.L=7.241; Fcwe640.L=0.4; Fcwe641A.L=4.111;
3257 Fcwe641B.L=0.881; FHC02.L=0.87; FHC03.L=3.132;
3258 FHC04.L=3.132; FHC05.L=3.132; FHC06.L=4.002;
3259 FHC07.L=1; FHC08.L=3.002; FHC11.L=1.002;
3260 FHC14.L=1; FHC15.L=2; FHC16.L=1;
3261 FHC22.L=1.496; FHC23.L=1.493; FHC24.L=2.989;
3262 FHC25.L=1.336; FHC26.L=4.325; FHC27.L=1.62;
3263 FHC28.L=5.945; FHC29.L=0.679; FHC30.L=0.679;
3264 FHC31.L=5.945; FHC33.L=0.954; FHC34.L=0.62;
3265 FHC38.L=0.334; FHC40.L=0.989; FHC41.L=0.493;
3266 FHC45.L=0.496; FlHC28.L=3.019; FlHC29.L=0.345;
3267 FlHC30.L=0.198; FlHC31.L=2.302; Flr1.L=2.675;
3268 Flr29.L=2.105; FmC302.L=0.007; FmC308.L=0.055;
3269 FmC310.L=0.015; FmC311.L=0.04; FmC312.L=0.03;
3270 FmC317.L=0.029; FmC322.L=0.027; FmC323.L=0.013;
3271 FmC325.L=0.016; FmC405.L=0.011; FmC407.L=0.011;
3272 FmC408.L=0.04; FmC409.L=0.04; FmC412.L=0.000684;
3273 FmC414.L=0.05; FmC425.L=0.056; FmC427.L=0.045;
3274 FmC428.L=0.032; FmC430.L=0.058; FmC431.L=0.047;
3275 FmC432.L=0.046; FmHC01.L=0.012; FmHC32.L=0.033;
3276 FmlHC28.L=0.047; FmlHC29.L=0.005; FmlHC30.L=0.003;
3277 Fmlr1.L=0.042; Fmlr29.L=0.032; FmSC403.L=0.006;
3278 FmSC406.L=0.023; FmSC408.L=0.024; FmvHC28.L=0.051;
3279 FmvHC29.L=0.006; FmvHC30.L=0.008; FmvR1.L=0.045;
3280 FmvR29.L=0.055; FR1.L=5.266; FR29.L=5.266;
3281 FSC401.L=0.484; FSC403.L=0.344; FSC404.L=0.344;
3282 FSC406.L=1.412; FSC407.L=1.412; FSC408.L=1.412;
3283 FSC409.L=1.412; FSC412.L=0.139; FSC414.L=0;

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3284 FstmE602.L=0.401; FstmE695A.L=0.409; FstmE695B.L=0.1;
3285 FstmE696A.L=0.111; FstmE696B.L=0.019; FvHC28.L=2.926;
3286 FvHC29.L=0.334; FvHC30.L=0.481; FvHC31.L=3.643;
3287 FvR1.L=2.592; FvR29.L=3.162; h1C601.L=1.083;
3288 h1C603.L=-0.308; h1C606A.L=0.988; h2C601.L=0.551;
3289 h3C601.L=3.047; h3C603.L=0.237; h3C606A.L=-65;
3290 h4C601.L=0.576; h4C603.L=0.303; h4C606A.L=0;
3291 h5C601.L=0.893; h5C603.L=0.4; h5C606A.L=0.484;
3292 h6C601.L=0.919; h7C601.L=0.963; h7C603.L=0.466;
3293 h7C606A.L=0.548; hAC02.L=9.363; hAC05.L=345.67;
3294 hAC07.L=355.032; hAC09.L=1238.893; hAC12.L=8.054;
3295 hAC15.L=381.455; hAC18.L=389.509; hAC20.L=1095.317;
3296 hAC23.L=6.896; hAC26.L=712.123; hAC29.L=719.019;
3297 hAC31.L=1498.7; hAC34.L=6.108; hAC37.L=550.6;
3298 hAC40.L=556.708; hAC42.L=1479.085; hacAC09.L=400.225;
3299 hacAC20.L=404.239; hacAC31.L=725.831; hacAC42.L=698.262;
3300 hc301.L=3202.309; hc302.L=362.16; hc303.L=3564.469;
3301 hc306.L=4694.871; hc307.L=3144.814; hc308.L=2047.223;
3302 hc309.L=2011.834; hc310.L=732.158; hc311.L=1279.676;
3303 hc312.L=1592.117; hc312liq.L=1097.591; hc315.L=1007.31;
3304 hc316.L=1177.087; hc317.L=1206.034; hc318.L=1036.258;
3305 hc319.L=948.614; hc321.L=63.005; hc322.L=861.064;
3306 hc323.L=519.83; hc324.L=824.202; hc325.L=576.997;
3307 hc326.L=469.229; hc329.L=437.948; hc401.L=1191.06;
3308 hc402.L=1195.852; hc403.L=1256.207; hc404.L=1308.674;
3309 hc405.L=732.132; hc406.L=679.665; hc407.L=494.768;
3310 hc408.L=2583.757; hc408vap.L=3369.113; hc409.L=3561.113;
3311 hc410.L=589.132; hc410vap.L=826.439; hc411.L=866.516;
3312 hc412.L=41.665; hc412liq.L=30.115; hc413.L=23.373;
3313 hc414.L=2726.349; hc414liq.L=1918.758; hc415.L=1687.138;
3314 hc417.L=79.433; hc418.L=1766.572; hc419.L=1748.594;
3315 hc425.L=2663.701; hc426.L=2074.569; hc427.L=2889.353;
3316 hc428.L=2022.838; hc430.L=2637.618; hc431.L=2855.907;
3317 hc432.L=2814.242; hc623.L=54.051; hc625.L=10;
3318 hc627.L=10; hc629.L=151.308; hHC01.L=454.527;
3319 hHC02.L=449.735; hHC03.L=1811.6; hHC04.L=1751.245;
3320 hHC05.L=1699.117; hHC06.L=2148.851; hHC07.L=536.914;
3321 hHC11.L=538.109; hHC14.L=536.914; hHC16.L=536.914;
3322 hHC29.L=469.914; hHC30.L=522.042; hHC31.L=4393.369;
3323 hHC32.L=917.516; hHC34.L=292.895; hHC38.L=157.699;
3324 hHC41.L=232.767; hHC45.L=234.155; hlHC29.L=177.154;
3325 hlHC30.L=100.685; hlHC31.L=1191.06; hLR1.L=1374.506;
3326 hLR29.L=1077.84; hR1.L=3645.969; hR29.L=3871.327;
3327 hSC401.L=298.275; hSC402.L=301.683; hSC403.L=223.217;
3328 hSC404.L=219.81; hSC405.L=193.288; hSC406.L=915.321;
3329 hSC407.L=1775.662; hSC408.L=921.092; hSC409.L=872.425;

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3330 hSC411.L=786.391; hSC412.L=86.033; hSC413.L=79.433;
3331 hSC414.L=0; hvHC29.L=292.759; hvHC30.L=421.357;
3332 hvHC31.L=3202.309; hvR1.L=2271.462; hvR29.L=2793.488;
3333 K1C323.L=2.018; K1C325.L=1; K1C408.L=7.956;
3334 K1C414.L=2.523; K1C428.L=4.259; K1C430.L=3.799;
3335 K1C601.L=2.666; K1C603.L=1.267; K1C606A.L=1.812;
3336 K1C606C.L=4.173; K1C614B.L=2.98; K1C615_A.L=2.404;
3337 K1C616_A.L=2.852; K1E633.L=4.427; K1E6XX.L=3.982;
3338 K1SC406.L=3.576; K1SC408.L=2.493; K2C601.L=0.784;
3339 K2E633.L=1.253; K2E6XX.L=1.127; K2SC406.L=1.122;
3340 K2SC408.L=0.723; K3C323.L=0.887; K3C325.L=0.401;
3341 K3C408.L=3.836; K3C414.L=1.052; K3C428.L=1.897;
3342 K3C430.L=1.668; K3C601.L=1.067; K3C603.L=0.525;
3343 K3C606A.L=0.723; K3C606C.L=1.851; K3C614B.L=0.93;
3344 K3C615_A.L=0.981; K3C616_A.L=1.021; K3E633.L=1.492;
3345 K3E6XX.L=1.342; K3SC406.L=1.488; K3SC408.L=0.989;
3346 K4C323.L=0.673; K4C325.L=0.29; K4C408.L=3.023;
3347 K4C414.L=0.776; K4C428.L=1.45; K4C430.L=1.266;
3348 K4C601.L=0.769; K4C603.L=0.386; K4C606A.L=0.52;
3349 K4C606C.L=1.413; K4C614B.L=0.58; K4C615_A.L=0.708;
3350 K4C616_A.L=0.686; K4E633.L=0.978; K4E6XX.L=0.88;
3351 K4SC406.L=1.096; K4SC408.L=0.709; K5C323.L=0.308;
3352 K5C325.L=0.12; K5C408.L=1.509; K5C414.L=0.335;
3353 K5C428.L=0.673; K5C430.L=0.579; K5C601.L=0.317;
3354 K5C603.L=0.165; K5C606A.L=0.213; K5C606C.L=0.653;
3355 K5C614B.L=0.162; K5C615_A.L=0.272; K5C616_A.L=0.225;
3356 K5E633.L=0.334; K5E6XX.L=0.301; K5SC406.L=0.472;
3357 K5SC408.L=0.289; K6C601.L=0.247; K6SC406.L=0.375;
3358 K6SC408.L=0.224; K7C323.L=0.12; K7C325.L=0.04;
3359 K7C408.L=0.674; K7C414.L=0.12; K7C428.L=0.268;
3360 K7C430.L=0.226; K7C601.L=0.105; K7C603.L=0.058;
3361 K7C606A.L=0.071; K7C614B.L=0.039; K7C615_A.L=0.103;
3362 K7C616_A.L=0.068; K7E633.L=0.081; K7E6XX.L=0.073;
3363 K7SC406.L=0.168; K7SC408.L=0.095; Kp1C601.L=3.197;
3364 Kp1C603.L=1.79; Kp1C606A.L=2.282; Kp1C606D.L=6.131;
3365 Kp2C601.L=0.979; Kp3C601.L=1.311; Kp3C603.L=0.775;
3366 Kp3C606A.L=0.939; Kp3C606D.L=2.859; Kp4C601.L=0.958;
3367 Kp4C603.L=0.584; Kp4C606A.L=0.688; Kp4C606D.L=2.23;
3368 Kp5C601.L=0.406; Kp5C603.L=0.263; Kp5C606A.L=0.292;
3369 Kp5C606D.L=1.082; Kp6C601.L=0.32; Kp7C601.L=0.141;
3370 Kp7C603.L=0.1; Kp7C606A.L=0.102; Kp7C606D.L=0.462;
3371 kWad1.L=171.048; kWad2.L=288.952; LpC601.L=1.757;
3372 LpC603.L=2.365; LpC606A.L=2.651; PC303.L=101;
3373 PC306.L=870; PC307.L=800; PC308.L=800;
3374 PC309.L=780; PC311.L=261.214; PC312.L=800;
3375 PHC30.L=121.513; PHC32.L=101.847; PR29.L=135.084;

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3376 Profit.L=20; Q2HC07.L=0.035; Q2HC11.L=0.035;
3377 Q2HC14.L=0.035; Q2HC16.L=0.035; qFp1C606A.L=0.007;
3378 qFp3C606A.L=0.00098; qFp4C606A.L=0.865; qFp5C606A.L=0.6;
3379 qFp7C606A.L=0.278; qS1C606A.L=0.796; qS3C606A.L=0.509;
3380 qS4C606A.L=0.046; qS5C606A.L=0.027; qS7C606A.L=0.008;
3381 r10C623.L=0; r10C625.L=0; r10C627.L=0.00000137;
3382 r10C629.L=0.00000117; r2C623.L=0.009; r2C625.L=0.009;
3383 r2C627.L=0.009; r2C629.L=0.009; r3C623.L=0.01;
3384 r3C625.L=0.01; r3C627.L=0.01; r3C629.L=0.01;
3385 r4C623.L=0.001; r4C625.L=0.001; r4C627.L=0.001;
3386 r4C629.L=0.001; r5C623.L=0.00000781; r5C625.L=0.0000117;
3387 r5C627.L=0.0000201; r5C629.L=0.0000167; r7C623.L=0;
3388 r7C625.L=0; r7C627.L=0; r7C629.L=0;
3389 r8C623.L=0.00000817; r8C625.L=0.0000121; r8C627.L=0.0000203;
3390 r8C629.L=0.000017; r9C623.L=0.009; r9C625.L=0.009;
3391 r9C627.L=0.009; r9C629.L=0.009; rho2HC07.L=650;
3392 rho2HC11.L=650; rho2HC14.L=650; rho2HC16.L=650;
3393 rhoAC09.L=1700; rhoAC20.L=1700; rhoAC31.L=1700;
3394 rhoAC42.L=1700; riC10C623.L=0; riC10C625.L=0;
3395 riC10C627.L=0; riC10C629.L=0; riC11C623.L=0;
3396 riC11C625.L=0; riC11C627.L=0.00000114; riC11C629.L=0;
3397 sf1S34.L=0.026; sf2S34.L=0.066; sfS11.L=0.5;
3398 sfS19.L=0.491; sfS2.L=0.886; sfS23.L=0.65;
3399 sfS27.L=0.499; sfS41.L=0.985; sfS42.L=0.779;
3400 sfS5.L=0.25; sfS7.L=0.334; SmlC601.L=2.57;
3401 SmlC603.L=0.539; SmlC606A.L=2.422; SmlC606D.L=2.936;
3402 Sm2C601.L=0.787; Sm3C601.L=1.054; Sm3C603.L=0.233;
3403 Sm3C606A.L=0.997; Sm3C606D.L=1.308; Sm4C601.L=0.77;
3404 Sm4C603.L=0.176; Sm4C606A.L=0.73; Sm4C606D.L=1;
3405 Sm5C601.L=0.326; Sm5C603.L=0.079; Sm5C606A.L=0.31;
3406 Sm5C606D.L=0.464; Sm6C601.L=0.257; Sm7C601.L=0.113;
3407 Sm7C603.L=0.03; Sm7C606A.L=0.108; Sm7C606D.L=0.185;
3408 Sn1C601.L=2.958; Sn1C603.L=1.358; Sn1C606A.L=3.483;
3409 Sn2C601.L=0.87; Sn3C601.L=1.184; Sn3C603.L=0.562;
3410 Sn3C606A.L=1.39; Sn4C601.L=0.853; Sn4C603.L=0.413;
3411 Sn4C606A.L=1; Sn5C601.L=0.351; Sn5C603.L=0.177;
3412 Sn5C606A.L=0.41; Sn6C601.L=0.274; Sn7C601.L=0.117;
3413 Sn7C603.L=0.062; Sn7C606A.L=0.136; TAC02.L=276;
3414 TAC05.L=280.004; TAC07.L=279.99; TAC15.L=280;
3415 TAC18.L=280.063; TAC20.L=280; TAC26.L=280.105;
3416 TAC29.L=280.224; TAC37.L=281.963; TAC40.L=281.981;
3417 TC301.L=282.932; TC302.L=259.254; TC309.L=324.429;
3418 TC310.L=288.704; TC311.L=288.704; TC312.L=328.661;
3419 TC318.L=321.965; TC319.L=301.113; TC320.L=301.113;
3420 TC322.L=301.113; TC323.L=359; TC326.L=322.937;
3421 TC328.L=322.937; TC329.L=322.937; TC401.L=282.932;

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3422 TC402.L=283.85; TC403.L=295.279; TC406.L=388.5;
3423 TC409.L=461; TC411.L=404.6; TC412.L=363.414;
3424 TC413.L=301; TC415.L=305.99; TC417.L=299.989;
3425 TC425.L=363.414; TC426.L=363.414; TC427.L=375.65;
3426 TC428.L=365.245; TC430.L=358.683; TC431.L=363.414;
3427 TC432.L=363.414; TcwotE609A.L=308.852; TcwotE621A.L=326.829;
3428 TcwotE621B.L=298; TcwotE627A.L=295; TcwotE627B.L=293;
3429 TcwotE641A.L=318.661; TcwotE641B.L=314.429; TcwoutE603.L=321.814;
3430 TcwoutE605.L=302.221; TcwoutE611.L=299.764; TcwoutE613.L=305.874;
3431 TcwoutE617.L=318.399; TcwoutE626.L=295.918; TcwoutE634.L=341.007;
3432 TcwoutE640.L=311.08; THC01.L=295.504; THC02.L=292.932;
3433 THC03.L=303.279; THC04.L=295.426; THC05.L=288.522;
3434 THC06.L=289.396; THC07.L=289.396; THC11.L=289.396;
3435 THC14.L=289.396; THC16.L=289.396; THC22.L=281.963;
3436 THC23.L=280.105; THC24.L=281.035; THC25.L=280;
3437 THC26.L=280.715; THC27.L=280.004; THC28.L=280.522;
3438 THC29.L=280.522; THC30.L=280.522; THC31.L=282.932;
3439 THC34.L=259.254; THC38.L=259.254; THC41.L=259.254;
3440 THC45.L=259.254; TmC601.L=330.505; TmC603.L=352.33;
3441 TmC606A.L=331.841; TmC606D.L=387.623; TmK601.L=306.796;
3442 TnC601.L=321.916; TnC603.L=334.298; TnC606A.L=320.914;
3443 TR1.L=280.522; TR29.L=280.522; TSC401.L=322.219;
3444 TSC404.L=332.219; TSC406.L=336.03; TSC407.L=336.03;
3445 TSC409.L=318.852; TSC411.L=318.852; TSC412.L=318.852;
3446 TSC414.L=320; Utilities.L=8.027; VFC614B.L=0.181;
3447 VFC615.L=0.347; VFC616.L=0.258; VFM3.L=0.492;
3448 VpC601.L=1.412; VpC603.L=0.712; VpC606A.L=2.814;
3449 x10AC09.L=0; x10AC20.L=0; x10AC31.L=0;
3450 x10AC42.L=0; x11AC02.L=0.998; x11AC05.L=0.971;
3451 x11AC07.L=0.972; x11AC09.L=0.784; x11AC15.L=0.944;
3452 x11AC18.L=0.944; x11AC20.L=0.819; x11AC26.L=0.917;
3453 x11AC29.L=0.917; x11AC31.L=0.848; x11AC37.L=0.89;
3454 x11AC40.L=0.89; x11AC42.L=0.809; x12AC02.L=0.002;
3455 x12AC05.L=0.029; x12AC07.L=0.028; x12AC09.L=0.023;
3456 x12AC12.L=0.029; x12AC15.L=0.056; x12AC18.L=0.056;
3457 x12AC20.L=0.049; x12AC23.L=0.056; x12AC26.L=0.083;
3458 x12AC29.L=0.083; x12AC31.L=0.077; x12AC34.L=0.083;
3459 x12AC37.L=0.11; x12AC40.L=0.11; x12AC42.L=0.1;
3460 x12AC45.L=0.11; x1AC09.L=0.009; x1AC20.L=0.007;
3461 x1AC31.L=0.004; x1AC42.L=0.004; x1C301.L=0.068;
3462 x1C302.L=0.069; x1C303.L=0.068; x1C306.L=0.072;
3463 x1C307.L=0.072; x1C308.L=0.048; x1C309.L=0.048;
3464 x1C310.L=0.094; x1C311.L=0.031; x1C312.L=0.119;
3465 x1C315.L=0.119; x1C317.L=0.094; x1C318.L=0.094;
3466 x1C319.L=0.094; x1C320.L=0.094; x1C321.L=0.094;
3467 x1C322.L=0.094; x1C323.L=0.094; x1C324.L=0.094;

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3468 x1C326.L=1; x1C328.L=1; x1C329.L=1;
3469 x1C401.L=0.015; x1C402.L=0.015; x1C403.L=0.015;
3470 x1C404.L=0.015; x1C405.L=0; x1C406.L=0;
3471 x1C407.L=0; x1C408.L=0; x1C409.L=0;
3472 x1C410.L=0.0001; x1C411.L=0.0001; x1C412.L=0.000463;
3473 x1C413.L=0.000463; x1C414.L=0.061; x1C415.L=0.061;
3474 x1C418.L=0.059; x1C419.L=0.059; x1C425.L=0.0001;
3475 x1C426.L=0.0001; x1C427.L=0.000132; x1C428.L=0.000145;
3476 x1C430.L=0.0000468; x1C431.L=0.000463; x1C432.L=0.000463;
3477 x1HC01.L=0.055; x1HC02.L=0.055; x1HC03.L=0.06;
3478 x1HC04.L=0.06; x1HC05.L=0.06; x1HC06.L=0.059;
3479 x1HC07.L=0.059; x1HC08.L=0.059; x1HC11.L=0.059;
3480 x1HC14.L=0.059; x1HC15.L=0.059; x1HC16.L=0.059;
3481 x1HC22.L=0.047; x1HC23.L=0.047; x1HC24.L=0.047;
3482 x1HC25.L=0.05; x1HC26.L=0.048; x1HC27.L=0.045;
3483 x1HC28.L=0.019; x1HC29.L=0.019; x1HC30.L=0.012;
3484 x1HC31.L=0.015; x1HC33.L=0.023; x1HC34.L=0.023;
3485 x1HC38.L=0.023; x1HC40.L=0.023; x1HC41.L=0.023;
3486 x1HC45.L=0.023; x1R1.L=0.019; x1R29.L=0.015;
3487 x1SC401.L=0.006; x1SC404.L=0.0000081; x1SC405.L=0.0000081;
3488 x1SC406.L=0.0000081; x1SC407.L=0.0000081; x1SC409.L=0.02;
3489 x1SC411.L=0.02; x1SC412.L=0.02; x1SC413.L=0.02;
3490 x1SC414.L=0.1; x2AC09.L=0; x2AC20.L=0;
3491 x2AC31.L=0; x2AC42.L=0; x2C301.L=0;
3492 x2C417.L=0.00031; x2C418.L=0.000922; x2C419.L=0.000922;
3493 x2HC01.L=0.1; x2HC02.L=0.1; x2HC03.L=0.000889;
3494 x2HC04.L=0.000889; x2HC05.L=0.000889; x2HC06.L=0.022;
3495 x2HC07.L=0.022; x2HC08.L=0.022; x2HC11.L=0.022;
3496 x2HC14.L=0.022; x2HC15.L=0.022; x2HC16.L=0.022;
3497 x2HC22.L=0; x2HC23.L=0; x2HC24.L=0;
3498 x2HC25.L=0; x2HC26.L=0; x2HC27.L=0;
3499 x2HC28.L=0; x2HC29.L=0; x2HC30.L=0;
3500 x2HC31.L=0; x2R1.L=0; x2R29.L=0;
3501 x2SC401.L=0.009; x2SC404.L=0.012; x2SC405.L=0.012;
3502 x2SC406.L=0.012; x2SC407.L=0.012; x2SC409.L=0.00031;
3503 x2SC411.L=0.00031; x2SC412.L=0.00031; x2SC413.L=0.00031;
3504 x2SC414.L=0.1; x3AC09.L=0.132; x3AC20.L=0.088;
3505 x3AC31.L=0.051; x3AC42.L=0.062; x3C301.L=0.781;
3506 x3C302.L=0.71; x3C303.L=0.774; x3C306.L=0.78;
3507 x3C307.L=0.78; x3C308.L=0.775; x3C309.L=0.775;
3508 x3C310.L=0.812; x3C311.L=0.762; x3C312.L=0.79;
3509 x3C315.L=0.79; x3C317.L=0.813; x3C318.L=0.813;
3510 x3C319.L=0.813; x3C320.L=0.813; x3C321.L=0.813;
3511 x3C322.L=0.813; x3C323.L=0.813; x3C324.L=0.813;
3512 x3C326.L=0.00000166; x3C328.L=0.00000166; x3C329.L=0.00000166;
3513 x3C401.L=0.51; x3C402.L=0.51; x3C403.L=0.51;

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3514 x3C404.L=0.51; x3C405.L=0.00000694; x3C406.L=0.00000694;
3515 x3C407.L=0.00000694; x3C408.L=0.00000694; x3C409.L=0.00000694;
3516 x3C410.L=0.000406; x3C411.L=0.000406; x3C412.L=0.000834;
3517 x3C413.L=0.000834; x3C414.L=0.83; x3C415.L=0.83;
3518 x3C418.L=0.837; x3C419.L=0.837; x3C425.L=0.000406;
3519 x3C426.L=0.000406; x3C427.L=0.000533; x3C428.L=0.000586;
3520 x3C430.L=0.000634; x3C431.L=0.000834; x3C432.L=0.000834;
3521 x3HC01.L=0.01; x3HC02.L=0.01; x3HC03.L=0.836;
3522 x3HC04.L=0.836; x3HC05.L=0.836; x3HC06.L=0.656;
3523 x3HC07.L=0.656; x3HC08.L=0.656; x3HC11.L=0.656;
3524 x3HC14.L=0.656; x3HC15.L=0.656; x3HC16.L=0.656;
3525 x3HC22.L=0.677; x3HC23.L=0.677; x3HC24.L=0.677;
3526 x3HC25.L=0.665; x3HC26.L=0.673; x3HC27.L=0.684;
3527 x3HC28.L=0.568; x3HC29.L=0.568; x3HC30.L=0.446;
3528 x3HC31.L=0.51; x3HC33.L=0.774; x3HC34.L=0.774;
3529 x3HC38.L=0.774; x3HC40.L=0.774; x3HC41.L=0.774;
3530 x3HC45.L=0.774; x3R1.L=0.568; x3R29.L=0.516;
3531 x3SC401.L=0.293; x3SC404.L=0.021; x3SC405.L=0.021;
3532 x3SC406.L=0.021; x3SC407.L=0.021; x3SC409.L=0.967;
3533 x3SC411.L=0.967; x3SC412.L=0.967; x3SC413.L=0.967;
3534 x3SC414.L=0.5; x4AC09.L=0.02; x4AC20.L=0.014;
3535 x4AC31.L=0.008; x4AC42.L=0.01; x4C301.L=0.105;
3536 x4C302.L=0.073; x4C303.L=0.101; x4C306.L=0.099;
3537 x4C307.L=0.099; x4C308.L=0.108; x4C309.L=0.108;
3538 x4C310.L=0.084; x4C311.L=0.117; x4C312.L=0.08;
3539 x4C315.L=0.08; x4C317.L=0.082; x4C318.L=0.082;
3540 x4C319.L=0.082; x4C320.L=0.082; x4C321.L=0.082;
3541 x4C322.L=0.082; x4C323.L=0.082; x4C324.L=0.082;
3542 x4C325.L=0; x4C326.L=0; x4C328.L=0;
3543 x4C329.L=0; x4C401.L=0.104; x4C402.L=0.104;
3544 x4C403.L=0.104; x4C404.L=0.104; x4C405.L=0.059;
3545 x4C406.L=0.059; x4C407.L=0.059; x4C408.L=0.059;
3546 x4C409.L=0.059; x4C410.L=0.527; x4C411.L=0.527;
3547 x4C412.L=0.826; x4C413.L=0.826; x4C414.L=0.095;
3548 x4C415.L=0.095; x4C418.L=0.092; x4C419.L=0.092;
3549 x4C425.L=0.527; x4C426.L=0.527; x4C427.L=0.676;
3550 x4C428.L=0.738; x4C430.L=0.641; x4C431.L=0.826;
3551 x4C432.L=0.826; x4HC01.L=0.085; x4HC02.L=0.085;
3552 x4HC03.L=0.091; x4HC04.L=0.091; x4HC05.L=0.091;
3553 x4HC06.L=0.09; x4HC07.L=0.09; x4HC08.L=0.09;
3554 x4HC11.L=0.09; x4HC14.L=0.09; x4HC15.L=0.09;
3555 x4HC16.L=0.09; x4HC22.L=0.105; x4HC23.L=0.105;
3556 x4HC24.L=0.105; x4HC25.L=0.102; x4HC26.L=0.104;
3557 x4HC27.L=0.106; x4HC28.L=0.109; x4HC29.L=0.109;
3558 x4HC30.L=0.096; x4HC31.L=0.104; x4HC33.L=0.127;
3559 x4HC34.L=0.127; x4HC38.L=0.127; x4HC40.L=0.127;

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3560 x4HC41.L=0.127; x4HC45.L=0.127; x4R1.L=0.109;
3561 x4R29.L=0.105; x4SC401.L=0.562; x4SC404.L=0.784;
3562 x4SC405.L=0.784; x4SC406.L=0.784; x4SC407.L=0.784;
3563 x4SC409.L=0.013; x4SC411.L=0.013; x4SC412.L=0.013;
3564 x4SC413.L=0.013; x4SC414.L=0.1; x5AC09.L=0.006;
3565 x5AC20.L=0.004; x5AC31.L=0.002; x5AC42.L=0.003;
3566 x5C301.L=0.019; x5C302.L=0.005; x5C303.L=0.017;
3567 x5C306.L=0.015; x5C307.L=0.015; x5C308.L=0.021;
3568 x5C309.L=0.021; x5C310.L=0.006; x5C311.L=0.026;
3569 x5C312.L=0.006; x5C315.L=0.006; x5C317.L=0.006;
3570 x5C318.L=0.006; x5C319.L=0.006; x5C320.L=0.006;
3571 x5C321.L=0.006; x5C322.L=0.006; x5C323.L=0.006;
3572 x5C324.L=0.006; x5C325.L=0; x5C326.L=0;
3573 x5C328.L=0; x5C329.L=0; x5C401.L=0.054;
3574 x5C402.L=0.054; x5C403.L=0.054; x5C404.L=0.054;
3575 x5C405.L=0.14; x5C406.L=0.14; x5C407.L=0.14;
3576 x5C408.L=0.14; x5C409.L=0.14; x5C410.L=0.099;
3577 x5C411.L=0.099; x5C412.L=0.072; x5C413.L=0.072;
3578 x5C414.L=0.001; x5C415.L=0.001; x5C418.L=0.001;
3579 x5C419.L=0.001; x5C425.L=0.099; x5C426.L=0.099;
3580 x5C427.L=0.086; x5C428.L=0.08; x5C430.L=0.088;
3581 x5C431.L=0.072; x5C432.L=0.072; x5HC01.L=0.15;
3582 x5HC02.L=0.15; x5HC03.L=0.001; x5HC04.L=0.001;
3583 x5HC05.L=0.001; x5HC06.L=0.034; x5HC07.L=0.034;
3584 x5HC08.L=0.034; x5HC11.L=0.034; x5HC14.L=0.034;
3585 x5HC15.L=0.034; x5HC16.L=0.034; x5HC22.L=0.033;
3586 x5HC23.L=0.033; x5HC24.L=0.033; x5HC25.L=0.033;
3587 x5HC26.L=0.033; x5HC27.L=0.032; x5HC28.L=0.049;
3588 x5HC29.L=0.049; x5HC30.L=0.058; x5HC31.L=0.054;
3589 x5HC33.L=0.03; x5HC34.L=0.03; x5HC38.L=0.03;
3590 x5HC40.L=0.03; x5HC41.L=0.03; x5HC45.L=0.03;
3591 x5R1.L=0.049; x5R29.L=0.054; x5SC401.L=0.052;
3592 x5SC404.L=0.073; x5SC405.L=0.073; x5SC406.L=0.073;
3593 x5SC407.L=0.073; x5SC409.L=0; x5SC411.L=0;
3594 x5SC412.L=0; x5SC413.L=0; x5SC414.L=0;
3595 x6SC401.L=0.071; x6SC404.L=0.1; x6SC405.L=0.1;
3596 x6SC406.L=0.1; x6SC407.L=0.1; x6SC409.L=0;
3597 x6SC411.L=0; x6SC412.L=0; x6SC413.L=0;
3598 x6SC414.L=0.1; x7AC09.L=0.02; x7AC20.L=0.015;
3599 x7AC31.L=0.008; x7AC42.L=0.01; x7C301.L=0.027;
3600 x7C302.L=0.144; x7C303.L=0.039; x7C306.L=0.033;
3601 x7C307.L=0.033; x7C308.L=0.048; x7C309.L=0.048;
3602 x7C310.L=0.005; x7C311.L=0.064; x7C312.L=0.005;
3603 x7C315.L=0.005; x7C316.L=0.005; x7C317.L=0.005;
3604 x7C318.L=0.005; x7C319.L=0.005; x7C320.L=0.005;
3605 x7C321.L=0.005; x7C322.L=0.005; x7C323.L=0.005;

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3606 x7C324.L=0.005; x7C325.L=0; x7C326.L=0;
3607 x7C328.L=0; x7C329.L=0; x7C401.L=0.316;
3608 x7C402.L=0.316; x7C403.L=0.316; x7C404.L=0.316;
3609 x7C405.L=0.801; x7C406.L=0.801; x7C407.L=0.801;
3610 x7C408.L=0.801; x7C409.L=0.801; x7C410.L=0.374;
3611 x7C411.L=0.374; x7C412.L=0.101; x7C413.L=0.101;
3612 x7C414.L=0.012; x7C415.L=0.012; x7C417.L=0.00031;
3613 x7C418.L=0.011; x7C419.L=0.011; x7C425.L=0.374;
3614 x7C426.L=0.374; x7C427.L=0.238; x7C428.L=0.181;
3615 x7C430.L=0.271; x7C431.L=0.101; x7C432.L=0.101;
3616 x7HC01.L=0.6; x7HC02.L=0.6; x7HC03.L=0.01;
3617 x7HC04.L=0.01; x7HC05.L=0.01; x7HC06.L=0.139;
3618 x7HC07.L=0.139; x7HC08.L=0.139; x7HC11.L=0.139;
3619 x7HC14.L=0.139; x7HC15.L=0.139; x7HC16.L=0.139;
3620 x7HC22.L=0.138; x7HC23.L=0.139; x7HC24.L=0.139;
3621 x7HC25.L=0.15; x7HC26.L=0.142; x7HC27.L=0.131;
3622 x7HC28.L=0.255; x7HC29.L=0.255; x7HC30.L=0.389;
3623 x7HC31.L=0.316; x7HC33.L=0.046; x7HC34.L=0.046;
3624 x7HC38.L=0.046; x7HC40.L=0.046; x7HC41.L=0.046;
3625 x7HC45.L=0.046; x7R1.L=0.255; x7R29.L=0.31;
3626 x7SC401.L=0.007; x7SC404.L=0.01; x7SC405.L=0.01;
3627 x7SC406.L=0.01; x7SC407.L=0.01; x7SC409.L=0;
3628 x7SC411.L=0; x7SC412.L=0; x7SC413.L=0;
3629 x7SC414.L=0.1; x8AC09.L=0.00000448; x8AC20.L=0.00000554;
3630 x8AC31.L=0.00000475; x8AC42.L=0.00000478; x9AC09.L=0.005;
3631 x9AC20.L=0.005; x9AC31.L=0.002; x9AC42.L=0.003;
3632 xAC02.L=0.5; xAC05.L=0.498; xAC07.L=0.498;
3633 xAC09.L=0.482; xAC12.L=0.498; xAC15.L=0.496;
3634 xAC18.L=0.496; xAC20.L=0.485; xAC23.L=0.496;
3635 xAC26.L=0.494; xAC29.L=0.494; xAC31.L=0.488;
3636 xAC34.L=0.494; xAC37.L=0.492; xAC40.L=0.492;
3637 xAC42.L=0.484; xiC10AC09.L=0; xiC10AC20.L=0;
3638 xiC10AC31.L=0; xiC10AC42.L=0; xiC11AC09.L=0;
3639 xiC11AC20.L=0; xiC11AC31.L=0; xiC11AC42.L=0;
3640 xM1C606D.L=0.0000485; xM3C606D.L=0.000334; xM4C606D.L=0.55;
3641 xM5C606D.L=0.104; xM7C606D.L=0.346; xx1C302.L=0.093;
3642 xx1C308.L=0.063; xx1C310.L=0.12; xx1C311.L=0.042;
3643 xx1C312.L=0.151; xx1C323.L=0.12; xx1C325.L=1;
3644 xx1C405.L=0; xx1C408.L=0; xx1C425.L=0.000153;
3645 xx1C428.L=0.000207; xx1C430.L=0.0000689; xx1C431.L=0.00064;
3646 xx1HC28.L=0.027; xx1HC29.L=0.027; xx1HC30.L=0.018;
3647 xx1HC32.L=0.031; xx1R1.L=0.027; xx1R29.L=0.023;
3648 xx1SC406.L=0.0000111; xx1SC408.L=0.026; xx2HC28.L=0;
3649 xx2HC29.L=0; xx2HC30.L=0; xx2R1.L=0;
3650 xx2R29.L=0; xx2SC406.L=0.013; xx2SC408.L=0.000319;
3651 xx3C302.L=0.729; xx3C308.L=0.779; xx3C310.L=0.791;

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3652 xx3C311.L=0.774; xx3C312.L=0.764; xx3C323.L=0.792;
3653 xx3C325.L=0.00000126; xx3C405.L=0.00000975; xx3C408.L=0.00000975;
3654 xx3C425.L=0.000473; xx3C428.L=0.000633; xx3C430.L=0.000709;
3655 xx3C431.L=0.000875; xx3C432.L=0.000875; xx3HC28.L=0.621;
3656 xx3HC29.L=0.621; xx3HC30.L=0.515; xx3HC32.L=0.784;
3657 xx3R1.L=0.621; xx3R29.L=0.578; xx3SC406.L=0.021;
3658 xx3SC408.L=0.961; xx4C302.L=0.075; xx4C308.L=0.109;
3659 xx4C310.L=0.082; xx4C311.L=0.119; xx4C312.L=0.077;
3660 xx4C323.L=0.08; xx4C325.L=0; xx4C405.L=0.083;
3661 xx4C408.L=0.083; xx4C409.L=0.083; xx4C425.L=0.613;
3662 xx4C427.L=0.746; xx4C428.L=0.797; xx4C430.L=0.716;
3663 xx4C431.L=0.867; xx4C432.L=0.867; xx4HC28.L=0.12;
3664 xx4HC29.L=0.12; xx4HC30.L=0.11; xx4HC32.L=0.129;
3665 xx4R1.L=0.12; xx4R29.L=0.117; xx4SC406.L=0.814;
3666 xx4SC408.L=0.012; xx5C302.L=0.004; xx5C308.L=0.017;
3667 xx5C310.L=0.005; xx5C311.L=0.021; xx5C312.L=0.005;
3668 xx5C323.L=0.005; xx5C325.L=0; xx5C405.L=0.158;
3669 xx5C408.L=0.158; xx5C425.L=0.093; xx5C428.L=0.07;
3670 xx5C430.L=0.079; xx5C431.L=0.061; xx5HC28.L=0.044;
3671 xx5HC29.L=0.044; xx5HC30.L=0.054; xx5HC32.L=0.025;
3672 xx5R1.L=0.044; xx5R29.L=0.049; xx5SC406.L=0.061;
3673 xx5SC408.L=0; xx6SC406.L=0.084; xx6SC408.L=0;
3674 xx7C302.L=0.1; xx7C308.L=0.033; xx7C310.L=0.003;
3675 xx7C311.L=0.044; xx7C312.L=0.003; xx7C323.L=0.004;
3676 xx7C325.L=0; xx7C405.L=0.759; xx7C408.L=0.759;
3677 xx7C425.L=0.293; xx7C428.L=0.132; xx7C430.L=0.204;
3678 xx7C431.L=0.071; xx7HC28.L=0.188; xx7HC29.L=0.188;
3679 xx7HC30.L=0.303; xx7HC32.L=0.031; xx7R1.L=0.188;
3680 xx7R29.L=0.234; xx7SC406.L=0.007; xx7SC408.L=0;
3681 y1HC28.L=0.077; y1HC29.L=0.077; y1HC30.L=0.062;
3682 y1HC31.L=0.068; y1R1.L=0.077; y1R29.L=0.069;
3683 y2HC28.L=0; y2HC29.L=0; y2HC30.L=0;
3684 y2HC31.L=0; y2R1.L=0; y2R29.L=0;
3685 y3HC28.L=0.789; y3HC29.L=0.789; y3HC30.L=0.771;
3686 y3HC31.L=0.781; y3R1.L=0.789; y3R29.L=0.783;
3687 y4HC28.L=0.1; y4HC29.L=0.1; y4HC30.L=0.108;
3688 y4HC31.L=0.105; y4R1.L=0.1; y4R29.L=0.104;
3689 y5HC28.L=0.015; y5HC29.L=0.015; y5HC30.L=0.022;
3690 y5HC31.L=0.019; y5R1.L=0.015; y5R29.L=0.018;
3691 y7HC28.L=0.019; y7HC29.L=0.019; y7HC30.L=0.037;
3692 y7HC31.L=0.027; y7R1.L=0.019; y7R29.L=0.026;
3693 yy1HC28.L=0.1; yy1HC29.L=0.1; yy1HC30.L=0.081;
3694 yy1R1.L=0.1; yy1R29.L=0.09; yy2HC28.L=0;
3695 yy2HC29.L=0; yy2HC30.L=0; yy2R1.L=0;
3696 yy2R29.L=0; yy3HC28.L=0.777; yy3HC29.L=0.777;
3697 yy3HC30.L=0.768; yy3R1.L=0.777; yy3R29.L=0.775;

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3698 yy4HC28.L=0.098; yy4HC29.L=0.098; yy4HC30.L=0.108;
3699 yy4R1.L=0.098; yy4R29.L=0.103; yy5HC28.L=0.012;
3700 yy5HC29.L=0.012; yy5HC30.L=0.018; yy5R1.L=0.012;
3701 yy5R29.L=0.015; yy7HC28.L=0.013; yy7HC29.L=0.013;
3702 yy7HC30.L=0.025; yy7R1.L=0.013; yy7R29.L=0.017;
3703 C10pC623.LO=0; C10pC625.LO=0; C10pC627.LO=0;
3704 C10pC629.LO=0; C2C623.LO=0; C2C625.LO=0;
3705 C2C627.LO=0; C2C629.LO=0; C3C623.LO=0;
3706 C3C625.LO=0; C3C627.LO=0; C3C629.LO=0;
3707 C3pC623.LO=0; C3pC625.LO=0; C3pC627.LO=0;
3708 C3pC629.LO=0; C4pC623.LO=0; C4pC625.LO=0;
3709 C4pC627.LO=0; C4pC629.LO=0; C5pC623.LO=0;
3710 C5pC625.LO=0; C5pC627.LO=0; C5pC629.LO=0;
3711 C7pC623.LO=0; C7pC625.LO=0; C7pC627.LO=0;
3712 C7pC629.LO=0; C8pC623.LO=0; C8pC625.LO=0;
3713 C8pC627.LO=0; C8pC629.LO=0; C9pC623.LO=0;
3714 C9pC625.LO=0; C9pC627.LO=0; C9pC629.LO=0;
3715 CHXC623.LO=2.5; CHXC625.LO=2.5; CHXC627.LO=2.5;
3716 CHXC629.LO=2.5; CiC10pC623.LO=0; CiC10pC625.LO=0;
3717 CiC10pC627.LO=0; CiC10pC629.LO=0; CiC11pC623.LO=0;
3718 CiC11pC625.LO=0; CiC11pC627.LO=0; CiC11pC629.LO=0;
3719 CiC4eC623.LO=0; CiC4eC625.LO=0; CiC4eC627.LO=0;
3720 CiC4eC629.LO=0; CiC5eC623.LO=0; CiC5eC625.LO=0;
3721 CiC5eC627.LO=0; CiC5eC629.LO=0; CiC8eC623.LO=0;
3722 CiC8eC625.LO=0; CiC8eC627.LO=0; CiC8eC629.LO=0;
3723 Cost.LO=-10000; dTE601.LO=5; dTE602.LO=5;
3724 dTE603.LO=5; dTE605.LO=5; dTE609A.LO=5;
3725 dTE610.LO=5; dTE611.LO=5; dTE612.LO=10;
3726 dTE613.LO=4; dTE616.LO=10; dTE617.LO=5;
3727 dTE621A.LO=5; dTE621B.LO=5; dTE626.LO=5;
3728 dTE627A.LO=5; dTE627B.LO=5; dTE628.LO=5;
3729 dTE629.LO=5; dTE633.LO=5; dTE634.LO=5;
3730 dTE640.LO=5; dTE641.LO=5; dTE695A.LO=5;
3731 dTE695B.LO=5; dTE696A.LO=10; dTE696B.LO=10;
3732 dTE6XX.LO=1; Earnings.LO=-10000; f1C601.LO=0;
3733 f1C603.LO=0; f1C606A.LO=0; f2C601.LO=0.5;
3734 f3C601.LO=0.05; f3C603.LO=0; f3C606A.LO=0;
3735 f4C601.LO=0.95; f4C603.LO=0; f4C606A.LO=0;
3736 f5C601.LO=0.5; f5C603.LO=0.5; f5C606A.LO=0.5;
3737 f6C601.LO=0.5; f7C601.LO=0.5; f7C603.LO=0.5;
3738 f7C606A.LO=0.5; FAC05.LO=0.1; FAC07.LO=0.1;
3739 FAC09.LO=0.01; FAC15.LO=0.1; FAC18.LO=0.1;
3740 FAC20.LO=0.01; FAC26.LO=0.1; FAC29.LO=0.1;
3741 FAC31.LO=0.01; FAC37.LO=0.1; FAC40.LO=0.1;
3742 FAC42.LO=0.01; FC301.LO=1; FC302.LO=0.1;
3743 FC303.LO=2; FC306.LO=0.1; FC307.LO=0.0001;

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3744 FC309.LO=0.0001; FC310.LO=0.0001; FC311.LO=0;
3745 FC312.LO=0.0001; FC315.LO=0.0001; FC317.LO=0.1;
3746 FC318.LO=0.0001; FC319.LO=0.0001; FC321.LO=0;
3747 FC323.LO=0.5; FC324.LO=0.5; FC325.LO=0.5;
3748 FC326.LO=0.01; FC401.LO=0.1; FC402.LO=0.1;
3749 FC404.LO=0; FC405.LO=0.1; FC406.LO=0;
3750 FC408.LO=0; FC409.LO=0; FC410.LO=0.1;
3751 FC411.LO=0; FC413.LO=0; FC414.LO=0.1;
3752 FC415.LO=0; FC418.LO=0.1; FC419.LO=0.0001;
3753 FC425.LO=1; FC426.LO=0; FC427.LO=0;
3754 FC428.LO=0; FC430.LO=1; FC431.LO=0;
3755 FC432.LO=1; Fcwe603.LO=0.1; Fcwe605.LO=0.1;
3756 Fcwe609A.LO=0.01; Fcwe611.LO=0.1; Fcwe613.LO=0.1;
3757 Fcwe617.LO=1; Fcwe621A.LO=0.1; Fcwe621B.LO=0.1;
3758 Fcwe626.LO=0.1; Fcwe627A.LO=0.1; Fcwe627B.LO=0.1;
3759 Fcwe634.LO=4; Fcwe640.LO=0.4; Fcwe641A.LO=0.1;
3760 Fcwe641B.LO=0.1; FHC02.LO=0.01; FHC03.LO=1;
3761 FHC04.LO=1; FHC05.LO=1; FHC06.LO=1;
3762 FHC07.LO=1; FHC08.LO=1; FHC11.LO=1;
3763 FHC14.LO=1; FHC15.LO=1; FHC16.LO=1;
3764 FHC22.LO=1; FHC23.LO=1; FHC24.LO=1;
3765 FHC25.LO=1; FHC26.LO=1; FHC27.LO=1;
3766 FHC28.LO=1; FHC29.LO=0; FHC30.LO=0;
3767 FHC31.LO=0; FHC33.LO=0; FHC34.LO=0;
3768 FHC38.LO=0; FHC40.LO=0; FHC41.LO=0;
3769 FHC45.LO=0; FlHC28.LO=1; FlHC29.LO=0;
3770 FlHC30.LO=0; FlHC31.LO=0; FlR1.LO=0;
3771 FlR29.LO=0; FmC302.LO=0; FmC308.LO=0.0001;
3772 FmC310.LO=0; FmC311.LO=0; FmC312.LO=0;
3773 FmC317.LO=0.001; FmC322.LO=0; FmC323.LO=0;
3774 FmC325.LO=0.01; FmC405.LO=0; FmC407.LO=0;
3775 FmC408.LO=0; FmC409.LO=0; FmC412.LO=0;
3776 FmC414.LO=0.0001; FmC425.LO=0; FmC427.LO=0;
3777 FmC428.LO=0; FmC430.LO=0; FmC431.LO=0;
3778 FmC432.LO=0; FmHC01.LO=0; FmHC32.LO=0;
3779 FmlHC28.LO=0.01; FmlHC29.LO=0; FmlHC30.LO=0;
3780 FmlR1.LO=0; FmlR29.LO=0; FmSC403.LO=0.001;
3781 FmSC406.LO=0; FmSC408.LO=0; FmvHC28.LO=0;
3782 FmvHC29.LO=0; FmvHC30.LO=0; FmvR1.LO=0;
3783 FmvR29.LO=0; FR1.LO=0; FR29.LO=0;
3784 FSC401.LO=0.1; FSC403.LO=0.1; FSC404.LO=0.1;
3785 FSC406.LO=0; FSC407.LO=0; FSC408.LO=0.05;
3786 FSC409.LO=0.05; FSC412.LO=0.102; FSC414.LO=0;
3787 FstmE602.LO=0.1; FstmE695A.LO=0; FstmE695B.LO=0.1;
3788 FstmE696A.LO=0.01; FstmE696B.LO=0.01; FvHC28.LO=0;
3789 FvHC29.LO=0; FvHC30.LO=0; FvHC31.LO=0;

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3790 FvR1.LO=0; FvR29.LO=0; h1C601.LO=0.8;
3791 h1C603.LO=-3; h1C606A.LO=0; h2C601.LO=0.395;
3792 h3C601.LO=0.5; h3C603.LO=0; h3C606A.LO=-65;
3793 h4C601.LO=0.45; h4C603.LO=0; h4C606A.LO=-10;
3794 h5C601.LO=0.5; h5C603.LO=0; h5C606A.LO=-5;
3795 h6C601.LO=0.5; h7C601.LO=0.5; h7C603.LO=0;
3796 h7C606A.LO=0; hAC02.LO=0; hAC05.LO=10;
3797 hAC07.LO=10; hAC09.LO=10; hAC12.LO=0;
3798 hAC15.LO=10; hAC18.LO=10; hAC20.LO=10;
3799 hAC23.LO=0; hAC26.LO=10; hAC29.LO=10;
3800 hAC31.LO=10; hAC34.LO=0; hAC37.LO=10;
3801 hAC40.LO=10; hAC42.LO=10; hacAC09.LO=10;
3802 hacAC20.LO=10; hacAC31.LO=10; hacAC42.LO=10;
3803 hc301.LO=10; hc302.LO=0; hc303.LO=0.0001;
3804 hc306.LO=0.0001; hc307.LO=0.0001; hc308.LO=0.0001;
3805 hc309.LO=0.0001; hc310.LO=0.0001; hc311.LO=0.001;
3806 hc312.LO=0.0001; hc312liq.LO=0; hc315.LO=0.0001;
3807 hc316.LO=0.0001; hc317.LO=0.0001; hc318.LO=0.0001;
3808 hc319.LO=0.0001; hc321.LO=0; hc322.LO=0.0001;
3809 hc323.LO=0; hc324.LO=0.0001; hc325.LO=0.0001;
3810 hc326.LO=0.0001; hc329.LO=0.0001; hc401.LO=0;
3811 hc402.LO=10; hc403.LO=0.0001; hc404.LO=0.0001;
3812 hc405.LO=0.0001; hc406.LO=0.0001; hc407.LO=0.0001;
3813 hc408.LO=0.0001; hc408vap.LO=10; hc409.LO=0.0001;
3814 hc410.LO=0.0001; hc410vap.LO=10; hc411.LO=10;
3815 hc412.LO=0.0001; hc412liq.LO=1; hc413.LO=0.0001;
3816 hc414.LO=0.0001; hc414liq.LO=10; hc415.LO=0.0001;
3817 hc417.LO=0.0001; hc418.LO=0.0001; hc419.LO=0.0001;
3818 hc425.LO=10; hc426.LO=10; hc427.LO=0;
3819 hc428.LO=10; hc430.LO=10; hc431.LO=10;
3820 hc432.LO=10; hc623.LO=10; hc625.LO=10;
3821 hc627.LO=10; hc629.LO=10; hHC01.LO=0;
3822 hHC02.LO=0; hHC03.LO=1; hHC04.LO=10;
3823 hHC05.LO=10; hHC06.LO=10; hHC07.LO=10;
3824 hHC11.LO=10; hHC14.LO=10; hHC16.LO=10;
3825 hHC29.LO=20; hHC30.LO=20; hHC31.LO=100;
3826 hHC32.LO=0; hHC34.LO=0; hHC38.LO=0;
3827 hHC41.LO=0; hHC45.LO=0; hlHC29.LO=0;
3828 hlHC30.LO=0; hlHC31.LO=20; hlr1.LO=0;
3829 hlr29.LO=10; hr1.LO=0; hr29.LO=20;
3830 hSC401.LO=10; hSC402.LO=10; hSC403.LO=10;
3831 hSC404.LO=10; hSC405.LO=10; hSC406.LO=0.1;
3832 hSC407.LO=10; hSC408.LO=10; hSC409.LO=10;
3833 hSC411.LO=10; hSC412.LO=10; hSC413.LO=10;
3834 hSC414.LO=0; hvHC29.LO=10; hvHC30.LO=10;
3835 hvHC31.LO=20; hvR1.LO=0; hvR29.LO=10;

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3836 K1C323.LO=1; K1C325.LO=0.5; K1C408.LO=1;
3837 K1C414.LO=1; K1C428.LO=0; K1C430.LO=1;
3838 K1C601.LO=1.5; K1C603.LO=1; K1C606A.LO=1;
3839 K1C606C.LO=1; K1C614B.LO=2; K1C615_A.LO=0.5;
3840 K1C616_A.LO=0.5; K1E633.LO=1; K1E6XX.LO=1;
3841 K1SC406.LO=2; K1SC408.LO=1.5; K2C601.LO=0.5;
3842 K2E633.LO=0.2; K2E6XX.LO=0.2; K2SC406.LO=0.5;
3843 K2SC408.LO=0.5; K3C323.LO=0.5; K3C325.LO=0.01;
3844 K3C408.LO=1; K3C414.LO=0.5; K3C428.LO=0;
3845 K3C430.LO=1; K3C601.LO=0.5; K3C603.LO=0.5;
3846 K3C606A.LO=0.5; K3C606C.LO=1; K3C614B.LO=0.6;
3847 K3C615_A.LO=0.1; K3C616_A.LO=0.1; K3E633.LO=0.3;
3848 K3E6XX.LO=0.3; K3SC406.LO=1; K3SC408.LO=0.7;
3849 K4C323.LO=0.5; K4C325.LO=0.03; K4C408.LO=1;
3850 K4C414.LO=0.5; K4C428.LO=0; K4C430.LO=0.5;
3851 K4C601.LO=0.2; K4C603.LO=0.1; K4C606A.LO=0.1;
3852 K4C606C.LO=1; K4C614B.LO=0.5; K4C615_A.LO=0.05;
3853 K4C616_A.LO=0.05; K4E633.LO=0.2; K4E6XX.LO=0.2;
3854 K4SC406.LO=0.8; K4SC408.LO=0.5; K5C323.LO=0.1;
3855 K5C325.LO=0.1; K5C408.LO=0.5; K5C414.LO=0.1;
3856 K5C428.LO=0; K5C430.LO=0.2; K5C601.LO=0.1;
3857 K5C603.LO=0.01; K5C606A.LO=0.1; K5C606C.LO=0.1;
3858 K5C614B.LO=0.05; K5C615_A.LO=0.002; K5C616_A.LO=0.002;
3859 K5E633.LO=0.05; K5E6XX.LO=0.05; K5SC406.LO=0.1;
3860 K5SC408.LO=0.2; K6C601.LO=0.1; K6SC406.LO=0;
3861 K6SC408.LO=0.1; K7C323.LO=0.1; K7C325.LO=0.001;
3862 K7C408.LO=0.1; K7C414.LO=0.05; K7C428.LO=0;
3863 K7C430.LO=0; K7C601.LO=0.01; K7C603.LO=0.01;
3864 K7C606A.LO=0.05; K7C614B.LO=0.001; K7C615_A.LO=0.001;
3865 K7C616_A.LO=0.011; K7E633.LO=0.01; K7E6XX.LO=0.01;
3866 K7SC406.LO=0.1; K7SC408.LO=0.05; Kp1C601.LO=1;
3867 Kp1C603.LO=1; Kp1C606A.LO=1; Kp1C606D.LO=1;
3868 Kp2C601.LO=0.5; Kp3C601.LO=1; Kp3C603.LO=0.5;
3869 Kp3C606A.LO=0.5; Kp3C606D.LO=1; Kp4C601.LO=0.5;
3870 Kp4C603.LO=0.2; Kp4C606A.LO=0.1; Kp4C606D.LO=1;
3871 Kp5C601.LO=0.1; Kp5C603.LO=0.1; Kp5C606A.LO=0.1;
3872 Kp5C606D.LO=1; Kp6C601.LO=0.1; Kp7C601.LO=0.01;
3873 Kp7C603.LO=0.01; Kp7C606A.LO=0.05; Kp7C606D.LO=0.1;
3874 kWad1.LO=50; kWad2.LO=105; LpC601.LO=1;
3875 LpC603.LO=1; LpC606A.LO=0.5; PC303.LO=101;
3876 PC306.LO=650; PC307.LO=600; PC308.LO=600;
3877 PC309.LO=580; PC311.LO=260; PC312.LO=600;
3878 PHC30.LO=101; PHC32.LO=101; PR29.LO=101;
3879 Profit.LO=10; Q2HC07.LO=0; Q2HC11.LO=0;
3880 Q2HC14.LO=0; Q2HC16.LO=0; qFp1C606A.LO=0;
3881 qFp3C606A.LO=0; qFp4C606A.LO=0; qFp5C606A.LO=0;

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3882 qFp7C606A.LO=0; qS1C606A.LO=0; qS3C606A.LO=0;
3883 qS4C606A.LO=0; qS5C606A.LO=0; qS7C606A.LO=0;
3884 r10C623.LO=0; r10C625.LO=0; r10C627.LO=0;
3885 r10C629.LO=0; r2C623.LO=0; r2C625.LO=0;
3886 r2C627.LO=0; r2C629.LO=0; r3C623.LO=0;
3887 r3C625.LO=0; r3C627.LO=0; r3C629.LO=0;
3888 r4C623.LO=0; r4C625.LO=0; r4C627.LO=0;
3889 r4C629.LO=0; r5C623.LO=0; r5C625.LO=0;
3890 r5C627.LO=0; r5C629.LO=0; r7C623.LO=0;
3891 r7C625.LO=0; r7C627.LO=0; r7C629.LO=0;
3892 r8C623.LO=0; r8C625.LO=0; r8C627.LO=0;
3893 r8C629.LO=0; r9C623.LO=0; r9C625.LO=0;
3894 r9C627.LO=0; r9C629.LO=0; rho2HC07.LO=610;
3895 rho2HC11.LO=610; rho2HC14.LO=610; rho2HC16.LO=610;
3896 rhoAC09.LO=1500; rhoAC20.LO=1500; rhoAC31.LO=1500;
3897 rhoAC42.LO=1500; riC10C623.LO=0; riC10C625.LO=0;
3898 riC10C627.LO=0; riC10C629.LO=0; riC11C623.LO=0;
3899 riC11C625.LO=0; riC11C627.LO=0; riC11C629.LO=0;
3900 sfS1S34.LO=0.0001; sfS2S34.LO=0; sfS11.LO=0.1;
3901 sfS19.LO=0.1; sfS2.LO=0.1; sfS23.LO=0.1;
3902 sfS27.LO=0.1; sfS41.LO=0.0001; sfS42.LO=0.0001;
3903 sfS5.LO=0.1; sfS7.LO=0.1; SmlC601.LO=1;
3904 SmlC603.LO=0.05; SmlC606A.LO=0.1; SmlC606D.LO=1;
3905 Sm2C601.LO=0.5; Sm3C601.LO=0.5; Sm3C603.LO=0.001;
3906 Sm3C606A.LO=0.1; Sm3C606D.LO=1; Sm4C601.LO=0.4;
3907 Sm4C603.LO=0.01; Sm4C606A.LO=0.1; Sm4C606D.LO=0.5;
3908 Sm5C601.LO=0.1; Sm5C603.LO=0.01; Sm5C606A.LO=0.05;
3909 Sm5C606D.LO=0.1; Sm6C601.LO=0.1; Sm7C601.LO=0.01;
3910 Sm7C603.LO=0.001; Sm7C606A.LO=0.001; Sm7C606D.LO=0.1;
3911 Sn1C601.LO=1; Sn1C603.LO=1; Sn1C606A.LO=1;
3912 Sn2C601.LO=0.5; Sn3C601.LO=0.5; Sn3C603.LO=0.5;
3913 Sn3C606A.LO=1; Sn4C601.LO=0.5; Sn4C603.LO=0.2;
3914 Sn4C606A.LO=0.8; Sn5C601.LO=0.1; Sn5C603.LO=0.1;
3915 Sn5C606A.LO=0.3; Sn6C601.LO=0.1; Sn7C601.LO=0.01;
3916 Sn7C603.LO=0.01; Sn7C606A.LO=0.1; TAC02.LO=276;
3917 TAC05.LO=273; TAC07.LO=273; TAC15.LO=273;
3918 TAC18.LO=273; TAC20.LO=280; TAC26.LO=273;
3919 TAC29.LO=273; TAC37.LO=273; TAC40.LO=273;
3920 TC301.LO=200; TC302.LO=250; TC309.LO=270;
3921 TC310.LO=200; TC311.LO=270; TC312.LO=300;
3922 TC318.LO=250; TC319.LO=250; TC320.LO=250;
3923 TC322.LO=250; TC323.LO=300; TC326.LO=300;
3924 TC328.LO=300; TC329.LO=300; TC401.LO=260;
3925 TC402.LO=270; TC403.LO=280; TC406.LO=298;
3926 TC409.LO=400; TC411.LO=300; TC412.LO=330;
3927 TC413.LO=250; TC415.LO=250; TC417.LO=275;

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3928 TC425.LO=300; TC426.LO=300; TC427.LO=360;
3929 TC428.LO=300; TC430.LO=300; TC431.LO=300;
3930 TC432.LO=350; TcwotE609A.LO=298; TcwotE621A.LO=298;
3931 TcwotE621B.LO=298; TcwotE627A.LO=295; TcwotE627B.LO=293;
3932 TcwotE641A.LO=295; TcwotE641B.LO=295; TcwoutE603.LO=296.836;
3933 TcwoutE605.LO=298; TcwoutE611.LO=295; TcwoutE613.LO=298;
3934 TcwoutE617.LO=295; TcwoutE626.LO=295; TcwoutE634.LO=295;
3935 TcwoutE640.LO=295; THC01.LO=295; THC02.LO=275;
3936 THC03.LO=290; THC04.LO=280; THC05.LO=270;
3937 THC06.LO=273; THC07.LO=273; THC11.LO=273;
3938 THC14.LO=273; THC16.LO=273; THC22.LO=273;
3939 THC23.LO=273; THC24.LO=273; THC25.LO=273;
3940 THC26.LO=273; THC27.LO=273; THC28.LO=270;
3941 THC29.LO=270; THC30.LO=250; THC31.LO=260;
3942 THC34.LO=250; THC38.LO=250; THC41.LO=250;
3943 THC45.LO=250; TmC601.LO=315; TmC603.LO=350;
3944 TmC606A.LO=327; TmC606D.LO=370; TmK601.LO=273;
3945 TnC601.LO=310; TnC603.LO=320; TnC606A.LO=310;
3946 TR1.LO=270; TR29.LO=260; TSC401.LO=280;
3947 TSC404.LO=310; TSC406.LO=320; TSC407.LO=320;
3948 TSC409.LO=308; TSC411.LO=308; TSC412.LO=308;
3949 TSC414.LO=275; Utilities.LO=-10000; VFC614B.LO=0.1;
3950 VFC615.LO=0.001; VFC616.LO=0.05; VFM3.LO=0;
3951 VpC601.LO=1; VpC603.LO=0.01; VpC606A.LO=0.1;
3952 x10AC09.LO=0; x10AC20.LO=0; x10AC31.LO=0;
3953 x10AC42.LO=0; x11AC02.LO=0.97; x11AC05.LO=0.89;
3954 x11AC07.LO=0.89; x11AC09.LO=0; x11AC15.LO=0.89;
3955 x11AC18.LO=0.89; x11AC20.LO=0; x11AC26.LO=0.89;
3956 x11AC29.LO=0.89; x11AC31.LO=0; x11AC37.LO=0.89;
3957 x11AC40.LO=0.89; x11AC42.LO=0; x12AC02.LO=0.002;
3958 x12AC05.LO=0.001; x12AC07.LO=0.001; x12AC09.LO=0;
3959 x12AC12.LO=0.001; x12AC15.LO=0.001; x12AC18.LO=0.001;
3960 x12AC20.LO=0; x12AC23.LO=0.001; x12AC26.LO=0.001;
3961 x12AC29.LO=0.001; x12AC31.LO=0; x12AC34.LO=0.001;
3962 x12AC37.LO=0.001; x12AC40.LO=0.001; x12AC42.LO=0;
3963 x12AC45.LO=0.001; x1AC09.LO=0; x1AC20.LO=0;
3964 x1AC31.LO=0; x1AC42.LO=0; x1C301.LO=0;
3965 x1C302.LO=0; x1C303.LO=0.05; x1C306.LO=0;
3966 x1C307.LO=0; x1C308.LO=0; x1C309.LO=0;
3967 x1C310.LO=0; x1C311.LO=0; x1C312.LO=0;
3968 x1C315.LO=0.0001; x1C317.LO=0; x1C318.LO=0.0001;
3969 x1C319.LO=0.0001; x1C320.LO=0; x1C321.LO=0.0001;
3970 x1C322.LO=0; x1C323.LO=0; x1C324.LO=0;
3971 x1C326.LO=0.4; x1C328.LO=0.4; x1C329.LO=0.4;
3972 x1C401.LO=0; x1C402.LO=0; x1C403.LO=0;
3973 x1C404.LO=0; x1C405.LO=0; x1C406.LO=0;

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3974 x1C407.LO=0; x1C408.LO=0; x1C409.LO=0;
3975 x1C410.LO=0.0001; x1C411.LO=0; x1C412.LO=0;
3976 x1C413.LO=0; x1C414.LO=0; x1C415.LO=0;
3977 x1C418.LO=0; x1C419.LO=0.0001; x1C425.LO=0;
3978 x1C426.LO=0; x1C427.LO=0; x1C428.LO=0;
3979 x1C430.LO=0; x1C431.LO=0; x1C432.LO=0;
3980 x1HC01.LO=0.001; x1HC02.LO=0; x1HC03.LO=0.0001;
3981 x1HC04.LO=0; x1HC05.LO=0; x1HC06.LO=0;
3982 x1HC07.LO=0; x1HC08.LO=0; x1HC11.LO=0;
3983 x1HC14.LO=0; x1HC15.LO=0; x1HC16.LO=0;
3984 x1HC22.LO=0; x1HC23.LO=0; x1HC24.LO=0;
3985 x1HC25.LO=0; x1HC26.LO=0; x1HC27.LO=0;
3986 x1HC28.LO=0; x1HC29.LO=0; x1HC30.LO=0;
3987 x1HC31.LO=0; x1HC33.LO=0; x1HC34.LO=0;
3988 x1HC38.LO=0; x1HC40.LO=0; x1HC41.LO=0;
3989 x1HC45.LO=0; x1R1.LO=0; x1R29.LO=0;
3990 x1SC401.LO=0; x1SC404.LO=0; x1SC405.LO=0;
3991 x1SC406.LO=0; x1SC407.LO=0; x1SC409.LO=0;
3992 x1SC411.LO=0; x1SC412.LO=0; x1SC413.LO=0;
3993 x1SC414.LO=0; x2AC09.LO=0; x2AC20.LO=0;
3994 x2AC31.LO=0; x2AC42.LO=0; x2C301.LO=0;
3995 x2C417.LO=0; x2C418.LO=0; x2C419.LO=0;
3996 x2HC01.LO=0.1; x2HC02.LO=0.1; x2HC03.LO=0;
3997 x2HC04.LO=0; x2HC05.LO=0; x2HC06.LO=0;
3998 x2HC07.LO=0; x2HC08.LO=0; x2HC11.LO=0;
3999 x2HC14.LO=0; x2HC15.LO=0; x2HC16.LO=0;
4000 x2HC22.LO=0; x2HC23.LO=0; x2HC24.LO=0;
4001 x2HC25.LO=0; x2HC26.LO=0; x2HC27.LO=0;
4002 x2HC28.LO=0; x2HC29.LO=0; x2HC30.LO=0;
4003 x2HC31.LO=0; x2R1.LO=0; x2R29.LO=0;
4004 x2SC401.LO=0; x2SC404.LO=0; x2SC405.LO=0;
4005 x2SC406.LO=0; x2SC407.LO=0; x2SC409.LO=0;
4006 x2SC411.LO=0; x2SC412.LO=0; x2SC413.LO=0;
4007 x2SC414.LO=0; x3AC09.LO=0; x3AC20.LO=0;
4008 x3AC31.LO=0; x3AC42.LO=0; x3C301.LO=0.5;
4009 x3C302.LO=0.45; x3C303.LO=0.5; x3C306.LO=0;
4010 x3C307.LO=0; x3C308.LO=0; x3C309.LO=0.2;
4011 x3C310.LO=0; x3C311.LO=0; x3C312.LO=0;
4012 x3C315.LO=0.0001; x3C317.LO=0.5; x3C318.LO=0.0001;
4013 x3C319.LO=0.0001; x3C320.LO=0.0001; x3C321.LO=0.0001;
4014 x3C322.LO=0; x3C323.LO=0.5; x3C324.LO=0.5;
4015 x3C326.LO=0; x3C328.LO=0; x3C329.LO=0;
4016 x3C401.LO=0; x3C402.LO=0; x3C403.LO=0.0001;
4017 x3C404.LO=0.0001; x3C405.LO=0; x3C406.LO=0;
4018 x3C407.LO=0; x3C408.LO=0; x3C409.LO=0;
4019 x3C410.LO=0.0001; x3C411.LO=0.0001; x3C412.LO=0;

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4020 x3C413.LO=0; x3C414.LO=0.5; x3C415.LO=0;
4021 x3C418.LO=0.0001; x3C419.LO=0.0001; x3C425.LO=0;
4022 x3C426.LO=0.0001; x3C427.LO=0; x3C428.LO=0;
4023 x3C430.LO=0; x3C431.LO=0; x3C432.LO=0;
4024 x3HC01.LO=0.01; x3HC02.LO=0; x3HC03.LO=0.1;
4025 x3HC04.LO=0.1; x3HC05.LO=0.1; x3HC06.LO=0.3;
4026 x3HC07.LO=0.3; x3HC08.LO=0.3; x3HC11.LO=0.3;
4027 x3HC14.LO=0.3; x3HC15.LO=0.3; x3HC16.LO=0.3;
4028 x3HC22.LO=0.1; x3HC23.LO=0.1; x3HC24.LO=0.1;
4029 x3HC25.LO=0.1; x3HC26.LO=0.1; x3HC27.LO=0.1;
4030 x3HC28.LO=0.1; x3HC29.LO=0.1; x3HC30.LO=0.1;
4031 x3HC31.LO=0.1; x3HC33.LO=0.1; x3HC34.LO=0.1;
4032 x3HC38.LO=0.1; x3HC40.LO=0.1; x3HC41.LO=0.1;
4033 x3HC45.LO=0.1; x3R1.LO=0; x3R29.LO=0.1;
4034 x3SC401.LO=0.2; x3SC404.LO=0; x3SC405.LO=0;
4035 x3SC406.LO=0; x3SC407.LO=0; x3SC409.LO=0.5;
4036 x3SC411.LO=0.5; x3SC412.LO=0.5; x3SC413.LO=0.5;
4037 x3SC414.LO=0.5; x4AC09.LO=0; x4AC20.LO=0;
4038 x4AC31.LO=0; x4AC42.LO=0; x4C301.LO=0;
4039 x4C302.LO=0; x4C303.LO=0.05; x4C306.LO=0;
4040 x4C307.LO=0; x4C308.LO=0; x4C309.LO=0;
4041 x4C310.LO=0; x4C311.LO=0; x4C312.LO=0;
4042 x4C315.LO=0.0001; x4C317.LO=0; x4C318.LO=0.0001;
4043 x4C319.LO=0.0001; x4C320.LO=0.0001; x4C321.LO=0.0001;
4044 x4C322.LO=0; x4C323.LO=0.01; x4C324.LO=0.01;
4045 x4C325.LO=0; x4C326.LO=0; x4C328.LO=0;
4046 x4C329.LO=0; x4C401.LO=0.001; x4C402.LO=0.001;
4047 x4C403.LO=0.0001; x4C404.LO=0.0001; x4C405.LO=0.0001;
4048 x4C406.LO=0; x4C407.LO=0.01; x4C408.LO=0;
4049 x4C409.LO=0; x4C410.LO=0.0001; x4C411.LO=0;
4050 x4C412.LO=0.5; x4C413.LO=0.0001; x4C414.LO=0.01;
4051 x4C415.LO=0.0001; x4C418.LO=0.0001; x4C419.LO=0.0001;
4052 x4C425.LO=0; x4C426.LO=0.0001; x4C427.LO=0;
4053 x4C428.LO=0; x4C430.LO=0.5; x4C431.LO=0.0001;
4054 x4C432.LO=0.5; x4HC01.LO=0; x4HC02.LO=0;
4055 x4HC03.LO=0; x4HC04.LO=0; x4HC05.LO=0;
4056 x4HC06.LO=0; x4HC07.LO=0; x4HC08.LO=0;
4057 x4HC11.LO=0; x4HC14.LO=0; x4HC15.LO=0;
4058 x4HC16.LO=0; x4HC22.LO=0; x4HC23.LO=0;
4059 x4HC24.LO=0; x4HC25.LO=0; x4HC26.LO=0;
4060 x4HC27.LO=0; x4HC28.LO=0; x4HC29.LO=0;
4061 x4HC30.LO=0; x4HC31.LO=0; x4HC33.LO=0;
4062 x4HC34.LO=0; x4HC38.LO=0; x4HC40.LO=0;
4063 x4HC41.LO=0; x4HC45.LO=0; x4R1.LO=0;
4064 x4R29.LO=0.01; x4SC401.LO=0.5; x4SC404.LO=0.48;
4065 x4SC405.LO=0.48; x4SC406.LO=0.7; x4SC407.LO=0.7;

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4066 x4SC409.LO=0; x4SC411.LO=0; x4SC412.LO=0;
4067 x4SC413.LO=0; x4SC414.LO=0; x5AC09.LO=0;
4068 x5AC20.LO=0; x5AC31.LO=0; x5AC42.LO=0;
4069 x5C301.LO=0; x5C302.LO=0; x5C303.LO=0;
4070 x5C306.LO=0; x5C307.LO=0; x5C308.LO=0;
4071 x5C309.LO=0; x5C310.LO=0; x5C311.LO=0;
4072 x5C312.LO=0; x5C315.LO=0.0001; x5C317.LO=0;
4073 x5C318.LO=0.0001; x5C319.LO=0.0001; x5C320.LO=0;
4074 x5C321.LO=0.0001; x5C322.LO=0; x5C323.LO=0.002;
4075 x5C324.LO=0.002; x5C325.LO=0; x5C326.LO=0;
4076 x5C328.LO=0; x5C329.LO=0; x5C401.LO=0;
4077 x5C402.LO=0; x5C403.LO=0.0001; x5C404.LO=0;
4078 x5C405.LO=0; x5C406.LO=0; x5C407.LO=0;
4079 x5C408.LO=0; x5C409.LO=0; x5C410.LO=0.0001;
4080 x5C411.LO=0; x5C412.LO=0; x5C413.LO=0;
4081 x5C414.LO=0; x5C415.LO=0; x5C418.LO=0;
4082 x5C419.LO=0.0001; x5C425.LO=0; x5C426.LO=0.0001;
4083 x5C427.LO=0; x5C428.LO=0; x5C430.LO=0;
4084 x5C431.LO=0; x5C432.LO=0; x5HC01.LO=0;
4085 x5HC02.LO=0; x5HC03.LO=0; x5HC04.LO=0;
4086 x5HC05.LO=0; x5HC06.LO=0; x5HC07.LO=0;
4087 x5HC08.LO=0; x5HC11.LO=0; x5HC14.LO=0;
4088 x5HC15.LO=0; x5HC16.LO=0; x5HC22.LO=0;
4089 x5HC23.LO=0; x5HC24.LO=0; x5HC25.LO=0;
4090 x5HC26.LO=0; x5HC27.LO=0; x5HC28.LO=0;
4091 x5HC29.LO=0.01; x5HC30.LO=0; x5HC31.LO=0;
4092 x5HC33.LO=0; x5HC34.LO=0; x5HC38.LO=0;
4093 x5HC40.LO=0; x5HC41.LO=0; x5HC45.LO=0;
4094 x5R1.LO=0; x5R29.LO=0.01; x5SC401.LO=0.008;
4095 x5SC404.LO=0; x5SC405.LO=0; x5SC406.LO=0.01;
4096 x5SC407.LO=0.01; x5SC409.LO=0; x5SC411.LO=0;
4097 x5SC412.LO=0; x5SC413.LO=0; x5SC414.LO=0;
4098 x6SC401.LO=0; x6SC404.LO=0; x6SC405.LO=0;
4099 x6SC406.LO=0; x6SC407.LO=0; x6SC409.LO=0;
4100 x6SC411.LO=0; x6SC412.LO=0; x6SC413.LO=0;
4101 x6SC414.LO=0; x7AC09.LO=0; x7AC20.LO=0;
4102 x7AC31.LO=0; x7AC42.LO=0; x7C301.LO=0;
4103 x7C302.LO=0; x7C303.LO=0; x7C306.LO=0;
4104 x7C307.LO=0; x7C308.LO=0; x7C309.LO=0;
4105 x7C310.LO=0; x7C311.LO=0; x7C312.LO=0;
4106 x7C315.LO=0; x7C316.LO=0; x7C317.LO=0;
4107 x7C318.LO=0; x7C319.LO=0; x7C320.LO=0;
4108 x7C321.LO=0; x7C322.LO=0; x7C323.LO=0;
4109 x7C324.LO=0; x7C325.LO=0; x7C326.LO=0;
4110 x7C328.LO=0; x7C329.LO=0; x7C401.LO=0;
4111 x7C402.LO=0; x7C403.LO=0.0001; x7C404.LO=0.0001;

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4112 x7C405.LO=0.0001; x7C406.LO=0.001; x7C407.LO=0.01;
4113 x7C408.LO=0; x7C409.LO=0; x7C410.LO=0.0001;
4114 x7C411.LO=0; x7C412.LO=0; x7C413.LO=0;
4115 x7C414.LO=0; x7C415.LO=0; x7C417.LO=0.0001;
4116 x7C418.LO=0.0001; x7C419.LO=0; x7C425.LO=0.2;
4117 x7C426.LO=0.0001; x7C427.LO=0; x7C428.LO=0;
4118 x7C430.LO=0; x7C431.LO=0; x7C432.LO=0;
4119 x7HC01.LO=0; x7HC02.LO=0; x7HC03.LO=0;
4120 x7HC04.LO=0; x7HC05.LO=0; x7HC06.LO=0;
4121 x7HC07.LO=0; x7HC08.LO=0; x7HC11.LO=0;
4122 x7HC14.LO=0; x7HC15.LO=0; x7HC16.LO=0;
4123 x7HC22.LO=0; x7HC23.LO=0; x7HC24.LO=0;
4124 x7HC25.LO=0; x7HC26.LO=0; x7HC27.LO=0;
4125 x7HC28.LO=0; x7HC29.LO=0.1; x7HC30.LO=0.1;
4126 x7HC31.LO=0.1; x7HC33.LO=0; x7HC34.LO=0;
4127 x7HC38.LO=0; x7HC40.LO=0; x7HC41.LO=0;
4128 x7HC45.LO=0; x7R1.LO=0; x7R29.LO=0.1;
4129 x7SC401.LO=0; x7SC404.LO=0; x7SC405.LO=0;
4130 x7SC406.LO=0; x7SC407.LO=0; x7SC409.LO=0;
4131 x7SC411.LO=0; x7SC412.LO=0; x7SC413.LO=0;
4132 x7SC414.LO=0; x8AC09.LO=0; x8AC20.LO=0;
4133 x8AC31.LO=0; x8AC42.LO=0; x9AC09.LO=0;
4134 x9AC20.LO=0; x9AC31.LO=0; x9AC42.LO=0;
4135 xAC02.LO=0.4; xAC05.LO=0.4; xAC07.LO=0.4;
4136 xAC09.LO=0.4; xAC12.LO=0.4; xAC15.LO=0.4;
4137 xAC18.LO=0.4; xAC20.LO=0.4; xAC23.LO=0.4;
4138 xAC26.LO=0.4; xAC29.LO=0.4; xAC31.LO=0.4;
4139 xAC34.LO=0.4; xAC37.LO=0.4; xAC40.LO=0.4;
4140 xAC42.LO=0.4; xiC10AC09.LO=0; xiC10AC20.LO=0;
4141 xiC10AC31.LO=0; xiC10AC42.LO=0; xiC11AC09.LO=0;
4142 xiC11AC20.LO=0; xiC11AC31.LO=0; xiC11AC42.LO=0;
4143 xM1C606D.LO=0; xM3C606D.LO=0; xM4C606D.LO=0;
4144 xM5C606D.LO=0; xM7C606D.LO=0; xx1C302.LO=0;
4145 xx1C308.LO=0; xx1C310.LO=0; xx1C311.LO=0;
4146 xx1C312.LO=0; xx1C323.LO=0; xx1C325.LO=0.4;
4147 xx1C405.LO=0; xx1C408.LO=0; xx1C425.LO=0;
4148 xx1C428.LO=0; xx1C430.LO=0; xx1C431.LO=0;
4149 xx1HC28.LO=0.01; xx1HC29.LO=0; xx1HC30.LO=0.01;
4150 xx1HC32.LO=0; xx1R1.LO=0; xx1R29.LO=0;
4151 xx1SC406.LO=0; xx1SC408.LO=0; xx2HC28.LO=0;
4152 xx2HC29.LO=0; xx2HC30.LO=0; xx2R1.LO=0;
4153 xx2R29.LO=0; xx2SC406.LO=0; xx2SC408.LO=0;
4154 xx3C302.LO=0.5; xx3C308.LO=0; xx3C310.LO=0;
4155 xx3C311.LO=0; xx3C312.LO=0; xx3C323.LO=0.5;
4156 xx3C325.LO=0; xx3C405.LO=0; xx3C408.LO=0;
4157 xx3C425.LO=0; xx3C428.LO=0; xx3C430.LO=0;

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4158 xx3C431.LO=0; xx3C432.LO=0; xx3HC28.LO=0.2;
4159 xx3HC29.LO=0.1; xx3HC30.LO=0.1; xx3HC32.LO=0.3;
4160 xx3R1.LO=0.1; xx3R29.LO=0.1; xx3SC406.LO=0;
4161 xx3SC408.LO=0.5; xx4C302.LO=0; xx4C308.LO=0;
4162 xx4C310.LO=0; xx4C311.LO=0; xx4C312.LO=0;
4163 xx4C323.LO=0.08; xx4C325.LO=0; xx4C405.LO=0.0001;
4164 xx4C408.LO=0; xx4C409.LO=0.0001; xx4C425.LO=0;
4165 xx4C427.LO=0; xx4C428.LO=0; xx4C430.LO=0.5;
4166 xx4C431.LO=0.0001; xx4C432.LO=0.5; xx4HC28.LO=0.01;
4167 xx4HC29.LO=0.01; xx4HC30.LO=0.01; xx4HC32.LO=0;
4168 xx4R1.LO=0; xx4R29.LO=0.01; xx4SC406.LO=0.6;
4169 xx4SC408.LO=0; xx5C302.LO=0; xx5C308.LO=0;
4170 xx5C310.LO=0; xx5C311.LO=0; xx5C312.LO=0;
4171 xx5C323.LO=0.001; xx5C325.LO=0; xx5C405.LO=0.0001;
4172 xx5C408.LO=0; xx5C425.LO=0; xx5C428.LO=0;
4173 xx5C430.LO=0; xx5C431.LO=0; xx5HC28.LO=0.01;
4174 xx5HC29.LO=0; xx5HC30.LO=0; xx5HC32.LO=0;
4175 xx5R1.LO=0; xx5R29.LO=0; xx5SC406.LO=0;
4176 xx5SC408.LO=0; xx6SC406.LO=0; xx6SC408.LO=0;
4177 xx7C302.LO=0; xx7C308.LO=0; xx7C310.LO=0;
4178 xx7C311.LO=0; xx7C312.LO=0; xx7C323.LO=0.002;
4179 xx7C325.LO=0; xx7C405.LO=0.0001; xx7C408.LO=0;
4180 xx7C425.LO=0; xx7C428.LO=0; xx7C430.LO=0;
4181 xx7C431.LO=0; xx7HC28.LO=0.1; xx7HC29.LO=0;
4182 xx7HC30.LO=0.1; xx7HC32.LO=0; xx7R1.LO=0.1;
4183 xx7R29.LO=0.1; xx7SC406.LO=0; xx7SC408.LO=0;
4184 y1HC28.LO=0.05; y1HC29.LO=0.05; y1HC30.LO=0.05;
4185 y1HC31.LO=0.05; y1R1.LO=0; y1R29.LO=0.05;
4186 y2HC28.LO=0; y2HC29.LO=0; y2HC30.LO=0;
4187 y2HC31.LO=0; y2R1.LO=0; y2R29.LO=0;
4188 y3HC28.LO=0.2; y3HC29.LO=0.1; y3HC30.LO=0.1;
4189 y3HC31.LO=0.1; y3R1.LO=0.1; y3R29.LO=0.1;
4190 y4HC28.LO=0; y4HC29.LO=0; y4HC30.LO=0.01;
4191 y4HC31.LO=0; y4R1.LO=0; y4R29.LO=0;
4192 y5HC28.LO=0; y5HC29.LO=0; y5HC30.LO=0;
4193 y5HC31.LO=0; y5R1.LO=0; y5R29.LO=0;
4194 y7HC28.LO=0.01; y7HC29.LO=0; y7HC30.LO=0;
4195 y7HC31.LO=0; y7R1.LO=0; y7R29.LO=0;
4196 yy1HC28.LO=0.1; yy1HC29.LO=0.1; yy1HC30.LO=0.05;
4197 yy1R1.LO=0.1; yy1R29.LO=0.05; yy2HC28.LO=0;
4198 yy2HC29.LO=0; yy2HC30.LO=0; yy2R1.LO=0;
4199 yy2R29.LO=0; yy3HC28.LO=0.1; yy3HC29.LO=0.1;
4200 yy3HC30.LO=0.1; yy3R1.LO=0.1; yy3R29.LO=0.1;
4201 yy4HC28.LO=0.01; yy4HC29.LO=0.01; yy4HC30.LO=0.01;
4202 yy4R1.LO=0; yy4R29.LO=0.01; yy5HC28.LO=0.001;
4203 yy5HC29.LO=0; yy5HC30.LO=0; yy5R1.LO=0;

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4204 yy5R29.LO=0; yy7HC28.LO=0; yy7HC29.LO=0;
4205 yy7HC30.LO=0; yy7R1.LO=0; yy7R29.LO=0;
4206 C10pC623.UP=0.5; C10pC625.UP=0.5; C10pC627.UP=0.5;
4207 C10pC629.UP=0.5; C2C623.UP=0.1; C2C625.UP=0.1;
4208 C2C627.UP=0.1; C2C629.UP=0.1; C3C623.UP=6;
4209 C3C625.UP=6; C3C627.UP=6; C3C629.UP=6;
4210 C3pC623.UP=10; C3pC625.UP=10; C3pC627.UP=10;
4211 C3pC629.UP=10; C4pC623.UP=1; C4pC625.UP=1;
4212 C4pC627.UP=1; C4pC629.UP=1; C5pC623.UP=0.1;
4213 C5pC625.UP=0.1; C5pC627.UP=0.1; C5pC629.UP=0.1;
4214 C7pC623.UP=0.1; C7pC625.UP=0.1; C7pC627.UP=0.1;
4215 C7pC629.UP=0.1; C8pC623.UP=0.1; C8pC625.UP=0.1;
4216 C8pC627.UP=0.1; C8pC629.UP=0.1; C9pC623.UP=10;
4217 C9pC625.UP=10; C9pC627.UP=10; C9pC629.UP=10;
4218 CHXC623.UP=15; CHXC625.UP=15; CHXC627.UP=15;
4219 CHXC629.UP=15; CiC10pC623.UP=1; CiC10pC625.UP=1;
4220 CiC10pC627.UP=1; CiC10pC629.UP=1; CiC11pC623.UP=0.1;
4221 CiC11pC625.UP=0.1; CiC11pC627.UP=0.1; CiC11pC629.UP=0.1;
4222 CiC4eC623.UP=0.1; CiC4eC625.UP=0.1; CiC4eC627.UP=0.1;
4223 CiC4eC629.UP=0.1; CiC5eC623.UP=0.1; CiC5eC625.UP=0.1;
4224 CiC5eC627.UP=0.1; CiC5eC629.UP=0.1; CiC8eC623.UP=0.3;
4225 CiC8eC625.UP=0.3; CiC8eC627.UP=0.3; CiC8eC629.UP=0.3;
4226 Cost.UP=10000; dTE601.UP=50; dTE602.UP=90;
4227 dTE603.UP=50; dTE605.UP=50; dTE609A.UP=20;
4228 dTE610.UP=50; dTE611.UP=50; dTE612.UP=90;
4229 dTE613.UP=30; dTE616.UP=120; dTE617.UP=50;
4230 dTE621A.UP=50; dTE621B.UP=40; dTE626.UP=50;
4231 dTE627A.UP=55; dTE627B.UP=50; dTE628.UP=60;
4232 dTE629.UP=80; dTE633.UP=50; dTE634.UP=20;
4233 dTE640.UP=50; dTE641.UP=50; dTE695A.UP=90;
4234 dTE695B.UP=60; dTE696A.UP=90; dTE696B.UP=90;
4235 dTE6XX.UP=50; Earnings.UP=10000; f1C601.UP=0.1;
4236 f1C603.UP=1; f1C606A.UP=1; f2C601.UP=1;
4237 f3C601.UP=1; f3C603.UP=1; f3C606A.UP=1;
4238 f4C601.UP=1; f4C603.UP=1; f4C606A.UP=1;
4239 f5C601.UP=1; f5C603.UP=1; f5C606A.UP=1;
4240 f6C601.UP=1; f7C601.UP=1; f7C603.UP=1;
4241 f7C606A.UP=1; FAC05.UP=20; FAC07.UP=20;
4242 FAC09.UP=20; FAC15.UP=20; FAC18.UP=20;
4243 FAC20.UP=20; FAC26.UP=20; FAC29.UP=20;
4244 FAC31.UP=20; FAC37.UP=20; FAC40.UP=20;
4245 FAC42.UP=20; FC301.UP=6; FC302.UP=5;
4246 FC303.UP=6; FC306.UP=15; FC307.UP=15;
4247 FC309.UP=10; FC310.UP=3; FC311.UP=8;
4248 FC312.UP=5; FC315.UP=5; FC317.UP=3;
4249 FC318.UP=3; FC319.UP=3; FC321.UP=5;

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4250 FC323.UP=3; FC324.UP=3; FC325.UP=3;
4251 FC326.UP=3; FC401.UP=5; FC402.UP=5;
4252 FC404.UP=5; FC405.UP=2; FC406.UP=5;
4253 FC408.UP=10; FC409.UP=10; FC410.UP=10;
4254 FC411.UP=10; FC413.UP=1; FC414.UP=5;
4255 FC415.UP=10; FC418.UP=5; FC419.UP=10;
4256 FC425.UP=10; FC426.UP=5; FC427.UP=10;
4257 FC428.UP=5; FC430.UP=10; FC431.UP=10;
4258 FC432.UP=5; Fcwe603.UP=20; Fcwe605.UP=15;
4259 Fcwe609A.UP=1; Fcwe611.UP=20; Fcwe613.UP=15;
4260 Fcwe617.UP=25; Fcwe621A.UP=10; Fcwe621B.UP=20;
4261 Fcwe626.UP=20; Fcwe627A.UP=10; Fcwe627B.UP=30;
4262 Fcwe634.UP=60; Fcwe640.UP=50; Fcwe641A.UP=30;
4263 Fcwe641B.UP=10; FHC02.UP=5; FHC03.UP=10;
4264 FHC04.UP=10; FHC05.UP=10; FHC06.UP=12;
4265 FHC07.UP=5; FHC08.UP=5; FHC11.UP=5;
4266 FHC14.UP=5; FHC15.UP=5; FHC16.UP=5;
4267 FHC22.UP=6; FHC23.UP=6; FHC24.UP=6;
4268 FHC25.UP=6; FHC26.UP=6; FHC27.UP=10;
4269 FHC28.UP=12; FHC29.UP=12; FHC30.UP=12;
4270 FHC31.UP=12; FHC33.UP=1; FHC34.UP=1;
4271 FHC38.UP=1; FHC40.UP=1; FHC41.UP=1;
4272 FHC45.UP=1; FlHC28.UP=10; FlHC29.UP=12;
4273 FlHC30.UP=12; FlHC31.UP=12; FlR1.UP=10;
4274 FlR29.UP=12; FmC302.UP=0.1; FmC308.UP=0.5;
4275 FmC310.UP=0.8; FmC311.UP=0.5; FmC312.UP=0.1;
4276 FmC317.UP=0.1; FmC322.UP=1; FmC323.UP=0.4;
4277 FmC325.UP=1; FmC405.UP=0.1; FmC407.UP=0.1;
4278 FmC408.UP=2; FmC409.UP=0.2; FmC412.UP=0.1;
4279 FmC414.UP=0.1; FmC425.UP=2; FmC427.UP=0.2;
4280 FmC428.UP=0.1; FmC430.UP=0.2; FmC431.UP=1;
4281 FmC432.UP=0.1; FmHC01.UP=0.1; FmHC32.UP=0.1;
4282 FmlHC28.UP=0.2; FmlHC29.UP=0.1; FmlHC30.UP=0.1;
4283 FmlR1.UP=0.2; FmlR29.UP=0.1; FmSC403.UP=0.1;
4284 FmSC406.UP=0.1; FmSC408.UP=1; FmvHC28.UP=0.2;
4285 FmvHC29.UP=0.1; FmvHC30.UP=0.1; FmvR1.UP=0.2;
4286 FmvR29.UP=0.1; FR1.UP=12; FR29.UP=12;
4287 FSC401.UP=5; FSC403.UP=3; FSC404.UP=3;
4288 FSC406.UP=3; FSC407.UP=3; FSC408.UP=3.2;
4289 FSC409.UP=3.2; FSC412.UP=1; FSC414.UP=0.5;
4290 Fstme602.UP=1; Fstme695A.UP=10; Fstme695B.UP=10;
4291 Fstme696A.UP=10; Fstme696B.UP=10; FvHC28.UP=8;
4292 FvHC29.UP=12; FvHC30.UP=12; FvHC31.UP=12;
4293 FvR1.UP=12; FvR29.UP=12; h1C601.UP=2;
4294 h1C603.UP=1; h1C606A.UP=10; h2C601.UP=5;
4295 h3C601.UP=6; h3C603.UP=1; h3C606A.UP=-35;

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4296 h4C601.UP=2; h4C603.UP=1; h4C606A.UP=1;
4297 h5C601.UP=1.5; h5C603.UP=1.5; h5C606A.UP=2;
4298 h6C601.UP=3; h7C601.UP=1.5; h7C603.UP=1.5;
4299 h7C606A.UP=1; hAC02.UP=10000; hAC05.UP=10000;
4300 hAC07.UP=10000; hAC09.UP=10000; hAC12.UP=10000;
4301 hAC15.UP=10000; hAC18.UP=10000; hAC20.UP=10000;
4302 hAC23.UP=10000; hAC26.UP=10000; hAC29.UP=10000;
4303 hAC31.UP=10000; hAC34.UP=10000; hAC37.UP=10000;
4304 hAC40.UP=10000; hAC42.UP=10000; hacAC09.UP=10000;
4305 hacAC20.UP=10000; hacAC31.UP=10000; hacAC42.UP=10000;
4306 hc301.UP=10000; hc302.UP=5000; hc303.UP=10000;
4307 hc306.UP=10000; hc307.UP=10000; hc308.UP=10000;
4308 hc309.UP=10000; hc310.UP=5000; hc311.UP=10000;
4309 hc312.UP=10000; hc312liq.UP=10000; hc315.UP=10000;
4310 hc316.UP=10000; hc317.UP=10000; hc318.UP=10000;
4311 hc319.UP=10000; hc321.UP=5000; hc322.UP=5000;
4312 hc323.UP=10000; hc324.UP=10000; hc325.UP=10000;
4313 hc326.UP=5000; hc329.UP=5000; hc401.UP=5000;
4314 hc402.UP=10000; hc403.UP=10000; hc404.UP=10000;
4315 hc405.UP=5000; hc406.UP=5000; hc407.UP=5000;
4316 hc408.UP=10000; hc408vap.UP=10000; hc409.UP=10000;
4317 hc410.UP=10000; hc410vap.UP=10000; hc411.UP=10000;
4318 hc412.UP=5000; hc412liq.UP=1000; hc413.UP=5000;
4319 hc414.UP=10000; hc414liq.UP=10000; hc415.UP=5000;
4320 hc417.UP=5000; hc418.UP=10000; hc419.UP=10000;
4321 hc425.UP=10000; hc426.UP=5000; hc427.UP=10000;
4322 hc428.UP=10000; hc430.UP=10000; hc431.UP=10000;
4323 hc432.UP=10000; hc623.UP=5000; hc625.UP=5000;
4324 hc627.UP=5000; hc629.UP=5000; hHC01.UP=5000;
4325 hHC02.UP=5000; hHC03.UP=10000; hHC04.UP=10000;
4326 hHC05.UP=10000; hHC06.UP=10000; hHC07.UP=5000;
4327 hHC11.UP=5000; hHC14.UP=5000; hHC16.UP=5000;
4328 hHC29.UP=10000; hHC30.UP=10000; hHC31.UP=10000;
4329 hHC32.UP=5000; hHC34.UP=5000; hHC38.UP=5000;
4330 hHC41.UP=5000; hHC45.UP=5000; hlHC29.UP=10000;
4331 hlHC30.UP=10000; hlHC31.UP=10000; hlR1.UP=10000;
4332 hlR29.UP=10000; hR1.UP=10000; hR29.UP=10000;
4333 hSC401.UP=10000; hSC402.UP=10000; hSC403.UP=10000;
4334 hSC404.UP=10000; hSC405.UP=10000; hSC406.UP=10000;
4335 hSC407.UP=10000; hSC408.UP=10000; hSC409.UP=5000;
4336 hSC411.UP=5000; hSC412.UP=10000; hSC413.UP=10000;
4337 hSC414.UP=500; hvHC29.UP=10000; hvHC30.UP=10000;
4338 hvHC31.UP=10000; hvR1.UP=10000; hvR29.UP=10000;
4339 K1C323.UP=3; K1C325.UP=2; K1C408.UP=15;
4340 K1C414.UP=4; K1C428.UP=10; K1C430.UP=6;
4341 K1C601.UP=3; K1C603.UP=3; K1C606A.UP=3;

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4342 K1C606C.UP=7; K1C614B.UP=3.5; K1C615_A.UP=4;
4343 K1C616_A.UP=5; K1E633.UP=5.5; K1E6XX.UP=5.5;
4344 K1SC406.UP=5; K1SC408.UP=3.5; K2C601.UP=1;
4345 K2E633.UP=1.5; K2E6XX.UP=1.5; K2SC406.UP=1.2;
4346 K2SC408.UP=1; K3C323.UP=1.5; K3C325.UP=1.5;
4347 K3C408.UP=6; K3C414.UP=3; K3C428.UP=5;
4348 K3C430.UP=5; K3C601.UP=2; K3C603.UP=1;
4349 K3C606A.UP=3; K3C606C.UP=5; K3C614B.UP=1.5;
4350 K3C615_A.UP=2; K3C616_A.UP=2; K3E633.UP=2;
4351 K3E6XX.UP=3; K3SC406.UP=2; K3SC408.UP=1.5;
4352 K4C323.UP=1; K4C325.UP=1; K4C408.UP=5;
4353 K4C414.UP=2; K4C428.UP=5; K4C430.UP=3;
4354 K4C601.UP=1; K4C603.UP=1; K4C606A.UP=3;
4355 K4C606C.UP=4; K4C614B.UP=1; K4C615_A.UP=1.5;
4356 K4C616_A.UP=1.5; K4E633.UP=1.5; K4E6XX.UP=1.5;
4357 K4SC406.UP=1.5; K4SC408.UP=1; K5C323.UP=0.6;
4358 K5C325.UP=0.6; K5C408.UP=3; K5C414.UP=2;
4359 K5C428.UP=2; K5C430.UP=1.5; K5C601.UP=0.5;
4360 K5C603.UP=0.5; K5C606A.UP=1; K5C606C.UP=1.2;
4361 K5C614B.UP=0.8; K5C615_A.UP=1; K5C616_A.UP=1;
4362 K5E633.UP=1; K5E6XX.UP=1; K5SC406.UP=0.6;
4363 K5SC408.UP=0.6; K6C601.UP=1; K6SC406.UP=0.5;
4364 K6SC408.UP=0.5; K7C323.UP=0.3; K7C325.UP=0.2;
4365 K7C408.UP=1; K7C414.UP=1; K7C428.UP=2;
4366 K7C430.UP=1; K7C601.UP=0.5; K7C603.UP=0.5;
4367 K7C606A.UP=0.5; K7C614B.UP=0.1; K7C615_A.UP=1;
4368 K7C616_A.UP=1; K7E633.UP=0.1; K7E6XX.UP=0.1;
4369 K7SC406.UP=0.3; K7SC408.UP=0.2; Kp1C601.UP=5;
4370 Kp1C603.UP=3; Kp1C606A.UP=5; Kp1C606D.UP=12;
4371 Kp2C601.UP=1.5; Kp3C601.UP=2; Kp3C603.UP=1.5;
4372 Kp3C606A.UP=3; Kp3C606D.UP=5; Kp4C601.UP=1.5;
4373 Kp4C603.UP=1; Kp4C606A.UP=3; Kp4C606D.UP=5;
4374 Kp5C601.UP=1; Kp5C603.UP=0.5; Kp5C606A.UP=1;
4375 Kp5C606D.UP=5; Kp6C601.UP=1; Kp7C601.UP=1;
4376 Kp7C603.UP=0.3; Kp7C606A.UP=0.5; Kp7C606D.UP=5;
4377 kWad1.UP=300; kWad2.UP=355; LpC601.UP=5;
4378 LpC603.UP=10; LpC606A.UP=5; PC303.UP=140;
4379 PC306.UP=900; PC307.UP=850; PC308.UP=800;
4380 PC309.UP=780; PC311.UP=400; PC312.UP=850;
4381 PHC30.UP=140; PHC32.UP=200; PR29.UP=140;
4382 Profit.UP=10000; Q2HC07.UP=1; Q2HC11.UP=1;
4383 Q2HC14.UP=1; Q2HC16.UP=1; qFp1C606A.UP=1;
4384 qFp3C606A.UP=0.1; qFp4C606A.UP=1; qFp5C606A.UP=1;
4385 qFp7C606A.UP=1; qS1C606A.UP=1; qS3C606A.UP=1;
4386 qS4C606A.UP=0.5; qS5C606A.UP=0.55; qS7C606A.UP=0.16;
4387 r10C623.UP=0.1; r10C625.UP=0.1; r10C627.UP=0.1;

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4388 r10C629.UP=0.1; r2C623.UP=0.832; r2C625.UP=0.832;
4389 r2C627.UP=0.832; r2C629.UP=0.832; r3C623.UP=0.15;
4390 r3C625.UP=0.15; r3C627.UP=0.15; r3C629.UP=0.15;
4391 r4C623.UP=0.03; r4C625.UP=0.03; r4C627.UP=0.03;
4392 r4C629.UP=0.03; r5C623.UP=0.3; r5C625.UP=0.3;
4393 r5C627.UP=0.3; r5C629.UP=0.3; r7C623.UP=0.05;
4394 r7C625.UP=0.05; r7C627.UP=0.05; r7C629.UP=0.05;
4395 r8C623.UP=0.1; r8C625.UP=0.1; r8C627.UP=0.1;
4396 r8C629.UP=0.1; r9C623.UP=0.1; r9C625.UP=0.1;
4397 r9C627.UP=0.1; r9C629.UP=0.1; rho2HC07.UP=650;
4398 rho2HC11.UP=650; rho2HC14.UP=650; rho2HC16.UP=650;
4399 rhoAC09.UP=1700; rhoAC20.UP=1700; rhoAC31.UP=1700;
4400 rhoAC42.UP=1700; riC10C623.UP=0.3; riC10C625.UP=0.3;
4401 riC10C627.UP=0.3; riC10C629.UP=0.3; riC11C623.UP=0.1;
4402 riC11C625.UP=0.1; riC11C627.UP=0.1; riC11C629.UP=0.1;
4403 sf1S34.UP=1; sf2S34.UP=1; sfS11.UP=0.8;
4404 sfS19.UP=0.8; sfS2.UP=1; sfS23.UP=0.8;
4405 sfS27.UP=0.8; sfS41.UP=1; sfS42.UP=1;
4406 sfS5.UP=0.5; sfS7.UP=0.8; SmlC601.UP=5;
4407 SmlC603.UP=1; SmlC606A.UP=5; SmlC606D.UP=5;
4408 Sm2C601.UP=1; Sm3C601.UP=2; Sm3C603.UP=0.5;
4409 Sm3C606A.UP=5; Sm3C606D.UP=10; Sm4C601.UP=1.5;
4410 Sm4C603.UP=0.5; Sm4C606A.UP=5; Sm4C606D.UP=5;
4411 Sm5C601.UP=0.6; Sm5C603.UP=0.5; Sm5C606A.UP=5;
4412 Sm5C606D.UP=5; Sm6C601.UP=1; Sm7C601.UP=0.2;
4413 Sm7C603.UP=0.2; Sm7C606A.UP=5; Sm7C606D.UP=5;
4414 Sn1C601.UP=5; Sn1C603.UP=3; Sn1C606A.UP=20;
4415 Sn2C601.UP=1.5; Sn3C601.UP=1.5; Sn3C603.UP=1.5;
4416 Sn3C606A.UP=15; Sn4C601.UP=1; Sn4C603.UP=1;
4417 Sn4C606A.UP=10; Sn5C601.UP=0.8; Sn5C603.UP=0.4;
4418 Sn5C606A.UP=10; Sn6C601.UP=1; Sn7C601.UP=0.5;
4419 Sn7C603.UP=0.5; Sn7C606A.UP=5; TAC02.UP=290;
4420 TAC05.UP=300; TAC07.UP=300; TAC15.UP=300;
4421 TAC18.UP=300; TAC20.UP=300; TAC26.UP=300;
4422 TAC29.UP=300; TAC37.UP=300; TAC40.UP=300;
4423 TC301.UP=300; TC302.UP=290; TC309.UP=350;
4424 TC310.UP=310; TC311.UP=310; TC312.UP=369;
4425 TC318.UP=365; TC319.UP=400; TC320.UP=400;
4426 TC322.UP=400; TC323.UP=420; TC326.UP=360;
4427 TC328.UP=360; TC329.UP=375; TC401.UP=300;
4428 TC402.UP=305; TC403.UP=320; TC406.UP=400;
4429 TC409.UP=461; TC411.UP=418; TC412.UP=405;
4430 TC413.UP=350; TC415.UP=400; TC417.UP=350;
4431 TC425.UP=410; TC426.UP=410; TC427.UP=405;
4432 TC428.UP=405; TC430.UP=400; TC431.UP=405;
4433 TC432.UP=400; TcwotE609A.UP=320; TcwotE621A.UP=355;

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4434 TcwotE621B.UP=325; TcwotE627A.UP=360; TcwotE627B.UP=310;
4435 TcwotE641A.UP=360; TcwotE641B.UP=325; TcwoutE603.UP=350;
4436 TcwoutE605.UP=320; TcwoutE611.UP=350; TcwoutE613.UP=320;
4437 TcwoutE617.UP=350; TcwoutE626.UP=310; TcwoutE634.UP=360;
4438 TcwoutE640.UP=330; THC01.UP=370; THC02.UP=302;
4439 THC03.UP=360; THC04.UP=310; THC05.UP=300;
4440 THC06.UP=300; THC07.UP=300; THC11.UP=300;
4441 THC14.UP=300; THC16.UP=300; THC22.UP=290;
4442 THC23.UP=290; THC24.UP=290; THC25.UP=290;
4443 THC26.UP=290; THC27.UP=290; THC28.UP=290;
4444 THC29.UP=290; THC30.UP=300; THC31.UP=310;
4445 THC34.UP=310; THC38.UP=310; THC41.UP=310;
4446 THC45.UP=310; TmC601.UP=360; TmC603.UP=375;
4447 TmC606A.UP=370; TmC606D.UP=400; TmK601.UP=333;
4448 TnC601.UP=340; TnC603.UP=375; TnC606A.UP=370;
4449 TR1.UP=290; TR29.UP=300; TSC401.UP=350;
4450 TSC404.UP=365; TSC406.UP=360; TSC407.UP=400;
4451 TSC409.UP=360; TSC411.UP=375; TSC412.UP=360;
4452 TSC414.UP=320; Utilities.UP=10000; VFC614B.UP=0.8;
4453 VFC615.UP=0.6; VFC616.UP=1; VFM3.UP=0.55;
4454 VpC601.UP=5; VpC603.UP=3; VpC606A.UP=10;
4455 x10AC09.UP=0.1; x10AC20.UP=0.1; x10AC31.UP=0.1;
4456 x10AC42.UP=0.1; x11AC02.UP=0.998; x11AC05.UP=0.999;
4457 x11AC07.UP=0.999; x11AC09.UP=1; x11AC15.UP=0.999;
4458 x11AC18.UP=0.999; x11AC20.UP=1; x11AC26.UP=0.999;
4459 x11AC29.UP=0.999; x11AC31.UP=1; x11AC37.UP=0.999;
4460 x11AC40.UP=0.999; x11AC42.UP=1; x12AC02.UP=0.03;
4461 x12AC05.UP=0.11; x12AC07.UP=0.11; x12AC09.UP=0.1;
4462 x12AC12.UP=0.12; x12AC15.UP=0.11; x12AC18.UP=0.11;
4463 x12AC20.UP=0.1; x12AC23.UP=0.12; x12AC26.UP=0.11;
4464 x12AC29.UP=0.11; x12AC31.UP=0.1; x12AC34.UP=0.12;
4465 x12AC37.UP=0.11; x12AC40.UP=0.11; x12AC42.UP=0.1;
4466 x12AC45.UP=0.12; x1AC09.UP=0.1; x1AC20.UP=0.1;
4467 x1AC31.UP=0.1; x1AC42.UP=0.1; x1C301.UP=0.2;
4468 x1C302.UP=0.2; x1C303.UP=0.22; x1C306.UP=0.5;
4469 x1C307.UP=0.5; x1C308.UP=0.4; x1C309.UP=0.5;
4470 x1C310.UP=0.5; x1C311.UP=0.2; x1C312.UP=1;
4471 x1C315.UP=1; x1C317.UP=0.3; x1C318.UP=0.3;
4472 x1C319.UP=0.1; x1C320.UP=0.1; x1C321.UP=0.1;
4473 x1C322.UP=0.15; x1C323.UP=0.2; x1C324.UP=0.3;
4474 x1C326.UP=1; x1C328.UP=1; x1C329.UP=1;
4475 x1C401.UP=0.2; x1C402.UP=0.2; x1C403.UP=0.2;
4476 x1C404.UP=0.2; x1C405.UP=0.01; x1C406.UP=0.01;
4477 x1C407.UP=0.01; x1C408.UP=1; x1C409.UP=0.01;
4478 x1C410.UP=1; x1C411.UP=0.1; x1C412.UP=0.05;
4479 x1C413.UP=0.1; x1C414.UP=0.25; x1C415.UP=0.2;

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4480 x1C418.UP=0.3; x1C419.UP=0.2; x1C425.UP=0.1;
4481 x1C426.UP=0.1; x1C427.UP=1; x1C428.UP=0.1;
4482 x1C430.UP=0.1; x1C431.UP=0.1; x1C432.UP=0.1;
4483 x1HC01.UP=0.3; x1HC02.UP=0.3; x1HC03.UP=0.2;
4484 x1HC04.UP=0.2; x1HC05.UP=0.2; x1HC06.UP=0.2;
4485 x1HC07.UP=0.2; x1HC08.UP=0.2; x1HC11.UP=0.2;
4486 x1HC14.UP=0.2; x1HC15.UP=0.2; x1HC16.UP=0.2;
4487 x1HC22.UP=0.5; x1HC23.UP=0.5; x1HC24.UP=0.5;
4488 x1HC25.UP=0.5; x1HC26.UP=0.5; x1HC27.UP=0.5;
4489 x1HC28.UP=0.2; x1HC29.UP=0.2; x1HC30.UP=0.2;
4490 x1HC31.UP=0.1; x1HC33.UP=0.1; x1HC34.UP=0.1;
4491 x1HC38.UP=0.1; x1HC40.UP=0.1; x1HC41.UP=0.1;
4492 x1HC45.UP=0.1; x1R1.UP=0.1; x1R29.UP=0.2;
4493 x1SC401.UP=0.1; x1SC404.UP=0.1; x1SC405.UP=0.1;
4494 x1SC406.UP=0.1; x1SC407.UP=0.1; x1SC409.UP=0.1;
4495 x1SC411.UP=0.1; x1SC412.UP=0.1; x1SC413.UP=0.1;
4496 x1SC414.UP=0.1; x2AC09.UP=1; x2AC20.UP=1;
4497 x2AC31.UP=1; x2AC42.UP=1; x2C301.UP=0.01;
4498 x2C417.UP=0.1; x2C418.UP=0.1; x2C419.UP=0.1;
4499 x2HC01.UP=0.7; x2HC02.UP=1; x2HC03.UP=0.1;
4500 x2HC04.UP=0.1; x2HC05.UP=0.1; x2HC06.UP=0.15;
4501 x2HC07.UP=0.15; x2HC08.UP=0.15; x2HC11.UP=0.15;
4502 x2HC14.UP=0.15; x2HC15.UP=0.15; x2HC16.UP=0.15;
4503 x2HC22.UP=0.1; x2HC23.UP=0.1; x2HC24.UP=0.1;
4504 x2HC25.UP=0.1; x2HC26.UP=0.1; x2HC27.UP=0.1;
4505 x2HC28.UP=0.1; x2HC29.UP=0.1; x2HC30.UP=0.1;
4506 x2HC31.UP=0.1; x2R1.UP=0.1; x2R29.UP=0.1;
4507 x2SC401.UP=0.1; x2SC404.UP=0.1; x2SC405.UP=0.1;
4508 x2SC406.UP=0.1; x2SC407.UP=0.1; x2SC409.UP=0.1;
4509 x2SC411.UP=0.1; x2SC412.UP=0.1; x2SC413.UP=0.1;
4510 x2SC414.UP=0.1; x3AC09.UP=0.7; x3AC20.UP=0.7;
4511 x3AC31.UP=0.7; x3AC42.UP=0.7; x3C301.UP=1;
4512 x3C302.UP=1; x3C303.UP=0.8; x3C306.UP=1;
4513 x3C307.UP=1; x3C308.UP=1; x3C309.UP=0.8;
4514 x3C310.UP=1; x3C311.UP=1; x3C312.UP=1;
4515 x3C315.UP=1; x3C317.UP=1; x3C318.UP=1;
4516 x3C319.UP=1; x3C320.UP=1; x3C321.UP=1;
4517 x3C322.UP=1; x3C323.UP=0.95; x3C324.UP=0.95;
4518 x3C326.UP=0.5; x3C328.UP=0.5; x3C329.UP=0.5;
4519 x3C401.UP=1; x3C402.UP=0.8; x3C403.UP=1;
4520 x3C404.UP=1; x3C405.UP=0.1; x3C406.UP=0.01;
4521 x3C407.UP=0.01; x3C408.UP=1; x3C409.UP=0.01;
4522 x3C410.UP=0.1; x3C411.UP=0.2; x3C412.UP=0.1;
4523 x3C413.UP=0.1; x3C414.UP=1; x3C415.UP=1;
4524 x3C418.UP=1; x3C419.UP=1; x3C425.UP=0.1;
4525 x3C426.UP=0.1; x3C427.UP=1; x3C428.UP=0.3;

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4526 x3C430.UP=0.1; x3C431.UP=0.1; x3C432.UP=0.1;
4527 x3HC01.UP=0.6; x3HC02.UP=0.5; x3HC03.UP=1;
4528 x3HC04.UP=1; x3HC05.UP=1; x3HC06.UP=1;
4529 x3HC07.UP=1; x3HC08.UP=1; x3HC11.UP=1;
4530 x3HC14.UP=1; x3HC15.UP=1; x3HC16.UP=1;
4531 x3HC22.UP=0.9; x3HC23.UP=0.9; x3HC24.UP=0.9;
4532 x3HC25.UP=0.9; x3HC26.UP=0.9; x3HC27.UP=0.9;
4533 x3HC28.UP=0.6; x3HC29.UP=0.6; x3HC30.UP=0.6;
4534 x3HC31.UP=0.6; x3HC33.UP=1; x3HC34.UP=1;
4535 x3HC38.UP=1; x3HC40.UP=1; x3HC41.UP=1;
4536 x3HC45.UP=1; x3R1.UP=0.6; x3R29.UP=0.6;
4537 x3SC401.UP=0.4; x3SC404.UP=0.1; x3SC405.UP=0.1;
4538 x3SC406.UP=0.1; x3SC407.UP=0.1; x3SC409.UP=1;
4539 x3SC411.UP=1; x3SC412.UP=1; x3SC413.UP=1;
4540 x3SC414.UP=1; x4AC09.UP=0.2; x4AC20.UP=0.2;
4541 x4AC31.UP=0.2; x4AC42.UP=0.2; x4C301.UP=0.5;
4542 x4C302.UP=0.5; x4C303.UP=0.2; x4C306.UP=0.8;
4543 x4C307.UP=0.8; x4C308.UP=0.5; x4C309.UP=0.4;
4544 x4C310.UP=0.3; x4C311.UP=0.5; x4C312.UP=1;
4545 x4C315.UP=0.3; x4C317.UP=0.2; x4C318.UP=0.3;
4546 x4C319.UP=0.3; x4C320.UP=0.3; x4C321.UP=0.3;
4547 x4C322.UP=0.4; x4C323.UP=0.25; x4C324.UP=0.25;
4548 x4C325.UP=0.1; x4C326.UP=0.1; x4C328.UP=0.1;
4549 x4C329.UP=0.1; x4C401.UP=0.5; x4C402.UP=0.5;
4550 x4C403.UP=0.3; x4C404.UP=0.3; x4C405.UP=0.2;
4551 x4C406.UP=0.2; x4C407.UP=0.3; x4C408.UP=0.2;
4552 x4C409.UP=0.3; x4C410.UP=1; x4C411.UP=1;
4553 x4C412.UP=1; x4C413.UP=1; x4C414.UP=0.25;
4554 x4C415.UP=0.3; x4C418.UP=0.3; x4C419.UP=0.3;
4555 x4C425.UP=1; x4C426.UP=1; x4C427.UP=1;
4556 x4C428.UP=1; x4C430.UP=1; x4C431.UP=1;
4557 x4C432.UP=1; x4HC01.UP=0.25; x4HC02.UP=0.25;
4558 x4HC03.UP=0.3; x4HC04.UP=0.5; x4HC05.UP=0.5;
4559 x4HC06.UP=0.4; x4HC07.UP=0.4; x4HC08.UP=0.4;
4560 x4HC11.UP=0.4; x4HC14.UP=0.4; x4HC15.UP=0.4;
4561 x4HC16.UP=0.4; x4HC22.UP=0.5; x4HC23.UP=0.5;
4562 x4HC24.UP=0.5; x4HC25.UP=0.5; x4HC26.UP=0.5;
4563 x4HC27.UP=0.5; x4HC28.UP=0.5; x4HC29.UP=0.3;
4564 x4HC30.UP=0.3; x4HC31.UP=0.3; x4HC33.UP=0.5;
4565 x4HC34.UP=0.5; x4HC38.UP=0.5; x4HC40.UP=0.5;
4566 x4HC41.UP=0.5; x4HC45.UP=0.5; x4R1.UP=0.3;
4567 x4R29.UP=0.3; x4SC401.UP=0.7; x4SC404.UP=1;
4568 x4SC405.UP=1; x4SC406.UP=1; x4SC407.UP=1;
4569 x4SC409.UP=0.1; x4SC411.UP=0.1; x4SC412.UP=0.1;
4570 x4SC413.UP=0.1; x4SC414.UP=0.1; x5AC09.UP=0.1;
4571 x5AC20.UP=0.1; x5AC31.UP=0.1; x5AC42.UP=0.1;

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4572 x5C301.UP=0.2; x5C302.UP=0.1; x5C303.UP=0.1;
4573 x5C306.UP=0.6; x5C307.UP=0.6; x5C308.UP=0.2;
4574 x5C309.UP=0.2; x5C310.UP=0.1; x5C311.UP=0.2;
4575 x5C312.UP=0.4; x5C315.UP=0.1; x5C317.UP=0.1;
4576 x5C318.UP=0.1; x5C319.UP=0.1; x5C320.UP=0.1;
4577 x5C321.UP=0.1; x5C322.UP=0.1; x5C323.UP=0.1;
4578 x5C324.UP=0.1; x5C325.UP=0.01; x5C326.UP=0.01;
4579 x5C328.UP=0.01; x5C329.UP=0.01; x5C401.UP=0.5;
4580 x5C402.UP=0.5; x5C403.UP=0.2; x5C404.UP=0.2;
4581 x5C405.UP=0.2; x5C406.UP=0.2; x5C407.UP=0.2;
4582 x5C408.UP=0.2; x5C409.UP=0.3; x5C410.UP=1;
4583 x5C411.UP=1; x5C412.UP=0.1; x5C413.UP=0.3;
4584 x5C414.UP=0.1; x5C415.UP=0.1; x5C418.UP=0.1;
4585 x5C419.UP=0.1; x5C425.UP=1; x5C426.UP=1;
4586 x5C427.UP=1; x5C428.UP=0.4; x5C430.UP=0.1;
4587 x5C431.UP=0.2; x5C432.UP=0.1; x5HC01.UP=0.15;
4588 x5HC02.UP=0.15; x5HC03.UP=0.1; x5HC04.UP=0.3;
4589 x5HC05.UP=0.3; x5HC06.UP=0.3; x5HC07.UP=0.3;
4590 x5HC08.UP=0.3; x5HC11.UP=0.3; x5HC14.UP=0.3;
4591 x5HC15.UP=0.3; x5HC16.UP=0.3; x5HC22.UP=0.5;
4592 x5HC23.UP=0.5; x5HC24.UP=0.5; x5HC25.UP=0.5;
4593 x5HC26.UP=0.5; x5HC27.UP=0.5; x5HC28.UP=0.5;
4594 x5HC29.UP=0.3; x5HC30.UP=0.3; x5HC31.UP=0.3;
4595 x5HC33.UP=2.5; x5HC34.UP=2.5; x5HC38.UP=2.5;
4596 x5HC40.UP=2.5; x5HC41.UP=2.5; x5HC45.UP=2.5;
4597 x5R1.UP=0.3; x5R29.UP=0.4; x5SC401.UP=0.1;
4598 x5SC404.UP=0.1; x5SC405.UP=0.1; x5SC406.UP=0.1;
4599 x5SC407.UP=0.1; x5SC409.UP=0.1; x5SC411.UP=0.1;
4600 x5SC412.UP=0.1; x5SC413.UP=0.1; x5SC414.UP=0.1;
4601 x6SC401.UP=0.1; x6SC404.UP=0.12; x6SC405.UP=0.1;
4602 x6SC406.UP=0.1; x6SC407.UP=0.1; x6SC409.UP=0.1;
4603 x6SC411.UP=0.1; x6SC412.UP=0.1; x6SC413.UP=0.1;
4604 x6SC414.UP=0.1; x7AC09.UP=0.1; x7AC20.UP=0.1;
4605 x7AC31.UP=0.1; x7AC42.UP=0.1; x7C301.UP=0.1;
4606 x7C302.UP=0.3; x7C303.UP=0.1; x7C306.UP=0.8;
4607 x7C307.UP=0.8; x7C308.UP=0.3; x7C309.UP=0.3;
4608 x7C310.UP=0.2; x7C311.UP=1; x7C312.UP=0.5;
4609 x7C315.UP=0.01; x7C316.UP=0.01; x7C317.UP=0.1;
4610 x7C318.UP=0.15; x7C319.UP=0.15; x7C320.UP=0.1;
4611 x7C321.UP=0.1; x7C322.UP=0.1; x7C323.UP=0.02;
4612 x7C324.UP=0.1; x7C325.UP=0.2; x7C326.UP=0.2;
4613 x7C328.UP=0.2; x7C329.UP=0.1; x7C401.UP=1;
4614 x7C402.UP=0.6; x7C403.UP=1; x7C404.UP=1;
4615 x7C405.UP=1; x7C406.UP=1; x7C407.UP=1;
4616 x7C408.UP=1; x7C409.UP=1; x7C410.UP=1;
4617 x7C411.UP=1; x7C412.UP=0.2; x7C413.UP=0.3;

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4618 x7C414.UP=0.1; x7C415.UP=0.1; x7C417.UP=0.08;
4619 x7C418.UP=0.1; x7C419.UP=0.1; x7C425.UP=1;
4620 x7C426.UP=1; x7C427.UP=1; x7C428.UP=0.5;
4621 x7C430.UP=0.35; x7C431.UP=0.3; x7C432.UP=0.3;
4622 x7HC01.UP=0.6; x7HC02.UP=0.6; x7HC03.UP=0.1;
4623 x7HC04.UP=0.25; x7HC05.UP=0.25; x7HC06.UP=0.3;
4624 x7HC07.UP=0.3; x7HC08.UP=0.3; x7HC11.UP=0.3;
4625 x7HC14.UP=0.3; x7HC15.UP=0.3; x7HC16.UP=0.3;
4626 x7HC22.UP=0.5; x7HC23.UP=0.5; x7HC24.UP=0.5;
4627 x7HC25.UP=0.5; x7HC26.UP=0.5; x7HC27.UP=0.5;
4628 x7HC28.UP=0.5; x7HC29.UP=0.5; x7HC30.UP=0.5;
4629 x7HC31.UP=0.6; x7HC33.UP=2; x7HC34.UP=2;
4630 x7HC38.UP=2; x7HC40.UP=2; x7HC41.UP=2;
4631 x7HC45.UP=2; x7R1.UP=0.5; x7R29.UP=0.6;
4632 x7SC401.UP=0.1; x7SC404.UP=0.12; x7SC405.UP=0.12;
4633 x7SC406.UP=0.01; x7SC407.UP=0.1; x7SC409.UP=0.1;
4634 x7SC411.UP=0.1; x7SC412.UP=0.1; x7SC413.UP=0.1;
4635 x7SC414.UP=0.1; x8AC09.UP=0.1; x8AC20.UP=0.1;
4636 x8AC31.UP=0.1; x8AC42.UP=0.1; x9AC09.UP=0.3;
4637 x9AC20.UP=0.3; x9AC31.UP=0.3; x9AC42.UP=0.3;
4638 xAC02.UP=1; xAC05.UP=1; xAC07.UP=1;
4639 xAC09.UP=1; xAC12.UP=1; xAC15.UP=1;
4640 xAC18.UP=1; xAC20.UP=1; xAC23.UP=1;
4641 xAC26.UP=1; xAC29.UP=1; xAC31.UP=1;
4642 xAC34.UP=1; xAC37.UP=1; xAC40.UP=1;
4643 xAC42.UP=1; xiC10AC09.UP=1; xiC10AC20.UP=1;
4644 xiC10AC31.UP=1; xiC10AC42.UP=1; xiC11AC09.UP=1;
4645 xiC11AC20.UP=1; xiC11AC31.UP=1; xiC11AC42.UP=1;
4646 xM1C606D.UP=0.5; xM3C606D.UP=0.5; xM4C606D.UP=0.65;
4647 xM5C606D.UP=0.5; xM7C606D.UP=1; xx1C302.UP=0.25;
4648 xx1C308.UP=0.5; xx1C310.UP=0.5; xx1C311.UP=0.3;
4649 xx1C312.UP=1; xx1C323.UP=0.2; xx1C325.UP=1;
4650 xx1C405.UP=0.01; xx1C408.UP=1; xx1C425.UP=1;
4651 xx1C428.UP=1; xx1C430.UP=0.5; xx1C431.UP=0.1;
4652 xx1HC28.UP=0.2; xx1HC29.UP=0.2; xx1HC30.UP=0.2;
4653 xx1HC32.UP=0.1; xx1R1.UP=0.2; xx1R29.UP=0.1;
4654 xx1SC406.UP=0.2; xx1SC408.UP=0.1; xx2HC28.UP=0.1;
4655 xx2HC29.UP=0.1; xx2HC30.UP=0.1; xx2R1.UP=0.1;
4656 xx2R29.UP=0.1; xx2SC406.UP=0.1; xx2SC408.UP=1;
4657 xx3C302.UP=1; xx3C308.UP=1; xx3C310.UP=1;
4658 xx3C311.UP=1; xx3C312.UP=1; xx3C323.UP=0.92;
4659 xx3C325.UP=0.5; xx3C405.UP=0.1; xx3C408.UP=1;
4660 xx3C425.UP=1; xx3C428.UP=1; xx3C430.UP=0.1;
4661 xx3C431.UP=0.5; xx3C432.UP=0.15; xx3HC28.UP=0.8;
4662 xx3HC29.UP=0.8; xx3HC30.UP=0.6; xx3HC32.UP=1;
4663 xx3R1.UP=0.8; xx3R29.UP=0.6; xx3SC406.UP=0.1;

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4664 xx3SC408.UP=1; xx4C302.UP=0.5; xx4C308.UP=0.5;
4665 xx4C310.UP=0.3; xx4C311.UP=0.5; xx4C312.UP=0.15;
4666 xx4C323.UP=0.28; xx4C325.UP=0.05; xx4C405.UP=0.2;
4667 xx4C408.UP=0.3; xx4C409.UP=0.3; xx4C425.UP=1;
4668 xx4C427.UP=1; xx4C428.UP=1; xx4C430.UP=1;
4669 xx4C431.UP=1; xx4C432.UP=1; xx4HC28.UP=0.3;
4670 xx4HC29.UP=0.3; xx4HC30.UP=0.3; xx4HC32.UP=0.5;
4671 xx4R1.UP=0.3; xx4R29.UP=0.3; xx4SC406.UP=1;
4672 xx4SC408.UP=0.05; xx5C302.UP=0.1; xx5C308.UP=0.8;
4673 xx5C310.UP=0.1; xx5C311.UP=0.1; xx5C312.UP=0.3;
4674 xx5C323.UP=0.15; xx5C325.UP=0.001; xx5C405.UP=0.2;
4675 xx5C408.UP=0.3; xx5C425.UP=1; xx5C428.UP=1;
4676 xx5C430.UP=1; xx5C431.UP=1; xx5HC28.UP=0.3;
4677 xx5HC29.UP=0.3; xx5HC30.UP=0.3; xx5HC32.UP=0.2;
4678 xx5R1.UP=0.3; xx5R29.UP=0.3; xx5SC406.UP=0.15;
4679 xx5SC408.UP=0.1; xx6SC406.UP=0.1; xx6SC408.UP=1;
4680 xx7C302.UP=0.2; xx7C308.UP=0.1; xx7C310.UP=0.1;
4681 xx7C311.UP=0.3; xx7C312.UP=0.1; xx7C323.UP=0.1;
4682 xx7C325.UP=0.1; xx7C405.UP=1; xx7C408.UP=1;
4683 xx7C425.UP=1; xx7C428.UP=1; xx7C430.UP=1;
4684 xx7C431.UP=1; xx7HC28.UP=0.4; xx7HC29.UP=0.5;
4685 xx7HC30.UP=0.5; xx7HC32.UP=0.2; xx7R1.UP=0.5;
4686 xx7R29.UP=0.5; xx7SC406.UP=0.1; xx7SC408.UP=0.1;
4687 y1HC28.UP=0.5; y1HC29.UP=0.5; y1HC30.UP=0.5;
4688 y1HC31.UP=0.4; y1R1.UP=0.5; y1R29.UP=0.5;
4689 y2HC28.UP=0.1; y2HC29.UP=0.1; y2HC30.UP=0.1;
4690 y2HC31.UP=0.1; y2R1.UP=0.1; y2R29.UP=0.1;
4691 y3HC28.UP=0.9; y3HC29.UP=0.9; y3HC30.UP=0.85;
4692 y3HC31.UP=0.85; y3R1.UP=0.9; y3R29.UP=0.85;
4693 y4HC28.UP=0.5; y4HC29.UP=0.3; y4HC30.UP=0.4;
4694 y4HC31.UP=0.3; y4R1.UP=0.3; y4R29.UP=0.5;
4695 y5HC28.UP=0.2; y5HC29.UP=0.2; y5HC30.UP=0.2;
4696 y5HC31.UP=0.2; y5R1.UP=0.2; y5R29.UP=0.2;
4697 y7HC28.UP=0.5; y7HC29.UP=0.1; y7HC30.UP=0.1;
4698 y7HC31.UP=0.2; y7R1.UP=0.1; y7R29.UP=0.2;
4699 yy1HC28.UP=0.5; yy1HC29.UP=0.6; yy1HC30.UP=0.6;
4700 yy1R1.UP=0.6; yy1R29.UP=0.6; yy2HC28.UP=0.1;
4701 yy2HC29.UP=0.1; yy2HC30.UP=0.1; yy2R1.UP=0.1;
4702 yy2R29.UP=0.1; yy3HC28.UP=0.9; yy3HC29.UP=0.8;
4703 yy3HC30.UP=0.8; yy3R1.UP=0.8; yy3R29.UP=0.8;
4704 yy4HC28.UP=0.3; yy4HC29.UP=0.3; yy4HC30.UP=0.3;
4705 yy4R1.UP=0.3; yy4R29.UP=0.3; yy5HC28.UP=0.2;
4706 yy5HC29.UP=0.2; yy5HC30.UP=0.1; yy5R1.UP=0.2;
4707 yy5R29.UP=0.2; yy7HC28.UP=0.2; yy7HC29.UP=0.2;
4708 yy7HC30.UP=0.1; yy7R1.UP=0.1; yy7R29.UP=0.2;
4709

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4710 deltaPE634.L=70; deltaPE640.L=20; FE601.L=0.5;
4711 FE603.L=1; FE609A.L=0.5; FE610.L=1;
4712 FE611.L=0.5; FE616.L=0.5; FE617.L=1;
4713 FE621A.L=0.722; FE621B.L=1; FE626.L=0.5;
4714 FE627A.L=0.5; FE627B.L=0.5; FE628.L=0.5;
4715 FE629.L=0.5; FE634.L=1; FE640.L=0.5;
4716 FE641.L=0.5; hstmE602.L=2145; hstmE612.L=2145;
4717 hstmE695.L=1920; hstmE696.L=2145; PC606A.L=900;
4718 PC606C.L=890; PC606D.L=900; PE633.L=145;
4719 qC601.L=1; qC603.L=1; qC606A.L=0.5;
4720 RC601.L=9.141; RC603.L=14; sfC631.L=0.977;
4721 sfC632.L=0.982; sfC633.L=0.991; sfC634.L=0.99;
4722 Tcwin.L=290; UE601.L=0.008; UE602.L=0.016;
4723 UE603.L=0.025; UE605.L=0.045; UE609A.L=0.04;
4724 UE610.L=0.083; UE611.L=0.099; UE612.L=0.013;
4725 UE613.L=0.02; UE616.L=0.01; UE617.L=0.052;
4726 UE621A.L=0.114; UE621B.L=0.078; UE626.L=0.01;
4727 UE627A.L=0.01; UE627B.L=0.01; UE628.L=0.01;
4728 UE629.L=0.01; UE633.L=0.016; UE634.L=0.021;
4729 UE640.L=0.01; UE641.L=0.084; UE695A.L=0.033;
4730 UE695B.L=0.039; UE696A.L=0.012; UE696B.L=0.01;
4731 UE6XX.L=0.031;
4732 deltaPE634.LO=50; deltaPE640.LO=15; FE601.LO=0.5;
4733 FE603.LO=0.5; FE609A.LO=0.5; FE610.LO=0.5;
4734 FE611.LO=0.5; FE616.LO=0.5; FE617.LO=0.5;
4735 FE621A.LO=0.5; FE621B.LO=0.5; FE626.LO=0.5;
4736 FE627A.LO=0.5; FE627B.LO=0.5; FE628.LO=0.5;
4737 FE629.LO=0.5; FE634.LO=0.5; FE640.LO=0.5;
4738 FE641.LO=0.5; hstmE602.LO=2135; hstmE612.LO=2135;
4739 hstmE695.LO=1900; hstmE696.LO=2135; PC606A.LO=870;
4740 PC606C.LO=890; PC606D.LO=893; PE633.LO=130;
4741 qC601.LO=0.5; qC603.LO=0.5; qC606A.LO=0;
4742 RC601.LO=7.5; RC603.LO=1; sfC631.LO=0.8;
4743 sfC632.LO=0.8; sfC633.LO=0.8; sfC634.LO=0.8;
4744 Tcwin.LO=290; UE601.LO=0.008; UE602.LO=0.01;
4745 UE603.LO=0.025; UE605.LO=0.04; UE609A.LO=0.04;
4746 UE610.LO=0.01; UE611.LO=0.01; UE612.LO=0.01;
4747 UE613.LO=0.015; UE616.LO=0.01; UE617.LO=0.01;
4748 UE621A.LO=0.01; UE621B.LO=0.01; UE626.LO=0.01;
4749 UE627A.LO=0.01; UE627B.LO=0.01; UE628.LO=0.01;
4750 UE629.LO=0.01; UE633.LO=0.01; UE634.LO=0.01;
4751 UE640.LO=0.01; UE641.LO=0.01; UE695A.LO=0.01;
4752 UE695B.LO=0.01; UE696A.LO=0.01; UE696B.LO=0.01;
4753 UE6XX.LO=0.01;
4754 deltaPE634.UP=70; deltaPE640.UP=30; FE601.UP=1;
4755 FE603.UP=1; FE609A.UP=1; FE610.UP=1;

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```
4756 FE611.UP=1; FE616.UP=1; FE617.UP=1;
4757 FE621A.UP=1; FE621B.UP=1; FE626.UP=1;
4758 FE627A.UP=1; FE627B.UP=1; FE628.UP=1;
4759 FE629.UP=1; FE634.UP=1; FE640.UP=1;
4760 FE641.UP=1; hstmE602.UP=2145; hstmE612.UP=2145;
4761 hstmE695.UP=1920; hstmE696.UP=2145; PC606A.UP=900;
4762 PC606C.UP=910; PC606D.UP=900; PE633.UP=145;
4763 qC601.UP=1; qC603.UP=1; qC606A.UP=0.5;
4764 RC601.UP=15; RC603.UP=14; sfC631.UP=1;
4765 sfC632.UP=1; sfC633.UP=1; sfC634.UP=1;
4766 Tcwin.UP=294; UE601.UP=0.02; UE602.UP=0.03;
4767 UE603.UP=0.036; UE605.UP=0.05; UE609A.UP=0.054;
4768 UE610.UP=0.1; UE611.UP=0.1; UE612.UP=0.02;
4769 UE613.UP=0.03; UE616.UP=0.1; UE617.UP=0.1;
4770 UE621A.UP=0.2; UE621B.UP=0.2; UE626.UP=0.1;
4771 UE627A.UP=0.1; UE627B.UP=0.1; UE628.UP=0.1;
4772 UE629.UP=0.1; UE633.UP=0.1; UE634.UP=0.1;
4773 UE640.UP=0.1; UE641.UP=0.1; UE695A.UP=0.1;
4774 UE695B.UP=0.1; UE696A.UP=0.1; UE696B.UP=0.1;
4775 UE6XX.UP=0.1;
4776
4777 MODEL Alkyl /ALL/;
4778 OPTION LIMCOL=0;
4779 OPTION LIMROW=0;
4780 OPTION ITERLIM= 10000;
4781 OPTION DOMLIM= 0;
4782 OPTION RESLIM= 10000;
4783
4784 OPTION NLP=CONOPT2;
4785 SOLVE Alkyl Using NLP Maximizing ObjVar;
4786
```

COMPILATION TIME = 0.600 SECONDS 1.6 Mb WIN-18-097

Parameter Estimation Program
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Model Statistics SOLVE ALKYL USING NLP FROM LINE 4785
GAMS 2.50A Windows NT/95/98

MODEL STATISTICS

BLOCKS OF EQUATIONS	1630	SINGLE EQUATIONS	1630
BLOCKS OF VARIABLES	1699	SINGLE VARIABLES	1699
NON ZERO ELEMENTS	6884	NON LINEAR N-Z	4444
DERIVATIVE POOL	128	CONSTANT POOL	501
CODE LENGTH	79538		

GENERATION TIME = 1.040 SECONDS 3.0 Mb WIN-18-097

EXECUTION TIME = 1.260 SECONDS 2.9 Mb WIN-18-097

Parameter Estimation Program
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GAMS 2.50A Windows NT/95/98

S O L V E S U M M A R Y

MODEL	ALKYL	OBJECTIVE	OBJVAR
TYPE	NLP	DIRECTION	MAXIMIZE
SOLVER	CONOPT2	FROM LINE	4785

**** SOLVER STATUS 1 NORMAL COMPLETION
**** MODEL STATUS 2 LOCALLY OPTIMAL
**** OBJECTIVE VALUE 113.7605

RESOURCE USAGE, LIMIT	162.418	10000.000
ITERATION COUNT, LIMIT	1490	10000
EVALUATION ERRORS	0	0

C O N O P T Wintel version 2.070F-003-035
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Bagsvaerdvej 246 A
DK-2880 Bagsvaerd, Denmark

Using control program file C:\PROGRAM FILES\GAMSIDE\CONOPT2.OPT

Rtmaxj=1E9;
rtnwmi=1E-8;
*rtredg=1E-9;
*lslack =t;
lsscal= t;
*lstcrs =t;
lfstal =2000;

** Warning ** Rtmaxj is very large. Try to scale the model.
CONOPT may become unreliable and there are no
guaranties.

** Optimal solution. Reduced gradient less than tolerance.

CONOPT time Total	160.500 seconds
of which: Function evaluations	45.371 = 28.3%
Derivative evaluations	27.594 = 17.2%

Work length = 3.59 Mbytes
Estimate = 3.59 Mbytes
Max used = 1.99 Mbytes

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1 108.6270	.	.	.
---- EQU EQU2
---- EQU EQU3 0.0037	.	.	.
---- EQU EQU4 -1.1657	.	.	.
---- EQU EQU5 0.0560	.	.	.
---- EQU EQU6 -0.0015	.	.	.
---- EQU EQU7 -0.0002	.	.	.
---- EQU EQU8 0.0013	.	.	.
---- EQU EQU9 -0.0004	.	.	.
---- EQU EQU10 0.0005	.	.	.
---- EQU EQU11 0.9573	1.0000	1.0000	1.0000
---- EQU EQU12 EPS	.	.	.
---- EQU EQU13
---- EQU EQU14 -0.0122	460.0000	460.0000	460.0000
---- EQU EQU15 0.0008	.	.	.
---- EQU EQU16 -0.0064	.	.	.
---- EQU EQU17 168.4593	.	.	.
---- EQU EQU18 -0.0033	.	.	.
---- EQU EQU19 EPS	.	.	.
---- EQU EQU20 44.0579	1.0000	1.0000	1.0000
---- EQU EQU21 0.4870	.	.	.
---- EQU EQU22 EPS	.	.	.
---- EQU EQU23 EPS	.	.	.
---- EQU EQU24 22.4127	.	.	.

---- EQU EQU25	.	.	.	-
171.6709				
---- EQU EQU26	.	.	.	
0.0025				
---- EQU EQU27	.	.	.	
1.7720				
---- EQU EQU28	.	.	.	
EPS				
---- EQU EQU29	.	.	.	
-0.2631				
---- EQU EQU30	.	.	.	
0.0136				
---- EQU EQU31	.	.	.	
EPS				
---- EQU EQU32	.	.	.	
0.0033				
---- EQU EQU33	.	.	.	
62.4187				
---- EQU EQU34	.	.	.	
EPS				
---- EQU EQU35	.	.	.	
0.0173				
---- EQU EQU36	.	.	.	
0.0011				
---- EQU EQU37	.	.	.	
19.2207				
---- EQU EQU38	.	.	.	
689.7635				
---- EQU EQU39	.	.	.	
-16.1663				
---- EQU EQU40	.	.	.	
-12.0723				
---- EQU EQU41	.	.	.	
EPS				
---- EQU EQU42	1.0000	1.0000	1.0000	
-1.1728				
---- EQU EQU43	1.0000	1.0000	1.0000	
18.1508				
---- EQU EQU44	1.0000	1.0000	1.0000	
-4.3492				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU45 0.2310	1.0000	1.0000	1.0000
---- EQU EQU46 1.6726	1.0000	1.0000	1.0000
---- EQU EQU47 4.5659	1.0000	1.0000	1.0000
---- EQU EQU48 EPS	1.0000	1.0000	1.0000
---- EQU EQU49 EPS	1.0000	1.0000	1.0000
---- EQU EQU50 EPS	1.0000	1.0000	1.0000
---- EQU EQU51 -4.3092	1.0000	1.0000	1.0000
---- EQU EQU52 EPS	1.0000	1.0000	1.0000
---- EQU EQU53 -26.3664	1.0000	1.0000	1.0000
---- EQU EQU54 EPS	1.0000	1.0000	1.0000
---- EQU EQU55 -1.9441	1.0000	1.0000	1.0000
---- EQU EQU56 0.3699	1.0000	1.0000	1.0000
---- EQU EQU57 0.8606	1.0000	1.0000	1.0000
---- EQU EQU58 3.4652	1.0000	1.0000	1.0000
---- EQU EQU59 EPS	1.0000	1.0000	1.0000
---- EQU EQU60 EPS	1.0000	1.0000	1.0000
---- EQU EQU61 105.1505	1.0000	1.0000	1.0000
---- EQU EQU62 108.6270	1.0000	1.0000	1.0000
---- EQU EQU63 -0.3116	1.0000	1.0000	1.0000
---- EQU EQU64 -50.3166	1.0000	1.0000	1.0000
---- EQU EQU65 29.0039	1.0000	1.0000	1.0000
---- EQU EQU66 EPS	1.0000	1.0000	1.0000
---- EQU EQU67 -64.2263	1.0000	1.0000	1.0000
---- EQU EQU68 .	1.0000	1.0000	1.0000

---- EQU EQU69	1.0000	1.0000	1.0000
EPS			
---- EQU EQU70	1.0000	1.0000	1.0000
EPS			
---- EQU EQU71	1.0000	1.0000	1.0000
EPS			
---- EQU EQU72	1.0000	1.0000	1.0000
0.0119			
---- EQU EQU73	1.0000	1.0000	1.0000
10.9576			
---- EQU EQU74	1.0000	1.0000	1.0000
53.9733			
---- EQU EQU75	1.0000	1.0000	1.0000
-0.0452			
---- EQU EQU76	.	.	.
EPS			
---- EQU EQU77	.	.	.
EPS			
---- EQU EQU78	.	.	.
0.0033			
---- EQU EQU79	.	.	.
-0.0029			
---- EQU EQU80	.	.	.
EPS			
---- EQU EQU81	.	.	.
EPS			
---- EQU EQU82	.	.	.
EPS			
---- EQU EQU83	.	.	.
EPS			
---- EQU EQU84	.	.	.
EPS			
---- EQU EQU85	.	.	.
EPS			
---- EQU EQU86	.	.	.
EPS			
---- EQU EQU87	.	.	.
EPS			
---- EQU EQU88	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU89 -0.0002	.	.	.
---- EQU EQU90 14.1701	.	.	.
---- EQU EQU91 126.6567	.	.	-
---- EQU EQU92 11.7264	.	.	.
---- EQU EQU93 104.9738	.	.	-
---- EQU EQU94 75.4750	.	.	.
---- EQU EQU95 73.6822	.	.	.
---- EQU EQU96 0.1377	.	.	.
---- EQU EQU97 12.1045	.	.	.
---- EQU EQU98 114.7042	.	.	-
---- EQU EQU99 82.5276	.	.	.
---- EQU EQU100 80.5633	.	.	.
---- EQU EQU101 0.1532	.	.	.
---- EQU EQU102 EPS	.	.	.
---- EQU EQU103 EPS	.	.	.
---- EQU EQU104 0.0008	.	.	.
---- EQU EQU105 2.6003882E-5	.	.	.
---- EQU EQU106 1.4582754E-5	.	.	.
---- EQU EQU107 1.752326E-6	.	.	-
---- EQU EQU108 EPS	.	.	.
---- EQU EQU109 EPS	.	.	.
---- EQU EQU110 EPS	.	.	.
---- EQU EQU111 EPS	.	.	.
---- EQU EQU112 EPS	.	.	.

----	EQU EQU113	.	.	.
EPS				
----	EQU EQU114	.	.	.
EPS				
----	EQU EQU115	.	.	.
0.0723				
----	EQU EQU116	.	.	.
0.0174				
----	EQU EQU117	.	.	.
-0.0038				
----	EQU EQU118	.	.	.
3.694665E-5				-
----	EQU EQU119	.	.	.
EPS				
----	EQU EQU120	.	.	.
EPS				
----	EQU EQU121	.	.	.
EPS				
----	EQU EQU122	.	.	.
EPS				
----	EQU EQU123	.	.	.
EPS				
----	EQU EQU124	.	.	.
EPS				
----	EQU EQU125	.	.	.
EPS				
----	EQU EQU126	.	.	.
5.7893822E-5				
----	EQU EQU127	.	.	.
EPS				
----	EQU EQU128	.	.	.
-11.4389				
----	EQU EQU129	.	.	.
-2.8531				
----	EQU EQU130	.	.	.
EPS				
----	EQU EQU131	.	.	.
EPS				
----	EQU EQU132	.	.	.
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU133 EPS	.	.	.
---- EQU EQU134 EPS	.	.	.
---- EQU EQU135 EPS	.	.	.
---- EQU EQU136 EPS	.	.	.
---- EQU EQU137 0.0070	0.0100	0.0100	0.0100
---- EQU EQU138 167.9312	1.0000	1.0000	1.0000
---- EQU EQU139 -0.3449	1.0000	1.0000	1.0000
---- EQU EQU140 -0.0219	1.0000	1.0000	1.0000
---- EQU EQU141 -0.0370	1.0000	1.0000	1.0000
---- EQU EQU142 0.4745	.	.	.
---- EQU EQU143 847.1584	.	.	.
---- EQU EQU144 22.2605	.	.	.
---- EQU EQU145 25.5064	.	.	.
---- EQU EQU146 35.6813	.	.	.
---- EQU EQU147 -0.0397	.	.	.
---- EQU EQU148 -0.0003	.	.	.
---- EQU EQU149 EPS	.	.	.
---- EQU EQU150 EPS	.	.	.
---- EQU EQU151 EPS	.	.	.
---- EQU EQU152 -0.0002	.	.	.
---- EQU EQU153 -0.0016	.	.	.
---- EQU EQU154 -0.0002	.	.	.
---- EQU EQU155 1.002426E-5	.	.	.
---- EQU EQU156 1.143845E-5	.	.	.

---- EQU EQU157	1.0000	1.0000	1.0000	
3.5110				
---- EQU EQU158	.	.	.	-
910.0924				
---- EQU EQU159	.	.	.	
-10.7280				
---- EQU EQU160	.	.	.	
-3.2886				
---- EQU EQU161	.	.	.	
240.3228				
---- EQU EQU162	.	.	.	
-0.6496				
---- EQU EQU163	1.0000	1.0000	1.0000	
-0.4242				
---- EQU EQU164	.	.	.	
EPS				
---- EQU EQU165	.	.	.	
19.2207				
---- EQU EQU166	.	.	.	
689.7635				
---- EQU EQU167	.	.	.	
-16.1663				
---- EQU EQU168	.	.	.	
9.6415				
---- EQU EQU169	.	.	.	
EPS				
---- EQU EQU170	.	.	.	
EPS				
---- EQU EQU171	.	.	.	
EPS				
---- EQU EQU172	.	.	.	
EPS				
---- EQU EQU173	.	.	.	
9.9256				
---- EQU EQU174	.	.	.	
9.9256				
---- EQU EQU175	.	.	.	
-34.1862				
---- EQU EQU176	.	.	.	
28.3414				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU177 94.1648	.	.	.
---- EQU EQU178 -47.4334	.	.	.
---- EQU EQU179 -1.6399	.	.	.
---- EQU EQU180 -12.0723	.	.	.
---- EQU EQU181 -1.3608	1.0000	1.0000	1.0000
---- EQU EQU182 .	1.0000	1.0000	1.0000
---- EQU EQU183 EPS	.	.	.
---- EQU EQU184 EPS	.	.	.
---- EQU EQU185 EPS	.	.	.
---- EQU EQU186 EPS	.	.	.
---- EQU EQU187 EPS	.	.	.
---- EQU EQU188 EPS	.	.	.
---- EQU EQU189 6.5286065E-5	.	.	.
---- EQU EQU190 EPS	.	.	.
---- EQU EQU191 EPS	.	.	.
---- EQU EQU192 EPS	.	.	.
---- EQU EQU193 EPS	.	.	.
---- EQU EQU194 0.1106	1.0000	1.0000	1.0000
---- EQU EQU195 143.0220	.	.	.
---- EQU EQU196 3.2431	.	.	.
---- EQU EQU197 2.3088	.	.	.
---- EQU EQU198 2.2104	.	.	.
---- EQU EQU199 1.3758	.	.	.
---- EQU EQU200 -2.7706	1.0000	1.0000	1.0000

---- EQU EQU201	.	.	.	
EPS				
---- EQU EQU202	.	.	.	-
819.9280				
---- EQU EQU203	.	.	.	
0.7593				
---- EQU EQU204	.	.	.	
0.7593				
---- EQU EQU205	.	.	.	
752.9054				
---- EQU EQU206	.	.	.	
0.7593				
---- EQU EQU207	.	.	.	
0.7593				
---- EQU EQU208	.	.	.	
0.7593				
---- EQU EQU209	.	.	.	
-0.7593				
---- EQU EQU210	.	.	.	
-11.4389				
---- EQU EQU211	.	.	.	
EPS				
---- EQU EQU212	.	.	.	
EPS				
---- EQU EQU213	.	.	.	
-0.7592				
---- EQU EQU214	.	.	.	
-0.7343				
---- EQU EQU215	.	.	.	
-0.7337				
---- EQU EQU216	.	.	.	-
794.7328				
---- EQU EQU217	.	.	.	
2032.9108				
---- EQU EQU218	.	.	.	
2589.5177				
---- EQU EQU219	.	.	.	
3083.2048				
---- EQU EQU220	.	.	.	
4063.2589				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU221	.	.	.	
4553.2970				
---- EQU EQU222	.	.	.	
5036.3062				
---- EQU EQU223	.	.	.	
3573.2318				
---- EQU EQU224	.	.	.	
5526.3326				
---- EQU EQU225	.	.	.	
-66.0384				
---- EQU EQU226	.	.	.	
-0.7858				
---- EQU EQU227	.	.	.	
2032.1779				
---- EQU EQU228	.	.	.	-
2032.0356				
---- EQU EQU229	.	.	.	-
2585.0582				
---- EQU EQU230	.	.	.	-
4125.0844				
---- EQU EQU231	.	.	.	-
2032.9108				
---- EQU EQU232	.	.	.	-
2031.2879				
---- EQU EQU233	.	.	.	-
2589.5177				
---- EQU EQU234	.	.	.	-
3082.9884				
---- EQU EQU235	.	.	.	
5.1764				
---- EQU EQU236	.	.	.	
-0.0002				
---- EQU EQU237	.	.	.	
7.8572661E-5				
---- EQU EQU238	.	.	.	
-41.8260				
---- EQU EQU239	.	.	.	
-14.6765				
---- EQU EQU240	.	.	.	
19.1689				
---- EQU EQU241	.	.	.	
18.5635				
---- EQU EQU242	.	.	.	
-6.3061				
---- EQU EQU243	.	.	.	-
131.1947				
---- EQU EQU244	.	.	.	
23.6552				

---- EQU EQU245	.	.	.	-
815.2187				
---- EQU EQU246	.	.	.	
-43.9015				
---- EQU EQU247	.	.	.	
-6.3542				
---- EQU EQU248	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU249	.	.	.	
-0.6942				
---- EQU EQU250	.	.	.	
EPS				
---- EQU EQU251	.	.	.	
-12.8812				
---- EQU EQU252	.	.	.	
-54.3293				
---- EQU EQU253	.	.	.	
35.4919				
---- EQU EQU254	.	.	.	
42.8148				
---- EQU EQU255	.	.	.	
-20.5984				
---- EQU EQU256	.	.	.	
16.5615				
---- EQU EQU257	.	.	.	
-0.2064				
---- EQU EQU258	.	.	.	
-15.3450				
---- EQU EQU259	1.0000	1.0000	1.0000	-
6491.7802				
---- EQU EQU260	.	.	.	-
752.9054				
---- EQU EQU261	.	.	.	
819.9280				
---- EQU EQU262	1.0000	1.0000	1.0000	
5644.9520				
---- EQU EQU263	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU264	.	.	.	-
3571.3141				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU265 4063.3235	.	.	.	-
---- EQU EQU266 4553.2970	.	.	.	-
---- EQU EQU267 5036.3062	.	.	.	-
---- EQU EQU268 5528.5519	.	.	.	-
---- EQU EQU269 EPS	.	.	.	
---- EQU EQU270 -0.0643	.	.	.	
---- EQU EQU271 EPS	414.6000	414.6000	414.6000	
---- EQU EQU272 -0.0021	.	.	.	
---- EQU EQU273 -0.0005	.	.	.	
---- EQU EQU274 8.4305	.	.	.	
---- EQU EQU275 -3.2561	.	.	.	
---- EQU EQU276 -2.2090	.	.	.	
---- EQU EQU277 -0.0026	.	.	.	
---- EQU EQU278 0.0020	.	.	.	
---- EQU EQU279 EPS	1.0000	1.0000	1.0000	
---- EQU EQU280 756.0553	.	.	.	-
---- EQU EQU281 823.1694	.	.	.	
---- EQU EQU282 6729.8160	1.0000	1.0000	1.0000	
---- EQU EQU283 EPS	1.0000	1.0000	1.0000	
---- EQU EQU284 -0.7624	.	.	.	
---- EQU EQU285 4571.7016	.	.	.	
---- EQU EQU286 4079.6159	.	.	.	
---- EQU EQU287 3095.4853	.	.	.	
---- EQU EQU288 2599.7454	.	.	.	

---- EQU EQU289	.	.	.	
12.5956				
---- EQU EQU290	.	.	.	
-35.7752				
---- EQU EQU291	.	.	.	
28.6678				
---- EQU EQU292	.	.	.	
-0.6331				
---- EQU EQU293	.	.	.	
-19.6456				
---- EQU EQU294	.	.	.	
13.3874				
---- EQU EQU295	1.0000	1.0000	1.0000	
-0.2064				
---- EQU EQU296	.	.	.	
7.3008				
---- EQU EQU297	.	.	.	
-28.1451				
---- EQU EQU298	.	.	.	
0.3153				
---- EQU EQU299	.	.	.	
4.7852				
---- EQU EQU300	.	.	.	
-1.0490				
---- EQU EQU301	1.0000	1.0000	1.0000	
0.0146				
---- EQU EQU302	.	.	.	
26.0577				
---- EQU EQU303	.	.	.	
-34.6580				
---- EQU EQU304	.	.	.	
-22.9685				
---- EQU EQU305	.	.	.	
7.2922				
---- EQU EQU306	.	.	.	
2041.1003				
---- EQU EQU307	.	.	.	-
797.8910				
---- EQU EQU308	.	.	.	
-0.7369				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU309 823.1694	.	.	.	-
---- EQU EQU310 -0.7624	.	.	.	
---- EQU EQU311 5548.7696	.	.	.	
---- EQU EQU312 0.7624	.	.	.	
---- EQU EQU313 0.7624	.	.	.	
---- EQU EQU314 0.7624	.	.	.	
---- EQU EQU315 756.0553	.	.	.	
---- EQU EQU316 0.7624	.	.	.	
---- EQU EQU317 0.7624	.	.	.	
---- EQU EQU318 -0.7375	.	.	.	
---- EQU EQU319 2039.4767	.	.	.	-
---- EQU EQU320 5056.7054	.	.	.	-
---- EQU EQU321 4571.7016	.	.	.	-
---- EQU EQU322 4079.7021	.	.	.	-
---- EQU EQU323 3585.0139	.	.	.	-
---- EQU EQU324 7.9526824E-5	.	.	.	
---- EQU EQU325 -0.0003	.	.	.	
---- EQU EQU326 6.0084	.	.	.	
---- EQU EQU327 5056.7054	.	.	.	
---- EQU EQU328 2599.7454	.	.	.	-
---- EQU EQU329 3587.5506	.	.	.	
---- EQU EQU330 2041.1003	.	.	.	-
---- EQU EQU331 4140.8278	.	.	.	-
---- EQU EQU332 2595.2906	.	.	.	-

---- EQU EQU333	.	.	.	-
2040.2255				
---- EQU EQU334	.	.	.	
2040.3664				
---- EQU EQU335	.	.	.	
-0.7889				
---- EQU EQU336	.	.	.	
-65.7690				
---- EQU EQU337	.	.	.	-
5551.7446				
---- EQU EQU338	.	.	.	-
3095.1940				
---- EQU EQU339	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU340	.	.	.	
-12.5943				
---- EQU EQU341	.	.	.	
-26.0577				
---- EQU EQU342	.	.	.	
34.6580				
---- EQU EQU343	.	.	.	
22.9685				
---- EQU EQU344	.	.	.	
-7.2922				
---- EQU EQU345	1.0000	1.0000	1.0000	-
7563.1331				
---- EQU EQU346	.	.	.	
-6.3614				
---- EQU EQU347	.	.	.	
-21.8775				
---- EQU EQU348	.	.	.	-
792.5926				
---- EQU EQU349	.	.	.	
46.0888				
---- EQU EQU350	.	.	.	-
131.7182				
---- EQU EQU351	.	.	.	
-6.3133				
---- EQU EQU352	.	.	.	
18.5563				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU353 19.1617	.	.	.	
---- EQU EQU354 -14.6837	.	.	.	
---- EQU EQU355 -41.8332	.	.	.	
---- EQU EQU356 EPS	.	.	.	
---- EQU EQU357 EPS	.	.	.	
---- EQU EQU358 EPS	.	.	.	
---- EQU EQU359 EPS	1.0000	1.0000	1.0000	
---- EQU EQU360 EPS	1.0000	1.0000	1.0000	
---- EQU EQU361 13971.3490	1.0000	1.0000	1.0000	
---- EQU EQU362 15216.5045	1.0000	1.0000	1.0000	-
---- EQU EQU363 EPS	.	.	.	
---- EQU EQU364 1.8609	.	.	.	
---- EQU EQU365 844.7360	1.0000	1.0000	1.0000	
---- EQU EQU366 -1.7109	.	.	.	
---- EQU EQU367 373.4273	1.0000	1.0000	1.0000	
---- EQU EQU368 760.8251	.	.	.	-
---- EQU EQU369 828.2165	.	.	.	
---- EQU EQU370 -41.8283	.	.	.	
---- EQU EQU371 -14.6788	.	.	.	
---- EQU EQU372 19.1666	.	.	.	
---- EQU EQU373 18.5612	.	.	.	
---- EQU EQU374 27.4584	.	.	.	
---- EQU EQU375 44.0579	.	.	.	
---- EQU EQU376 -79.0031	.	.	.	

---- EQU EQU377	.	.	.
193.9006			
---- EQU EQU378	.	.	.
-0.0115			
---- EQU EQU379	.	.	.
0.0115			
---- EQU EQU380	.	.	.
1388.9637			
---- EQU EQU381	.	.	.
-11.7527			
---- EQU EQU382	.	.	.
-23.4154			
---- EQU EQU383	.	.	.
-66.1342			
---- EQU EQU384	.	.	.
64.8907			
---- EQU EQU385	.	.	.
-97.9142			
---- EQU EQU386	.	.	.
-27.1872			
---- EQU EQU387	.	.	.
1.3832			
---- EQU EQU388	.	.	.
20.3957			
---- EQU EQU389	.	.	.
-13.0841			
---- EQU EQU390	1.0000	1.0000	1.0000
-4.6631			
---- EQU EQU391	.	.	.
13.0533			
---- EQU EQU392	.	.	.
1.2228975E-5			
---- EQU EQU393	.	.	.
1.2228975E-5			
---- EQU EQU394	.	.	.
EPS			
---- EQU EQU395	.	.	.
111.6410			
---- EQU EQU396	.	.	.
-35.4446			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU397 13.4153	.	.	.
---- EQU EQU398 -40.3702	.	.	.
---- EQU EQU399 13.4153	.	.	.
---- EQU EQU400 -40.3702	.	.	.
---- EQU EQU401 34.2643	.	.	.
---- EQU EQU402 EPS	.	.	.
---- EQU EQU403 EPS	.	.	.
---- EQU EQU404 105.0268	.	.	.
---- EQU EQU405 -2.6002	.	.	.
---- EQU EQU406 -1.5968	.	.	.
---- EQU EQU407 15.4799	.	.	.
---- EQU EQU408 34.2643	.	.	.
---- EQU EQU409 -63.6706	.	.	.
---- EQU EQU410 109.3493	.	.	.
---- EQU EQU411 -6.3084	.	.	.
---- EQU EQU412 132.5214	.	.	.
---- EQU EQU413 70.0140	.	.	.
---- EQU EQU414 765.4628	.	.	.
---- EQU EQU415 2.0142	.	.	.
---- EQU EQU416 -6.3565	.	.	.
---- EQU EQU417 828.2165	.	.	.
---- EQU EQU418 -0.7672	.	.	.
---- EQU EQU419 0.7672	.	.	.
---- EQU EQU420 0.7672	.	.	.

---- EQU EQU421	.	.	.	
760.8251				
---- EQU EQU422	.	.	.	
0.7672				
---- EQU EQU423	.	.	.	
0.7672				
---- EQU EQU424	.	.	.	
0.7672				
---- EQU EQU425	.	.	.	-
2051.8655				
---- EQU EQU426	.	.	.	
-0.7671				
---- EQU EQU427	.	.	.	-
5087.5255				
---- EQU EQU428	.	.	.	
-0.7417				
---- EQU EQU429	.	.	.	-
802.6545				
---- EQU EQU430	.	.	.	
2053.4904				
---- EQU EQU431	.	.	.	
2615.2100				
---- EQU EQU432	.	.	.	
3114.0463				
---- EQU EQU433	.	.	.	
4104.3258				
---- EQU EQU434	.	.	.	
4599.4766				
---- EQU EQU435	.	.	.	
5582.6646				
---- EQU EQU436	.	.	.	-
2615.2100				
---- EQU EQU437	.	.	.	-
5588.2041				
---- EQU EQU438	.	.	.	
-65.4003				
---- EQU EQU439	.	.	.	
-0.7937				
---- EQU EQU440	.	.	.	
2052.7380				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU441 2052.6168	.	.	.	-
---- EQU EQU442 2610.3542	.	.	.	-
---- EQU EQU443 4162.7262	.	.	.	-
---- EQU EQU444 -0.7423	.	.	.	
---- EQU EQU445 3609.1861	.	.	.	
---- EQU EQU446 3113.4395	.	.	.	-
---- EQU EQU447 5087.5255	.	.	.	
---- EQU EQU448 13.6289	.	.	.	
---- EQU EQU449 -0.0010	.	.	.	
---- EQU EQU450 9.4236326E-5	.	.	.	
---- EQU EQU451 3604.2375	.	.	.	-
---- EQU EQU452 4104.4823	.	.	.	-
---- EQU EQU453 -63.6706	.	.	.	
---- EQU EQU454 109.3493	.	.	.	
---- EQU EQU455 -34.1862	.	.	.	
---- EQU EQU456 28.3414	.	.	.	
---- EQU EQU457 94.1648	.	.	.	
---- EQU EQU458 -47.4334	.	.	.	
---- EQU EQU459	
---- EQU EQU460 -21.1282	.	.	.	
---- EQU EQU461	
---- EQU EQU462	
---- EQU EQU463 1924.6793	.	.	.	
---- EQU EQU464 EPS	.	.	.	

---- EQU EQU465	.	.	.	
3.1478				
---- EQU EQU466	.	.	.	
EPS				
---- EQU EQU467	.	.	.	
EPS				
---- EQU EQU468	.	.	.	-
4599.4766				
---- EQU EQU469	.	.	.	-
2053.4904				
---- EQU EQU470	1.0000	1.0000	1.0000	
-23.3075				
---- EQU EQU471	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU472	1.0000	1.0000	1.0000	
-21.8508				
---- EQU EQU473	1.0000	1.0000	1.0000	
10794.2156				
---- EQU EQU474	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU475	1.0000	1.0000	1.0000	-
12016.5979				
---- EQU EQU476	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU477	.	.	.	
EPS				
---- EQU EQU478	.	.	.	
1.6920				
---- EQU EQU479	1.0000	1.0000	1.0000	
739.7174				
---- EQU EQU480	.	.	.	-
733.3697				
---- EQU EQU481	.	.	.	
824.0105				
---- EQU EQU482	.	.	.	
-6.3468				
---- EQU EQU483	.	.	.	
0.0004				
---- EQU EQU484	.	.	.	-
741.3274				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU485 91.6247	.	.	.	
---- EQU EQU486 -1.8898	.	.	.	
---- EQU EQU487 -6.2987	.	.	.	
---- EQU EQU488 18.5709	.	.	.	
---- EQU EQU489 19.1763	.	.	.	
---- EQU EQU490 -14.6691	.	.	.	
---- EQU EQU491 -41.8186	.	.	.	
---- EQU EQU492 1980.8177	.	.	.	-
---- EQU EQU493 824.0105	.	.	.	-
---- EQU EQU494 3962.2492	.	.	.	
---- EQU EQU495 3007.4206	.	.	.	
---- EQU EQU496 286.7516	.	.	.	-
---- EQU EQU497 -0.4586	.	.	.	
---- EQU EQU498 0.8151	.	.	.	
---- EQU EQU499 0.7957	.	.	.	
---- EQU EQU500 -61.4792	.	.	.	
---- EQU EQU501 15.4631	.	.	.	
---- EQU EQU502 274.9082	.	.	.	-
---- EQU EQU503	.	.	.	
EPS				
---- EQU EQU504 -36.6383	.	.	.	
---- EQU EQU505 25.1086	.	.	.	
---- EQU EQU506 2526.4364	.	.	.	
---- EQU EQU507 1982.4421	.	.	.	
---- EQU EQU508 775.1903	.	.	.	-

---- EQU EQU509	.	.	.	
-0.7142				
---- EQU EQU510	.	.	.	
5387.6649				
---- EQU EQU511	.	.	.	
-0.7397				
---- EQU EQU512	.	.	.	-
2526.4364				
---- EQU EQU513	.	.	.	
0.7397				
---- EQU EQU514	.	.	.	
0.7397				
---- EQU EQU515	.	.	.	
0.7397				
---- EQU EQU516	.	.	.	
733.3697				
---- EQU EQU517	.	.	.	
0.7397				
---- EQU EQU518	.	.	.	
0.7397				
---- EQU EQU519	.	.	.	
-0.7397				
---- EQU EQU520	.	.	.	-
4910.2512				
---- EQU EQU521	.	.	.	
-0.7148				
---- EQU EQU522	.	.	.	-
4439.6747				
---- EQU EQU523	.	.	.	-
3962.3873				
---- EQU EQU524	.	.	.	-
3480.5962				
---- EQU EQU525	.	.	.	
8.9172757E-5				
---- EQU EQU526	.	.	.	
-0.0007				
---- EQU EQU527	.	.	.	
11.1628				
---- EQU EQU528	.	.	.	
4910.2512				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU529	.	.	.
4439.6747			
---- EQU EQU530	.	.	.
3484.8349			
---- EQU EQU531	.	.	.
1982.4421			-
---- EQU EQU532	.	.	.
4021.4917			-
---- EQU EQU533	.	.	.
2521.7133			-
---- EQU EQU534	.	.	.
1981.5695			-
---- EQU EQU535	.	.	.
1981.6970			
---- EQU EQU536	.	.	.
-0.7663			
---- EQU EQU537	.	.	.
-67.9127			
---- EQU EQU538	.	.	.
5392.5001			-
---- EQU EQU539	.	.	.
3006.9104			-
---- EQU EQU540	.	.	.
901.0599			
---- EQU EQU541	.	.	.
-21.1186			
---- EQU EQU542	.	.	.
-15.7705			
---- EQU EQU543	.	.	.
79.1172			
---- EQU EQU544	.	.	.
69.1555			
---- EQU EQU545	.	.	.
126.4250			-
---- EQU EQU546	.	.	.
64.5971			
---- EQU EQU547	.	.	.
9.2609			
---- EQU EQU548	.	.	.
35.4435			
---- EQU EQU549	.	.	.
-25.5410			
---- EQU EQU550	.	.	.
-24.9303			
---- EQU EQU551	.	.	.
-0.0493			
---- EQU EQU552	.	.	.
0.0007			

----	EQU	EQU553	.	.	.
15.8949					
----	EQU	EQU554	.	.	.
27.1495					
----	EQU	EQU555	.	.	.
-33.8453					
----	EQU	EQU556	.	.	.
-33.2400					
----	EQU	EQU557	.	.	.
-8.3703					
----	EQU	EQU558	.	.	.
-8.3222					
----	EQU	EQU559	1.0000	1.0000	1.0000
EPS					
----	EQU	EQU560	1.0000	1.0000	1.0000
-19.8599					
----	EQU	EQU561	.	.	.
15.8949					
----	EQU	EQU562	.	.	.
27.1495					
----	EQU	EQU563	.	.	.
-33.8453					
----	EQU	EQU564	.	.	.
-33.2400					
----	EQU	EQU565	.	.	.
-8.3703					
----	EQU	EQU566	.	.	.
-8.3222					
----	EQU	EQU567	1.0000	1.0000	1.0000
EPS					
----	EQU	EQU568	1.0000	1.0000	1.0000
-22.5700					
----	EQU	EQU569	.	.	.
15.8949					
----	EQU	EQU570	.	.	.
27.1495					
----	EQU	EQU571	.	.	.
-33.8453					
----	EQU	EQU572	.	.	.
-33.2400					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU573 -8.3703	.	.	.
---- EQU EQU574 -8.3222	.	.	.
---- EQU EQU575 24.4402	1.0000	1.0000	1.0000
---- EQU EQU576 EPS	.	.	.
---- EQU EQU577 -0.3012	.	.	.
---- EQU EQU578 10.3431	.	.	.
---- EQU EQU579 13.0924	.	.	.
---- EQU EQU580 0.5952	.	.	.
---- EQU EQU581
---- EQU EQU582 10.1840	.	.	.
---- EQU EQU583 EPS	.	.	.
---- EQU EQU584 -39.0575	.	.	.
---- EQU EQU585 127.1093	.	.	.
---- EQU EQU586 140.8169	.	.	.
---- EQU EQU587 0.0496	.	.	.
---- EQU EQU588 -0.0477	.	.	.
---- EQU EQU589 -0.0556	.	.	.
---- EQU EQU590 -0.0032	.	.	.
---- EQU EQU591 35.4876	.	.	.
---- EQU EQU592 -25.5152	.	.	.
---- EQU EQU593 -24.9091	.	.	.
---- EQU EQU594 -0.0465	.	.	.
---- EQU EQU595 EPS	.	.	.
---- EQU EQU596 -4.1868	.	.	.

---- EQU EQU597	.	.	.	
14.3801				
---- EQU EQU598	.	.	.	
6.6966				
---- EQU EQU599	.	.	.	-
110.4531				
---- EQU EQU600	.	.	.	
49.2825				
---- EQU EQU601	.	.	.	
91.1486				
---- EQU EQU602	.	.	.	
17.9982				
---- EQU EQU603	.	.	.	
105.0511				
---- EQU EQU604	.	.	.	
-4.1658				
---- EQU EQU605	.	.	.	
14.3841				
---- EQU EQU606	.	.	.	
27.1163				
---- EQU EQU607	.	.	.	
EPS				
---- EQU EQU608	.	.	.	
4.1138				
---- EQU EQU609	.	.	.	
57.3265				
---- EQU EQU610	.	.	.	
-1.7091				
---- EQU EQU611	.	.	.	
-44.3557				
---- EQU EQU612	.	.	.	
EPS				
---- EQU EQU613	.	.	.	
EPS				
---- EQU EQU614	.	.	.	
EPS				
---- EQU EQU615	.	.	.	-
116.7734				
---- EQU EQU616	.	.	.	
61.0235				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU617 112.5036	.	.	.
---- EQU EQU618 22.2378	.	.	.
---- EQU EQU619 -6.0021	.	.	.
---- EQU EQU620 -31.5137	.	.	.
---- EQU EQU621 21.3696	.	.	.
---- EQU EQU622 39.3666	.	.	.
---- EQU EQU623 7.7819	.	.	.
---- EQU EQU624 28.1047	.	.	.
---- EQU EQU625 27.4367	.	.	.
---- EQU EQU626 0.0530	.	.	.
---- EQU EQU627 25.5242	.	.	.
---- EQU EQU628 24.9177	.	.	.
---- EQU EQU629 0.0481	.	.	.
---- EQU EQU630 -35.4717	.	.	.
---- EQU EQU631 EPS	1.0000	1.0000	1.0000
---- EQU EQU632 10.1840	.	.	.
---- EQU EQU633 EPS	.	.	.
---- EQU EQU634 -36.2251	.	.	.
---- EQU EQU635 129.6641	.	.	.
---- EQU EQU636 26.0660	.	.	.
---- EQU EQU637 25.4470	.	.	.
---- EQU EQU638 0.0491	.	.	.
---- EQU EQU639 -74.5293	.	.	.
---- EQU EQU640 267.9262	.	.	.

---- EQU EQU641	.	.	.
53.6289			
---- EQU EQU642	.	.	.
52.3544			
---- EQU EQU643	.	.	.
0.1011			
---- EQU EQU644	.	.	.
EPS			
---- EQU EQU645	.	.	.
1.8458			
---- EQU EQU646	1.0000	1.0000	1.0000
778.6099			
---- EQU EQU647	.	.	.
10.1840			
---- EQU EQU648	.	.	.
EPS			
---- EQU EQU649	.	.	.
-35.4717			
---- EQU EQU650	.	.	.
15.4799			
---- EQU EQU651	.	.	.
EPS			
---- EQU EQU652	.	.	.
EPS			
---- EQU EQU653	.	.	.
-8.7155			
---- EQU EQU654	.	.	.
33.8227			
---- EQU EQU655	.	.	.
6.6860			
---- EQU EQU656	.	.	.
-2.4665			
---- EQU EQU657	.	.	.
-22.8951			
---- EQU EQU658	.	.	.
123.2648			
---- EQU EQU659	.	.	.
55.0445			
---- EQU EQU660	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU661 -8.7155	.	.	.
---- EQU EQU662 33.8227	.	.	.
---- EQU EQU663 6.6860	.	.	.
---- EQU EQU664 EPS	.	.	.
---- EQU EQU665 EPS	.	.	.
---- EQU EQU666 10.1441	.	.	.
---- EQU EQU667 -39.3666	.	.	.
---- EQU EQU668 -7.7819	.	.	.
---- EQU EQU669 -4.9036	.	.	.
---- EQU EQU670 126.3713	.	.	.
---- EQU EQU671 25.5236	.	.	.
---- EQU EQU672 24.9177	.	.	.
---- EQU EQU673 0.0481	.	.	.
---- EQU EQU674 110.7543	.	.	.
---- EQU EQU675 397.5903	.	.	.
---- EQU EQU676 79.6949	.	.	.
---- EQU EQU677 77.8014	.	.	.
---- EQU EQU678 0.1502	.	.	.
---- EQU EQU679 759.2600	1.0000	1.0000	1.0000
---- EQU EQU680 0.8306	.	.	.
---- EQU EQU681 EPS	.	.	.
---- EQU EQU682 0.0050	1.0000	1.0000	1.0000
---- EQU EQU683 9.5764	.	.	.
---- EQU EQU684 35.4718	.	.	.

---- EQU EQU685	.	.	.	-
127.1035				
---- EQU EQU686	.	.	.	
-25.5240				
---- EQU EQU687	.	.	.	
-24.9177				
---- EQU EQU688	.	.	.	
-0.0481				
---- EQU EQU689	.	.	.	
18.5882				
---- EQU EQU690	.	.	.	
EPS				
---- EQU EQU691	.	.	.	
-17.2659				
---- EQU EQU692	.	.	.	
12.4241				
---- EQU EQU693	.	.	.	
12.1288				
---- EQU EQU694	.	.	.	
0.0234				
---- EQU EQU695	.	.	.	
-17.3664				
---- EQU EQU696	.	.	.	
12.4963				
---- EQU EQU697	.	.	.	
12.1993				
---- EQU EQU698	.	.	.	
-30.8290				
---- EQU EQU699	.	.	.	
-0.8326				
---- EQU EQU700	.	.	.	
-7.7284				
---- EQU EQU701	.	.	.	
41.6091				
---- EQU EQU702	.	.	.	
18.5807				
---- EQU EQU703	.	.	.	
EPS				
---- EQU EQU704	.	.	.	
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU705 EPS	.	.	.
---- EQU EQU706 EPS	.	.	.
---- EQU EQU707 EPS	.	.	.
---- EQU EQU708 0.0235	.	.	.
---- EQU EQU709 18.5882	.	.	.
---- EQU EQU710 362.1547	1.0000	1.0000	1.0000
---- EQU EQU711 -1.7059	.	.	.
---- EQU EQU712 EPS	1.0000	1.0000	1.0000
---- EQU EQU713 EPS	.	.	.
---- EQU EQU714 22.1831	.	.	.
---- EQU EQU715 21.6564	.	.	.
---- EQU EQU716 0.0418	.	.	.
---- EQU EQU717 -34.6324	.	.	.
---- EQU EQU718 24.9203	.	.	.
---- EQU EQU719 24.3281	.	.	.
---- EQU EQU720 0.0470	.	.	.
---- EQU EQU721 EPS	1.0000	1.0000	1.0000
---- EQU EQU722 18.5882	.	.	.
---- EQU EQU723 EPS	.	.	.
---- EQU EQU724 -19.0780	.	.	.
---- EQU EQU725 13.7276	.	.	.
---- EQU EQU726 13.4017	.	.	.
---- EQU EQU727 0.0259	.	.	.
---- EQU EQU728 -11.7510	.	.	.

---- EQU EQU729	.	.	.	
8.4555				
---- EQU EQU730	.	.	.	
8.2547				
---- EQU EQU731	.	.	.	
0.0159				
---- EQU EQU732	1.0000	1.0000	1.0000	
408.3588				
---- EQU EQU733	.	.	.	
-1.7101				
---- EQU EQU734	.	.	.	
-1.7142				
---- EQU EQU735	1.0000	1.0000	1.0000	
252.5714				
---- EQU EQU736	.	.	.	
EPS				
---- EQU EQU737	.	.	.	
EPS				
---- EQU EQU738	.	.	.	
EPS				
---- EQU EQU739	.	.	.	
EPS				
---- EQU EQU740	.	.	.	
EPS				
---- EQU EQU741	.	.	.	
.				
---- EQU EQU742	.	.	.	
27.5263				
---- EQU EQU743	.	.	.	
93.3691				
---- EQU EQU744	.	.	.	-
3058.3862				
---- EQU EQU745	.	.	.	
EPS				
---- EQU EQU746	.	.	.	
EPS				
---- EQU EQU747	.	.	.	
EPS				
---- EQU EQU748	.	.	.	
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU749 EPS	.	.	.
---- EQU EQU750 EPS	.	.	.
---- EQU EQU751 -0.0851	.	.	.
---- EQU EQU752 EPS	.	.	.
---- EQU EQU753 EPS	.	.	.
---- EQU EQU754 EPS	.	.	.
---- EQU EQU755 EPS	.	.	.
---- EQU EQU756 EPS	.	.	.
---- EQU EQU757 EPS	414.6000	414.6000	414.6000
---- EQU EQU758 EPS	.	.	.
---- EQU EQU759 EPS	.	.	.
---- EQU EQU760 EPS	829.2000	829.2000	829.2000
---- EQU EQU761 6.953751E-7	.	.	.
---- EQU EQU762 EPS	.	.	.
---- EQU EQU763 EPS	.	.	.
---- EQU EQU764 EPS	.	.	.
---- EQU EQU765 EPS	481.0000	481.0000	481.0000
---- EQU EQU766 EPS	.	.	.
---- EQU EQU767 EPS	.	.	.
---- EQU EQU768 EPS	962.0000	962.0000	962.0000
---- EQU EQU769 1.9357815E-6	.	.	.
---- EQU EQU770 -21.2045	1.0000	1.0000	1.0000
---- EQU EQU771 1.9357815E-6	.	.	.
---- EQU EQU772 -21.7354	1.0000	1.0000	1.0000

---- EQU EQU773	.	.	.
1.9357815E-6			
---- EQU EQU774	.	.	.
0.0028			
---- EQU EQU775	.	.	.
0.0028			
---- EQU EQU776	.	.	.
.			
---- EQU EQU777	.	.	.
0.0028			
---- EQU EQU778	.	.	.
18.4507			
---- EQU EQU779	.	.	.
21.5921			
---- EQU EQU780	.	.	.
0.3012			
---- EQU EQU781	.	.	.
0.0010			
---- EQU EQU782	.	.	.
EPS			
---- EQU EQU783	.	.	.
EPS			
---- EQU EQU784	.	.	.
EPS			
---- EQU EQU785	.	.	.
-0.0005			
---- EQU EQU786	.	.	.
EPS			
---- EQU EQU787	.	.	.
EPS			
---- EQU EQU788	.	.	.
EPS			
---- EQU EQU789	.	.	.
EPS			
---- EQU EQU790	.	.	.
EPS			
---- EQU EQU791	.	.	.
EPS			
---- EQU EQU792	.	.	.
-0.0010			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU793 30.3861	.	.	.
---- EQU EQU794 27.6326	.	.	.
---- EQU EQU795 1573.6161	.	.	-
---- EQU EQU796 0.0005	.	.	.
---- EQU EQU797 65.5671	1.0000	1.0000	1.0000
---- EQU EQU798 -49.7794	1.0000	1.0000	1.0000
---- EQU EQU799 -0.0005	.	.	.
---- EQU EQU800 -29.4173	.	.	.
---- EQU EQU801 -20.5925	.	.	.
---- EQU EQU802 -67.7361	.	.	.
---- EQU EQU803 -44.2390	.	.	.
---- EQU EQU804 2431.1212	.	.	.
---- EQU EQU805 9.2815	1.0000	1.0000	1.0000
---- EQU EQU806 18.5037	1.0000	1.0000	1.0000
---- EQU EQU807	1.0000	1.0000	1.0000
EPS			
---- EQU EQU808 -0.0010	.	.	.
---- EQU EQU809 -0.0010	.	.	.
---- EQU EQU810 7.2947	.	.	.
---- EQU EQU811 -22.9278	.	.	.
---- EQU EQU812 -34.6404	.	.	.
---- EQU EQU813 26.1099	.	.	.
---- EQU EQU814 14.6780	.	.	.
---- EQU EQU815 -0.0010	1.0000	1.0000	1.0000
---- EQU EQU816 2.341915E-6	.	.	-

---- EQU EQU817	1.0000	1.0000	1.0000
-4.6480			
---- EQU EQU818	.	.	.
-0.0028			
---- EQU EQU819	1.0000	1.0000	1.0000
2.6605			
---- EQU EQU820	.	.	.
0.0015			
---- EQU EQU821	.	.	.
-0.0023			
---- EQU EQU822	1.0000	1.0000	1.0000
-2.7141			
---- EQU EQU823	.	.	.
3.1231			
---- EQU EQU824	.	.	.
8.6926			
---- EQU EQU825	.	.	.
EPS			
---- EQU EQU826	.	.	.
EPS			
---- EQU EQU827	.	.	.
-30.3967			
---- EQU EQU828	.	.	.
0.1717			
---- EQU EQU829	.	.	.
21.8723			
---- EQU EQU830	.	.	.
21.3527			
---- EQU EQU831	.	.	.
0.0412			
---- EQU EQU832	.	.	.
0.0007			
---- EQU EQU833	.	.	.
155.9188			
---- EQU EQU834	.	.	.
5.7893822E-5			
---- EQU EQU835	.	.	.
EPS			
---- EQU EQU836	.	.	.
EPS			

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU837 110.0377	.	.	.	-
---- EQU EQU838 49.5279	.	.	.	
---- EQU EQU839 91.3442	.	.	.	
---- EQU EQU840 18.0216	.	.	.	
---- EQU EQU841 -0.0036	.	.	.	
---- EQU EQU842 -0.0012	.	.	.	
---- EQU EQU843 12.6810	.	.	.	
---- EQU EQU844 7.4785	.	.	.	
---- EQU EQU845 18.0058	.	.	.	
---- EQU EQU846 91.2105	.	.	.	
---- EQU EQU847 49.3591	.	.	.	
---- EQU EQU848 110.3231	.	.	.	-
---- EQU EQU849 0.1678	.	.	.	
---- EQU EQU850 81.4605	.	.	.	
---- EQU EQU851 83.4664	.	.	.	
---- EQU EQU852 414.7232	.	.	.	
---- EQU EQU853 115.6267	.	.	.	-
---- EQU EQU854 13.5489	.	.	.	
---- EQU EQU855 0.0025	.	.	.	
---- EQU EQU856 1.6310	.	.	.	
---- EQU EQU857 28.9791	.	.	.	
---- EQU EQU858 36.7966	.	.	.	
---- EQU EQU859 -23.3916	.	.	.	
---- EQU EQU860 EPS	.	.	.	

---- EQU EQU861	.	.	.	
-0.0028				
---- EQU EQU862	.	.	.	
-14.6780				
---- EQU EQU863	.	.	.	
0.1853				
---- EQU EQU864	.	.	.	
81.6013				
---- EQU EQU865	.	.	.	
83.6404				
---- EQU EQU866	.	.	.	
414.2794				
---- EQU EQU867	.	.	.	-
115.3314				
---- EQU EQU868	.	.	.	
EPS				
---- EQU EQU869	.	.	.	-
1.619744E-5				
---- EQU EQU870	.	.	.	
EPS				
---- EQU EQU871	.	.	.	-
2.313291E-6				
---- EQU EQU872	.	.	.	-
1.935755E-6				
---- EQU EQU873	.	.	.	-
3.575226E-6				
---- EQU EQU874	.	.	.	-
2.631620E-6				
---- EQU EQU875	.	.	.	
2.0935747E-6				
---- EQU EQU876	.	.	.	-
1.935763E-6				
---- EQU EQU877	.	.	.	
2.1057800E-6				
---- EQU EQU878	.	.	.	-
1.935782E-6				
---- EQU EQU879	.	.	.	
2.3419154E-6				
---- EQU EQU880	.	.	.	-
2.341915E-6				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU881 4.5361472E-6	.	.	.
---- EQU EQU882 1.935755E-6	.	.	-
---- EQU EQU883 8.5559325E-6	.	.	.
---- EQU EQU884 3.575226E-6	.	.	-
---- EQU EQU885 4.9947271E-6	.	.	.
---- EQU EQU886 1.935763E-6	.	.	-
---- EQU EQU887 4.5362091E-6	.	.	.
---- EQU EQU888 1.935782E-6	.	.	-
---- EQU EQU889	.	.	.
EPS			
---- EQU EQU890 17.2050	1.0000	1.0000	1.0000
---- EQU EQU891	.	.	.
EPS			
---- EQU EQU892	.	.	.
EPS			
---- EQU EQU893	.	.	.
EPS			
---- EQU EQU894 -23.0411	1.0000	1.0000	1.0000
---- EQU EQU895 -0.9925	.	.	.
---- EQU EQU896 0.0316	.	.	.
---- EQU EQU897	.	.	.
EPS			
---- EQU EQU898 0.0228	.	.	.
---- EQU EQU899 1.2080	1.0000	1.0000	1.0000
---- EQU EQU900 1.6517	.	.	.
---- EQU EQU901 -1.1504	1.0000	1.0000	1.0000
---- EQU EQU902 -0.4036	.	.	.
---- EQU EQU903 23.4745	1.0000	1.0000	1.0000
---- EQU EQU904 -0.0138	.	.	.

---- EQU EQU905	.	.	.
0.0857			
---- EQU EQU906	.	.	.
-0.0061			
---- EQU EQU907	.	.	.
-0.1760			
---- EQU EQU908	.	.	.
-0.2503			
---- EQU EQU909	.	.	.
-0.3523			
---- EQU EQU910	.	.	.
-0.2732			
---- EQU EQU911	.	.	.
-0.1009			
---- EQU EQU912	.	.	.
-0.0016			
---- EQU EQU913	.	.	.
0.3663			
---- EQU EQU914	.	.	.
-14.9514			
---- EQU EQU915	.	.	.
EPS			
---- EQU EQU916	.	.	.
-0.3178			
---- EQU EQU917	.	.	.
EPS			
---- EQU EQU918	.	.	.
-1.1504			
---- EQU EQU919	.	.	.
-1.1553			
---- EQU EQU920	.	.	.
-1.4525			
---- EQU EQU921	.	.	.
-2.1656			
---- EQU EQU922	.	.	.
-2.7156			
---- EQU EQU923	.	.	.
EPS			
---- EQU EQU924	1.0000	1.0000	1.0000
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU925 EPS	.	.	.
---- EQU EQU926 EPS	.	.	.
---- EQU EQU927 3.211475E-6	.	.	.
---- EQU EQU928 -0.0002	.	.	.
---- EQU EQU929 -0.0053	.	.	.
---- EQU EQU930 EPS	.	.	.
---- EQU EQU931 0.0019	.	.	.
---- EQU EQU932 3.1570451E-6	.	.	.
---- EQU EQU933 -0.0002	.	.	.
---- EQU EQU934 EPS	.	.	.
---- EQU EQU935 EPS	.	.	.
---- EQU EQU936 0.0053	.	.	.
---- EQU EQU937 -0.0010	.	.	.
---- EQU EQU938 -0.0635	.	.	.
---- EQU EQU939 -1.6045	.	.	.
---- EQU EQU940 EPS	.	.	.
---- EQU EQU941 0.5744	.	.	.
---- EQU EQU942 0.0010	.	.	.
---- EQU EQU943 -0.0505	.	.	.
---- EQU EQU944 EPS	.	.	.
---- EQU EQU945 0.0015	1.000000E-20	1.000000E-20	1.000000E-20
---- EQU EQU946 .	1.000000E-10	1.000000E-10	1.000000E-10
---- EQU EQU947 5.4577	1.0000	1.0000	1.0000
---- EQU EQU948 -29.3341	1.0000	1.0000	1.0000

---- EQU EQU949	1.0000	1.0000	1.0000
6.2211			
---- EQU EQU950	.	.	.
15.7466			
---- EQU EQU951	.	.	.
EPS			
---- EQU EQU952	.	.	.
EPS			
---- EQU EQU953	.	.	.
89.8078			
---- EQU EQU954	.	.	.
-6.0176			
---- EQU EQU955	.	.	.
EPS			
---- EQU EQU956	.	.	.
0.0010			
---- EQU EQU957	.	.	.
-0.2460			
---- EQU EQU958	.	.	.
1.6970358E-5			
---- EQU EQU959	.	.	.
5708.9190			
---- EQU EQU960	.	.	.
-96.9845			
---- EQU EQU961	.	.	.
EPS			
---- EQU EQU962	.	.	.
2.0512			
---- EQU EQU963	.	.	.
.			
---- EQU EQU964	.	.	.
-0.1701			
---- EQU EQU965	1.0000	1.0000	1.0000
5.0907			
---- EQU EQU966	.	.	.
214.8983			
---- EQU EQU967	.	.	.
-3.4482			
---- EQU EQU968	1.0000	1.0000	1.0000
-6.4409			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU969 145.2803	.	.	-
---- EQU EQU970 2.5535	.	.	
---- EQU EQU971 194.8155	.	.	-
---- EQU EQU972 -63.4444	.	.	
---- EQU EQU973 -46.5627	.	.	
---- EQU EQU974 -13.0781	.	.	
---- EQU EQU975 3.9798602E-5	.	.	
---- EQU EQU976 0.0020	.	.	
---- EQU EQU977 EPS	.	.	
---- EQU EQU978 -53.3701	.	.	
---- EQU EQU979 15.3260	.	.	
---- EQU EQU980 33.3317	.	.	
---- EQU EQU981 -88.0475	.	.	
---- EQU EQU982 EPS	.	.	
---- EQU EQU983 EPS	.	.	
---- EQU EQU984 36.9090	.	.	
---- EQU EQU985 EPS	.	.	
---- EQU EQU986 1.192003E-5	.	.	-
---- EQU EQU987 8.796160E-7	.	.	-
---- EQU EQU988 -0.0451	.	.	
---- EQU EQU989 8.775639E-7	.	.	-
---- EQU EQU990 EPS	.	.	
---- EQU EQU991 EPS	.	.	
---- EQU EQU992 1.9357532E-6	.	.	

---- EQU EQU993	.	.	.	
0.0550				
---- EQU EQU994	.	.	.	
8.6155116E-7				
---- EQU EQU995	.	.	.	
-0.0019				
---- EQU EQU996	.	.	.	-
1.620819E-6				
---- EQU EQU997	.	.	.	-
1.616795E-6				
---- EQU EQU998	.	.	.	
-0.0885				
---- EQU EQU999	.	.	.	
EPS				
---- EQU EQU1000	.	.	.	
EPS				
---- EQU EQU1001	.	.	.	
1.5948931E-6				
---- EQU EQU1002	.	.	.	
3.5752255E-6				
---- EQU EQU1003	.	.	.	
0.1050				
---- EQU EQU1004	.	.	.	-
8.753961E-7				
---- EQU EQU1005	.	.	.	
-0.0009				
---- EQU EQU1006	.	.	.	-
8.729386E-7				
---- EQU EQU1007	.	.	.	
-0.0935				
---- EQU EQU1008	.	.	.	
EPS				
---- EQU EQU1009	.	.	.	
EPS				
---- EQU EQU1010	.	.	.	
8.6618533E-7				
---- EQU EQU1011	.	.	.	
1.9357635E-6				
---- EQU EQU1012	.	.	.	
0.1030				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1013 8.729468E-7	.	.	.
---- EQU EQU1014 -0.0008	.	.	.
---- EQU EQU1015 -0.8221	.	.	.
---- EQU EQU1016 -6.5097	.	.	.
---- EQU EQU1017 EPS	.	.	.
---- EQU EQU1018 1.3074	.	.	.
---- EQU EQU1019 EPS	.	.	.
---- EQU EQU1020 EPS	.	.	.
---- EQU EQU1021 121.7669	.	.	.
---- EQU EQU1022 -61.6209	.	.	.
---- EQU EQU1023 -20.3118	.	.	.
---- EQU EQU1024 -15.0889	.	.	.
---- EQU EQU1025 -4.3224	.	.	.
---- EQU EQU1026 -9.9495	1.0000	1.0000	1.0000
---- EQU EQU1027 EPS	.	.	.
---- EQU EQU1028 EPS	.	.	.
---- EQU EQU1029 EPS	.	.	.
---- EQU EQU1030 EPS	.	.	.
---- EQU EQU1031 EPS	.	.	.
---- EQU EQU1032 EPS	.	.	.
---- EQU EQU1033 6.0021	.	.	.
---- EQU EQU1034 8.706169E-7	.	.	.
---- EQU EQU1035 -0.0733	.	.	.
---- EQU EQU1036 EPS	.	.	.

---- EQU EQU1037	.	.	.
8.6269057E-7			
---- EQU EQU1038	.	.	.
EPS			
---- EQU EQU1039	.	.	.
0.0996			
---- EQU EQU1040	.	.	.
1.9357815E-6			
---- EQU EQU1041	.	.	.
-9.2787			
---- EQU EQU1042	.	.	.
-2.6159			
---- EQU EQU1043	.	.	.
6.8361			
---- EQU EQU1044	.	.	.
4.7499			
---- EQU EQU1045	.	.	.
-2.5496			
---- EQU EQU1046	.	.	.
-97.0993			
---- EQU EQU1047	.	.	.
-21.7354			
---- EQU EQU1048	.	.	.
71.3034			
---- EQU EQU1049	.	.	.
71.2835			
---- EQU EQU1050	.	.	.
2.9309			
---- EQU EQU1051	.	.	.
-9.0537			
---- EQU EQU1052	.	.	.
-2.2912			
---- EQU EQU1053	.	.	.
6.6789			
---- EQU EQU1054	.	.	.
4.6218			
---- EQU EQU1055	.	.	.
-2.4872			
---- EQU EQU1056	.	.	.
-93.3811			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1057 -21.2045	.	.	.
---- EQU EQU1058 69.5679	.	.	.
---- EQU EQU1059 69.5484	.	.	.
---- EQU EQU1060 0.0054	.	.	.
---- EQU EQU1061 EPS	.	.	.
---- EQU EQU1062 EPS	.	.	.
---- EQU EQU1063 0.1701	.	.	.
---- EQU EQU1064 2.8595	.	.	.
---- EQU EQU1065 0.0042	.	.	.
---- EQU EQU1066 0.0216	.	.	.
---- EQU EQU1067 -2.6159	1.0000	1.0000	1.0000
---- EQU EQU1068 -2.2912	1.0000	1.0000	1.0000
---- EQU EQU1069 -0.0032	.	.	.
---- EQU EQU1070 -0.0032	.	.	.
---- EQU EQU1071 9.8053	.	.	.
---- EQU EQU1072 -0.0032	.	.	.
---- EQU EQU1073 EPS	1.0000	1.0000	1.0000
---- EQU EQU1074 EPS	1.0000	1.0000	1.0000
---- EQU EQU1075 -0.0005	.	.	.
---- EQU EQU1076 EPS	1.0000	1.0000	1.0000
---- EQU EQU1077 -0.0005	.	.	.
---- EQU EQU1078 10.7515	1.0000	1.0000	1.0000
---- EQU EQU1079 -0.0005	.	.	.
---- EQU EQU1080 9.8053	.	.	.

---- EQU EQU1081	.	.	.
0.0005			
---- EQU EQU1082	.	.	.
0.0005			
---- EQU EQU1083	.	.	.
-9.8053			
---- EQU EQU1084	.	.	.
0.0005			
---- EQU EQU1085	1.0000	1.0000	1.0000
EPS			
---- EQU EQU1086	1.0000	1.0000	1.0000
EPS			
---- EQU EQU1087	.	.	.
EPS			
---- EQU EQU1088	.	.	.
-0.0148			
---- EQU EQU1089	.	.	.
EPS			
---- EQU EQU1090	.	.	.
EPS			
---- EQU EQU1091	.	.	.
1.8505040E-7			
---- EQU EQU1092	.	.	.
6.0097683E-5			
---- EQU EQU1093	.	.	.
6.3579578E-6			
---- EQU EQU1094	.	.	.
1.7012513E-5			
---- EQU EQU1095	1.0000	1.0000	1.0000
-0.0754			
---- EQU EQU1096	1.0000	1.0000	1.0000
0.0169			
---- EQU EQU1097	.	.	.
0.1032			
---- EQU EQU1098	.	.	.
0.0062			
---- EQU EQU1099	1.0000	1.0000	1.0000
298.2846			
---- EQU EQU1100	.	.	.
2.840020E-5			-

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1101 -0.0017	.	.	.
---- EQU EQU1102 -0.0003	.	.	.
---- EQU EQU1103 2.158767E-5	.	.	-
---- EQU EQU1104 -0.0013	.	.	.
---- EQU EQU1105 -2.0371	1.0000	1.0000	1.0000
---- EQU EQU1106 120.4848	.	.	-
---- EQU EQU1107 115.5963	.	.	-
---- EQU EQU1108 -75.1422	.	.	.
---- EQU EQU1109 0.0270	.	.	.
---- EQU EQU1110 5.7940	1.0000	1.0000	1.0000
---- EQU EQU1111 172.1528	.	.	.
---- EQU EQU1112 -2.1425	.	.	.
---- EQU EQU1113 -19.4013	.	.	.
---- EQU EQU1114 51.1412	.	.	.
---- EQU EQU1115 -5.9361	.	.	.
---- EQU EQU1116 -54.3106	.	.	.
---- EQU EQU1117 -9.2257	.	.	.
---- EQU EQU1118 18.4587	.	.	.
---- EQU EQU1119 -15.7963	.	.	.
---- EQU EQU1120 EPS	1.0000	1.0000	1.0000
---- EQU EQU1121 32.4772	.	.	.
---- EQU EQU1122 -28.8260	.	.	.
---- EQU EQU1123 8.7006	.	.	.
---- EQU EQU1124 EPS	1.0000	1.0000	1.0000

---- EQU EQU1125	.	.	.	
1.3642044E-5				
---- EQU EQU1126	.	.	.	-
8.457914E-5				
---- EQU EQU1127	.	.	.	
0.0041				
---- EQU EQU1128	.	.	.	
0.0054				
---- EQU EQU1129	.	.	.	
4.5040				
---- EQU EQU1130	.	.	.	
-1.7795				
---- EQU EQU1131	.	.	.	
1.3221				
---- EQU EQU1132	1.0000	1.0000	1.0000	
9.4558				
---- EQU EQU1133	.	.	.	
-3.6214				
---- EQU EQU1134	.	.	.	
-1.5474				
---- EQU EQU1135	.	.	.	
-11.2864				
---- EQU EQU1136	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU1137	.	.	.	
4.8829171E-7				
---- EQU EQU1138	.	.	.	
2.5516842E-5				
---- EQU EQU1139	.	.	.	
-0.0015				
---- EQU EQU1140	.	.	.	
0.0036				
---- EQU EQU1141	.	.	.	
-0.0009				
---- EQU EQU1142	.	.	.	
-2.2200				
---- EQU EQU1143	.	.	.	
-6.8450				
---- EQU EQU1144	.	.	.	
-6.5177				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1145 -26.4736	.	.	.
---- EQU EQU1146 EPS	.	.	.
---- EQU EQU1147 1.4031158E-6	.	.	.
---- EQU EQU1148 EPS	.	.	.
---- EQU EQU1149 0.0005	.	.	.
---- EQU EQU1150 -0.0022	.	.	.
---- EQU EQU1151 -0.0057	.	.	.
---- EQU EQU1152 1.6122327E-7	.	.	.
---- EQU EQU1153 0.0078	.	.	.
---- EQU EQU1154 -2.4066	.	.	.
---- EQU EQU1155 0.3076	.	.	.
---- EQU EQU1156 -0.3882	.	.	.
---- EQU EQU1157 EPS	.	.	.
---- EQU EQU1158 4.934662E-7	.	.	.
---- EQU EQU1159 -0.0014	.	.	.
---- EQU EQU1160 EPS	.	.	.
---- EQU EQU1161 -0.0238	.	.	.
---- EQU EQU1162 0.0275	.	.	.
---- EQU EQU1163 0.0213	.	.	.
---- EQU EQU1164 0.0584	.	.	.
---- EQU EQU1165 1.9357551E-6	.	.	.
---- EQU EQU1166 3.5752255E-6	.	.	.
---- EQU EQU1167 1.9357635E-6	.	.	.
---- EQU EQU1168 1.9357815E-6	.	.	.

---- EQU EQU1169	.	.	.
-9.8053			
---- EQU EQU1170	.	.	.
-4.8727			
---- EQU EQU1171	.	.	.
-25.6317			
---- EQU EQU1172	.	.	.
35.1005			
---- EQU EQU1173	.	.	.
23.4004			
---- EQU EQU1174	.	.	.
-6.8424			
---- EQU EQU1175	.	.	.
0.4511			
---- EQU EQU1176	.	.	.
-43.7429			
---- EQU EQU1177	.	.	.
24.9762			
---- EQU EQU1178	.	.	.
42.9854			
---- EQU EQU1179	.	.	.
11.4225			
---- EQU EQU1180	.	.	.
3.6637			
---- EQU EQU1181	.	.	.
-13.5721			
---- EQU EQU1182	.	.	.
91.9068			
---- EQU EQU1183	.	.	.
-3.0902			
---- EQU EQU1184	.	.	.
129.4322			-
---- EQU EQU1185	.	.	.
-86.8196			
---- EQU EQU1186	.	.	.
23.4944			
---- EQU EQU1187	.	.	.
-8.6926			
---- EQU EQU1188	.	.	.
100.9930			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1189 -58.5726	.	.	.
---- EQU EQU1190 100.3888	.	.	.
---- EQU EQU1191 -27.0663	.	.	.
---- EQU EQU1192 -9.0447	.	.	.
---- EQU EQU1193 0.0111	.	.	.
---- EQU EQU1194 1.3628	.	.	.
---- EQU EQU1195 EPS	.	.	.
---- EQU EQU1196 -0.1872	.	.	.
---- EQU EQU1197 EPS	.	.	.
---- EQU EQU1198 0.0005	.	.	.
---- EQU EQU1199 -0.5680	.	.	.
---- EQU EQU1200 18.5037	.	.	.
---- EQU EQU1201 -10.6977	.	.	.
---- EQU EQU1202 7.4870	.	.	.
---- EQU EQU1203 EPS	1.0000	1.0000	1.0000
---- EQU EQU1204 -0.0025	.	.	.
---- EQU EQU1205 -0.0125	.	.	.
---- EQU EQU1206 14.7684	1.0000	1.0000	1.0000
---- EQU EQU1207 EPS	.	.	.
---- EQU EQU1208 EPS	1.0000	1.0000	1.0000
---- EQU EQU1209 EPS	1.0000	1.0000	1.0000
---- EQU EQU1210 EPS	.	.	.
---- EQU EQU1211 EPS	.	.	.
---- EQU EQU1212 EPS	.	.	.

----	EQU	EQU1213	.	.	.
EPS					
----	EQU	EQU1214	.	.	.
EPS					
----	EQU	EQU1215	.	.	.
EPS					
----	EQU	EQU1216	.	.	.
EPS					
----	EQU	EQU1217	.	.	.
EPS					
----	EQU	EQU1218	.	.	.
EPS					
----	EQU	EQU1219	.	.	.
EPS					
----	EQU	EQU1220	.	.	.
EPS					
----	EQU	EQU1221	.	.	.
EPS					
----	EQU	EQU1222	.	.	.
EPS					
----	EQU	EQU1223	.	.	.
EPS					
----	EQU	EQU1224	.	.	.
EPS					
----	EQU	EQU1225	.	.	.
EPS					
----	EQU	EQU1226	.	.	.
EPS					
----	EQU	EQU1227	.	.	.
EPS					
----	EQU	EQU1228	.	.	.
EPS					
----	EQU	EQU1229	.	.	.
EPS					
----	EQU	EQU1230	.	.	.
EPS					
----	EQU	EQU1231	.	.	.
EPS					
----	EQU	EQU1232	.	.	.
EPS					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1233 EPS	.	.	.
---- EQU EQU1234 EPS	1.0000	1.0000	1.0000
---- EQU EQU1235 EPS	1.0000	1.0000	1.0000
---- EQU EQU1236 3.256451E-5	.	.	.
---- EQU EQU1237 EPS	.	.	.
---- EQU EQU1238 -0.0020	.	.	.
---- EQU EQU1239 0.0010	.	.	.
---- EQU EQU1240 0.0016	.	.	.
---- EQU EQU1241 0.0197	.	.	.
---- EQU EQU1242 0.7003	.	.	.
---- EQU EQU1243 1.1318	.	.	.
---- EQU EQU1244 -2.6750	.	.	.
---- EQU EQU1245 -5.6952	.	.	.
---- EQU EQU1246 -7.9335	.	.	.
---- EQU EQU1247 -18.5812	.	.	.
---- EQU EQU1248 -10.1179	.	.	.
---- EQU EQU1249 15.6877	.	.	.
---- EQU EQU1250 11.4046	.	.	.
---- EQU EQU1251 3.8582	.	.	.
---- EQU EQU1252 EPS	.	.	.
---- EQU EQU1253 EPS	.	.	.
---- EQU EQU1254 EPS	1.0000	1.0000	1.0000
---- EQU EQU1255 EPS	1.0000	1.0000	1.0000
---- EQU EQU1256 0.0033	.	.	.

----	EQU	EQU1257	.	.	.
-0.0003					
----	EQU	EQU1258	.	.	.
0.0003					
----	EQU	EQU1259	.	.	.
EPS					
----	EQU	EQU1260	.	.	.
EPS					
----	EQU	EQU1261	.	.	.
EPS					
----	EQU	EQU1262	.	.	.
EPS					
----	EQU	EQU1263	.	.	.
EPS					
----	EQU	EQU1264	.	.	.
EPS					
----	EQU	EQU1265	.	.	.
EPS					
----	EQU	EQU1266	.	.	.
0.0002					
----	EQU	EQU1267	.	.	.
0.0005					
----	EQU	EQU1268	.	.	.
EPS					
----	EQU	EQU1269	.	.	.
EPS					
----	EQU	EQU1270	.	.	.
-7.0478					
----	EQU	EQU1271	.	.	.
-15.4048					
----	EQU	EQU1272	.	.	.
-9.9710					
----	EQU	EQU1273	.	.	.
1.7111					
----	EQU	EQU1274	.	.	.
1.7407					
----	EQU	EQU1275	.	.	.
-2.3125					
----	EQU	EQU1276	.	.	.
3.7672					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1277 9.6056	.	.	.
---- EQU EQU1278 -8.4078	.	.	.
---- EQU EQU1279 -17.4338	.	.	.
---- EQU EQU1280 EPS	1.0000	1.0000	1.0000
---- EQU EQU1281 9.2830	1.0000	1.0000	1.0000
---- EQU EQU1282 271.4772	.	.	.
---- EQU EQU1283 EPS	.	.	.
---- EQU EQU1284 -0.2263	.	.	.
---- EQU EQU1285 -0.4818	.	.	.
---- EQU EQU1286 1.1388	.	.	.
---- EQU EQU1287 3.0087	.	.	.
---- EQU EQU1288 5.0109	.	.	.
---- EQU EQU1289 -4.2988	.	.	.
---- EQU EQU1290 -5.5671	.	.	.
---- EQU EQU1291 32.4408	.	.	.
---- EQU EQU1292 62.1970	.	.	.
---- EQU EQU1293 34.0205	.	.	.
---- EQU EQU1294 0.0042	.	.	.
---- EQU EQU1295 11.1551	.	.	.
---- EQU EQU1296 1.935782E-6	.	.	.
---- EQU EQU1297 7.8956	.	.	.
---- EQU EQU1298 8.9602	.	.	.
---- EQU EQU1299 -27.3724	.	.	.
---- EQU EQU1300 33.7944	.	.	.

----	EQU EQU1301	.	.	.	
	33.7871				
----	EQU EQU1302	.	.	.	
	-14.6444				
----	EQU EQU1303	.	.	.	
	EPS				
----	EQU EQU1304	.	.	.	
	-0.0007				
----	EQU EQU1305	.	.	.	-
	127.4356				
----	EQU EQU1306	.	.	.	
	EPS				
----	EQU EQU1307	.	.	.	
	-34.6648				
----	EQU EQU1308	.	.	.	
	-0.0057				
----	EQU EQU1309	.	.	.	
	0.0043				
----	EQU EQU1310	.	.	.	
	-60.7866				
----	EQU EQU1311	.	.	.	
	57.4654				
----	EQU EQU1312	.	.	.	
	69.2612				
----	EQU EQU1313	.	.	.	
	21.6322				
----	EQU EQU1314	.	.	.	
	EPS				
----	EQU EQU1315	1.0000	1.0000	1.0000	
	0.2108				
----	EQU EQU1316	.	.	.	
	EPS				
----	EQU EQU1317	1.0000	1.0000	1.0000	
	9.0447				
----	EQU EQU1318	.	.	.	
	4.4586690E-6				
----	EQU EQU1319	.	.	.	
	-0.0036				
----	EQU EQU1320	.	.	.	
	0.0067				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1321 1.9357551E-6	.	.	.
---- EQU EQU1322 0.0043	.	.	.
---- EQU EQU1323 9.9494523E-6	.	.	.
---- EQU EQU1324 -0.0057	.	.	.
---- EQU EQU1325 0.0059	.	.	.
---- EQU EQU1326 3.5752198E-6	.	.	.
---- EQU EQU1327 -0.0043	.	.	.
---- EQU EQU1328 1.9357635E-6	.	.	.
---- EQU EQU1329 1.1547525E-5	.	.	.
---- EQU EQU1330 -0.0046	.	.	.
---- EQU EQU1331 0.0069	.	.	.
---- EQU EQU1332 -0.0043	.	.	.
---- EQU EQU1333 1.9357815E-6	.	.	.
---- EQU EQU1334 9.0609908E-6	.	.	.
---- EQU EQU1335 -0.0019	.	.	.
---- EQU EQU1336 0.0064	.	.	.
---- EQU EQU1337 0.0005	.	.	.
---- EQU EQU1338 EPS	.	.	.
---- EQU EQU1339 EPS	.	.	.
---- EQU EQU1340 4.3080015E-6	.	.	.
---- EQU EQU1341 0.0046	.	.	.
---- EQU EQU1342 3.6468	.	.	.
---- EQU EQU1343 156.6372	.	.	.
---- EQU EQU1344 -15.9820	.	.	.

---- EQU EQU1345	.	.	.	-
115.0049				
---- EQU EQU1346	.	.	.	-
8834.4310				
---- EQU EQU1347	.	.	.	
90.2166				
---- EQU EQU1348	.	.	.	-
1313.8371				
---- EQU EQU1349	.	.	.	
1074.9611				
---- EQU EQU1350	.	.	.	
-22.0315				
---- EQU EQU1351	.	.	.	
-28.7732				
---- EQU EQU1352	.	.	.	
7.0801				
---- EQU EQU1353	.	.	.	
-19.7476				
---- EQU EQU1354	.	.	.	
1.8385				
---- EQU EQU1355	.	.	.	
21.2024				
---- EQU EQU1356	.	.	.	
-35.7065				
---- EQU EQU1357	.	.	.	
0.0684				
---- EQU EQU1358	.	.	.	
0.0094				
---- EQU EQU1359	.	.	.	
24.7988				
---- EQU EQU1360	.	.	.	
411.6874				
---- EQU EQU1361	.	.	.	-
127.0550				
---- EQU EQU1362	.	.	.	
-17.0818				
---- EQU EQU1363	.	.	.	
-33.6105				
---- EQU EQU1364	.	.	.	
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1365 2.3645600E-7	.	.	.
---- EQU EQU1366 EPS	.	.	.
---- EQU EQU1367 170.8177	.	.	.
---- EQU EQU1368 EPS	.	.	.
---- EQU EQU1369 EPS	.	.	.
---- EQU EQU1370 -25.5729	.	.	.
---- EQU EQU1371 -25.4199	.	.	.
---- EQU EQU1372 40637.0280	.	.	.
---- EQU EQU1373 574.9270	.	.	.
---- EQU EQU1374 797.6546	.	.	.
---- EQU EQU1375 653.9684	.	.	.
---- EQU EQU1376 200.8754	.	.	.
---- EQU EQU1377 -24.8643	.	.	.
---- EQU EQU1378 EPS	.	.	.
---- EQU EQU1379 -20.8608	.	.	.
---- EQU EQU1380 -50.5668	.	.	.
---- EQU EQU1381 -25.3640	.	.	.
---- EQU EQU1382 7.0676	.	.	.
---- EQU EQU1383 -0.1138	.	.	.
---- EQU EQU1384 EPS	.	.	.
---- EQU EQU1385 -25.3160	.	.	.
---- EQU EQU1386 40560.0099	.	.	.
---- EQU EQU1387 -0.2123	.	.	.
---- EQU EQU1388 1.5622	.	.	.

----	EQU	EQU1389	.	.	.
-0.0007					
----	EQU	EQU1390	.	.	.
-23.7350					
----	EQU	EQU1391	.	.	.
7.5769					
----	EQU	EQU1392	.	.	.
-3.9589					
----	EQU	EQU1393	.	.	.
0.4938					
----	EQU	EQU1394	.	.	.
194.7854					
----	EQU	EQU1395	.	.	.
-0.3015					
----	EQU	EQU1396	.	.	.
EPS					
----	EQU	EQU1397	.	.	.
0.1601					
----	EQU	EQU1398	.	.	.
EPS					
----	EQU	EQU1399	.	.	.
720.0099					
----	EQU	EQU1400	.	.	.
66.2984					
----	EQU	EQU1401	.	.	.
7.0676					
----	EQU	EQU1402	.	.	.
-0.1138					
----	EQU	EQU1403	.	.	.
EPS					
----	EQU	EQU1404	.	.	.
EPS					
----	EQU	EQU1405	.	.	.
868.4082					
----	EQU	EQU1406	.	.	.
40493.7595					-
----	EQU	EQU1407	.	.	.
241.9230					
----	EQU	EQU1408	.	.	.
641.6771					

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1409 40570.8334	.	.	.	-
---- EQU EQU1410 EPS	.	.	.	
---- EQU EQU1411 EPS	.	.	.	
---- EQU EQU1412 EPS	.	.	.	
---- EQU EQU1413 9.267414E-8	.	.	.	-
---- EQU EQU1414 EPS	.	.	.	
---- EQU EQU1415 EPS	.	.	.	
---- EQU EQU1416 EPS	.	.	.	
---- EQU EQU1417 8.6964	.	.	.	
---- EQU EQU1418 EPS	.	.	.	
---- EQU EQU1419 EPS	.	.	.	
---- EQU EQU1420 EPS	.	.	.	
---- EQU EQU1421 EPS	.	.	.	
---- EQU EQU1422 EPS	414.6000	414.6000	414.6000	
---- EQU EQU1423 EPS	.	.	.	
---- EQU EQU1424 EPS	.	.	.	
---- EQU EQU1425 EPS	.	.	.	
---- EQU EQU1426 EPS	.	.	.	
---- EQU EQU1427 EPS	.	.	.	
---- EQU EQU1428 EPS	.	.	.	
---- EQU EQU1429 EPS	.	.	.	
---- EQU EQU1430 3.8217	.	.	.	
---- EQU EQU1431 3.1981	.	.	.	
---- EQU EQU1432 0.5092	.	.	.	

----	EQU	EQU1433	.	.	.	
4.1070						
----	EQU	EQU1434	.	.	.	
1.5601						
----	EQU	EQU1435	.	.	.	
1.0912						
----	EQU	EQU1436	.	.	.	
364.7500						
----	EQU	EQU1437	.	.	.	
44.5665						
----	EQU	EQU1438	.	.	.	
0.0020						
----	EQU	EQU1439	.	.	.	
EPS						
----	EQU	EQU1440	.	.	.	
EPS						
----	EQU	EQU1441	.	.	.	
9.9475161E-5						
----	EQU	EQU1442	.	.	.	
-5.6705						
----	EQU	EQU1443	.	.	.	
0.0068						
----	EQU	EQU1444	.	.	.	
6.3258						
----	EQU	EQU1445	.	.	.	
EPS						
----	EQU	EQU1446	.	.	.	-
30047.6210						
----	EQU	EQU1447	.	.	.	
EPS						
----	EQU	EQU1448	.	.	.	
148.8123						
----	EQU	EQU1449	.	.	.	
484.4721						
----	EQU	EQU1450	.	.	.	
590.9176						
----	EQU	EQU1451	.	.	.	-
487.0763						
----	EQU	EQU1452	.	.	.	
1.1753						

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1453 0.3097	.	.	.
---- EQU EQU1454 0.0034	.	.	.
---- EQU EQU1455 EPS	.	.	.
---- EQU EQU1456 EPS	.	.	.
---- EQU EQU1457 EPS	.	.	.
---- EQU EQU1458 1.8918456E-5	.	.	.
---- EQU EQU1459 -6.6945	.	.	.
---- EQU EQU1460 -7.4365	.	.	.
---- EQU EQU1461 0.4917	.	.	.
---- EQU EQU1462 EPS	.	.	.
---- EQU EQU1463 0.0194	.	.	.
---- EQU EQU1464 EPS	.	.	.
---- EQU EQU1465 0.1785	.	.	.
---- EQU EQU1466 0.2760	.	.	.
---- EQU EQU1467 4.5740	.	.	.
---- EQU EQU1468 -23.5926	1.0000	1.0000	1.0000
---- EQU EQU1469 -0.3015	.	.	.
---- EQU EQU1470 EPS	.	.	.
---- EQU EQU1471 EPS	1.0000	1.0000	1.0000
---- EQU EQU1472 0.3015	.	.	.
---- EQU EQU1473 .	1.0000	1.0000	1.0000
---- EQU EQU1474 EPS	.	.	.
---- EQU EQU1475 EPS	.	.	.
---- EQU EQU1476 91.6144	1.0000	1.0000	1.0000

---- EQU EQU1477	.	.	.	
-91.7631				
---- EQU EQU1478	.	.	.	
EPS				
---- EQU EQU1479	.	.	.	
-33.7561				
---- EQU EQU1480	.	.	.	
-65.2022				
---- EQU EQU1481	1.0000	1.0000	1.0000	
109.9149				
---- EQU EQU1482	.	.	.	
-39.3011				
---- EQU EQU1483	.	.	.	-
6.940672E-6				
---- EQU EQU1484	.	.	.	
-65.5074				
---- EQU EQU1485	.	.	.	
-0.0160				
---- EQU EQU1486	.	.	.	
3819.5057				
---- EQU EQU1487	1.0000	1.0000	1.0000	
-10.0617				
---- EQU EQU1488	.	.	.	
EPS				
---- EQU EQU1489	.	.	.	
EPS				
---- EQU EQU1490	.	.	.	
-0.0003				
---- EQU EQU1491	.	.	.	
-0.0002				
---- EQU EQU1492	1.0000	1.0000	1.0000	
.				
---- EQU EQU1493	.	.	.	
-62.7824				
---- EQU EQU1494	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU1495	1.0000	1.0000	1.0000	
-2.1285				
---- EQU EQU1496	.	.	.	-
6.563285E-5				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1497 12.7892	1.0000	1.0000	1.0000	
---- EQU EQU1498 428.4231	.	.	.	
---- EQU EQU1499 -8.6794	.	.	.	
---- EQU EQU1500 -1.4679	.	.	.	
---- EQU EQU1501 -0.0003	.	.	.	
---- EQU EQU1502 -0.0016	.	.	.	
---- EQU EQU1503 -39.5003	.	.	.	
---- EQU EQU1504 -11.6017	.	.	.	
---- EQU EQU1505 -8.1594	.	.	.	
---- EQU EQU1506 -0.0013	.	.	.	
---- EQU EQU1507 -2.1522	.	.	.	
---- EQU EQU1508 .	1.0000	1.0000	1.0000	
---- EQU EQU1509 -0.0168	.	.	.	
---- EQU EQU1510 -0.0004	.	.	.	
---- EQU EQU1511 EPS	.	.	.	
---- EQU EQU1512 EPS	.	.	.	
---- EQU EQU1513 EPS	1.0000	1.0000	1.0000	
---- EQU EQU1514 EPS	.	.	.	
---- EQU EQU1515 -53.3802	1.0000	1.0000	1.0000	
---- EQU EQU1516 -0.2557	.	.	.	
---- EQU EQU1517 235.6496	1.0000	1.0000	1.0000	
---- EQU EQU1518 EPS	.	.	.	
---- EQU EQU1519 0.2557	.	.	.	
---- EQU EQU1520 297.3586	1.0000	1.0000	1.0000	-

---- EQU EQU1521	.	.	.	
-0.1822				
---- EQU EQU1522	1.0000	1.0000	1.0000	
52.1720				
---- EQU EQU1523	.	.	.	
0.1822				
---- EQU EQU1524	.	.	.	
EPS				
---- EQU EQU1525	.	.	.	
0.0138				
---- EQU EQU1526	.	.	.	
EPS				
---- EQU EQU1527	.	.	.	
EPS				
---- EQU EQU1528	6.8883	6.8883	6.8883	
EPS				
---- EQU EQU1529	.	.	.	
EPS				
---- EQU EQU1530	.	.	.	
EPS				
---- EQU EQU1531	.	.	.	
EPS				
---- EQU EQU1532	.	.	.	
EPS				
---- EQU EQU1533	.	.	.	-
5.789382E-5				
---- EQU EQU1534	.	.	.	
7.1015				
---- EQU EQU1535	.	.	.	
171.7365				
---- EQU EQU1536	.	.	.	
6.5724				
---- EQU EQU1537	.	.	.	
112.3337				
---- EQU EQU1538	.	.	.	
-0.1822				
---- EQU EQU1539	.	.	.	
-0.0734				
---- EQU EQU1540	.	.	.	-
7.145562E-5				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1541 -9.1703	.	.	.	
---- EQU EQU1542 1.3723	.	.	.	
---- EQU EQU1543 -9.5954	.	.	.	
---- EQU EQU1544 1.2631	.	.	.	
---- EQU EQU1545 3.4684	.	.	.	
---- EQU EQU1546 0.4476	.	.	.	
---- EQU EQU1547 425.9168	.	.	.	
---- EQU EQU1548 EPS	.	.	.	
---- EQU EQU1549 0.0127	.	.	.	
---- EQU EQU1550 30557.9214	.	.	.	
---- EQU EQU1551 8.5285	.	.	.	
---- EQU EQU1552 0.0437	.	.	.	
---- EQU EQU1553 EPS	.	.	.	
---- EQU EQU1554 0.9638	.	.	.	
---- EQU EQU1555 EPS	.	.	.	
---- EQU EQU1556 1.1310453E-7	.	.	.	
---- EQU EQU1557 79.5606	.	.	.	
---- EQU EQU1558 129.1929	1.0000	1.0000	1.0000	-
---- EQU EQU1559 -0.1415	1.0000	1.0000	1.0000	
---- EQU EQU1560 EPS	.	.	.	
---- EQU EQU1561 0.0062	.	.	.	
---- EQU EQU1562 2.7128	.	.	.	
---- EQU EQU1563 145.2333	.	.	.	
---- EQU EQU1564 EPS	.	.	.	

---- EQU EQU1565	1.0000	1.0000	1.0000	
0.0066				
---- EQU EQU1566	1.0000	1.0000	1.0000	
-40.4312				
---- EQU EQU1567	1.0000	1.0000	1.0000	-
109.5566				
---- EQU EQU1568	1.0000	1.0000	1.0000	
-0.0251				
---- EQU EQU1569	.	.	.	-
12896.4775				
---- EQU EQU1570	.	.	.	
30.6843				
---- EQU EQU1571	.	.	.	-
30104.6775				
---- EQU EQU1572	.	.	.	
30449.0051				
---- EQU EQU1573	.	.	.	
EPS				
---- EQU EQU1574	.	.	.	
EPS				
---- EQU EQU1575	.	.	.	
-0.7369				
---- EQU EQU1576	.	.	.	
2.2069				
---- EQU EQU1577	.	.	.	
EPS				
---- EQU EQU1578	.	.	.	
EPS				
---- EQU EQU1579	.	.	.	
EPS				
---- EQU INEQU1	-INF	0.1037	1.0000	
.				
---- EQU INEQU2	8.0000	8.0000	+INF	
EPS				
---- EQU INEQU3	10.0000	12.3383	+INF	
.				
---- EQU INEQU4	10.0000	13.8590	+INF	
.				
---- EQU INEQU5	10.0000	14.1903	+INF	
.				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU INEQU6	10.0000	11.0948	+INF
.			
---- EQU INEQU7	10.0000	23.2293	+INF
.			
---- EQU INEQU8	-404.6000	-359.0000	+INF
.			
---- EQU INEQU9	-404.6000	-359.0000	+INF
.			
---- EQU INEQU10	10.0000	32.6861	+INF
.			
---- EQU INEQU11	10.0000	10.0000	+INF
EPS			
---- EQU INEQU12	10.0000	104.8153	+INF
.			
---- EQU INEQU13	10.0000	93.2268	+INF
.			
---- EQU INEQU14	10.0000	12.9500	+INF
.			
---- EQU INEQU15	10.0000	72.2203	+INF
.			
---- EQU INEQU16	10.0000	46.7854	+INF
.			
---- EQU INEQU17	10.0000	10.0000	+INF
-0.0851			
---- EQU INEQU18	10.0000	16.9590	+INF
.			
---- EQU INEQU19	10.0000	38.7854	+INF
.			
---- EQU INEQU20	10.0000	15.1181	+INF
.			
---- EQU INEQU21	10.0000	10.0000	+INF
-0.0002			
---- EQU INEQU22	10.0000	12.5141	+INF
.			
---- EQU INEQU23	10.0000	10.0000	+INF
4.308002E-6			-
---- EQU INEQU24	8.0000	73.3927	+INF
.			
---- EQU INEQU25	8.0000	68.3927	+INF
.			
---- EQU INEQU26	8.0000	8.0000	+INF
EPS			
---- EQU INEQU27	8.0000	11.8381	+INF
.			
---- EQU INEQU28	8.0000	8.0000	+INF
-0.0138			
---- EQU INEQU29	8.0000	8.0000	+INF
-0.0217			

----	EQU INEQU30	8.0000	15.4861	+INF
.				
----	EQU INEQU31	8.0000	39.3628	+INF
.				
----	EQU INEQU32	10.0000	12.3383	+INF
.				
----	EQU INEQU33	10.0000	39.3628	+INF
.				
----	EQU INEQU34	10.0000	10.0000	+INF
EPS				
----	EQU INEQU35	10.0000	10.0000	+INF
EPS				
----	EQU INEQU36	-471.0000	-405.0000	+INF
.				
----	EQU INEQU37	-471.0000	-461.0000	+INF
.				
----	EQU INEQU38	-404.6000	-363.3927	+INF
.				
----	EQU INEQU39	-404.6000	-403.7141	+INF
.				
----	EQU INEQU40	10.0000	10.0000	+INF
-0.2403				
----	EQU INEQU41	10.0000	11.0898	+INF
.				
----	EQU INEQU42	-404.6000	-335.7424	+INF
.				
----	EQU INEQU43	-404.6000	-335.7424	+INF
.				
----	EQU INEQU44	10.0000	10.1651	+INF
EPS				
----	EQU INEQU45	10.0000	11.2561	+INF
.				
----	EQU INEQU46	10.0000	14.7826	+INF
.				
----	EQU INEQU47	10.0000	27.9076	+INF
.				
----	EQU INEQU48	10.0000	10.0000	+INF
-0.0995				
----	EQU INEQU49	10.0000	10.0000	+INF
-0.2095				

GAMS 2.50A Windows NT/95/98

	LOWER	LEVEL	UPPER
MARGINAL			
---- EQU INEQU50 90.0278	-INF	0.0001	0.0001
---- EQU OBJNAME 1.0000	.	.	.

	LOWER	LEVEL	UPPER
MARGINAL			
---- VAR FAC02 65.3826	0.0900	0.1600	0.1600
---- VAR FAC12	0.0100	0.1600	0.9000
.			
---- VAR FAC23	0.0100	0.1600	0.9000
.			
---- VAR FAC34	0.0100	0.1600	0.9000
.			
---- VAR FAC45	0.0100	0.1600	0.9000
.			
---- VAR FC308	1.0000	3.0606	6.0000
.			
---- VAR FC316 4.1246	0.1000	1.8000	1.8000
---- VAR FC320	0.0100	0.1490	1.5000
.			
---- VAR FC322	0.1000	1.5644	1.6000
.			
---- VAR FC328	0.0100	0.0547	1.0000
.			
---- VAR FC329	0.1000	0.7655	3.0000
.			
---- VAR FC403	0.1000	2.3223	5.0000
.			
---- VAR FC407	0.7500	0.9205	5.0000
.			
---- VAR FC412	0.0100	0.0420	1.0000
.			
---- VAR FC417	0.1000	0.2754	2.0000
.			
---- VAR FHC01	0.7950	0.8569	1.5000
.			
---- VAR FHC32	0.5000	1.8455	5.0000
.			
---- VAR FSC402	0.1000	0.4915	4.0000
.			
---- VAR FSC405	.	0.3452	3.0000
.			
---- VAR FSC411	0.1000	1.3499	3.2000
.			

----	VAR FSC413	0.1000	0.1464	0.5000
.				
----	VAR FSTME612	0.0500	0.0889	1.0000
.				
----	VAR PC302	101.0000	102.8996	187.0000
.				
----	VAR PC310	230.0000	264.1366	360.0000
.				
----	VAR PC601	600.0000	625.0000	625.0000
0.0060				
----	VAR PC603	1600.0000	1694.5307	1800.0000
.				
----	VAR QHC07	0.1000	1.7391	5.0000
.				
----	VAR QHC11	0.1000	1.7761	5.0000
.				
----	VAR QHC14	0.1000	1.9149	5.0000
.				
----	VAR QHC16	0.1000	1.7391	5.0000
.				
----	VAR QHC34	0.1000	0.9354	5.0000
.				
----	VAR QHC38	0.1000	0.5761	5.0000
.				
----	VAR QHC41	0.1000	0.8465	5.0000
.				
----	VAR QHC45	0.1000	0.8515	5.0000
.				
----	VAR TAC09	280.0000	281.6669	300.0000
.				
----	VAR TAC12	280.0000	281.6669	300.0000
.				
----	VAR TAC23	280.0000	280.0000	300.0000
.				
----	VAR TAC31	280.0000	281.1345	300.0000
.				
----	VAR TAC34	280.0000	281.1345	300.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR TAC42	280.0000	283.3783	300.0000
.			
---- VAR TAC45	280.0000	283.3783	300.0000
.			
---- VAR TC303	260.0000	280.6987	300.0000
.			
---- VAR TC306	320.0000	349.7839	368.0000
.			
---- VAR TC307	300.0000	329.3628	330.0000
.			
---- VAR TC308	270.0000	329.3628	350.0000
.			
---- VAR TC315	300.0000	308.2378	320.0000
.			
---- VAR TC316	335.0000	345.1410	370.0000
.			
---- VAR TC317	300.0000	359.0000	420.0000
.			
---- VAR TC321	250.0000	301.0948	350.0000
.			
---- VAR TC324	359.0000	359.0000	385.0000
-0.0599			
---- VAR TC325	300.0000	322.6861	360.0000
.			
---- VAR TC404	305.0000	306.2880	325.0000
EPS			
---- VAR TC405	410.0000	411.1033	440.0000
EPS			
---- VAR TC407	298.0000	302.9500	350.0000
.			
---- VAR TC408	405.0000	405.0000	440.0000
-0.2742			
---- VAR TC410	345.0000	363.3927	369.0000
.			
---- VAR TC414	300.0000	336.7854	368.0000
.			
---- VAR TC418	301.0000	307.4867	350.0000
.			
---- VAR TC419	298.0000	305.1181	310.0000
.			
---- VAR THC32	250.0000	256.5978	310.0000
.			
---- VAR TSC402	310.0000	324.6526	340.0000
.			
---- VAR TSC403	320.0000	335.7424	350.0000
.			
---- VAR TSC405	300.0000	301.2561	360.0000
.			

----	VAR TSC408	300.0000	317.9076	330.0000
.				
----	VAR TSC413	295.0000	300.0000	350.0000
.				
----	VAR X11AC12	0.8800	0.9718	0.9990
.				
----	VAR X11AC23	0.8800	0.9450	0.9990
.				
----	VAR X11AC34	0.8800	0.9162	0.9990
.				
----	VAR X11AC45	0.8800	0.8900	0.9990
.				
----	VAR X1C316	0.0100	0.1184	0.5000
.				
----	VAR X1C325	0.5000	1.0000	1.0000
.				
----	VAR X1C417	0.0200	0.0253	0.2000
.				
----	VAR X1HC32	.	0.0235	0.1000
.				
----	VAR X1SC402	.	0.0142	0.1000
.				
----	VAR X1SC403	.	2.0225016E-6	0.1000
.				
----	VAR X1SC408	.	0.0477	0.1000
.				
----	VAR X2SC402	.	0.0084	0.1000
.				
----	VAR X2SC403	.	0.0119	0.1000
.				
----	VAR X2SC408	.	0.0002	0.1000
.				
----	VAR X3C316	0.5000	0.7880	1.0000
.				
----	VAR X3C325	.	1.5362264E-6	0.1000
.				
----	VAR X3C417	0.3500	0.8137	1.0000
.				
----	VAR X3HC32	0.1000	0.7708	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3SC402	0.2000	0.2959	0.4200
.			
---- VAR X3SC403	.	0.0212	0.1000
.			
---- VAR X3SC408	0.5000	0.9435	1.0000
.			
---- VAR X4C316	0.0010	0.0795	0.2000
.			
---- VAR X4C417	0.0010	0.0514	0.4000
.			
---- VAR X4HC32	.	0.1255	0.5000
.			
---- VAR X4SC402	0.4800	0.5601	0.7000
.			
---- VAR X4SC403	0.5000	0.7939	1.0000
.			
---- VAR X4SC408	.	0.0086	0.1000
.			
---- VAR X5C316	.	0.0060	0.0100
.			
---- VAR X5C417	.	0.0295	0.1500
1.362842E-8			
---- VAR X5HC32	.	0.0306	2.5000
.			
---- VAR X5SC402	.	0.0516	0.1000
.			
---- VAR X5SC403	.	0.0734	0.1000
.			
---- VAR X5SC408	.	.	0.1000
.			
---- VAR X6SC402	.	0.0666	0.1000
.			
---- VAR X6SC403	.	0.0949	0.1200
.			
---- VAR X6SC408	.	.	0.1000
.			
---- VAR X7HC32	.	0.0496	2.0000
.			
---- VAR X7SC402	.	0.0032	0.1000
.			
---- VAR X7SC403	.	0.0046	0.1000
.			
---- VAR X7SC408	.	.	0.1000
.			
---- VAR XX1C322	.	0.1167	0.1200
.			
---- VAR XX1C414	.	0.0798	0.0800
1.3924813E-7 NOPT			

----	VAR XX1HC01	.	0.1111	0.5000
.				
----	VAR XX2HC01	0.1000	0.1290	0.6000
.				
----	VAR XX3C317	0.5000	0.7930	1.0000
.				
----	VAR XX3C322	0.5000	0.7930	1.0000
.				
----	VAR XX3C407	.	3.0072368E-5	0.1000
.				
----	VAR XX3C412	.	0.0027	0.1500
.				
----	VAR XX3C414	0.5000	0.8196	1.0000
.				
----	VAR XX3HC01	.	0.0125	0.5500
.				
----	VAR XX4C317	.	0.0800	0.2000
.				
----	VAR XX4C322	.	0.0800	0.2000
.				
----	VAR XX4C407	0.0100	0.0850	0.3000
.				
----	VAR XX4C412	0.5000	0.8668	1.0000
.				
----	VAR XX4C414	.	0.0916	0.2000
.				
----	VAR XX4HC01	.	0.1064	0.3000
.				
----	VAR XX5C407	0.0100	0.1514	0.5000
.				
----	VAR XX5C412	.	0.0580	0.1000
.				
----	VAR XX5C414	.	0.0011	0.1000
.				
----	VAR XX7C414	.	0.0080	0.0080
53.6030				
----	VAR C10PC623	.	3.9376420E-5	0.5000
.				
----	VAR C10PC625	.	7.2952566E-5	0.5000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR C10PC627	.	0.0003	0.5000
.			
---- VAR C10PC629	.	0.0002	0.5000
.			
---- VAR C2C623	.	0.0153	0.1000
.			
---- VAR C2C625	.	0.0153	0.1000
.			
---- VAR C2C627	.	0.0167	0.1000
.			
---- VAR C2C629	.	0.0162	0.1000
.			
---- VAR C3C623	.	3.5540	6.0000
.			
---- VAR C3C625	.	2.6369	6.0000
.			
---- VAR C3C627	.	1.3840	6.0000
.			
---- VAR C3C629	.	1.5918	6.0000
.			
---- VAR C3PC623	.	1.1842	10.0000
.			
---- VAR C3PC625	.	1.2105	10.0000
.			
---- VAR C3PC627	.	1.2077	10.0000
.			
---- VAR C3PC629	.	1.1248	10.0000
.			
---- VAR C4PC623	.	0.0292	1.0000
.			
---- VAR C4PC625	.	0.0403	1.0000
.			
---- VAR C4PC627	.	0.0766	1.0000
.			
---- VAR C4PC629	.	0.0620	1.0000
.			
---- VAR C5PC623	.	0.0005	0.1000
.			
---- VAR C5PC625	.	0.0009	0.1000
.			
---- VAR C5PC627	.	0.0035	0.1000
.			
---- VAR C5PC629	.	0.0024	0.1000
.			
---- VAR C7PC623	.	5.1621960E-5	0.1000
.			
---- VAR C7PC625	.	0.0002	0.1000
.			

----	VAR C7PC627	.	0.0025	0.1000
.				
----	VAR C7PC629	.	0.0013	0.1000
.				
----	VAR C8PC623	.	0.0018	0.1000
.				
----	VAR C8PC625	.	0.0032	0.1000
.				
----	VAR C8PC627	.	0.0122	0.1000
.				
----	VAR C8PC629	.	0.0084	0.1000
.				
----	VAR C9PC623	.	0.4549	10.0000
.				
----	VAR C9PC625	.	0.6259	10.0000
.				
----	VAR C9PC627	.	1.2838	10.0000
.				
----	VAR C9PC629	.	1.0142	10.0000
.				
----	VAR CHXC623	2.5000	13.8511	15.0000
.				
----	VAR CHXC625	2.5000	14.1771	15.0000
.				
----	VAR CHXC627	2.5000	12.9101	15.0000
.				
----	VAR CHXC629	2.5000	12.3840	15.0000
.				
----	VAR CIC10PC623	.	.	1.0000
.				
----	VAR CIC10PC625	.	.	1.0000
.				
----	VAR CIC10PC627	.	.	1.0000
.				
----	VAR CIC10PC629	.	.	1.0000
.				
----	VAR CIC11PC623	.	1.6609251E-5	0.1000
.				
----	VAR CIC11PC625	.	4.0886144E-5	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR CIC11PC627	.	0.0003	0.1000
.			
---- VAR CIC11PC629	.	0.0002	0.1000
.			
---- VAR CIC4EC623	.	0.0031	0.1000
.			
---- VAR CIC4EC625	.	0.0031	0.1000
.			
---- VAR CIC4EC627	.	0.0031	0.1000
.			
---- VAR CIC4EC629	.	0.0031	0.1000
.			
---- VAR CIC5EC623	.	0.0006	0.1000
.			
---- VAR CIC5EC625	.	0.0009	0.1000
.			
---- VAR CIC5EC627	.	0.0019	0.1000
.			
---- VAR CIC5EC629	.	0.0016	0.1000
.			
---- VAR CIC8EC623	.	0.0191	0.3000
.			
---- VAR CIC8EC625	.	0.0257	0.3000
.			
---- VAR CIC8EC627	.	0.0528	0.3000
.			
---- VAR CIC8EC629	.	0.0448	0.3000
.			
---- VAR COST	-10000.0000	158.5463	10000.0000
.			
---- VAR DTE601	5.0000	10.5355	50.0000
.			
---- VAR DTE602	5.0000	78.8576	90.0000
.			
---- VAR DTE603	5.0000	10.7013	50.0000
.			
---- VAR DTE605	5.0000	21.3451	50.0000
.			
---- VAR DTE609A	5.0000	10.0000	20.0000
.			
---- VAR DTE610	5.0000	14.0240	50.0000
.			
---- VAR DTE611	5.0000	16.4150	50.0000
.			
---- VAR DTE612	10.0000	55.6000	90.0000
.			
---- VAR DTE613	4.0000	21.3430	30.0000
.			

----	VAR DTE616	10.0000	98.9079	120.0000
.				
----	VAR DTE617	5.0000	34.1504	50.0000
EPS				
----	VAR DTE621A	5.0000	28.3927	50.0000
.				
----	VAR DTE621B	5.0000	26.3681	40.0000
.				
----	VAR DTE626	5.0000	12.3828	50.0000
.				
----	VAR DTE627A	5.0000	55.0000	55.0000
0.1701				
----	VAR DTE627B	5.0000	31.5858	50.0000
.				
----	VAR DTE628	5.0000	11.2101	60.0000
.				
----	VAR DTE629	5.0000	16.4907	80.0000
.				
----	VAR DTE633	5.0000	11.7431	50.0000
.				
----	VAR DTE634	5.0000	19.5371	20.0000
.				
----	VAR DTE640	5.0000	21.2233	50.0000
.				
----	VAR DTE641	5.0000	16.9304	50.0000
.				
----	VAR DTE695A	5.0000	76.0000	90.0000
.				
----	VAR DTE695B	5.0000	48.0000	60.0000
.				
----	VAR DTE696A	10.0000	51.2073	90.0000
.				
----	VAR DTE696B	10.0000	31.0466	90.0000
.				
----	VAR DTE6XX	1.0000	1.0000	50.0000
EPS				
----	VAR EARNINGS	-10000.0000	178.8225	10000.0000
.				
----	VAR F1C601	.	0.0001	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR F1C603	.	0.7434	1.0000
.			
---- VAR F1C606A	.	0.0122	1.0000
.			
---- VAR F2C601	0.5000	0.9926	1.0000
.			
---- VAR F3C601	0.0500	0.0503	1.0000
3.6418118E-8			
---- VAR F3C603	.	1.0000	1.0000
.			
---- VAR F3C606A	.	0.0031	1.0000
1.297521E-7 NOPT			
---- VAR F4C601	0.9500	0.9954	1.0000
.			
---- VAR F4C603	.	1.0000	1.0000
.			
---- VAR F4C606A	.	0.8993	1.0000
.			
---- VAR F5C601	0.5000	1.0000	1.0000
.			
---- VAR F5C603	0.5000	1.0000	1.0000
.			
---- VAR F5C606A	0.5000	0.9878	1.0000
.			
---- VAR F6C601	0.5000	1.0000	1.0000
.			
---- VAR F7C601	0.5000	1.0000	1.0000
.			
---- VAR F7C603	0.5000	1.0000	1.0000
.			
---- VAR F7C606A	0.5000	0.9983	1.0000
.			
---- VAR FAC05	0.1000	6.9245	20.0000
.			
---- VAR FAC07	0.1000	7.0845	20.0000
.			
---- VAR FAC09	0.0100	8.6223	20.0000
.			
---- VAR FAC15	0.1000	8.4909	20.0000
.			
---- VAR FAC18	0.1000	8.6509	20.0000
.			
---- VAR FAC20	0.0100	10.0034	20.0000
.			
---- VAR FAC26	0.1000	18.2522	20.0000
.			
---- VAR FAC29	0.1000	18.4122	20.0000
.			

----	VAR FAC31	0.0100	20.0000	20.0000
	5.8346093E-5			
----	VAR FAC37	0.1000	14.7359	20.0000
.				
----	VAR FAC40	0.1000	14.8959	20.0000
.				
----	VAR FAC42	0.0100	16.3854	20.0000
.				
----	VAR FC301	1.0000	3.6455	6.0000
.				
----	VAR FC302	0.1000	0.4644	5.0000
.				
----	VAR FC303	2.0000	4.1098	6.0000
.				
----	VAR FC306	0.1000	4.8606	15.0000
.				
----	VAR FC307	0.0001	4.8606	15.0000
.				
----	VAR FC309	0.0001	3.0606	10.0000
.				
----	VAR FC310	0.0001	0.7508	3.0000
.				
----	VAR FC311	.	2.3098	8.0000
.				
----	VAR FC312	0.0001	1.8000	5.0000
.				
----	VAR FC315	0.0001	1.8000	5.0000
.				
----	VAR FC317	0.1000	1.7453	3.0000
.				
----	VAR FC318	0.0001	1.7453	3.0000
.				
----	VAR FC319	0.0001	1.7453	3.0000
.				
----	VAR FC321	.	0.0319	5.0000
.				
----	VAR FC323	0.5000	0.8028	3.0000
.				
----	VAR FC324	0.5000	0.8028	3.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FC325	0.5000	0.8202	3.0000
.			
---- VAR FC326	0.0100	0.8202	3.0000
.			
---- VAR FC401	0.1000	2.3223	5.0000
.			
---- VAR FC402	0.1000	2.3223	5.0000
.			
---- VAR FC404	.	2.3223	5.0000
.			
---- VAR FC405	0.1000	0.9205	2.0000
.			
---- VAR FC406	.	0.9205	5.0000
.			
---- VAR FC408	.	3.2323	10.0000
.			
---- VAR FC409	.	3.2323	10.0000
.			
---- VAR FC410	0.1000	0.8592	10.0000
.			
---- VAR FC411	.	0.8592	10.0000
.			
---- VAR FC413	.	0.0420	1.0000
.			
---- VAR FC414	0.1000	2.9580	5.0000
.			
---- VAR FC415	.	2.9580	10.0000
.			
---- VAR FC418	0.1000	3.2335	5.0000
.			
---- VAR FC419	0.0001	3.2335	10.0000
.			
---- VAR FC425	1.0000	3.8216	10.0000
.			
---- VAR FC426	.	2.9625	5.0000
.			
---- VAR FC427	.	2.9011	10.0000
.			
---- VAR FC428	.	2.0420	5.0000
.			
---- VAR FC430	1.0000	3.8216	10.0000
.			
---- VAR FC431	.	2.9011	10.0000
.			
---- VAR FC432	1.0000	2.8591	5.0000
.			
---- VAR FCWE603	0.1000	0.1976	20.0000
.			

----	VAR FCWE605	0.1000	8.2625	15.0000
	EPS			
----	VAR FCWE609A	0.0100	0.0878	1.0000
	.			
----	VAR FCWE611	0.1000	2.4527	20.0000
	.			
----	VAR FCWE613	0.1000	2.4764	15.0000
	1.8443244E-9			
----	VAR FCWE617	1.0000	1.6367	25.0000
	EPS			
----	VAR FCWE621A	0.1000	5.3660	10.0000
	.			
----	VAR FCWE621B	0.1000	6.8541	20.0000
	.			
----	VAR FCWE626	0.1000	0.6069	20.0000
	.			
----	VAR FCWE627A	0.1000	0.5522	10.0000
	.			
----	VAR FCWE627B	0.1000	0.5407	30.0000
	.			
----	VAR FCWE634	4.0000	7.0695	60.0000
	2.1766468E-9			
----	VAR FCWE640	0.4000	0.4000	50.0000
	EPS			
----	VAR FCWE641A	0.1000	4.2348	30.0000
	.			
----	VAR FCWE641B	0.1000	0.9956	10.0000
	.			
----	VAR FHC02	0.0100	0.8569	5.0000
	.			
----	VAR FHC03	1.0000	3.2654	10.0000
	.			
----	VAR FHC04	1.0000	3.2654	10.0000
	.			
----	VAR FHC05	1.0000	3.2654	10.0000
	.			
----	VAR FHC06	1.0000	4.1223	12.0000
	.			
----	VAR FHC07	1.0000	1.0000	5.0000
	-1.7594			

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FHC08	1.0000	3.1223	5.0000
.			
---- VAR FHC11	1.0000	1.0212	5.0000
.			
---- VAR FHC14	1.0000	1.1011	5.0000
.			
---- VAR FHC15	1.0000	2.1011	5.0000
.			
---- VAR FHC16	1.0000	1.0000	5.0000
-0.2851			
---- VAR FHC22	1.0000	1.4896	6.0000
.			
---- VAR FHC23	1.0000	1.5878	6.0000
.			
---- VAR FHC24	1.0000	3.0774	6.0000
.			
---- VAR FHC25	1.0000	1.3525	6.0000
.			
---- VAR FHC26	1.0000	4.4299	6.0000
.			
---- VAR FHC27	1.0000	1.5378	10.0000
.			
---- VAR FHC28	1.0000	5.9678	12.0000
.			
---- VAR FHC29	.	0.5285	12.0000
.			
---- VAR FHC30	.	0.5285	12.0000
.			
---- VAR FHC31	.	5.9678	12.0000
.			
---- VAR FHC33	.	0.8691	1.0000
.			
---- VAR FHC34	.	0.5378	1.0000
.			
---- VAR FHC38	.	0.3313	1.0000
.			
---- VAR FHC40	.	0.9763	1.0000
.			
---- VAR FHC41	.	0.4868	1.0000
.			
---- VAR FHC45	.	0.4896	1.0000
.			
---- VAR FLHC28	1.0000	3.0207	10.0000
.			
---- VAR FLHC29	.	0.2675	12.0000
.			
---- VAR FLHC30	.	0.1006	12.0000
.			

----	VAR FLHC31	.	2.3223	12.0000
.				
----	VAR FLR1	.	2.7532	10.0000
.				
----	VAR FLR29	.	2.2218	12.0000
.				
----	VAR FMC302	.	0.0074	0.1000
.				
----	VAR FMC308	0.0001	0.0520	0.5000
.				
----	VAR FMC310	.	0.0133	0.8000
.				
----	VAR FMC311	.	0.0387	0.5000
.				
----	VAR FMC312	.	0.0320	0.1000
.				
----	VAR FMC317	0.0010	0.0308	0.1000
.				
----	VAR FMC322	.	0.0276	1.0000
.				
----	VAR FMC323	.	0.0142	0.4000
.				
----	VAR FMC325	0.0100	0.0186	1.0000
.				
----	VAR FMC405	.	0.0113	0.1000
.				
----	VAR FMC407	.	0.0113	0.1000
.				
----	VAR FMC408	.	0.0396	2.0000
.				
----	VAR FMC409	.	0.0396	0.2000
.				
----	VAR FMC412	.	0.0007	0.1000
.				
----	VAR FMC414	0.0001	0.0517	0.1000
.				
----	VAR FMC425	.	0.0565	2.0000
.				
----	VAR FMC427	.	0.0452	0.2000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FMC428	.	0.0325	0.1000
.			
---- VAR FMC430	.	0.0589	0.2000
.			
---- VAR FMC431	.	0.0477	1.0000
.			
---- VAR FMC432	.	0.0470	0.1000
.			
---- VAR FMHC01	.	0.0118	0.1000
.			
---- VAR FMHC32	.	0.0313	0.1000
.			
---- VAR FMLHC28	0.0100	0.0474	0.2000
.			
---- VAR FMLHC29	.	0.0042	0.1000
.			
---- VAR FMLHC30	.	0.0014	0.1000
.			
---- VAR FMLR1	.	0.0432	0.2000
.			
---- VAR FMLR29	.	0.0342	0.1000
.			
---- VAR FMSC403	0.0010	0.0057	0.1000
.			
---- VAR FMSC406	.	0.0249	0.1000
.			
---- VAR FMSC408	.	0.0261	1.0000
.			
---- VAR FMVHC28	.	0.0515	0.2000
.			
---- VAR FMVHC29	.	0.0046	0.1000
.			
---- VAR FMVHC30	.	0.0073	0.1000
.			
---- VAR FMVR1	.	0.0470	0.2000
.			
---- VAR FMVR29	.	0.0560	0.1000
.			
---- VAR FR1	.	5.4393	12.0000
.			
---- VAR FR29	.	5.4393	12.0000
.			
---- VAR FSC401	0.1000	0.4915	5.0000
.			
---- VAR FSC403	0.1000	0.3452	3.0000
.			
---- VAR FSC404	0.1000	0.3452	3.0000
.			

----	VAR FSC406	.	1.4962	3.0000
.				
----	VAR FSC407	.	1.4962	3.0000
.				
----	VAR FSC408	0.0500	1.4962	3.2000
.				
----	VAR FSC409	0.0500	1.4962	3.2000
.				
----	VAR FSC412	0.1020	0.1464	1.0000
.				
----	VAR FSC414	.	0.1290	0.5000
.				
----	VAR FSTME602	0.1000	0.2141	1.0000
.				
----	VAR FSTME695A	.	0.4038	10.0000
.				
----	VAR FSTME695B	0.1000	0.1000	10.0000
EPS				
----	VAR FSTME696A	0.0100	0.1141	10.0000
.				
----	VAR FSTME696B	0.0100	0.0190	10.0000
.				
----	VAR FVHC28	.	2.9471	8.0000
.				
----	VAR FVHC29	.	0.2610	12.0000
.				
----	VAR FVHC30	.	0.4279	12.0000
.				
----	VAR FVHC31	.	3.6455	12.0000
.				
----	VAR FVR1	.	2.6862	12.0000
.				
----	VAR FVR29	.	3.2176	12.0000
.				
----	VAR H1C601	0.8000	1.0723	2.0000
.				
----	VAR H1C603	-3.0000	-0.3465	1.0000
.				
----	VAR H1C606A	.	1.0002	10.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR H2C601	0.3950	0.6359	5.0000
.			
---- VAR H3C601	0.5000	2.6030	6.0000
.			
---- VAR H3C603	.	0.2589	1.0000
.			
---- VAR H3C606A 9.138369E-6	-65.0000	-65.0000	-35.0000 -
---- VAR H4C601	0.4500	0.6541	2.0000
.			
---- VAR H4C603	.	0.3290	1.0000
.			
---- VAR H4C606A	-10.0000	.	1.0000
.			
---- VAR H5C601	0.5000	0.9234	1.5000
.			
---- VAR H5C603	.	0.4310	1.5000
.			
---- VAR H5C606A	-5.0000	0.4905	2.0000
.			
---- VAR H6C601	0.5000	0.9478	3.0000
.			
---- VAR H7C601	0.5000	0.9893	1.5000
.			
---- VAR H7C603	.	0.5012	1.5000
.			
---- VAR H7C606A	.	0.5561	1.0000
.			
---- VAR HAC02	.	9.6649	10000.0000
.			
---- VAR HAC05	10.0000	365.3623	10000.0000
EPS			
---- VAR HAC07	10.0000	375.0272	10000.0000
.			
---- VAR HAC09	10.0000	1185.8935	10000.0000
EPS			
---- VAR HAC12	.	8.4422	10000.0000
.			
---- VAR HAC15	10.0000	379.9099	10000.0000
.			
---- VAR HAC18	10.0000	388.3521	10000.0000
EPS			
---- VAR HAC20	10.0000	1103.6635	10000.0000
.			
---- VAR HAC23	.	7.1589	10000.0000
.			
---- VAR HAC26	10.0000	723.9046	10000.0000
.			

----	VAR HAC29	10.0000	731.0635	10000.0000
.				
----	VAR HAC31	10.0000	1575.1915	10000.0000
.				
----	VAR HAC34	.	6.3401	10000.0000
.				
----	VAR HAC37	10.0000	554.7213	10000.0000
EPS				
----	VAR HAC40	10.0000	561.0615	10000.0000
.				
----	VAR HAC42	10.0000	1484.9191	10000.0000
.				
----	VAR HACAC09	10.0000	384.0122	10000.0000
.				
----	VAR HACAC20	10.0000	404.0276	10000.0000
.				
----	VAR HACAC31	10.0000	749.3861	10000.0000
.				
----	VAR HACAC42	10.0000	702.3729	10000.0000
.				
----	VAR HC301	10.0000	3208.9909	10000.0000
.				
----	VAR HC302	.	389.6698	5000.0000
.				
----	VAR HC303	0.0001	3598.6608	10000.0000
.				
----	VAR HC306	0.0001	4664.3605	10000.0000
.				
----	VAR HC307	0.0001	3127.8897	10000.0000
.				
----	VAR HC308	0.0001	1962.6215	10000.0000
.				
----	VAR HC309	0.0001	1917.2528	10000.0000
.				
----	VAR HC310	0.0001	667.1152	5000.0000
.				
----	VAR HC311	0.0010	1250.1376	10000.0000
.				
----	VAR HC312	0.0001	1687.1509	10000.0000
.				

	LOWER	LEVEL	UPPER
MARGINAL			
---- VAR HC312LIQ	.	1165.2681	10000.0000
.			
---- VAR HC315	0.0001	1066.3366	10000.0000
.			
---- VAR HC316	0.0001	1243.3762	10000.0000
.			
---- VAR HC317	0.0001	1273.2247	10000.0000
.			
---- VAR HC318	0.0001	1096.1851	10000.0000
.			
---- VAR HC319	0.0001	1001.4922	10000.0000
.			
---- VAR HC321	.	18.3296	5000.0000
.			
---- VAR HC322	0.0001	897.6717	5000.0000
.			
---- VAR HC323	.	585.6823	10000.0000
.			
---- VAR HC324	0.0001	776.4483	10000.0000
.			
---- VAR HC325	0.0001	775.4999	10000.0000
.			
---- VAR HC326	0.0001	539.7171	5000.0000
.			
---- VAR HC329	0.0001	503.7360	5000.0000
.			
---- VAR HC401	.	1206.5395	5000.0000
.			
---- VAR HC402	10.0000	1213.6737	10000.0000
.			
---- VAR HC403	0.0001	1274.9365	10000.0000
.			
---- VAR HC404	0.0001	1327.3577	10000.0000
.			
---- VAR HC405	0.0001	742.6379	5000.0000
.			
---- VAR HC406	0.0001	690.2167	5000.0000
EPS			
---- VAR HC407	0.0001	499.9733	5000.0000
.			
---- VAR HC408	0.0001	2553.6488	10000.0000
.			
---- VAR HC408VAP	10.0000	3329.0208	10000.0000
.			
---- VAR HC409	0.0001	3521.0208	10000.0000
.			
---- VAR HC410	0.0001	607.6066	10000.0000
.			

----	VAR HC410VAP	10.0000	852.3299	10000.0000	
.					
----	VAR HC411	10.0000	893.0010	10000.0000	
.					
----	VAR HC412	0.0001	41.9921	5000.0000	
.					
----	VAR HC412LIQ	1.0000	30.4044	1000.0000	
.					
----	VAR HC413	0.0001	23.5962	5000.0000	
.					
----	VAR HC414	0.0001	2796.7173	10000.0000	
.					
----	VAR HC414LIQ	10.0000	1968.2624	10000.0000	
.					
----	VAR HC415	0.0001	1738.1299	5000.0000	
.					
----	VAR HC417	0.0001	161.1040	5000.0000	
.					
----	VAR HC418	0.0001	1899.2339	10000.0000	
.					
----	VAR HC419	0.0001	1880.1644	10000.0000	
EPS					
----	VAR HC425	10.0000	2702.6475	10000.0000	
.					
----	VAR HC426	10.0000	2095.0409	5000.0000	
.					
----	VAR HC427	.	2933.7852	10000.0000	
.					
----	VAR HC428	10.0000	2040.7842	10000.0000	
.					
----	VAR HC430	10.0000	2674.2415	10000.0000	
.					
----	VAR HC431	10.0000	2897.3900	10000.0000	
.					
----	VAR HC432	10.0000	2855.3978	10000.0000	
.					
----	VAR HC623	10.0000	20.6989	5000.0000	
EPS					
----	VAR HC625	10.0000	10.0000	5000.0000	-
1.639444E-6					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR HC627	10.0000	23.2530	5000.0000
EPS			
---- VAR HC629	10.0000	156.1888	5000.0000
.			
---- VAR HHC01	.	452.4846	5000.0000
.			
---- VAR HHC02	.	445.3504	5000.0000
.			
---- VAR HHC03	1.0000	1898.4940	10000.0000
.			
---- VAR HHC04	10.0000	1837.2312	10000.0000
.			
---- VAR HHC05	10.0000	1778.2045	10000.0000
.			
---- VAR HHC06	10.0000	2223.5549	10000.0000
.			
---- VAR HHC07	10.0000	539.3930	5000.0000
.			
---- VAR HHC11	10.0000	550.8489	5000.0000
.			
---- VAR HHC14	10.0000	593.9201	5000.0000
.			
---- VAR HHC16	10.0000	539.3930	5000.0000
.			
---- VAR HHC29	20.0000	367.1652	10000.0000
.			
---- VAR HHC30	20.0000	426.1918	10000.0000
EPS			
---- VAR HHC31	100.0000	4415.5304	10000.0000
.			
---- VAR HHC32	.	860.4677	5000.0000
.			
---- VAR HHC34	.	250.7744	5000.0000
.			
---- VAR HHC38	.	154.4625	5000.0000
.			
---- VAR HHC41	.	226.9549	5000.0000
.			
---- VAR HHC45	.	228.2759	5000.0000
.			
---- VAR HLHC29	.	138.0867	10000.0000
.			
---- VAR HLHC30	.	51.1581	10000.0000
.			
---- VAR HLHC31	20.0000	1206.5395	10000.0000
.			
---- VAR HLR1	.	1421.3142	10000.0000
.			

----	VAR HLR29	10.0000	1143.3126	10000.0000
.				
----	VAR HR1	.	3779.1979	10000.0000
.				
----	VAR HR29	20.0000	3989.3386	10000.0000
.				
----	VAR HSC401	10.0000	303.0302	10000.0000
.				
----	VAR HSC402	10.0000	306.4437	10000.0000
.				
----	VAR HSC403	10.0000	223.5319	10000.0000
.				
----	VAR HSC404	10.0000	220.1184	10000.0000
.				
----	VAR HSC405	10.0000	193.7669	10000.0000
EPS				
----	VAR HSC406	0.1000	969.0056	10000.0000
.				
----	VAR HSC407	10.0000	1428.2434	10000.0000
.				
----	VAR HSC408	10.0000	1376.9559	10000.0000
.				
----	VAR HSC409	10.0000	921.8094	5000.0000
.				
----	VAR HSC411	10.0000	831.6216	5000.0000
.				
----	VAR HSC412	10.0000	90.1877	10000.0000
.				
----	VAR HSC413	10.0000	83.5877	10000.0000
.				
----	VAR HSC414	.	77.5162	500.0000
.				
----	VAR HVHC29	10.0000	229.0784	10000.0000
.				
----	VAR HVHC30	10.0000	375.0337	10000.0000
.				
----	VAR HVHC31	20.0000	3208.9909	10000.0000
.				
----	VAR HVR1	.	2357.8837	10000.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR HVR29	10.0000	2846.0260	10000.0000
.			
---- VAR K1C323	1.0000	2.0291	3.0000
.			
---- VAR K1C325	0.5000	1.0000	2.0000
.			
---- VAR K1C408	1.0000	7.9557	15.0000
.			
---- VAR K1C414	1.0000	2.5211	4.0000
.			
---- VAR K1C428	.	4.2597	10.0000
.			
---- VAR K1C430	1.0000	3.7812	6.0000
.			
---- VAR K1C601	1.5000	2.6298	3.0000
.			
---- VAR K1C603	1.0000	1.2642	3.0000
.			
---- VAR K1C606A	1.0000	1.8365	3.0000
.			
---- VAR K1C606C	1.0000	4.1715	7.0000
.			
---- VAR K1C614B	2.0000	2.6902	3.5000
.			
---- VAR K1C615_A	0.5000	2.4396	4.0000
.			
---- VAR K1C616_A	0.5000	2.9009	5.0000
.			
---- VAR K1E633	1.0000	5.1976	5.5000
.			
---- VAR K1E6XX	1.0000	3.9562	5.5000
.			
---- VAR K1SC406	2.0000	3.5557	5.0000
.			
---- VAR K1SC408	1.5000	2.4417	3.5000
.			
---- VAR K2C601	0.5000	0.7712	1.0000
.			
---- VAR K2E633	0.2000	1.4710	1.5000
.			
---- VAR K2E6XX	0.2000	1.1197	1.5000
.			
---- VAR K2SC406	0.5000	1.1138	1.2000
.			
---- VAR K2SC408	0.5000	0.7042	1.0000
.			
---- VAR K3C323	0.5000	0.8915	1.5000
.			

----	VAR K3C325	0.0100	0.4012	1.5000
.				
----	VAR K3C408	1.0000	3.8360	6.0000
.				
----	VAR K3C414	0.5000	1.0507	3.0000
.				
----	VAR K3C428	.	1.8973	5.0000
.				
----	VAR K3C430	1.0000	1.6591	5.0000
.				
----	VAR K3C601	0.5000	1.0508	2.0000
.				
----	VAR K3C603	0.5000	0.5230	1.0000
.				
----	VAR K3C606A	0.5000	0.7344	3.0000
.				
----	VAR K3C606C	1.0000	1.8505	5.0000
.				
----	VAR K3C614B	0.6000	0.8267	1.5000
.				
----	VAR K3C615_A	0.1000	0.9971	2.0000
.				
----	VAR K3C616_A	0.1000	1.0428	2.0000
.				
----	VAR K3E633	0.3000	1.7512	2.0000
.				
----	VAR K3E6XX	0.3000	1.3329	3.0000
.				
----	VAR K3SC406	1.0000	1.4779	2.0000
.				
----	VAR K3SC408	0.7000	0.9661	1.5000
.				
----	VAR K4C323	0.5000	0.6771	1.0000
.				
----	VAR K4C325	0.0300	0.2895	1.0000
.				
----	VAR K4C408	1.0000	3.0229	5.0000
.				
----	VAR K4C414	0.5000	0.7752	2.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR K4C428	.	1.4508	5.0000
.			
---- VAR K4C430	0.5000	1.2593	3.0000
.			
---- VAR K4C601	0.2000	0.7564	1.0000
.			
---- VAR K4C603	0.1000	0.3842	1.0000
.			
---- VAR K4C606A	0.1000	0.5289	3.0000
.			
---- VAR K4C606C	1.0000	1.4122	4.0000
.			
---- VAR K4C614B	0.5000	0.5119	1.0000
.			
---- VAR K4C615_A	0.0500	0.7207	1.5000
.			
---- VAR K4C616_A	0.0500	0.7025	1.5000
.			
---- VAR K4E633	0.2000	1.1488	1.5000
.			
---- VAR K4E6XX	0.2000	0.8744	1.5000
.			
---- VAR K4SC406	0.8000	1.0888	1.5000
.			
---- VAR K4SC408	0.5000	0.6913	1.0000
.			
---- VAR K5C323	0.1000	0.3098	0.6000
.			
---- VAR K5C325	0.1000	0.1195	0.6000
.			
---- VAR K5C408	0.5000	1.5088	3.0000
.			
---- VAR K5C414	0.1000	0.3345	2.0000
.			
---- VAR K5C428	.	0.6733	2.0000
.			
---- VAR K5C430	0.2000	0.5753	1.5000
.			
---- VAR K5C601	0.1000	0.3108	0.5000
.			
---- VAR K5C603	0.0100	0.1644	0.5000
.			
---- VAR K5C606A	0.1000	0.2175	1.0000
.			
---- VAR K5C606C	0.1000	0.6527	1.2000
.			
---- VAR K5C614B	0.0500	0.1407	0.8000
.			

----	VAR K5C615_A	0.0020	0.2770	1.0000
.				
----	VAR K5C616_A	0.0020	0.2313	1.0000
.				
----	VAR K5E633	0.0500	0.3923	1.0000
.				
----	VAR K5E6XX	0.0500	0.2986	1.0000
.				
----	VAR K5SC406	0.1000	0.4684	0.6000
.				
----	VAR K5SC408	0.2000	0.2808	0.6000
.				
----	VAR K6C601	0.1000	0.2419	1.0000
.				
----	VAR K6SC406	.	0.3723	0.5000
.				
----	VAR K6SC408	0.1000	0.2174	0.5000
.				
----	VAR K7C323	0.1000	0.1208	0.3000
.				
----	VAR K7C325	0.0010	0.0399	0.2000
.				
----	VAR K7C408	0.1000	0.6737	1.0000
.				
----	VAR K7C414	0.0500	0.1194	1.0000
.				
----	VAR K7C428	.	0.2685	2.0000
.				
----	VAR K7C430	.	0.2239	1.0000
.				
----	VAR K7C601	0.0100	0.1031	0.5000
.				
----	VAR K7C603	0.0100	0.0579	0.5000
.				
----	VAR K7C606A	0.0500	0.0722	0.5000
.				
----	VAR K7C614B	0.0010	0.0329	0.1000
.				
----	VAR K7C615_A	0.0010	0.1058	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR K7C616_A	0.0110	0.0705	1.0000
.			
---- VAR K7E633	0.0100	0.0953	0.1000
.			
---- VAR K7E6XX	0.0100	0.0725	0.1000
.			
---- VAR K7SC406	0.1000	0.1664	0.3000
.			
---- VAR K7SC408	0.0500	0.0915	0.2000
.			
---- VAR KP1C601	1.0000	3.1771	5.0000
.			
---- VAR KP1C603	1.0000	1.7916	3.0000
.			
---- VAR KP1C606A	1.0000	2.3059	5.0000
.			
---- VAR KP1C606D	1.0000	6.1842	12.0000
.			
---- VAR KP2C601	0.5000	0.9713	1.5000
.			
---- VAR KP3C601	1.0000	1.3014	2.0000
.			
---- VAR KP3C603	0.5000	0.7749	1.5000
.			
---- VAR KP3C606A	0.5000	0.9500	3.0000
.			
---- VAR KP3C606D	1.0000	2.8869	5.0000
.			
---- VAR KP4C601	0.5000	0.9507	1.5000
.			
---- VAR KP4C603	0.2000	0.5837	1.0000
.			
---- VAR KP4C606A	0.1000	0.6963	3.0000
.			
---- VAR KP4C606D	1.0000	2.2523	5.0000
.			
---- VAR KP5C601	0.1000	0.4021	1.0000
.			
---- VAR KP5C603	0.1000	0.2626	0.5000
.			
---- VAR KP5C606A	0.1000	0.2965	1.0000
.			
---- VAR KP5C606D	1.0000	1.0940	5.0000
.			
---- VAR KP6C601	0.1000	0.3173	1.0000
.			
---- VAR KP7C601	0.0100	0.1393	1.0000
.			

----	VAR KP7C603	0.0100	0.0998	0.3000
.				
----	VAR KP7C606A	0.0500	0.1038	0.5000
.				
----	VAR KP7C606D	0.1000	0.4680	5.0000
.				
----	VAR KWAD1	50.0000	174.9927	300.0000
.				
----	VAR KWAD2	105.0000	285.0073	355.0000
.				
----	VAR LPC601	1.0000	1.8414	5.0000
.				
----	VAR LPC603	1.0000	2.5482	10.0000
.				
----	VAR LPC606A	0.5000	2.7256	5.0000
.				
----	VAR PC303	101.0000	101.0000	140.0000
-0.0243				
----	VAR PC306	650.0000	870.0000	900.0000
.				
----	VAR PC307	600.0000	800.0000	850.0000
.				
----	VAR PC308	600.0000	800.0000	800.0000
0.0028				
----	VAR PC309	580.0000	780.0000	780.0000
EPS				
----	VAR PC311	260.0000	264.1366	400.0000
EPS				
----	VAR PC312	600.0000	800.0000	850.0000
.				
----	VAR PHC30	101.0000	103.4991	140.0000
.				
----	VAR PHC32	101.0000	102.8996	200.0000
.				
----	VAR PR29	101.0000	135.9774	140.0000
.				
----	VAR PROFIT	10.0000	12.0706	10000.0000
.				
----	VAR Q2HC07	.	0.0346	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR Q2HC11	.	0.0353	1.0000
.			
---- VAR Q2HC14	.	0.0381	1.0000
.			
---- VAR Q2HC16	.	0.0346	1.0000
.			
---- VAR QFP1C606A	.	0.0294	1.0000
.			
---- VAR QFP3C606A	.	0.0030	0.1000
.			
---- VAR QFP4C606A	.	0.8662	1.0000
.			
---- VAR QFP5C606A	.	0.6023	1.0000
.			
---- VAR QFP7C606A	.	0.2736	1.0000
9.091906E-9			-
---- VAR QS1C606A	.	0.7714	1.0000
.			
---- VAR QS3C606A	.	0.5149	1.0000
.			
---- VAR QS4C606A	.	0.0469	0.5000
.			
---- VAR QS5C606A	.	0.0295	0.5500
.			
---- VAR QS7C606A	.	0.0127	0.1600
.			
---- VAR R10C623	.	.	0.1000
.			
---- VAR R10C625	.	.	0.1000
.			
---- VAR R10C627	.	1.8465918E-6	0.1000
.			
---- VAR R10C629	.	1.4183495E-6	0.1000
.			
---- VAR R2C623	.	0.0087	0.8320
.			
---- VAR R2C625	.	0.0089	0.8320
.			
---- VAR R2C627	.	0.0096	0.8320
.			
---- VAR R2C629	.	0.0087	0.8320
.			
---- VAR R3C623	.	0.0101	0.1500
.			
---- VAR R3C625	.	0.0104	0.1500
.			
---- VAR R3C627	.	0.0111	0.1500
.			

----	VAR R3C629	.	0.0101	0.1500
.				
----	VAR R4C623	.	0.0014	0.0300
.				
----	VAR R4C625	.	0.0015	0.0300
.				
----	VAR R4C627	.	0.0015	0.0300
.				
----	VAR R4C629	.	0.0014	0.0300
.				
----	VAR R5C623	.	8.4884606E-6	0.3000
.				
----	VAR R5C625	.	1.1683620E-5	0.3000
.				
----	VAR R5C627	.	2.3860474E-5	0.3000
.				
----	VAR R5C629	.	1.8875860E-5	0.3000
.				
----	VAR R7C623	.	.	0.0500
.				
----	VAR R7C625	.	.	0.0500
.				
----	VAR R7C627	.	.	0.0500
.				
----	VAR R7C629	.	.	0.0500
.				
----	VAR R8C623	.	8.8586144E-6	0.1000
.				
----	VAR R8C625	.	1.2083901E-5	0.1000
.				
----	VAR R8C627	.	2.3918411E-5	0.1000
.				
----	VAR R8C629	.	1.9094763E-5	0.1000
.				
----	VAR R9C623	.	0.0087	0.1000
.				
----	VAR R9C625	.	0.0089	0.1000
.				
----	VAR R9C627	.	0.0095	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR R9C629 .	.	0.0087	0.1000
---- VAR RHO2HC07 0.0053	610.0000	650.0000	650.0000
---- VAR RHO2HC11 0.0054	610.0000	650.0000	650.0000
---- VAR RHO2HC14 0.0059	610.0000	650.0000	650.0000
---- VAR RHO2HC16 0.0053	610.0000	650.0000	650.0000
---- VAR RHOAC09 3.1986681E-7	1500.0000	1700.0000	1700.0000
---- VAR RHOAC20 2.3112745E-7	1500.0000	1700.0000	1700.0000
---- VAR RHOAC31 1.115157E-7	1500.0000	1500.0000	1700.0000
---- VAR RHOAC42	1500.0000	1500.0000	1700.0000
EPS			
---- VAR RIC10C623 .	.	.	0.3000
---- VAR RIC10C625 .	.	.	0.3000
---- VAR RIC10C627 .	.	.	0.3000
---- VAR RIC10C629 .	.	.	0.3000
---- VAR RIC11C623 .	.	.	0.1000
---- VAR RIC11C625 .	.	.	0.1000
---- VAR RIC11C627 .	.	1.6535457E-6	0.1000
---- VAR RIC11C629 .	.	1.1198867E-6	0.1000
---- VAR SF1S34 .	0.0001	0.0854	1.0000
---- VAR SF2S34 .	.	0.0183	1.0000
---- VAR SFS11 .	0.1000	0.5241	0.8000
---- VAR SFS19 .	0.1000	0.4709	0.8000
---- VAR SFS2 .	0.1000	0.9114	1.0000
---- VAR SFS23 .	0.1000	0.6188	0.8000
---- VAR SFS27 .	0.1000	0.4985	0.8000

----	VAR SFS41	0.0001	0.9855	1.0000
.				
----	VAR SFS42	0.0001	0.7752	1.0000
.				
----	VAR SFS5	0.1000	0.2426	0.5000
.				
----	VAR SFS7	0.1000	0.3271	0.8000
.				
----	VAR SM1C601	1.0000	2.5815	5.0000
.				
----	VAR SM1C603	0.0500	0.5645	1.0000
.				
----	VAR SM1C606A	0.1000	2.4189	5.0000
.				
----	VAR SM1C606D	1.0000	2.9361	5.0000
.				
----	VAR SM2C601	0.5000	0.7893	1.0000
.				
----	VAR SM3C601	0.5000	1.0575	2.0000
.				
----	VAR SM3C603	0.0010	0.2442	0.5000
.				
----	VAR SM3C606A	0.1000	0.9966	5.0000
.				
----	VAR SM3C606D	1.0000	1.3078	10.0000
.				
----	VAR SM4C601	0.4000	0.7725	1.5000
.				
----	VAR SM4C603	0.0100	0.1839	0.5000
.				
----	VAR SM4C606A	0.1000	0.7304	5.0000
.				
----	VAR SM4C606D	0.5000	1.0000	5.0000
.				
----	VAR SM5C601	0.1000	0.3267	0.6000
.				
----	VAR SM5C603	0.0100	0.0827	0.5000
.				
----	VAR SM5C606A	0.0500	0.3110	5.0000
.				

MARGINAL	LOWER	LEVEL	UPPER	
---- VAR SM5C606D	0.1000	0.4641	5.0000	
.				
---- VAR SM6C601	0.1000	0.2578	1.0000	
.				
---- VAR SM7C601	0.0100	0.1132	0.2000	
.				
---- VAR SM7C603	0.0010	0.0314	0.2000	
.				
---- VAR SM7C606A	0.0010	0.1088	5.0000	
.				
---- VAR SM7C606D	0.1000	0.1850	5.0000	
.				
---- VAR SN1C601	1.0000	2.9150	5.0000	
.				
---- VAR SN1C603	1.0000	1.3545	3.0000	
.				
---- VAR SN1C606A	1.0000	3.4726	20.0000	
.				
---- VAR SN2C601	0.5000	0.8549	1.5000	
.				
---- VAR SN3C601	0.5000	1.1648	1.5000	
.				
---- VAR SN3C603	0.5000	0.5603	1.5000	
.				
---- VAR SN3C606A	1.0000	1.3886	15.0000	
.				
---- VAR SN4C601	0.5000	0.8385	1.0000	
.				
---- VAR SN4C603	0.2000	0.4117	1.0000	
.				
---- VAR SN4C606A	0.8000	1.0000	10.0000	
.				
---- VAR SN5C601	0.1000	0.3445	0.8000	
.				
---- VAR SN5C603	0.1000	0.1761	0.4000	
.				
---- VAR SN5C606A	0.3000	0.4112	10.0000	
.				
---- VAR SN6C601	0.1000	0.2682	1.0000	
.				
---- VAR SN7C601	0.0100	0.1143	0.5000	
.				
---- VAR SN7C603	0.0100	0.0621	0.5000	
.				
---- VAR SN7C606A	0.1000	0.1366	5.0000	
.				
---- VAR TAC02	276.0000	276.0000	290.0000	-
1.045030E-7				

----	VAR TAC05	273.0000	281.6669	300.0000
.				
----	VAR TAC07	273.0000	281.6106	300.0000
.				
----	VAR TAC15	273.0000	280.0000	300.0000
.				
----	VAR TAC18	273.0000	280.0949	300.0000
.				
----	VAR TAC20	280.0000	280.0000	300.0000
-0.0002				
----	VAR TAC26	273.0000	281.1345	300.0000
.				
----	VAR TAC29	273.0000	281.2690	300.0000
.				
----	VAR TAC37	273.0000	283.3783	300.0000
.				
----	VAR TAC40	273.0000	283.3901	300.0000
.				
----	VAR TC301	200.0000	283.8703	300.0000
.				
----	VAR TC302	250.0000	256.5978	290.0000
.				
----	VAR TC309	270.0000	323.6758	350.0000
.				
----	VAR TC310	200.0000	289.7430	310.0000
.				
----	VAR TC311	270.0000	289.7430	310.0000
.				
----	VAR TC312	300.0000	329.3628	369.0000
.				
----	VAR TC318	250.0000	322.4281	365.0000
.				
----	VAR TC319	250.0000	301.0948	400.0000
.				
----	VAR TC320	250.0000	301.0948	400.0000
.				
----	VAR TC322	250.0000	301.0948	400.0000
.				
----	VAR TC323	300.0000	359.0000	420.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR TC326	300.0000	322.6861	360.0000
.			
---- VAR TC328	300.0000	322.6861	360.0000
.			
---- VAR TC329	300.0000	322.6861	375.0000
.			
---- VAR TC401	260.0000	283.8703	300.0000
.			
---- VAR TC402	270.0000	285.2226	305.0000
.			
---- VAR TC403	280.0000	296.6889	320.0000
.			
---- VAR TC406	298.0000	389.9157	400.0000
.			
---- VAR TC409	400.0000	461.0000	461.0000
EPS			
---- VAR TC411	300.0000	403.7141	418.0000
.			
---- VAR TC412	330.0000	363.3927	405.0000
.			
---- VAR TC413	250.0000	301.0000	350.0000
.			
---- VAR TC415	250.0000	306.9590	400.0000
.			
---- VAR TC417	275.0000	307.5815	350.0000
.			
---- VAR TC425	300.0000	363.3927	410.0000
.			
---- VAR TC426	300.0000	363.3927	410.0000
.			
---- VAR TC427	360.0000	375.5457	405.0000
.			
---- VAR TC428	300.0000	365.2590	405.0000
.			
---- VAR TC430	300.0000	358.4156	400.0000
.			
---- VAR TC431	300.0000	363.3927	405.0000
.			
---- VAR TC432	350.0000	363.3927	400.0000
.			
---- VAR TCWOTE609A	298.0000	307.9076	320.0000
.			
---- VAR TCWOTE621A	298.0000	326.7854	355.0000
.			
---- VAR TCWOTE621B	298.0000	298.0000	325.0000
EPS			
---- VAR TCWOTE627A	295.0000	295.0000	360.0000
EPS			

----	VAR	TCWOTE627B	293.0000	293.0000	310.0000
	EPS				
----	VAR	TCWOTE641A	295.0000	319.3628	360.0000
	.				
----	VAR	TCWOTE641B	295.0000	313.6758	325.0000
	.				
----	VAR	TCWOUTE603	296.8360	321.7693	350.0000
	.				
----	VAR	TCWOUTE605	298.0000	303.1250	320.0000
	.				
----	VAR	TCWOUTE611	295.0000	299.1987	350.0000
	EPS				
----	VAR	TCWOUTE613	298.0000	312.6861	320.0000
	.				
----	VAR	TCWOUTE617	295.0000	317.6954	350.0000
	.				
----	VAR	TCWOUTE626	295.0000	297.4867	310.0000
	.				
----	VAR	TCWOUTE634	295.0000	341.7839	360.0000
	.				
----	VAR	TCWOUTE640	295.0000	317.0245	330.0000
	.				
----	VAR	THC01	295.0000	297.7368	370.0000
	.				
----	VAR	THC02	275.0000	293.8703	302.0000
	.				
----	VAR	THC03	290.0000	304.6889	360.0000
	.				
----	VAR	THC04	280.0000	297.0607	310.0000
	.				
----	VAR	THC05	270.0000	289.5746	300.0000
	.				
----	VAR	THC06	273.0000	290.3906	300.0000
	.				
----	VAR	THC07	273.0000	290.3906	300.0000
	.				
----	VAR	THC11	273.0000	290.3906	300.0000
	.				
----	VAR	THC14	273.0000	290.3906	300.0000
	.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR THC16	273.0000	290.3906	300.0000
.			
---- VAR THC22	273.0000	283.3783	290.0000
.			
---- VAR THC23	273.0000	281.1345	290.0000
.			
---- VAR THC24	273.0000	282.2206	290.0000
.			
---- VAR THC25	273.0000	280.0000	290.0000
.			
---- VAR THC26	273.0000	281.5426	290.0000
.			
---- VAR THC27	273.0000	281.6669	290.0000
.			
---- VAR THC28	270.0000	281.5746	290.0000
.			
---- VAR THC29	270.0000	281.5746	290.0000
.			
---- VAR THC30	250.0000	281.5746	300.0000
.			
---- VAR THC31	260.0000	283.8703	310.0000
.			
---- VAR THC34	250.0000	256.5978	310.0000
.			
---- VAR THC38	250.0000	256.5978	310.0000
.			
---- VAR THC41	250.0000	256.5978	310.0000
.			
---- VAR THC45	250.0000	256.5978	310.0000
.			
---- VAR TMC601	315.0000	330.1975	360.0000
.			
---- VAR TMC603	350.0000	352.0705	375.0000
.			
---- VAR TMC606A	327.0000	332.3518	370.0000
.			
---- VAR TMC606D	370.0000	388.1811	400.0000
.			
---- VAR TMK601	273.0000	307.8456	333.0000
.			
---- VAR TNC601	310.0000	321.2801	340.0000
.			
---- VAR TNC603	320.0000	333.9135	375.0000
.			
---- VAR TNC606A	310.0000	321.5367	370.0000
.			
---- VAR TR1	270.0000	281.5746	290.0000
.			

----	VAR TR29	260.0000	281.5746	300.0000
.				
----	VAR TSC401	280.0000	321.9344	350.0000
.				
----	VAR TSC404	310.0000	331.9344	365.0000
.				
----	VAR TSC406	320.0000	335.7424	360.0000
.				
----	VAR TSC407	320.0000	335.7424	400.0000
.				
----	VAR TSC409	308.0000	317.9076	360.0000
.				
----	VAR TSC411	308.0000	317.9076	375.0000
.				
----	VAR TSC412	308.0000	317.9076	360.0000
.				
----	VAR TSC414	275.0000	320.0000	320.0000
EPS				
----	VAR UTILITIES	-10000.0000	8.2055	10000.0000
.				
----	VAR VFC614B	0.1000	0.2010	0.8000
.				
----	VAR VFC615	0.0010	0.3703	0.6000
.				
----	VAR VFC616	0.0500	0.2453	1.0000
.				
----	VAR VFM3	.	0.4938	0.5500
.				
----	VAR VPC601	1.0000	1.4962	5.0000
.				
----	VAR VPC603	0.0100	0.8028	3.0000
.				
----	VAR VPC606A	0.1000	2.8591	10.0000
.				
----	VAR X10AC09	.	.	0.1000
.				
----	VAR X10AC20	.	.	0.1000
.				
----	VAR X10AC31	.	.	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X10AC42	.	.	0.1000
.			
---- VAR X11AC02	0.9700	0.9980	0.9980
131.1884			
---- VAR X11AC05	0.8900	0.9718	0.9990
.			
---- VAR X11AC07	0.8900	0.9724	0.9990
.			
---- VAR X11AC09	.	0.7985	1.0000
.			
---- VAR X11AC15	0.8900	0.9450	0.9990
.			
---- VAR X11AC18	0.8900	0.9455	0.9990
.			
---- VAR X11AC20	.	0.8173	1.0000
.			
---- VAR X11AC26	0.8900	0.9162	0.9990
.			
---- VAR X11AC29	0.8900	0.9164	0.9990
.			
---- VAR X11AC31	.	0.8435	1.0000
.			
---- VAR X11AC37	0.8900	0.8900	0.9990
.			
---- VAR X11AC40	0.8900	0.8903	0.9990
.			
---- VAR X11AC42	.	0.8091	1.0000
.			
---- VAR X12AC02	0.0020	0.0020	0.0300
.			
---- VAR X12AC05	0.0010	0.0282	0.1100
.			
---- VAR X12AC07	0.0010	0.0276	0.1100
.			
---- VAR X12AC09	.	0.0232	0.1000
.			
---- VAR X12AC12	0.0010	0.0282	0.1200
.			
---- VAR X12AC15	0.0010	0.0550	0.1100
.			
---- VAR X12AC18	0.0010	0.0545	0.1100
.			
---- VAR X12AC20	.	0.0475	0.1000
.			
---- VAR X12AC23	0.0010	0.0550	0.1200
.			
---- VAR X12AC26	0.0010	0.0838	0.1100
.			

----	VAR X12AC29	0.0010	0.0836	0.1100
.				
----	VAR X12AC31	.	0.0771	0.1000
.				
----	VAR X12AC34	0.0010	0.0838	0.1200
.				
----	VAR X12AC37	0.0010	0.1100	0.1100
129.8751				
----	VAR X12AC40	0.0010	0.1097	0.1100
.				
----	VAR X12AC42	.	0.1000	0.1000
0.0911				
----	VAR X12AC45	0.0010	0.1100	0.1200
.				
----	VAR X1AC09	.	0.0085	0.1000
.				
----	VAR X1AC20	.	0.0070	0.1000
.				
----	VAR X1AC31	.	0.0039	0.1000
.				
----	VAR X1AC42	.	0.0044	0.1000
.				
----	VAR X1C301	.	0.0704	0.2000
.				
----	VAR X1C302	.	0.0596	0.2000
.				
----	VAR X1C303	0.0500	0.0691	0.2200
.				
----	VAR X1C306	.	0.0730	0.5000
.				
----	VAR X1C307	.	0.0730	0.5000
.				
----	VAR X1C308	.	0.0463	0.4000
.				
----	VAR X1C309	.	0.0463	0.5000
.				
----	VAR X1C310	.	0.0941	0.5000
.				
----	VAR X1C311	.	0.0308	0.2000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1C312	.	0.1184	1.0000
.			
---- VAR X1C315	0.0001	0.1184	1.0000
.			
---- VAR X1C317	.	0.0907	0.3000
.			
---- VAR X1C318	0.0001	0.0907	0.3000
.			
---- VAR X1C319	0.0001	0.0907	0.1000
.			
---- VAR X1C320	.	0.0907	0.1000
.			
---- VAR X1C321	0.0001	0.0907	0.1000
.			
---- VAR X1C322	.	0.0907	0.1500
.			
---- VAR X1C323	.	0.0907	0.2000
.			
---- VAR X1C324	.	0.0907	0.3000
.			
---- VAR X1C326	0.4000	1.0000	1.0000
.			
---- VAR X1C328	0.4000	1.0000	1.0000
.			
---- VAR X1C329	0.4000	1.0000	1.0000
.			
---- VAR X1C401	.	0.0158	0.2000
.			
---- VAR X1C402	.	0.0158	0.2000
.			
---- VAR X1C403	.	0.0158	0.2000
.			
---- VAR X1C404	.	0.0158	0.2000
.			
---- VAR X1C405	.	.	0.0100
.			
---- VAR X1C406	.	.	0.0100
.			
---- VAR X1C407	.	.	0.0100
.			
---- VAR X1C408	.	.	1.0000
.			
---- VAR X1C409	.	.	0.0100
.			
---- VAR X1C410	0.0001	0.0004	1.0000
.			
---- VAR X1C411	.	0.0004	0.1000
.			

----	VAR X1C412	.	0.0019	0.0500
.				
----	VAR X1C413	.	0.0019	0.1000
.				
----	VAR X1C414	.	0.0615	0.2500
.				
----	VAR X1C415	.	0.0615	0.2000
.				
----	VAR X1C418	.	0.0584	0.3000
.				
----	VAR X1C419	0.0001	0.0584	0.2000
.				
----	VAR X1C425	.	0.0004	0.1000
.				
----	VAR X1C426	.	0.0004	0.1000
.				
----	VAR X1C427	.	0.0005	1.0000
.				
----	VAR X1C428	.	0.0006	0.1000
.				
----	VAR X1C430	.	0.0006	0.1000
.				
----	VAR X1C431	.	0.0019	0.1000
.				
----	VAR X1C432	.	0.0019	0.1000
.				
----	VAR X1HC01	0.0010	0.0677	0.3000
.				
----	VAR X1HC02	.	0.0677	0.3000
.				
----	VAR X1HC03	0.0001	0.0587	0.2000
.				
----	VAR X1HC04	.	0.0587	0.2000
.				
----	VAR X1HC05	.	0.0587	0.2000
.				
----	VAR X1HC06	.	0.0606	0.2000
.				
----	VAR X1HC07	.	0.0606	0.2000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1HC08	.	0.0606	0.2000
.			
---- VAR X1HC11	.	0.0606	0.2000
.			
---- VAR X1HC14	.	0.0606	0.2000
.			
---- VAR X1HC15	.	0.0606	0.2000
.			
---- VAR X1HC16	.	0.0606	0.2000
.			
---- VAR X1HC22	.	0.0484	0.5000
.			
---- VAR X1HC23	.	0.0492	0.5000
.			
---- VAR X1HC24	.	0.0488	0.5000
.			
---- VAR X1HC25	.	0.0515	0.5000
.			
---- VAR X1HC26	.	0.0496	0.5000
.			
---- VAR X1HC27	.	0.0476	0.5000
.			
---- VAR X1HC28	.	0.0193	0.2000
.			
---- VAR X1HC29	.	0.0193	0.2000
.			
---- VAR X1HC30	.	0.0094	0.2000
.			
---- VAR X1HC31	.	0.0158	0.1000
.			
---- VAR X1HC33	.	0.0235	0.1000
.			
---- VAR X1HC34	.	0.0235	0.1000
.			
---- VAR X1HC38	.	0.0235	0.1000
.			
---- VAR X1HC40	.	0.0235	0.1000
.			
---- VAR X1HC41	.	0.0235	0.1000
.			
---- VAR X1HC45	.	0.0235	0.1000
.			
---- VAR X1R1	.	0.0193	0.1000
.			
---- VAR X1R29	.	0.0161	0.2000
.			
---- VAR X1SC401	.	0.0142	0.1000
.			

----	VAR	X1SC404	.	2.0225016E-6	0.1000	
.						
----	VAR	X1SC405	.	2.0225016E-6	0.1000	
.						
----	VAR	X1SC406	.	2.0225016E-6	0.1000	
.						
----	VAR	X1SC407	.	2.0225016E-6	0.1000	
.						
----	VAR	X1SC409	.	0.0477	0.1000	
.						
----	VAR	X1SC411	.	0.0477	0.1000	
.						
----	VAR	X1SC412	.	0.0477	0.1000	
.						
----	VAR	X1SC413	.	0.0477	0.1000	
.						
----	VAR	X1SC414	.	.	0.1000	
-4.3365						
----	VAR	X2AC09	.	.	1.0000	
.						
----	VAR	X2AC20	.	.	1.0000	
.						
----	VAR	X2AC31	.	.	1.0000	
.						
----	VAR	X2AC42	.	.	1.0000	
.						
----	VAR	X2C301	.	.	0.0100	
.						
----	VAR	X2C417	.	0.0448	0.1000	-
6.512285E-8						
----	VAR	X2C418	.	0.0022	0.1000	
.						
----	VAR	X2C419	.	0.0022	0.1000	
.						
----	VAR	X2HC01	0.1000	0.1000	0.7000	
.						
----	VAR	X2HC02	0.1000	0.1000	1.0000	-
108.7468						
----	VAR	X2HC03	.	0.0021	0.1000	
.						

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X2HC04	.	0.0021	0.1000
.			
---- VAR X2HC05	.	0.0021	0.1000
.			
---- VAR X2HC06	.	0.0225	0.1500
.			
---- VAR X2HC07	.	0.0225	0.1500
.			
---- VAR X2HC08	.	0.0225	0.1500
.			
---- VAR X2HC11	.	0.0225	0.1500
.			
---- VAR X2HC14	.	0.0225	0.1500
.			
---- VAR X2HC15	.	0.0225	0.1500
.			
---- VAR X2HC16	.	0.0225	0.1500
.			
---- VAR X2HC22	.	.	0.1000
.			
---- VAR X2HC23	.	.	0.1000
.			
---- VAR X2HC24	.	.	0.1000
.			
---- VAR X2HC25	.	.	0.1000
.			
---- VAR X2HC26	.	.	0.1000
.			
---- VAR X2HC27	.	.	0.1000
.			
---- VAR X2HC28	.	.	0.1000
.			
---- VAR X2HC29	.	.	0.1000
.			
---- VAR X2HC30	.	.	0.1000
.			
---- VAR X2HC31	.	.	0.1000
.			
---- VAR X2R1	.	.	0.1000
.			
---- VAR X2R29	.	.	0.1000
.			
---- VAR X2SC401	.	0.0084	0.1000
.			
---- VAR X2SC404	.	0.0119	0.1000
.			
---- VAR X2SC405	.	0.0119	0.1000
.			

----	VAR X2SC406	.	0.0119	0.1000
.				
----	VAR X2SC407	.	0.0119	0.1000
.				
----	VAR X2SC409	.	0.0002	0.1000
.				
----	VAR X2SC411	.	0.0002	0.1000
.				
----	VAR X2SC412	.	0.0002	0.1000
.				
----	VAR X2SC413	.	0.0002	0.1000
.				
----	VAR X2SC414	.	0.0954	0.1000
3.0508194E-8				
----	VAR X3AC09	.	0.1215	0.7000
.				
----	VAR X3AC20	.	0.0901	0.7000
.				
----	VAR X3AC31	.	0.0536	0.7000
.				
----	VAR X3AC42	.	0.0617	0.7000
.				
----	VAR X3C301	0.5000	0.7793	1.0000
.				
----	VAR X3C302	0.4500	0.6003	1.0000
.				
----	VAR X3C303	0.5000	0.7591	0.8000
.				
----	VAR X3C306	.	0.7669	1.0000
.				
----	VAR X3C307	.	0.7669	1.0000
.				
----	VAR X3C308	.	0.7544	1.0000
.				
----	VAR X3C309	0.2000	0.7544	0.8000
.				
----	VAR X3C310	.	0.8094	1.0000
.				
----	VAR X3C311	.	0.7365	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3C312	.	0.7880	1.0000
.			
---- VAR X3C315	0.0001	0.7880	1.0000
.			
---- VAR X3C317	0.5000	0.8127	1.0000
.			
---- VAR X3C318	0.0001	0.8127	1.0000
.			
---- VAR X3C319	0.0001	0.8127	1.0000
.			
---- VAR X3C320	0.0001	0.8127	1.0000
.			
---- VAR X3C321	0.0001	0.8127	1.0000
.			
---- VAR X3C322	.	0.8127	1.0000
.			
---- VAR X3C323	0.5000	0.8127	0.9500
.			
---- VAR X3C324	0.5000	0.8127	0.9500
.			
---- VAR X3C326	.	1.5362264E-6	0.5000
.			
---- VAR X3C328	.	1.5311403E-6	0.5000
.			
---- VAR X3C329	.	1.5362264E-6	0.5000
.			
---- VAR X3C401	.	0.5125	1.0000
.			
---- VAR X3C402	.	0.5125	0.8000
.			
---- VAR X3C403	0.0001	0.5125	1.0000
.			
---- VAR X3C404	0.0001	0.5125	1.0000
.			
---- VAR X3C405	.	2.1392185E-5	0.1000
.			
---- VAR X3C406	.	2.1392185E-5	0.0100
.			
---- VAR X3C407	.	2.1392185E-5	0.0100
.			
---- VAR X3C408	.	2.1392185E-5	1.0000
.			
---- VAR X3C409	.	2.1392185E-5	0.0100
.			
---- VAR X3C410	0.0001	0.0013	0.1000
.			
---- VAR X3C411	0.0001	0.0013	0.2000
.			

----	VAR X3C412	.	0.0026	0.1000
.				
----	VAR X3C413	.	0.0026	0.1000
.				
----	VAR X3C414	0.5000	0.8322	1.0000
.				
----	VAR X3C415	.	0.8322	1.0000
.				
----	VAR X3C418	0.0001	0.8306	1.0000
.				
----	VAR X3C419	0.0001	0.8306	1.0000
.				
----	VAR X3C425	.	0.0013	0.1000
.				
----	VAR X3C426	0.0001	0.0013	0.1000
.				
----	VAR X3C427	.	0.0017	1.0000
.				
----	VAR X3C428	.	0.0018	0.3000
.				
----	VAR X3C430	.	0.0020	0.1000
.				
----	VAR X3C431	.	0.0026	0.1000
.				
----	VAR X3C432	.	0.0026	0.1000
.				
----	VAR X3HC01	0.0100	0.0100	0.6000
-21.7623				
----	VAR X3HC02	.	0.0100	0.5000
.				
----	VAR X3HC03	0.1000	0.8304	1.0000
.				
----	VAR X3HC04	0.1000	0.8304	1.0000
.				
----	VAR X3HC05	0.1000	0.8304	1.0000
.				
----	VAR X3HC06	0.3000	0.6599	1.0000
.				
----	VAR X3HC07	0.3000	0.6599	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3HC08	0.3000	0.6599	1.0000
.			
---- VAR X3HC11	0.3000	0.6599	1.0000
.			
---- VAR X3HC14	0.3000	0.6599	1.0000
.			
---- VAR X3HC15	0.3000	0.6599	1.0000
.			
---- VAR X3HC16	0.3000	0.6599	1.0000
.			
---- VAR X3HC22	0.1000	0.6782	0.9000
.			
---- VAR X3HC23	0.1000	0.6752	0.9000
.			
---- VAR X3HC24	0.1000	0.6767	0.9000
.			
---- VAR X3HC25	0.1000	0.6665	0.9000
.			
---- VAR X3HC26	0.1000	0.6736	0.9000
.			
---- VAR X3HC27	0.1000	0.6810	0.9000
.			
---- VAR X3HC28	0.1000	0.5658	0.6000
.			
---- VAR X3HC29	0.1000	0.5658	0.6000
.			
---- VAR X3HC30	0.1000	0.3571	0.6000
.			
---- VAR X3HC31	0.1000	0.5125	0.6000
.			
---- VAR X3HC33	0.1000	0.7708	1.0000
.			
---- VAR X3HC34	0.1000	0.7708	1.0000
.			
---- VAR X3HC38	0.1000	0.7708	1.0000
.			
---- VAR X3HC40	0.1000	0.7708	1.0000
.			
---- VAR X3HC41	0.1000	0.7708	1.0000
.			
---- VAR X3HC45	0.1000	0.7708	1.0000
.			
---- VAR X3R1	.	0.5658	0.6000
.			
---- VAR X3R29	0.1000	0.5196	0.6000
.			
---- VAR X3SC401	0.2000	0.2959	0.4000
.			

----	VAR X3SC404	.	0.0212	0.1000
.				
----	VAR X3SC405	.	0.0212	0.1000
.				
----	VAR X3SC406	.	0.0212	0.1000
.				
----	VAR X3SC407	.	0.0212	0.1000
.				
----	VAR X3SC409	0.5000	0.9435	1.0000
.				
----	VAR X3SC411	0.5000	0.9435	1.0000
.				
----	VAR X3SC412	0.5000	0.9435	1.0000
.				
----	VAR X3SC413	0.5000	0.9435	1.0000
.				
----	VAR X3SC414	0.5000	0.6665	1.0000
.				
----	VAR X4AC09	.	0.0185	0.2000
.				
----	VAR X4AC20	.	0.0136	0.2000
.				
----	VAR X4AC31	.	0.0081	0.2000
.				
----	VAR X4AC42	.	0.0094	0.2000
.				
----	VAR X4C301	.	0.1028	0.5000
.				
----	VAR X4C302	.	0.0605	0.5000
.				
----	VAR X4C303	0.0500	0.0980	0.2000
.				
----	VAR X4C306	.	0.0957	0.8000
.				
----	VAR X4C307	.	0.0957	0.8000
.				
----	VAR X4C308	.	0.1053	0.5000
.				
----	VAR X4C309	.	0.1053	0.4000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4C310	.	0.0833	0.3000
.			
---- VAR X4C311	.	0.1125	0.5000
.			
---- VAR X4C312	.	0.0795	1.0000
.			
---- VAR X4C315	0.0001	0.0795	0.3000
.			
---- VAR X4C317	.	0.0820	0.2000
.			
---- VAR X4C318	0.0001	0.0820	0.3000
.			
---- VAR X4C319	0.0001	0.0820	0.3000
.			
---- VAR X4C320	0.0001	0.0820	0.3000
.			
---- VAR X4C321	0.0001	0.0820	0.3000
.			
---- VAR X4C322	.	0.0820	0.4000
.			
---- VAR X4C323	0.0100	0.0820	0.2500
.			
---- VAR X4C324	0.0100	0.0820	0.2500
.			
---- VAR X4C325	.	.	0.1000
.			
---- VAR X4C326	.	.	0.1000
.			
---- VAR X4C328	.	.	0.1000
.			
---- VAR X4C329	.	.	0.1000
.			
---- VAR X4C401	0.0010	0.1022	0.5000
.			
---- VAR X4C402	0.0010	0.1022	0.5000
.			
---- VAR X4C403	0.0001	0.1022	0.3000
.			
---- VAR X4C404	0.0001	0.1022	0.3000
.			
---- VAR X4C405	0.0001	0.0605	0.2000
.			
---- VAR X4C406	.	0.0605	0.2000
.			
---- VAR X4C407	0.0100	0.0605	0.3000
.			
---- VAR X4C408	.	0.0605	0.2000
.			

----	VAR	X4C409	.	0.0605	0.3000
.					
----	VAR	X4C410	0.0001	0.5273	1.0000
.					
----	VAR	X4C411	.	0.5273	1.0000
.					
----	VAR	X4C412	0.5000	0.8278	1.0000
.					
----	VAR	X4C413	0.0001	0.8278	1.0000
.					
----	VAR	X4C414	0.0100	0.0930	0.2500
.					
----	VAR	X4C415	0.0001	0.0930	0.3000
.					
----	VAR	X4C418	0.0001	0.0894	0.3000
.					
----	VAR	X4C419	0.0001	0.0894	0.3000
.					
----	VAR	X4C425	.	0.5273	1.0000
.					
----	VAR	X4C426	0.0001	0.5273	1.0000
.					
----	VAR	X4C427	.	0.6754	1.0000
.					
----	VAR	X4C428	.	0.7377	1.0000
.					
----	VAR	X4C430	0.5000	0.6430	1.0000
.					
----	VAR	X4C431	0.0001	0.8278	1.0000
.					
----	VAR	X4C432	0.5000	0.8278	1.0000
.					
----	VAR	X4HC01	.	0.0854	0.2500
.					
----	VAR	X4HC02	.	0.0854	0.2500
.					
----	VAR	X4HC03	.	0.0894	0.3000
.					
----	VAR	X4HC04	.	0.0894	0.5000
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4HC05	.	0.0894	0.5000
.			
---- VAR X4HC06	.	0.0886	0.4000
.			
---- VAR X4HC07	.	0.0886	0.4000
.			
---- VAR X4HC08	.	0.0886	0.4000
.			
---- VAR X4HC11	.	0.0886	0.4000
.			
---- VAR X4HC14	.	0.0886	0.4000
.			
---- VAR X4HC15	.	0.0886	0.4000
.			
---- VAR X4HC16	.	0.0886	0.4000
.			
---- VAR X4HC22	.	0.1032	0.5000
.			
---- VAR X4HC23	.	0.1024	0.5000
.			
---- VAR X4HC24	.	0.1027	0.5000
.			
---- VAR X4HC25	.	0.1005	0.5000
.			
---- VAR X4HC26	.	0.1021	0.5000
.			
---- VAR X4HC27	.	0.1040	0.5000
.			
---- VAR X4HC28	.	0.1071	0.5000
.			
---- VAR X4HC29	.	0.1071	0.3000
.			
---- VAR X4HC30	.	0.0785	0.3000
.			
---- VAR X4HC31	.	0.1022	0.3000
.			
---- VAR X4HC33	.	0.1255	0.5000
.			
---- VAR X4HC34	.	0.1255	0.5000
.			
---- VAR X4HC38	.	0.1255	0.5000
.			
---- VAR X4HC40	.	0.1255	0.5000
.			
---- VAR X4HC41	.	0.1255	0.5000
.			
---- VAR X4HC45	.	0.1255	0.5000
.			

----	VAR X4R1	.	0.1071	0.3000	
.					
----	VAR X4R29	0.0100	0.1032	0.3000	
.					
----	VAR X4SC401	0.5000	0.5601	0.7000	
.					
----	VAR X4SC404	0.4800	0.7939	1.0000	
.					
----	VAR X4SC405	0.4800	0.7939	1.0000	-
5.982299E-8					
----	VAR X4SC406	0.7000	0.7939	1.0000	
.					
----	VAR X4SC407	0.7000	0.7939	1.0000	
.					
----	VAR X4SC409	.	0.0086	0.1000	
.					
----	VAR X4SC411	.	0.0086	0.1000	
.					
----	VAR X4SC412	.	0.0086	0.1000	
.					
----	VAR X4SC413	.	0.0086	0.1000	
.					
----	VAR X4SC414	.	0.1000	0.1000	
22.0394					
----	VAR X5AC09	.	0.0056	0.1000	
.					
----	VAR X5AC20	.	0.0043	0.1000	
.					
----	VAR X5AC31	.	0.0025	0.1000	
.					
----	VAR X5AC42	.	0.0029	0.1000	
.					
----	VAR X5C301	.	0.0184	0.2000	
.					
----	VAR X5C302	.	0.0041	0.1000	
.					
----	VAR X5C303	.	0.0168	0.1000	
.					
----	VAR X5C306	.	0.0152	0.6000	
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5C307	.	0.0152	0.6000
.			
---- VAR X5C308	.	0.0206	0.2000
.			
---- VAR X5C309	.	0.0206	0.2000
.			
---- VAR X5C310	.	0.0062	0.1000
.			
---- VAR X5C311	.	0.0252	0.2000
.			
---- VAR X5C312	.	0.0060	0.4000
.			
---- VAR X5C315	0.0001	0.0060	0.1000
.			
---- VAR X5C317	.	0.0062	0.1000
.			
---- VAR X5C318	0.0001	0.0062	0.1000
.			
---- VAR X5C319	0.0001	0.0062	0.1000
.			
---- VAR X5C320	.	0.0062	0.1000
.			
---- VAR X5C321	0.0001	0.0062	0.1000
.			
---- VAR X5C322	.	0.0062	0.1000
.			
---- VAR X5C323	0.0020	0.0062	0.1000
.			
---- VAR X5C324	0.0020	0.0062	0.1000
.			
---- VAR X5C325	.	.	0.0100
.			
---- VAR X5C326	.	.	0.0100
.			
---- VAR X5C328	.	.	0.0100
.			
---- VAR X5C329	.	.	0.0100
.			
---- VAR X5C401	.	0.0518	0.5000
.			
---- VAR X5C402	.	0.0518	0.5000
.			
---- VAR X5C403	0.0001	0.0518	0.2000
.			
---- VAR X5C404	.	0.0518	0.2000
.			
---- VAR X5C405	.	0.1336	0.2000
.			

----	VAR X5C406	.	0.1336	0.2000
.				
----	VAR X5C407	.	0.1336	0.2000
.				
----	VAR X5C408	.	0.1336	0.2000
.				
----	VAR X5C409	.	0.1336	0.3000
.				
----	VAR X5C410	0.0001	0.0948	1.0000
.				
----	VAR X5C411	.	0.0948	1.0000
.				
----	VAR X5C412	.	0.0688	0.1000
.				
----	VAR X5C413	.	0.0688	0.3000
.				
----	VAR X5C414	.	0.0013	0.1000
.				
----	VAR X5C415	.	0.0013	0.1000
.				
----	VAR X5C418	.	0.0037	0.1000
.				
----	VAR X5C419	0.0001	0.0037	0.1000
.				
----	VAR X5C425	.	0.0948	1.0000
.				
----	VAR X5C426	0.0001	0.0948	1.0000
.				
----	VAR X5C427	.	0.0825	1.0000
.				
----	VAR X5C428	.	0.0773	0.4000
.				
----	VAR X5C430	.	0.0844	0.1000
.				
----	VAR X5C431	.	0.0688	0.2000
.				
----	VAR X5C432	.	0.0688	0.1000
.				
----	VAR X5HC01	.	0.1383	0.1500
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5HC02	.	0.1383	0.1500
.			
---- VAR X5HC03	.	0.0038	0.1000
.			
---- VAR X5HC04	.	0.0038	0.3000
.			
---- VAR X5HC05	.	0.0038	0.3000
.			
---- VAR X5HC06	.	0.0317	0.3000
.			
---- VAR X5HC07	.	0.0317	0.3000
.			
---- VAR X5HC08	.	0.0317	0.3000
.			
---- VAR X5HC11	.	0.0317	0.3000
.			
---- VAR X5HC14	.	0.0317	0.3000
.			
---- VAR X5HC15	.	0.0317	0.3000
.			
---- VAR X5HC16	.	0.0317	0.3000
.			
---- VAR X5HC22	.	0.0314	0.5000
.			
---- VAR X5HC23	.	0.0314	0.5000
.			
---- VAR X5HC24	.	0.0314	0.5000
.			
---- VAR X5HC25	.	0.0315	0.5000
.			
---- VAR X5HC26	.	0.0314	0.5000
.			
---- VAR X5HC27	.	0.0313	0.5000
.			
---- VAR X5HC28	.	0.0476	0.5000
.			
---- VAR X5HC29	0.0100	0.0476	0.3000
.			
---- VAR X5HC30	.	0.0550	0.3000
.			
---- VAR X5HC31	.	0.0518	0.3000
.			
---- VAR X5HC33	.	0.0306	2.5000
.			
---- VAR X5HC34	.	0.0306	2.5000
.			
---- VAR X5HC38	.	0.0306	2.5000
.			

----	VAR X5HC40	.	0.0306	2.5000
.				
----	VAR X5HC41	.	0.0306	2.5000
.				
----	VAR X5HC45	.	0.0306	2.5000
.				
----	VAR X5R1	.	0.0476	0.3000
.				
----	VAR X5R29	0.0100	0.0516	0.4000
.				
----	VAR X5SC401	0.0080	0.0516	0.1000
.				
----	VAR X5SC404	.	0.0734	0.1000
.				
----	VAR X5SC405	.	0.0734	0.1000
4.8814458E-9				
----	VAR X5SC406	0.0100	0.0734	0.1000
.				
----	VAR X5SC407	0.0100	0.0734	0.1000
.				
----	VAR X5SC409	.	.	0.1000
.				
----	VAR X5SC411	.	.	0.1000
.				
----	VAR X5SC412	.	.	0.1000
.				
----	VAR X5SC413	.	.	0.1000
.				
----	VAR X5SC414	.	0.0630	0.1000
.				
----	VAR X6SC401	.	0.0666	0.1000
.				
----	VAR X6SC404	.	0.0949	0.1200
.				
----	VAR X6SC405	.	0.0949	0.1000
.				
----	VAR X6SC406	.	0.0949	0.1000
.				
----	VAR X6SC407	.	0.0949	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X6SC409	.	.	0.1000
.			
---- VAR X6SC411	.	.	0.1000
.			
---- VAR X6SC412	.	.	0.1000
.			
---- VAR X6SC413	.	.	0.1000
.			
---- VAR X6SC414	.	0.0350	0.1000
EPS			
---- VAR X7AC09	.	0.0190	0.1000
.			
---- VAR X7AC20	.	0.0156	0.1000
.			
---- VAR X7AC31	.	0.0087	0.1000
.			
---- VAR X7AC42	.	0.0098	0.1000
.			
---- VAR X7C301	.	0.0291	0.1000
.			
---- VAR X7C302	.	0.2755	0.3000
.			
---- VAR X7C303	.	0.0569	0.1000
.			
---- VAR X7C306	.	0.0492	0.8000
.			
---- VAR X7C307	.	0.0492	0.8000
.			
---- VAR X7C308	.	0.0734	0.3000
.			
---- VAR X7C309	.	0.0734	0.3000
.			
---- VAR X7C310	.	0.0071	0.2000
.			
---- VAR X7C311	.	0.0950	1.0000
.			
---- VAR X7C312	.	0.0081	0.5000
.			
---- VAR X7C315	.	0.0081	0.0100
.			
---- VAR X7C316	.	0.0081	0.0100
.			
---- VAR X7C317	.	0.0084	0.1000
.			
---- VAR X7C318	.	0.0084	0.1500
.			
---- VAR X7C319	.	0.0084	0.1500
.			

----	VAR X7C320	.	0.0084	0.1000
.				
----	VAR X7C321	.	0.0084	0.1000
.				
----	VAR X7C322	.	0.0084	0.1000
.				
----	VAR X7C323	.	0.0084	0.0200
.				
----	VAR X7C324	.	0.0084	0.1000
.				
----	VAR X7C325	.	.	0.2000
.				
----	VAR X7C326	.	.	0.2000
.				
----	VAR X7C328	.	.	0.2000
.				
----	VAR X7C329	.	.	0.1000
.				
----	VAR X7C401	.	0.3177	1.0000
.				
----	VAR X7C402	.	0.3177	0.6000
.				
----	VAR X7C403	0.0001	0.3177	1.0000
.				
----	VAR X7C404	0.0001	0.3177	1.0000
.				
----	VAR X7C405	0.0001	0.8058	1.0000
.				
----	VAR X7C406	0.0010	0.8058	1.0000
.				
----	VAR X7C407	0.0100	0.8058	1.0000
.				
----	VAR X7C408	.	0.8058	1.0000
.				
----	VAR X7C409	.	0.8058	1.0000
.				
----	VAR X7C410	0.0001	0.3762	1.0000
.				
----	VAR X7C411	.	0.3762	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7C412	.	0.0989	0.2000
.			
---- VAR X7C413	.	0.0989	0.3000
.			
---- VAR X7C414	.	0.0121	0.1000
.			
---- VAR X7C415	.	0.0121	0.1000
.			
---- VAR X7C417	0.0001	0.0800	0.0800
1.9441			
---- VAR X7C418	0.0001	0.0157	0.1000
.			
---- VAR X7C419	.	0.0157	0.1000
.			
---- VAR X7C425	0.2000	0.3762	1.0000
.			
---- VAR X7C426	0.0001	0.3762	1.0000
.			
---- VAR X7C427	.	0.2399	1.0000
.			
---- VAR X7C428	.	0.1826	0.5000
.			
---- VAR X7C430	.	0.2700	0.3500
.			
---- VAR X7C431	.	0.0989	0.3000
.			
---- VAR X7C432	.	0.0989	0.3000
.			
---- VAR X7HC01	.	0.5986	0.6000
.			
---- VAR X7HC02	.	0.5986	0.6000
.			
---- VAR X7HC03	.	0.0156	0.1000
.			
---- VAR X7HC04	.	0.0156	0.2500
.			
---- VAR X7HC05	.	0.0156	0.2500
.			
---- VAR X7HC06	.	0.1368	0.3000
.			
---- VAR X7HC07	.	0.1368	0.3000
.			
---- VAR X7HC08	.	0.1368	0.3000
.			
---- VAR X7HC11	.	0.1368	0.3000
.			
---- VAR X7HC14	.	0.1368	0.3000
.			

----	VAR X7HC15	.	0.1368	0.3000
.				
----	VAR X7HC16	.	0.1368	0.3000
.				
----	VAR X7HC22	.	0.1388	0.5000
.				
----	VAR X7HC23	.	0.1418	0.5000
.				
----	VAR X7HC24	.	0.1403	0.5000
.				
----	VAR X7HC25	.	0.1500	0.5000
.				
----	VAR X7HC26	.	0.1433	0.5000
.				
----	VAR X7HC27	.	0.1360	0.5000
.				
----	VAR X7HC28	.	0.2602	0.5000
.				
----	VAR X7HC29	0.1000	0.2602	0.5000
.				
----	VAR X7HC30	0.1000	0.5000	0.5000
0.9800				
----	VAR X7HC31	0.1000	0.3177	0.6000
.				
----	VAR X7HC33	.	0.0496	2.0000
.				
----	VAR X7HC34	.	0.0496	2.0000
.				
----	VAR X7HC38	.	0.0496	2.0000
.				
----	VAR X7HC40	.	0.0496	2.0000
.				
----	VAR X7HC41	.	0.0496	2.0000
.				
----	VAR X7HC45	.	0.0496	2.0000
.				
----	VAR X7R1	.	0.2602	0.5000
.				
----	VAR X7R29	0.1000	0.3095	0.6000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7SC401	.	0.0032	0.1000
.			
---- VAR X7SC404	.	0.0046	0.1200
.			
---- VAR X7SC405	.	0.0046	0.1200
3.2456931E-8			
---- VAR X7SC406	.	0.0046	0.0100
.			
---- VAR X7SC407	.	0.0046	0.1000
.			
---- VAR X7SC409	.	.	0.1000
.			
---- VAR X7SC411	.	.	0.1000
.			
---- VAR X7SC412	.	.	0.1000
.			
---- VAR X7SC413	.	.	0.1000
.			
---- VAR X7SC414	.	0.0401	0.1000
.			
---- VAR X8AC09	.	4.7458200E-6	0.1000
.			
---- VAR X8AC20	.	5.5799197E-6	0.1000
.			
---- VAR X8AC31	.	5.5242202E-6	0.1000
.			
---- VAR X8AC42	.	5.3830067E-6	0.1000
.			
---- VAR X9AC09	.	0.0053	0.3000
.			
---- VAR X9AC20	.	0.0047	0.3000
.			
---- VAR X9AC31	.	0.0025	0.3000
.			
---- VAR X9AC42	.	0.0028	0.3000
.			
---- VAR XAC02	0.4000	0.4999	1.0000
.			
---- VAR XAC05	0.4000	0.4980	1.0000
.			
---- VAR XAC07	0.4000	0.4981	1.0000
.			
---- VAR XAC09	0.4000	0.4834	1.0000
.			
---- VAR XAC12	0.4000	0.4980	1.0000
.			
---- VAR XAC15	0.4000	0.4961	1.0000
.			

----	VAR	XAC18	0.4000	0.4961	1.0000
.					
----	VAR	XAC20	0.4000	0.4852	1.0000
.					
----	VAR	XAC23	0.4000	0.4961	1.0000
.					
----	VAR	XAC26	0.4000	0.4938	1.0000
.					
----	VAR	XAC29	0.4000	0.4939	1.0000
.					
----	VAR	XAC31	0.4000	0.4877	1.0000
.					
----	VAR	XAC34	0.4000	0.4938	1.0000
.					
----	VAR	XAC37	0.4000	0.4917	1.0000
.					
----	VAR	XAC40	0.4000	0.4917	1.0000
.					
----	VAR	XAC42	0.4000	0.4844	1.0000
.					
----	VAR	XIC10AC09	.	.	1.0000
.					
----	VAR	XIC10AC20	.	.	1.0000
.					
----	VAR	XIC10AC31	.	.	1.0000
.					
----	VAR	XIC10AC42	.	.	1.0000
.					
----	VAR	XIC11AC09	.	.	1.0000
.					
----	VAR	XIC11AC20	.	.	1.0000
.					
----	VAR	XIC11AC31	.	.	1.0000
.					
----	VAR	XIC11AC42	.	.	1.0000
.					
----	VAR	XM1C606D	.	0.0002	0.5000
.					
----	VAR	XM3C606D	.	0.0010	0.5000
.					

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XM4C606D	.	0.5493	0.6500
.			
---- VAR XM5C606D	.	0.1000	0.5000
.			
---- VAR XM7C606D	.	0.3495	1.0000
.			
---- VAR XX1C302	.	0.0846	0.2500
.			
---- VAR XX1C308	.	0.0618	0.5000
.			
---- VAR XX1C310	.	0.1208	0.5000
.			
---- VAR XX1C311	.	0.0416	0.3000
.			
---- VAR XX1C312	.	0.1508	1.0000
.			
---- VAR XX1C323	.	0.1167	0.2000
.			
---- VAR XX1C325	0.4000	1.0000	1.0000
.			
---- VAR XX1C405	.	.	0.0100
.			
---- VAR XX1C408	.	.	1.0000
.			
---- VAR XX1C425	.	0.0006	1.0000
.			
---- VAR XX1C428	.	0.0008	1.0000
.			
---- VAR XX1C430	.	0.0009	0.5000
.			
---- VAR XX1C431	.	0.0026	0.1000
.			
---- VAR XX1HC28	0.0100	0.0279	0.2000
.			
---- VAR XX1HC29	.	0.0279	0.2000
.			
---- VAR XX1HC30	0.0100	0.0149	0.2000
.			
---- VAR XX1HC32	.	0.0315	0.1000
.			
---- VAR XX1R1	.	0.0279	0.2000
.			
---- VAR XX1R29	.	0.0237	0.1000
.			
---- VAR XX1SC406	.	2.7576659E-6	0.2000
.			
---- VAR XX1SC408	.	0.0619	0.1000
.			

----	VAR XX2HC28	.	.	0.1000
.				
----	VAR XX2HC29	.	.	0.1000
.				
----	VAR XX2HC30	.	.	0.1000
.				
----	VAR XX2R1	.	.	0.1000
.				
----	VAR XX2R29	.	.	0.1000
-9.2830				
----	VAR XX2SC406	.	0.0128	0.1000
.				
----	VAR XX2SC408	.	0.0002	1.0000
.				
----	VAR XX3C302	0.5000	0.6467	1.0000
.				
----	VAR XX3C308	.	0.7645	1.0000
.				
----	VAR XX3C310	.	0.7886	1.0000
.				
----	VAR XX3C311	.	0.7563	1.0000
.				
----	VAR XX3C312	.	0.7623	1.0000
.				
----	VAR XX3C323	0.5000	0.7930	0.9200
.				
----	VAR XX3C325	.	1.1660518E-6	0.5000
.				
----	VAR XX3C405	.	3.0072368E-5	0.1000
.				
----	VAR XX3C408	.	3.0072368E-5	1.0000
.				
----	VAR XX3C425	.	0.0015	1.0000
.				
----	VAR XX3C428	.	0.0020	1.0000
.				
----	VAR XX3C430	.	0.0022	0.1000
.				
----	VAR XX3C431	.	0.0027	0.5000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX3C432	.	0.0027	0.1500
.			
---- VAR XX3HC28	0.2000	0.6204	0.8000
.			
---- VAR XX3HC29	0.1000	0.6204	0.8000
.			
---- VAR XX3HC30	0.1000	0.4306	0.6000
.			
---- VAR XX3HC32	0.3000	0.7823	1.0000
.			
---- VAR XX3R1	0.1000	0.6204	0.8000
.			
---- VAR XX3R29	0.1000	0.5811	0.6000
.			
---- VAR XX3SC406	.	0.0220	0.1000
.			
---- VAR XX3SC408	0.5000	0.9294	1.0000
.			
---- VAR XX4C302	.	0.0652	0.5000
.			
---- VAR XX4C308	.	0.1067	0.5000
.			
---- VAR XX4C310	.	0.0811	0.3000
.			
---- VAR XX4C311	.	0.1155	0.5000
.			
---- VAR XX4C312	.	0.0769	0.1500
.			
---- VAR XX4C323	0.0800	0.0800	0.2800
199.6951			
---- VAR XX4C325	.	.	0.0500
.			
---- VAR XX4C405	0.0001	0.0850	0.2000
.			
---- VAR XX4C408	.	0.0850	0.3000
.			
---- VAR XX4C409	0.0001	0.0850	0.3000
.			
---- VAR XX4C425	.	0.6138	1.0000
.			
---- VAR XX4C427	.	0.7455	1.0000
.			
---- VAR XX4C428	.	0.7969	1.0000
.			
---- VAR XX4C430	0.5000	0.7178	1.0000
.			
---- VAR XX4C431	0.0001	0.8668	1.0000
.			

----	VAR XX4C432	0.5000	0.8668	1.0000
.				
----	VAR XX4HC28	0.0100	0.1175	0.3000
.				
----	VAR XX4HC29	0.0100	0.1175	0.3000
.				
----	VAR XX4HC30	0.0100	0.0947	0.3000
.				
----	VAR XX4HC32	.	0.1274	0.5000
.				
----	VAR XX4R1	.	0.1175	0.3000
.				
----	VAR XX4R29	0.0100	0.1155	0.3000
.				
----	VAR XX4SC406	0.6000	0.8217	1.0000
.				
----	VAR XX4SC408	.	0.0085	0.0500
.				
----	VAR XX5C302	.	0.0035	0.1000
.				
----	VAR XX5C308	.	0.0168	0.8000
.				
----	VAR XX5C310	.	0.0048	0.1000
.				
----	VAR XX5C311	.	0.0209	0.1000
.				
----	VAR XX5C312	.	0.0047	0.3000
.				
----	VAR XX5C323	0.0010	0.0048	0.1500
.				
----	VAR XX5C325	.	.	0.0010
.				
----	VAR XX5C405	0.0001	0.1514	0.2000
.				
----	VAR XX5C408	.	0.1514	0.3000
.				
----	VAR XX5C425	.	0.0889	1.0000
.				
----	VAR XX5C428	.	0.0673	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX5C430	.	0.0759	1.0000
.			
---- VAR XX5C431	.	0.0580	1.0000
.			
---- VAR XX5HC28	0.0100	0.0420	0.3000
.			
---- VAR XX5HC29	.	0.0420	0.3000
.			
---- VAR XX5HC30	.	0.0534	0.3000
.			
---- VAR XX5HC32	.	0.0250	0.2000
.			
---- VAR XX5R1	.	0.0420	0.3000
.			
---- VAR XX5R29	.	0.0465	0.3000
.			
---- VAR XX5SC406	.	0.0612	0.1500
.			
---- VAR XX5SC408	.	.	0.1000
.			
---- VAR XX6SC406	.	0.0791	0.1000
.			
---- VAR XX6SC408	.	.	1.0000
.			
---- VAR XX7C302	.	0.2000	0.2000
0.3119			
---- VAR XX7C308	.	0.0501	0.1000
.			
---- VAR XX7C310	.	0.0046	0.1000
.			
---- VAR XX7C311	.	0.0657	0.3000
.			
---- VAR XX7C312	.	0.0053	0.1000
.			
---- VAR XX7C323	0.0020	0.0055	0.1000
.			
---- VAR XX7C325	.	.	0.1000
.			
---- VAR XX7C405	0.0001	0.7635	1.0000
.			
---- VAR XX7C408	.	0.7635	1.0000
1.1516472E-7 NOPT			
---- VAR XX7C425	.	0.2952	1.0000
.			
---- VAR XX7C428	.	0.1329	1.0000
.			
---- VAR XX7C430	.	0.2032	1.0000
.			

----	VAR XX7C431	.	0.0698	1.0000
.				
----	VAR XX7HC28	0.1000	0.1923	0.4000
.				
----	VAR XX7HC29	.	0.1923	0.5000
.				
----	VAR XX7HC30	0.1000	0.4064	0.5000
.				
----	VAR XX7HC32	.	0.0339	0.2000
.				
----	VAR XX7R1	0.1000	0.1923	0.5000
.				
----	VAR XX7R29	0.1000	0.2333	0.5000
.				
----	VAR XX7SC406	.	0.0032	0.1000
.				
----	VAR XX7SC408	.	.	0.1000
.				
----	VAR Y1HC28	0.0500	0.0797	0.5000
.				
----	VAR Y1HC29	0.0500	0.0797	0.5000
.				
----	VAR Y1HC30	0.0500	0.0585	0.5000
.				
----	VAR Y1HC31	0.0500	0.0704	0.4000
.				
----	VAR Y1R1	.	0.0797	0.5000
.				
----	VAR Y1R29	0.0500	0.0719	0.5000
.				
----	VAR Y2HC28	.	.	0.1000
.				
----	VAR Y2HC29	.	.	0.1000
.				
----	VAR Y2HC30	.	.	0.1000
.				
----	VAR Y2HC31	.	.	0.1000
.				
----	VAR Y2R1	.	.	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR Y2R29	.	.	0.1000
.			
---- VAR Y3HC28	0.2000	0.7879	0.9000
.			
---- VAR Y3HC29	0.1000	0.7879	0.9000
.			
---- VAR Y3HC30	0.1000	0.7503	0.8500
.			
---- VAR Y3HC31	0.1000	0.7793	0.8500
.			
---- VAR Y3R1	0.1000	0.7879	0.9000
.			
---- VAR Y3R29	0.1000	0.7832	0.8500
.			
---- VAR Y4HC28	.	0.0979	0.5000
.			
---- VAR Y4HC29	.	0.0979	0.3000
.			
---- VAR Y4HC30	0.0100	0.1082	0.4000
.			
---- VAR Y4HC31	.	0.1028	0.3000
.			
---- VAR Y4R1	.	0.0979	0.3000
.			
---- VAR Y4R29	.	0.1021	0.5000
.			
---- VAR Y5HC28	.	0.0148	0.2000
.			
---- VAR Y5HC29	.	0.0148	0.2000
.			
---- VAR Y5HC30	.	0.0259	0.2000
.			
---- VAR Y5HC31	.	0.0184	0.2000
.			
---- VAR Y5R1	.	0.0148	0.2000
.			
---- VAR Y5R29	.	0.0174	0.2000
.			
---- VAR Y7HC28	0.0100	0.0197	0.5000
.			
---- VAR Y7HC29	.	0.0197	0.1000
.			
---- VAR Y7HC30	.	0.0571	0.1000
.			
---- VAR Y7HC31	.	0.0291	0.2000
.			
---- VAR Y7R1	.	0.0197	0.1000
.			

----	VAR Y7R29	.	0.0254	0.2000
.				
----	VAR YY1HC28	0.1000	0.1033	0.5000
.				
----	VAR YY1HC29	0.1000	0.1033	0.6000
.				
----	VAR YY1HC30	0.0500	0.0774	0.6000
.				
----	VAR YY1R1	0.1000	0.1033	0.6000
.				
----	VAR YY1R29	0.0500	0.0937	0.6000
.				
----	VAR YY2HC28	.	.	0.1000
.				
----	VAR YY2HC29	.	.	0.1000
.				
----	VAR YY2HC30	.	.	0.1000
.				
----	VAR YY2R1	.	.	0.1000
.				
----	VAR YY2R29	.	.	0.1000
.				
----	VAR YY3HC28	0.1000	0.7755	0.9000
.				
----	VAR YY3HC29	0.1000	0.7755	0.8000
.				
----	VAR YY3HC30	0.1000	0.7542	0.8000
.				
----	VAR YY3R1	0.1000	0.7755	0.8000
.				
----	VAR YY3R29	0.1000	0.7745	0.8000
.				
----	VAR YY4HC28	0.0100	0.0963	0.3000
.				
----	VAR YY4HC29	0.0100	0.0963	0.3000
.				
----	VAR YY4HC30	0.0100	0.1088	0.3000
.				
----	VAR YY4R1	.	0.0963	0.3000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR YY4R29	0.0100	0.1010	0.3000
.			
---- VAR YY5HC28	0.0010	0.0118	0.2000
.			
---- VAR YY5HC29	.	0.0118	0.2000
.			
---- VAR YY5HC30	.	0.0210	0.1000
.			
---- VAR YY5R1	.	0.0118	0.2000
.			
---- VAR YY5R29	.	0.0139	0.2000
.			
---- VAR YY7HC28	.	0.0131	0.2000
.			
---- VAR YY7HC29	.	0.0131	0.2000
.			
---- VAR YY7HC30	.	0.0387	0.1000
.			
---- VAR YY7R1	.	0.0131	0.1000
.			
---- VAR YY7R29	.	0.0169	0.2000
.			
---- VAR OBJVAR	-INF	113.7605	+INF
.			
---- VAR SFC632	0.8000	0.9815	1.0000
.			
---- VAR FE641	0.5000	0.5000	1.0000
EPS			
---- VAR FE610	0.5000	0.9340	1.0000
EPS			
---- VAR FE611	0.5000	0.5218	1.0000
EPS			
---- VAR SFC633	0.8000	0.9913	1.0000
.			
---- VAR SFC634	0.8000	0.9893	1.0000
.			
---- VAR UE621B	0.0100	0.0759	0.2000
.			
---- VAR FE621A	0.5000	0.7397	1.0000
.			
---- VAR FE621B	0.5000	1.0000	1.0000
EPS			
---- VAR UE627B	0.0100	0.0100	0.1000
EPS			
---- VAR FE627A	0.5000	0.5016	1.0000
4.8997964E-9			
---- VAR FE627B	0.5000	0.5257	1.0000
.			

----	VAR HSTME696	2135.0000	2145.0000	2145.0000
	EPS			
----	VAR UE696B	0.0100	0.0100	0.1000
	EPS			
----	VAR FE626	0.5000	0.5000	1.0000
	-0.0079			
----	VAR FE617	0.5000	1.0000	1.0000
	EPS			
----	VAR FE616	0.5000	0.5000	1.0000
	-0.3086			
----	VAR HSTME695	1900.0000	1920.0000	1920.0000
	EPS			
----	VAR UE695A	0.0100	0.0329	0.1000
	.			
----	VAR FE628	0.5000	0.5000	1.0000
	EPS			
----	VAR UE628	0.0100	0.0143	0.1000
	.			
----	VAR FE629	0.5000	0.5000	1.0000
	-0.4358			
----	VAR UE629	0.0100	0.0100	0.1000
	-21.7913			
----	VAR QC606A	.	0.5000	0.5000
	0.1152			
----	VAR PC606A	870.0000	900.0000	900.0000
	0.0047			
----	VAR PC606D	893.0000	900.0000	900.0000
	0.0168			
----	VAR UE633	0.0100	0.0177	0.1000
	.			
----	VAR PE633	130.0000	145.0000	145.0000
	EPS			
----	VAR UE6XX	0.0100	0.0286	0.1000
	.			
----	VAR PC606C	890.0000	890.0000	910.0000
	-0.0092			
----	VAR FE601	0.5000	0.5000	1.0000
	-0.5014			
----	VAR UE601	0.0080	0.0080	0.0200
	-31.3352			

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR FE603 EPS	0.5000	1.0000	1.0000
---- VAR UE603 3.193293E-8	0.0250	0.0251	0.0360 -
---- VAR FE609A -3.9800	0.5000	0.5000	1.0000
---- VAR UE609A -49.7506	0.0400	0.0400	0.0540
---- VAR HSTME602 EPS	2135.0000	2145.0000	2145.0000
---- VAR UE602 .	0.0100	0.0160	0.0300
---- VAR QC601 0.2417	0.5000	1.0000	1.0000
---- VAR RC601 .	7.5000	9.2210	15.0000
---- VAR UE605 2.6342882E-7 NOPT	0.0400	0.0498	0.0500
---- VAR UE610 EPS	0.0100	0.0898	0.1000
---- VAR UE634 .	0.0100	0.0206	0.1000
---- VAR UE641 EPS	0.0100	0.0873	0.1000
---- VAR UE611 EPS	0.0100	0.1000	0.1000
---- VAR UE612 .	0.0100	0.0130	0.0200
---- VAR UE613 .	0.0150	0.0256	0.0300
---- VAR UE640 EPS	0.0100	0.0100	0.1000
---- VAR UE621A EPS	0.0100	0.1140	0.2000
---- VAR UE627A 2.4579090E-7 NOPT	0.0100	0.0100	0.1000
---- VAR UE616 -15.4299	0.0100	0.0100	0.1000
---- VAR UE617 .	0.0100	0.0526	0.1000
---- VAR UE696A .	0.0100	0.0122	0.1000
---- VAR UE695B .	0.0100	0.0388	0.1000
---- VAR UE626 -0.3961	0.0100	0.0100	0.1000
---- VAR DELTAPE634 0.0033	50.0000	70.0000	70.0000

----	VAR TCWIN	290.0000	290.0000	294.0000
	-0.0248			
----	VAR FE634	0.5000	1.0000	1.0000
	EPS			
----	VAR DELTAPE640	15.0000	20.0000	30.0000
	.			
----	VAR FE640	0.5000	0.7569	1.0000
	EPS			
----	VAR HSTME612	2135.0000	2145.0000	2145.0000
	5.1487996E-6			
----	VAR RC603	1.0000	14.0000	14.0000
	0.0637			
----	VAR QC603	0.5000	0.9904	1.0000
	.			
----	VAR SFC631	0.8000	0.9774	1.0000
	.			

FAC02
 FAC12
 FAC23
 FAC34
 FAC45
 FC308
 FC316
 FC320
 FC322
 FC328
 FC329

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FC403
FC407
FC412
FC417
FHC01
FHC32
FSC402
FSC405
FSC411
FSC413
FSTME612
PC302
PC310
PC601
PC603
QHC07
QHC11
QHC14
QHC16
QHC34
QHC38
QHC41
QHC45
TAC09
TAC12
TAC23
TAC31
TAC34
TAC42
TAC45
TC303
TC306
TC307
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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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GAMS 2.50A Windows NT/95/98

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X7HC33
X7HC34
X7HC38
X7HC40
X7HC41
X7HC45
X7R1
X7R29
X7SC401
X7SC404
X7SC405
X7SC406
X7SC407
X7SC409
X7SC411
X7SC412
X7SC413
X7SC414
X8AC09
X8AC20
X8AC31
X8AC42
X9AC09
X9AC20
X9AC31
X9AC42
XAC02
XAC05
XAC07
XAC09
XAC12
XAC15
XAC18
XAC20
XAC23
XAC26
XAC29
XAC31
XAC34
XAC37
XAC40
XAC42

GAMS 2.50A Windows NT/95/98

XIC10AC09
XIC10AC20
XIC10AC31
XIC10AC42
XIC11AC09
XIC11AC20
XIC11AC31
XIC11AC42
XM1C606D
XM3C606D
XM4C606D
XM5C606D
XM7C606D
XX1C302
XX1C308
XX1C310
XX1C311
XX1C312
XX1C323
XX1C325
XX1C405
XX1C408
XX1C425
XX1C428
XX1C430
XX1C431
XX1HC28
XX1HC29
XX1HC30
XX1HC32
XX1R1
XX1R29
XX1SC406
XX1SC408
XX2HC28
XX2HC29
XX2HC30
XX2R1
XX2R29
XX2SC406
XX2SC408
XX3C302
XX3C308
XX3C310
XX3C311
XX3C312

GAMS 2.50A Windows NT/95/98

XX3C323
XX3C325
XX3C405
XX3C408
XX3C425
XX3C428
XX3C430
XX3C431
XX3C432
XX3HC28
XX3HC29
XX3HC30
XX3HC32
XX3R1
XX3R29
XX3SC406
XX3SC408
XX4C302
XX4C308
XX4C310
XX4C311
XX4C312
XX4C323
XX4C325
XX4C405
XX4C408
XX4C409
XX4C425
XX4C427
XX4C428
XX4C430
XX4C431
XX4C432
XX4HC28
XX4HC29
XX4HC30
XX4HC32
XX4R1
XX4R29
XX4SC406
XX4SC408
XX5C302
XX5C308
XX5C310
XX5C311
XX5C312

GAMS 2.50A Windows NT/95/98

XX5C323
XX5C325
XX5C405
XX5C408
XX5C425
XX5C428
XX5C430
XX5C431
XX5HC28
XX5HC29
XX5HC30
XX5HC32
XX5R1
XX5R29
XX5SC406
XX5SC408
XX6SC406
XX6SC408
XX7C302
XX7C308
XX7C310
XX7C311
XX7C312
XX7C323
XX7C325
XX7C405
XX7C408
XX7C425
XX7C428
XX7C430
XX7C431
XX7HC28
XX7HC29
XX7HC30
XX7HC32
XX7R1
XX7R29
XX7SC406
XX7SC408
Y1HC28
Y1HC29
Y1HC30
Y1HC31
Y1R1
Y1R29
Y2HC28

GAMS 2.50A Windows NT/95/98

Y2HC29
Y2HC30
Y2HC31
Y2R1
Y2R29
Y3HC28
Y3HC29
Y3HC30
Y3HC31
Y3R1
Y3R29
Y4HC28
Y4HC29
Y4HC30
Y4HC31
Y4R1
Y4R29
Y5HC28
Y5HC29
Y5HC30
Y5HC31
Y5R1
Y5R29
Y7HC28
Y7HC29
Y7HC30
Y7HC31
Y7R1
Y7R29
YY1HC28
YY1HC29
YY1HC30
YY1R1
YY1R29
YY2HC28
YY2HC29
YY2HC30
YY2R1
YY2R29
YY3HC28
YY3HC29
YY3HC30
YY3R1
YY3R29
YY4HC28
YY4HC29

GAMS 2.50A Windows NT/95/98

YY4HC30
YY4R1
YY4R29
YY5HC28
YY5HC29
YY5HC30
YY5R1
YY5R29
YY7HC28
YY7HC29
YY7HC30
YY7R1
YY7R29
OBJVAR
SFC632
FE641
FE610
FE611
SFC633
SFC634
UE621B
FE621A
FE621B
UE627B
FE627A
FE627B
HSTME696
UE696B
FE626
FE617
FE616
HSTME695
UE695A
FE628
UE628
FE629
UE629
QC606A
PC606A
PC606D
UE633
PE633
UE6XX
PC606C
FE601
UE601

Objective function using ' ' algorithm

GAMS 2.50A Windows NT/95/98

FE603
UE603
FE609A
UE609A
HSTME602
UE602
QC601
RC601
UE605
UE610
UE634
UE641
UE611
UE612
UE613
UE640
UE621A
UE627A
UE616
UE617
UE696A
UE695B
UE626
DELTAPE634
TCWIN
FE634
DELTAPE640
FE640
HSTME612
RC603
QC603
SFC631

***** REPORT SUMMARY :
5 NONOPT (NOPT)
0 INFEASIBLE
0 UNBOUNDED
0 ERRORS

EXECUTION TIME = 0.220 SECONDS 1.3 Mb WIN-18-097

Parameter Estimation Program
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GAMS 2.50A Windows NT/95/98

USER: Ralph W. Pike G990726:1450AP-WIN
Louisiana State University, Department of Chemical EngineeriDC267

**** FILE SUMMARY

INPUT C:\PROGRAM FILES\GAMSIDE\DO_PARA
OUTPUT C:\PROGRAM FILES\GAMSIDE\DO_PARA.LST
SAVE C:\PROGRAM FILES\GAMSIDE\PUT_DATA.G0?

Appendix H.3 : Economic Optimization Program (Do_econ.lst)

Economic Optimization Program
05/15/01 16:49:39 PAGE 1

GAMS 2.50A Windows NT/95/98

```
2
5
6 SCALARS
7 MW1 / 44.1 /
8 MW2 / 56.1 /
9 MW3 / 58.1 /
10 MW4 / 58.1 /
11 MW5 / 72.1 /
12 MW6 / 72.1 /
13 MW7 / 86.2 /
14 MW8 / 100.2 /
15 MW9 / 114.2 /
16 MW10 / 128.2 /
17 MW11 / 98 /
18 MWiC10 / 142 /
19 MWiC11 / 156 /
20 ;
21
22 SCALARS
23 klav / 120000 /
24 Vr / 87.06 /
25 k1 / 6770 /
26 k2 / 13797000000 /
27 k3 / 4970000000 /
28 k4 / 1929700000 /
29 k5 / 1420300000 /
30 k6 / 5370200000 /
31 k7 / 4290200000 /
32 k8 / 4720300000 /
33 k9 / 1210000 /
34 k10 / 3960000000000000 /
35 k11 / 4010000000000000 /
36 k12 / 19971000 /
37 k13 / 4.02E+16 /
38 k14 / 96770000 /
39 k15 / 8.45E+15 /
40 k16 / 8.006E+16 /
41 k17 / 213740000 /
42 k18 / 3780100000 /
43 k19 / 1.231E+15 /
44 VaC623 / 46.1 /
45 Ha / 0.53 /
46 ;
47 SCALARS
48 AE601 / 81 /
49 AE602 / 365 /
```

GAMS 2.50A Windows NT/95/98

```
50 AE603 / 98 /
51 AE605 / 428 /
52 AE609A / 33 /
53 AE610 / 150.5 /
54 AE611 / 110.55 /
55 AE612 / 263.84 /
56 AE613 / 431.07 /
57 AE616 / 106 /
58 AE617 / 106 /
59 AE621A / 346 /
60 AE626 / 308 /
61 AE627A / 42 /
62 AE628 / 88.7 /
63 AE629 / 743 /
64 AE633 / 284 /
65 AE634 / 3820 /
66 AE640 / 282.42 /
67 AE641 / 133.8 /
68 AE695A / 310 /
69 AE696A / 393 /
70 ContrA / 2.2 /
71 AE6XX / 7360 /
72 AE621B / 115 /
73 AE627B / 41 /
74 AE696B / 131 /
75 AE695B / 103 /
76 ;
77 SCALARS
78 E01MTD / 40.2 /
79 E02MTD / 114.5 /
80 E03MTD / 24.3 /
81 E05MTD / 27.1 /
82 E09MTD / 19.9 /
83 E10MTD / 35.8 /
84 E11MTD / 19.8 /
85 E12MTD / 75.5 /
86 E13MTD / 21.5 /
87 E16MTD / 140.2 /
88 E17MTD / 29.1 /
89 E21MTD / 25.6 /
90 E26MTD / 15.4 /
91 E27MTD / 44.5 /
92 E28MTD / 36.1 /
93 E29MTD / 16.4 /
94 E33MTD / 20.4 /
95 E34MTD / 19.3 /
```

GAMS 2.50A Windows NT/95/98

```

 96 E40MTD / 13.6 /
 97 E41MTD / 15.7 /
 98 E95MTD / 59.2 /
 99 E96MTD / 70.4 /
100 ;
101 SCALARS
102 C06AN / 9 /
103 C06BN / 34 /
104 C06CN / 2 /
105 C06DN / 9 /
106 C03N / 40 /
107 C03M / 21 /
108 C01N / 60 /
109 C01M / 41 /
110 ;
111 SCALARS
112 R / 0.0083144 /
113 H298_1 /-12590 /
114 H298_2 /-64.95 /
115 H298_3 /-16240 /
116 H298_4 /-15130 /
117 H298_5 /-18490 /
118 H298_6 /-17650 /
119 H298_7 / 28980 /
120 H298_8 / 33220 /
121 H298_9 /-26940 /
122 H298_10 /-4454 /
123 b_1 /-14380 /
124 b_2 /-2115 /
125 b_3 /-18460 /
126 b_4 /-17590 /
127 b_5 /-20810 /
128 b_6 /-20090 /
129 b_7 /-542.63 /
130 b_8 /-26770 /
131 b_9 /-30480 /
132 b_10 /-8684 /
133 kK601 / 1.12 /
134 WK601 / 460 /
135 hsteam / 1946.60928 /
136 hwatin / 112 /
137 hsteam397 / 1736 /
138 ;
139 SCALARS
140 C03Kn1 / 1.3 /
141 C03Kn2 / 0.65 /
```

GAMS 2.50A Windows NT/95/98

142	C03Kn3	/ 0.62 /
143	C03Kn4	/ 0.46 /
144	C03Kn5	/ 0.22 /
145	C03Kn6	/ 0.18 /
146	C03Kn7	/ 0.1 /
147	C03Kn8	/ 0.045 /
148	C03Kn9	/ 0.02 /
149	C03Kn10	/ 0.005 /
150	C03Km1	/ 1.75 /
151	C03Km2	/ 0.93 /
152	C03Km3	/ 0.9 /
153	C03Km4	/ 0.7 /
154	C03Km5	/ 0.35 /
155	C03Km6	/ 0.3 /
156	C03Km7	/ 0.18 /
157	C03Km8	/ 0.07 /
158	C03Km9	/ 0.035 /
159	C03Km10	/ 0.012 /
160	C01Kn1	/ 1.8 /
161	C01Kn2	/ 0.75 /
162	C01Kn3	/ 0.8 /
163	C01Kn4	/ 0.6 /
164	C01Kn5	/ 0.26 /
165	C01Kn6	/ 0.22 /
166	C01Kn7	/ 0.09 /
167	C01Kn8	/ 0.04 /
168	C01Kn9	/ 0.018 /
169	C01Kn10	/ 0.005 /
170	C01Km1	/ 2.1 /
171	C01Km2	/ 0.85 /
172	C01Km3	/ 1 /
173	C01Km4	/ 0.7 /
174	C01Km5	/ 0.35 /
175	C01Km6	/ 0.28 /
176	C01Km7	/ 0.15 /
177	C01Km8	/ 0.05 /
178	C01Km9	/ 0.025 /
179	C01Km10	/ 0.008 /
180	K1C616	/ 3.5 /
181	K2C616	/ 1.7 /
182	K3C616	/ 1.4 /
183	K4C616	/ 0.95 /
184	K5C616	/ 0.4 /
185	K6C616	/ 0.3 /
186	K7C616	/ 0.13 /
187	K8C616	/ 0.04 /

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188 K9C616 / 0.015 /
189 K10C616 / 0.0045 /
190 C14K1 / 3.4 /
191 C14K2 / 1.2 /
192 C14K3 / 1.1 /
193 C14K4 / 0.75 /
194 C14K5 / 0.23 /
195 C14K6 / 0.16 /
196 C14K7 / 0.05 /
197 C14K8 / 0.011 /
198 C14K9 / 0.004 /
199 C14K10 / 0.0008 /
200 K1C615 / 2.2 /
201 K2C615 / 1.2 /
202 K3C615 / 1 /
203 K4C615 / 0.7 /
204 K5C615 / 0.3 /
205 K6C615 / 0.25 /
206 K7C615 / 0.13 /
207 K8C615 / 0.045 /
208 K9C615 / 0.02 /
209 K10C615 / 0.006 /
210 RK1 / 5 /
211 RK2 / 2 /
212 RK3 / 1.7 /
213 RK4 / 1.35 /
214 RK5 / 0.41 /
215 RK6 / 0.3 /
216 RK7 / 0.1 /
217 RK8 / 0.03 /
218 RK9 / 0.01 /
219 RK10 / 0.003 /
220 K1M3 / 3.71 /
221 K2M3 / 1.05 /
222 K3M3 / 1.25 /
223 K4M3 / 0.82 /
224 K5M3 / 0.28 /
225 K6M3 / 0.24 /
226 K7M3 / 0.068 /
227 K8M3 / 0.025 /
228 K9M3 / 0.0075 /
229 K10M3 / 0.0025 /
230 C06Am / 0.9 /
231 C06Bm / 1.2 /
232 C06Cm / 1.1 /
233 C06Dm / 2.9 /

GAMS 2.50A Windows NT/95/98

```
234 ;
235 SCALARS
236 AC07dens / 115.37 /
237 AC08dens / 115.37 /
238 AC18dens / 115.05 /
239 AC19dens / 115.05 /
240 AC29dens / 114.6 /
241 AC30dens / 114.6 /
242 AC40dens / 114.3 /
243 AC41dens / 114.3 /
244 HCdens1 / 0.002055 /
245 HCdens2 / 0.002543 /
246 HCdens3 / 0.002301 /
247 HCdens4 / 0.002389 /
248 HCdens5 / 0.002568 /
249 HCdens6 / 0.002589 /
250 HCdens7 / 0.002702 /
251 HCdens8 / 0.00281 /
252 HCdens9 / 0.002902 /
253 HCdens10 / 0.00296 /
254 ;
255 SCALARS
256 wat1 / 1.0861707 /
257 wat2 / 0.000563134 /
258 wat3 / 0.000000834491 /
259 wat4 / 11426.6 /
260 wat5 / 1018240 /
261 ;
262 SCALARS
263 Kdic4 / 0.0007 /
264 Kdic5 / 0.00056 /
265 Kdic6 / 0.00047 /
266 Kdic7 / 0.000407 /
267 Kdic8 / 0.000356 /
268 Kdic9 / 0.000317 /
269 ;
270
271 * The following are the Measured Variables
272 VARIABLES
273 FAC02, FAC12, FAC23, FAC34, FAC45, FC308, FC316, FC320,
274 FC322, FC328, FC329, FC403, FC407, FC412, FC417, FHC01,
275 FHC32, FSC402, FSC405, FSC411, FSC413, FstmE612, PC302, PC310,
276 PC601, PC603, QHC07, QHC11, QHC14, QHC16, QHC34, QHC38,
277 QHC41, QHC45, TAC09, TAC12, TAC23, TAC31, TAC34, TAC42,
278 TAC45, TC303, TC306, TC307, TC308, TC315, TC316, TC317,
279 TC321, TC324, TC325, TC404, TC405, TC407, TC408, TC410,
```

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```
280 TC414, TC418, TC419, THC32, TSC402, TSC403, TSC405, TSC408,
281 TSC413, x11AC12, x11AC23, x11AC34, x11AC45, x1C316, x1C325,
x1C417,
282 x1HC32, x1SC402, x1SC403, x1SC408, x2SC402, x2SC403, x2SC408,
x3C316,
283 x3C325, x3C417, x3HC32, x3SC402, x3SC403, x3SC408, x4C316,
x4C417,
284 x4HC32, x4SC402, x4SC403, x4SC408, x5C316, x5C417, x5HC32,
x5SC402,
285 x5SC403, x5SC408, x6SC402, x6SC403, x6SC408, x7HC32, x7SC402,
x7SC403,
286 x7SC408, xx1C322, xx1C414, xx1HC01, xx2HC01, xx3C317, xx3C322,
xx3C407,
287 xx3C412, xx3C414, xx3HC01, xx4C317, xx4C322, xx4C407, xx4C412,
xx4C414,
288 xx4HC01, xx5C407, xx5C412, xx5C414, xx7C414;
289
290 VARIABLE ObjVar objective or profit function;
291 * The following are the Unmeasured Variables
292 VARIABLES
293 C10pC623, C10pC625, C10pC627, C10pC629, C2C623, C2C625, C2C627,
C2C629,
294 C3C623, C3C625, C3C627, C3C629, C3pC623, C3pC625, C3pC627,
C3pC629,
295 C4pC623, C4pC625, C4pC627, C4pC629, C5pC623, C5pC625, C5pC627,
C5pC629,
296 C7pC623, C7pC625, C7pC627, C7pC629, C8pC623, C8pC625, C8pC627,
C8pC629,
297 C9pC623, C9pC625, C9pC627, C9pC629, CHXC623, CHXC625, CHXC627,
CHXC629,
298 CiC10pC623, CiC10pC625, CiC10pC627, CiC10pC629, CiC11pC623,
CiC11pC625, CiC11pC627, CiC11pC629,
299 CiC4eC623, CiC4eC625, CiC4eC627, CiC4eC629, CiC5eC623, CiC5eC625,
CiC5eC627, CiC5eC629,
300 CiC8eC623, CiC8eC625, CiC8eC627, CiC8eC629, Cost, dTE601, dTE602,
dTE603,
301 dTE605, dTE609A, dTE610, dTE611, dTE612, dTE613, dTE616, dTE617,
302 dTE621A, dTE621B, dTE626, dTE627A, dTE627B, dTE628, dTE629,
dTE633,
303 dTE634, dTE640, dTE641, dTE695A, dTE695B, dTE696A, dTE696B,
dTE6XX,
304 Earnings, f1C601, f1C603, f1C606A, f2C601, f3C601, f3C603,
f3C606A,
305 f4C601, f4C603, f4C606A, f5C601, f5C603, f5C606A, f6C601, f7C601,
306 f7C603, f7C606A, FAC05, FAC07, FAC09, FAC15, FAC18, FAC20,
307 FAC26, FAC29, FAC31, FAC37, FAC40, FAC42, FC301, FC302,
308 FC303, FC306, FC307, FC309, FC310, FC311, FC312, FC315,
309 FC317, FC318, FC319, FC321, FC323, FC324, FC325, FC326,
310 FC401, FC402, FC404, FC405, FC406, FC408, FC409, FC410,
311 FC411, FC413, FC414, FC415, FC418, FC419, FC425, FC426,
312 FC427, FC428, FC430, FC431, FC432, Fcwe603, Fcwe605, Fcwe609A,
```

313 Fcwe611, Fcwe613, Fcwe617, Fcwe621A, Fcwe621B, Fcwe626, Fcwe627A,
Fcwe627B,
314 Fcwe634, Fcwe640, Fcwe641A, Fcwe641B, FHC02, FHC03, FHC04, FHC05,
315 FHC06, FHC07, FHC08, FHC11, FHC14, FHC15, FHC16, FHC22,
316 FHC23, FHC24, FHC25, FHC26, FHC27, FHC28, FHC29, FHC30,
317 FHC31, FHC33, FHC34, FHC38, FHC40, FHC41, FHC45, FlHC28,
318 FlHC29, FlHC30, FlHC31, FlR1, FlR29, FmC302, FmC308, FmC310,
319 FmC311, FmC312, FmC317, FmC322, FmC323, FmC325, FmC405, FmC407,
320 FmC408, FmC409, FmC412, FmC414, FmC425, FmC427, FmC428, FmC430,
321 FmC431, FmC432, FmHC01, FmHC32, FmlHC28, FmlHC29, FmlHC30, FmlR1,
322 FmlR29, FmSC403, FmSC406, FmSC408, FmvHC28, FmvHC29, FmvHC30,
FmvR1,
323 FmvR29, FR1, FR29, FSC401, FSC403, FSC404, FSC406, FSC407,
324 FSC408, FSC409, FSC412, FSC414, FstmE602, FstmE695A, FstmE695B,
FstmE696A,
325 FstmE696B, FvHC28, FvHC29, FvHC30, FvHC31, FvR1, FvR29, h1C601,

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326 h1C603, h1C606A, h2C601, h3C601, h3C603, h3C606A, h4C601, h4C603,
327 h4C606A, h5C601, h5C603, h5C606A, h6C601, h7C601, h7C603,
h7C606A,
328 hAC02, hAC05, hAC07, hAC09, hAC12, hAC15, hAC18, hAC20,
329 hAC23, hAC26, hAC29, hAC31, hAC34, hAC37, hAC40, hAC42,
330 hacAC09, hacAC20, hacAC31, hacAC42, hc301, hc302, hc303, hc306,
331 hc307, hc308, hc309, hc310, hc311, hc312, hc312liq, hc315,
332 hc316, hc317, hc318, hc319, hc321, hc322, hc323, hc324,
333 hc325, hc326, hc329, hc401, hc402, hc403, hc404, hc405,
334 hc406, hc407, hc408, hc408vap, hc409, hc410, hc410vap, hc411,
335 hc412, hc412liq, hc413, hc414, hc414liq, hc415, hc417, hc418,
336 hc419, hc425, hc426, hc427, hc428, hc430, hc431, hc432,
337 hc623, hc625, hc627, hc629, hHC01, hHC02, hHC03, hHC04,
338 hHC05, hHC06, hHC07, hHC11, hHC14, hHC16, hHC29, hHC30,
339 hHC31, hHC32, hHC34, hHC38, hHC41, hHC45, h1HC29, h1HC30,
340 h1HC31, h1R1, h1R29, hR1, hR29, hSC401, hSC402, hSC403,
341 hSC404, hSC405, hSC406, hSC407, hSC408, hSC409, hSC411, hSC412,
342 hSC413, hSC414, hvHC29, hvHC30, hvHC31, hvR1, hvR29, K1C323,
343 K1C325, K1C408, K1C414, K1C428, K1C430, K1C601, K1C603, K1C606A,
344 K1C606C, K1C614B, K1C615_A, K1C616_A, K1E633, K1E6XX, K1SC406,
K1SC408,
345 K2C601, K2E633, K2E6XX, K2SC406, K2SC408, K3C323, K3C325, K3C408,
346 K3C414, K3C428, K3C430, K3C601, K3C603, K3C606A, K3C606C,
K3C614B,
347 K3C615_A, K3C616_A, K3E633, K3E6XX, K3SC406, K3SC408, K4C323,
K4C325,
348 K4C408, K4C414, K4C428, K4C430, K4C601, K4C603, K4C606A, K4C606C,
349 K4C614B, K4C615_A, K4C616_A, K4E633, K4E6XX, K4SC406, K4SC408,
K5C323,
350 K5C325, K5C408, K5C414, K5C428, K5C430, K5C601, K5C603, K5C606A,
351 K5C606C, K5C614B, K5C615_A, K5C616_A, K5E633, K5E6XX, K5SC406,
K5SC408,
352 K6C601, K6SC406, K6SC408, K7C323, K7C325, K7C408, K7C414, K7C428,
353 K7C430, K7C601, K7C603, K7C606A, K7C614B, K7C615_A, K7C616_A,
K7E633,
354 K7E6XX, K7SC406, K7SC408, Kp1C601, Kp1C603, Kp1C606A, Kp1C606D,
Kp2C601,
355 Kp3C601, Kp3C603, Kp3C606A, Kp3C606D, Kp4C601, Kp4C603, Kp4C606A,
Kp4C606D,
356 Kp5C601, Kp5C603, Kp5C606A, Kp5C606D, Kp6C601, Kp7C601, Kp7C603,
Kp7C606A,
357 Kp7C606D, kWad1, kWad2, LpC601, LpC603, LpC606A, PC303, PC306,
358 PC307, PC308, PC309, PC311, PC312, PHC30, PHC32, PR29,
359 Profit, Q2HC07, Q2HC11, Q2HC14, Q2HC16, qFp1C606A, qFp3C606A,
qFp4C606A,
360 qFp5C606A, qFp7C606A, qS1C606A, qS3C606A, qS4C606A, qS5C606A,
qS7C606A, r10C623,
361 r10C625, r10C627, r10C629, r2C623, r2C625, r2C627, r2C629,
r3C623,
362 r3C625, r3C627, r3C629, r4C623, r4C625, r4C627, r4C629, r5C623,
363 r5C625, r5C627, r5C629, r7C623, r7C625, r7C627, r7C629, r8C623,

364 r8C625, r8C627, r8C629, r9C623, r9C625, r9C627, r9C629, rho2HC07,
365 rho2HC11, rho2HC14, rho2HC16, rhoAC09, rhoAC20, rhoAC31, rhoAC42,
riC10C623,
366 riC10C625, riC10C627, riC10C629, riC11C623, riC11C625, riC11C627,
riC11C629, sf1S34,
367 sf2S34, sfS11, sfS19, sfS2, sfS23, sfS27, sfS41, sfS42,
368 sfS5, sfS7, SmlC601, SmlC603, SmlC606A, SmlC606D, Sm2C601,
Sm3C601,
369 Sm3C603, Sm3C606A, Sm3C606D, Sm4C601, Sm4C603, Sm4C606A,
Sm4C606D, Sm5C601,
370 Sm5C603, Sm5C606A, Sm5C606D, Sm6C601, Sm7C601, Sm7C603, Sm7C606A,
Sm7C606D,
371 Sn1C601, Sn1C603, Sn1C606A, Sn2C601, Sn3C601, Sn3C603, Sn3C606A,
Sn4C601,

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372 Sn4C603, Sn4C606A, Sn5C601, Sn5C603, Sn5C606A, Sn6C601, Sn7C601,
Sn7C603,
373 Sn7C606A, TAC02, TAC05, TAC07, TAC15, TAC18, TAC20, TAC26,
374 TAC29, TAC37, TAC40, TC301, TC302, TC309, TC310, TC311,
375 TC312, TC318, TC319, TC320, TC322, TC323, TC326, TC328,
376 TC329, TC401, TC402, TC403, TC406, TC409, TC411, TC412,
377 TC413, TC415, TC417, TC425, TC426, TC427, TC428, TC430,
378 TC431, TC432, TcwotE609A, TcwotE621A, TcwotE621B, TcwotE627A,
TcwotE627B, TcwotE641A,
379 TcwotE641B, TcwoutE603, TcwoutE605, TcwoutE611, TcwoutE613,
TcwoutE617, TcwoutE626, TcwoutE634,
380 TcwoutE640, THC01, THC02, THC03, THC04, THC05, THC06, THC07,
381 THC11, THC14, THC16, THC22, THC23, THC24, THC25, THC26,
382 THC27, THC28, THC29, THC30, THC31, THC34, THC38, THC41,
383 THC45, TmC601, TmC603, TmC606A, TmC606D, TmK601, TnC601, TnC603,
384 TnC606A, TR1, TR29, TSC401, TSC404, TSC406, TSC407, TSC409,
385 TSC411, TSC412, TSC414, Utilities, VFC614B, VFC615, VFC616, VFM3,
386 VpC601, VpC603, VpC606A, x10AC09, x10AC20, x10AC31, x10AC42,
x11AC02,
387 x11AC05, x11AC07, x11AC09, x11AC15, x11AC18, x11AC20, x11AC26,
x11AC29,
388 x11AC31, x11AC37, x11AC40, x11AC42, x12AC02, x12AC05, x12AC07,
x12AC09,
389 x12AC12, x12AC15, x12AC18, x12AC20, x12AC23, x12AC26, x12AC29,
x12AC31,
390 x12AC34, x12AC37, x12AC40, x12AC42, x12AC45, x1AC09, x1AC20,
x1AC31,
391 x1AC42, x1C301, x1C302, x1C303, x1C306, x1C307, x1C308, x1C309,
392 x1C310, x1C311, x1C312, x1C315, x1C317, x1C318, x1C319, x1C320,
393 x1C321, x1C322, x1C323, x1C324, x1C326, x1C328, x1C329, x1C401,
394 x1C402, x1C403, x1C404, x1C405, x1C406, x1C407, x1C408, x1C409,
395 x1C410, x1C411, x1C412, x1C413, x1C414, x1C415, x1C418, x1C419,
396 x1C425, x1C426, x1C427, x1C428, x1C430, x1C431, x1C432, x1HC01,
397 x1HC02, x1HC03, x1HC04, x1HC05, x1HC06, x1HC07, x1HC08, x1HC11,
398 x1HC14, x1HC15, x1HC16, x1HC22, x1HC23, x1HC24, x1HC25, x1HC26,
399 x1HC27, x1HC28, x1HC29, x1HC30, x1HC31, x1HC33, x1HC34, x1HC38,
400 x1HC40, x1HC41, x1HC45, x1R1, x1R29, x1SC401, x1SC404, x1SC405,
401 x1SC406, x1SC407, x1SC409, x1SC411, x1SC412, x1SC413, x1SC414,
x2AC09,
402 x2AC20, x2AC31, x2AC42, x2C301, x2C417, x2C418, x2C419, x2HC01,
403 x2HC02, x2HC03, x2HC04, x2HC05, x2HC06, x2HC07, x2HC08, x2HC11,
404 x2HC14, x2HC15, x2HC16, x2HC22, x2HC23, x2HC24, x2HC25, x2HC26,
405 x2HC27, x2HC28, x2HC29, x2HC30, x2HC31, x2R1, x2R29, x2SC401,
406 x2SC404, x2SC405, x2SC406, x2SC407, x2SC409, x2SC411, x2SC412,
x2SC413,
407 x2SC414, x3AC09, x3AC20, x3AC31, x3AC42, x3C301, x3C302, x3C303,
408 x3C306, x3C307, x3C308, x3C309, x3C310, x3C311, x3C312, x3C315,
409 x3C317, x3C318, x3C319, x3C320, x3C321, x3C322, x3C323, x3C324,
410 x3C326, x3C328, x3C329, x3C401, x3C402, x3C403, x3C404, x3C405,
411 x3C406, x3C407, x3C408, x3C409, x3C410, x3C411, x3C412, x3C413,
412 x3C414, x3C415, x3C418, x3C419, x3C425, x3C426, x3C427, x3C428,

413 x3C430, x3C431, x3C432, x3HC01, x3HC02, x3HC03, x3HC04, x3HC05,
414 x3HC06, x3HC07, x3HC08, x3HC11, x3HC14, x3HC15, x3HC16, x3HC22,
415 x3HC23, x3HC24, x3HC25, x3HC26, x3HC27, x3HC28, x3HC29, x3HC30,
416 x3HC31, x3HC33, x3HC34, x3HC38, x3HC40, x3HC41, x3HC45, x3R1,
417 x3R29, x3SC401, x3SC404, x3SC405, x3SC406, x3SC407, x3SC409,
x3SC411,

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418 x3SC412, x3SC413, x3SC414, x4AC09, x4AC20, x4AC31, x4AC42,
x4C301,
419 x4C302, x4C303, x4C306, x4C307, x4C308, x4C309, x4C310, x4C311,
420 x4C312, x4C315, x4C317, x4C318, x4C319, x4C320, x4C321, x4C322,
421 x4C323, x4C324, x4C325, x4C326, x4C328, x4C329, x4C401, x4C402,
422 x4C403, x4C404, x4C405, x4C406, x4C407, x4C408, x4C409, x4C410,
423 x4C411, x4C412, x4C413, x4C414, x4C415, x4C418, x4C419, x4C425,
424 x4C426, x4C427, x4C428, x4C430, x4C431, x4C432, x4HC01, x4HC02,
425 x4HC03, x4HC04, x4HC05, x4HC06, x4HC07, x4HC08, x4HC11, x4HC14,
426 x4HC15, x4HC16, x4HC22, x4HC23, x4HC24, x4HC25, x4HC26, x4HC27,
427 x4HC28, x4HC29, x4HC30, x4HC31, x4HC33, x4HC34, x4HC38, x4HC40,
428 x4HC41, x4HC45, x4R1, x4R29, x4SC401, x4SC404, x4SC405, x4SC406,
429 x4SC407, x4SC409, x4SC411, x4SC412, x4SC413, x4SC414, x5AC09,
x5AC20,
430 x5AC31, x5AC42, x5C301, x5C302, x5C303, x5C306, x5C307, x5C308,
431 x5C309, x5C310, x5C311, x5C312, x5C315, x5C317, x5C318, x5C319,
432 x5C320, x5C321, x5C322, x5C323, x5C324, x5C325, x5C326, x5C328,
433 x5C329, x5C401, x5C402, x5C403, x5C404, x5C405, x5C406, x5C407,
434 x5C408, x5C409, x5C410, x5C411, x5C412, x5C413, x5C414, x5C415,
435 x5C418, x5C419, x5C425, x5C426, x5C427, x5C428, x5C430, x5C431,
436 x5C432, x5HC01, x5HC02, x5HC03, x5HC04, x5HC05, x5HC06, x5HC07,
437 x5HC08, x5HC11, x5HC14, x5HC15, x5HC16, x5HC22, x5HC23, x5HC24,
438 x5HC25, x5HC26, x5HC27, x5HC28, x5HC29, x5HC30, x5HC31, x5HC33,
439 x5HC34, x5HC38, x5HC40, x5HC41, x5HC45, x5R1, x5R29, x5SC401,
440 x5SC404, x5SC405, x5SC406, x5SC407, x5SC409, x5SC411, x5SC412,
x5SC413,
441 x5SC414, x6SC401, x6SC404, x6SC405, x6SC406, x6SC407, x6SC409,
x6SC411,
442 x6SC412, x6SC413, x6SC414, x7AC09, x7AC20, x7AC31, x7AC42,
x7C301,
443 x7C302, x7C303, x7C306, x7C307, x7C308, x7C309, x7C310, x7C311,
444 x7C312, x7C315, x7C316, x7C317, x7C318, x7C319, x7C320, x7C321,
445 x7C322, x7C323, x7C324, x7C325, x7C326, x7C328, x7C329, x7C401,
446 x7C402, x7C403, x7C404, x7C405, x7C406, x7C407, x7C408, x7C409,
447 x7C410, x7C411, x7C412, x7C413, x7C414, x7C415, x7C417, x7C418,
448 x7C419, x7C425, x7C426, x7C427, x7C428, x7C430, x7C431, x7C432,
449 x7HC01, x7HC02, x7HC03, x7HC04, x7HC05, x7HC06, x7HC07, x7HC08,
450 x7HC11, x7HC14, x7HC15, x7HC16, x7HC22, x7HC23, x7HC24, x7HC25,
451 x7HC26, x7HC27, x7HC28, x7HC29, x7HC30, x7HC31, x7HC33, x7HC34,
452 x7HC38, x7HC40, x7HC41, x7HC45, x7R1, x7R29, x7SC401, x7SC404,
453 x7SC405, x7SC406, x7SC407, x7SC409, x7SC411, x7SC412, x7SC413,
x7SC414,
454 x8AC09, x8AC20, x8AC31, x8AC42, x9AC09, x9AC20, x9AC31, x9AC42,
455 xAC02, xAC05, xAC07, xAC09, xAC12, xAC15, xAC18, xAC20,
456 xAC23, xAC26, xAC29, xAC31, xAC34, xAC37, xAC40, xAC42,
457 xiC10AC09, xiC10AC20, xiC10AC31, xiC10AC42, xiC11AC09, xiC11AC20,
xiC11AC31, xiC11AC42,
458 xM1C606D, xM3C606D, xM4C606D, xM5C606D, xM7C606D, xx1C302,
xx1C308, xx1C310,
459 xx1C311, xx1C312, xx1C323, xx1C325, xx1C405, xx1C408, xx1C425,
xx1C428,

460 xx1C430, xx1C431, xx1HC28, xx1HC29, xx1HC30, xx1HC32, xx1R1,
xx1R29,
461 xx1SC406, xx1SC408, xx2HC28, xx2HC29, xx2HC30, xx2R1, xx2R29,
xx2SC406,
462 xx2SC408, xx3C302, xx3C308, xx3C310, xx3C311, xx3C312, xx3C323,
xx3C325,
463 xx3C405, xx3C408, xx3C425, xx3C428, xx3C430, xx3C431, xx3C432,
xx3HC28,

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464 xx3HC29, xx3HC30, xx3HC32, xx3R1, xx3R29, xx3SC406, xx3SC408,
xx4C302,
465 xx4C308, xx4C310, xx4C311, xx4C312, xx4C323, xx4C325, xx4C405,
xx4C408,
466 xx4C409, xx4C425, xx4C427, xx4C428, xx4C430, xx4C431, xx4C432,
xx4HC28,
467 xx4HC29, xx4HC30, xx4HC32, xx4R1, xx4R29, xx4SC406, xx4SC408,
xx5C302,
468 xx5C308, xx5C310, xx5C311, xx5C312, xx5C323, xx5C325, xx5C405,
xx5C408,
469 xx5C425, xx5C428, xx5C430, xx5C431, xx5HC28, xx5HC29, xx5HC30,
xx5HC32,
470 xx5R1, xx5R29, xx5SC406, xx5SC408, xx6SC406, xx6SC408, xx7C302,
xx7C308,
471 xx7C310, xx7C311, xx7C312, xx7C323, xx7C325, xx7C405, xx7C408,
xx7C425,
472 xx7C428, xx7C430, xx7C431, xx7HC28, xx7HC29, xx7HC30, xx7HC32,
xx7R1,
473 xx7R29, xx7SC406, xx7SC408, y1HC28, y1HC29, y1HC30, y1HC31, y1R1,
474 y1R29, y2HC28, y2HC29, y2HC30, y2HC31, y2R1, y2R29, y3HC28,
475 y3HC29, y3HC30, y3HC31, y3R1, y3R29, y4HC28, y4HC29, y4HC30,
476 y4HC31, y4R1, y4R29, y5HC28, y5HC29, y5HC30, y5HC31, y5R1,
477 y5R29, y7HC28, y7HC29, y7HC30, y7HC31, y7R1, y7R29, yy1HC28,
478 yy1HC29, yy1HC30, yy1R1, yy1R29, yy2HC28, yy2HC29, yy2HC30,
yy2R1,
479 yy2R29, yy3HC28, yy3HC29, yy3HC30, yy3R1, yy3R29, yy4HC28,
yy4HC29,
480 yy4HC30, yy4R1, yy4R29, yy5HC28, yy5HC29, yy5HC30, yy5R1, yy5R29,
481 yy7HC28, yy7HC29, yy7HC30, yy7R1, yy7R29;
482
483 * The following are the Parameters in the Model
484 SCALARS
485 deltaPE634 / 70 /
486 deltaPE640 / 20 /
487 FE601 / 0.5 /
488 FE603 / 1 /
489 FE609A / 0.5 /
490 FE610 / 0.93398 /
491 FE611 / 0.52182 /
492 FE616 / 0.5 /
493 FE617 / 1 /
494 FE621A / 0.73974 /
495 FE621B / 1 /
496 FE626 / 0.5 /
497 FE627A / 0.50163 /
498 FE627B / 0.52572 /
499 FE628 / 0.5 /
500 FE629 / 0.5 /
501 FE634 / 1 /
502 FE640 / 0.75692 /
503 FE641 / 0.5 /

504	hstmE602	/ 2145 /
505	hstmE612	/ 2145 /
506	hstmE695	/ 1920 /
507	hstmE696	/ 2145 /
508	PC606A	/ 900 /
509	PC606C	/ 890 /

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510 PC606D      / 900 /
511 PE633       / 145 /
512 qC601       / 1 /
513 qC603       / 0.99037 /
514 qC606A      / 0.5 /
515 RC601       / 9.22101 /
516 RC603       / 14 /
517 sfC631      / 0.97742 /
518 sfC632      / 0.9815 /
519 sfC633      / 0.99131 /
520 sfC634      / 0.98926 /
521 Tcwin       / 290 /
522 UE601       / 0.008 /
523 UE602       / 0.01596 /
524 UE603       / 0.02513 /
525 UE605       / 0.04982 /
526 UE609A      / 0.04 /
527 UE610       / 0.08981 /
528 UE611       / 0.1 /
529 UE612       / 0.013 /
530 UE613       / 0.02563 /
531 UE616       / 0.01 /
532 UE617       / 0.05255 /
533 UE621A      / 0.114 /
534 UE621B      / 0.07589 /
535 UE626       / 0.01 /
536 UE627A      / 0.01 /
537 UE627B      / 0.01 /
538 UE628       / 0.01435 /
539 UE629       / 0.01 /
540 UE633       / 0.0177 /
541 UE634       / 0.02059 /
542 UE640       / 0.01 /
543 UE641       / 0.08735 /
544 UE695A      / 0.03291 /
545 UE695B      / 0.03883 /
546 UE696A      / 0.01216 /
547 UE696B      / 0.01 /
548 UE6XX       / 0.02855 /
549 ;
550
551 VARIABLES
552 ObjVar Objective function using ' ' algorithm;
553
554 SETS
555 Coeff /a1,a2,a3,a4,a5/
```

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```

556 Comp /1, 2, 3, 4, 5, 6, 7, 8, 9, 10/
557 ;
558 TABLE Enth_Coe(Comp,Coeff)
559          a1          a2          a3          a4
560 1          4.211          1.716e-03          7.062e-05          -
9.196e-08
561 2          4.4267          6.6394e-03          6.8065e-05          -
9.2875e-08
562 3          4.455          8.261e-03          8.299e-05          -
1.146e-07
563 4          6.147          1.559e-04          9.679e-05          -
1.255e-07
564 5          1.083          4.457e-02          8.239e-06          -
3.526e-08
565 6          1.898          4.12e-02          1.231e-05          -
3.659e-08
566 7          8.763          2.162e-03          1.317e-04          -
1.738e-07
567 8          1.115e01          -9.494e-03          1.956e-04          -
2.498e-07
568 9          8.157e-01          7.326e-02          1.783e-05          -
6.936e-08
569 10         2.876          7.579e-02          1.346e-05          -
6.409e-08
570 +          a5
571 1          3.644e-11
572 2          3.7347e-11
573 3          4.646e-11
574 4          4.978e-11
575 5          1.579e-11
576 6          1.504e-11
577 7          6.925e-11
578 8          9.489e-11
579 9          3.216e-11
580 10         2.869e-11
581 TABLE Enth_Form(Comp,Coeff)
582          a1          a2          a3
583 1          -80.697          -9.05e-02          4.2104e-05
584 2          21.822          -8.5458e-02          3.8902e-05
585 3          -106.746          -1.0929e-01          5.2693e-05
586 4          -98.186          -1.0974e-01          5.2254e-05
587 5          -121.118          -1.3184e-01          6.5174e-05
588 6          -113.399          -1.3001e-01          6.2902e-05
589 7          -137.114          -1.4707e-01          7.2785e-05
590 8          -151.825          -1.7028e-01          8.4061e-05
591 9          -167.368          -1.9025e-01          9.4496e-05
592 10         -184.627          -2.0407e-01          1.0198e-04
593 TABLE Enth_gas(Comp,Coeff)
594          a1          a2          a3          a4
595 1          28.277          1.16e-01          1.9597e-04          -
2.3271e-07
    
```

596 2	30.11	1.71e-01	1.01e-04	-
1.812e-07				
597 3	6.772	3.4147e-01	-1.0271e-04	-
3.685e-08				
598 4	20.056	2.815e-01	-1.314e-05	-
9.4571e-08				
599 5	-0.881	4.75e-01	-2.479e-04	
6.751e-08				
600 6	26.671	3.234e-01	4.282e-05	-
1.664e-07				
601 7	-7.197	6.009e-01	-3.409e-04	
9.521e-08				

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602	8	-3.249	6.663e-01	-3.383e-04	
6.0489e-08					
603	9	-3.367	7.5824e-01	-3.8216e-04	
5.736e-08					
604	10	51.299	5.356e-01	1.696e-04	-
4.023e-07					
605	+	a5			
606	1	6.867e-11			
607	2	5.732e-11			
608	3	2.043e-11			
609	4	3.415e-11			
610	5	-8.534e-12			
611	6	5.604e-11			
612	7	-1.029e-11			
613	8	2.5385e-12			
614	9	8.0178e-12			
615	10	1.3567e-10			
616	TABLE Enth_liq(Comp,Coeff)				
617		a1	a2	a3	a4
618	1	59.642	3.283e-1	-1.5377e-03	
3.6539e-06					
619	2	50	5.1e-01	-2.02e-03	
2.56e-06					
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4.0634e-06					
621	4	62.873	5.8913e-01	-2.3558e-03	
4.2257e-06					
622	5	91.474	4.4852e-01	-1.6859e-03	
3.1342e-06					
623	6	80.641	6.2195e-01	-2.2682e-03	
3.7423e-06					
624	7	110.129	5.0521e-01	-1.7675e-03	
3.066e-06					
625	8	118.184	7.1284e-01	-2.3129e-03	
3.4493e-06					
626	9	134.965	8.1458e-01	-2.5182e-03	
3.5416e-06					
627	10	129.481	1.1045	-3.2083e-03	
4.0849e-06					
628	TABLE Enth_Vap(Comp,Coeff)				
629		a1	a2	a3	
630	1	26.89	369.82	0.365	
631	2	33.39	419.59	0.393	
632	3	31.954	408.14	0.392	
633	4	33.02	425.18	0.377	
634	5	37.692	460.43	0.395	
635	6	39.854	469.65	0.398	
636	7	42.78	497.5	0.384	
637	8	49.917	530.37	0.408	
638	9	59.503	559.64	0.481	
639	10	59.521	586.75	0.397	

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641 EQUATIONS
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895 EQU1513, EQU1514, EQU1515, EQU1516, EQU1517, EQU1518,
896 EQU1519, EQU1520, EQU1521, EQU1522, EQU1523, EQU1524,
897 EQU1525, EQU1526, EQU1527, EQU1528, EQU1529, EQU1530,
898 EQU1531, EQU1532, EQU1533, EQU1534, EQU1535, EQU1536,
899 EQU1537, EQU1538, EQU1539, EQU1540, EQU1541, EQU1542,
900 EQU1543, EQU1544, EQU1545, EQU1546, EQU1547, EQU1548,
901 EQU1549, EQU1550, EQU1551, EQU1552, EQU1553, EQU1554,
902 EQU1555, EQU1556, EQU1557, EQU1558, EQU1559, EQU1560,
903 EQU1561, EQU1562, EQU1563, EQU1564, EQU1565, EQU1566,
904 EQU1567, EQU1568, EQU1569, EQU1570, EQU1571, EQU1572,
905 EQU1573, EQU1574, EQU1575, EQU1576, EQU1577, EQU1578,
906 EQU1579,
907 INEQU1, INEQU2, INEQU3, INEQU4, INEQU5, INEQU6,
908 INEQU7, INEQU8, INEQU9, INEQU10, INEQU11, INEQU12,
909 INEQU13, INEQU14, INEQU15, INEQU16, INEQU17, INEQU18,
910 INEQU19, INEQU20, INEQU21, INEQU22, INEQU23, INEQU24,
911 INEQU25, INEQU26, INEQU27, INEQU28, INEQU29, INEQU30,
912 INEQU31, INEQU32, INEQU33, INEQU34, INEQU35, INEQU36,
913 INEQU37, INEQU38, INEQU39, INEQU40, INEQU41, INEQU42,
914 INEQU43, INEQU44, INEQU45, INEQU46, INEQU47, INEQU48,
915 INEQU49, INEQU50, ObjName;
916
917 ObjName..ObjVar=E=
918 Profit;
919
920 EQU1..x7C308 - x7C309 =e= 0;
921 EQU2..x3C308 - x3C309 =e= 0;
922 EQU3..TC317 - TC323 =e= 0;
923 EQU4..RC603*FC328 - FC329 =e= 0;
```

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```
924 EQU5..FC323 - FC324 =e= 0;
925 EQU6..x1C323 - x1C324 =e= 0;
926 EQU7..x3C323 - x3C324 =e= 0;
927 EQU8..x4C323 - x4C324 =e= 0;
928 EQU9..x5C323 - x5C324 =e= 0;
929 EQU10..hHC03 - FHC03 * ((x1HC03/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC03,ORD(Coeff))))
930 +(x2HC03/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC03,ORD(Coeff))))
931 +(x3HC03/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC03,ORD(Coeff))))
932 +(x4HC03/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC03,ORD(Coeff))))
933 +(x5HC03/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC03,ORD(Coeff))))
934 +(x7HC03/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC03,ORD(Coeff)))) =e= 0;
935 EQU11..x1HC03 + x2HC03 + x3HC03 + x4HC03 + x5HC03 + x7HC03 =e= 1;
936 EQU12..FC319 * sf2S34 - FC321 =e= 0;
937 EQU13..x7C306 - x7C307 =e= 0;
938 EQU14..kWad1+KWad2 =e= WK601;
939 EQU15..TmK601 *FC306 =e= FC303*(TC303*(PC310/PC303)**((kK601-
1)/kK601)) + FC310*TC310;
940 EQU16..TC306 =e= TmK601*(PC306/PC310)**((kK601-1)/kK601);
941 EQU17..x3C306 - x3C307 =e= 0;
942 EQU18..PC307=e=PC306-deltaPE634;
943 EQU19..dTE634**3 =e= ((TC306-TcwoutE634)*(TC307-Tcwin)*
944 ((TC306-TcwoutE634)+(TC307-Tcwin))/2);
945 EQU20..xx1C312 + xx3C312 + xx4C312 + xx5C312 + xx7C312 =e= 1;
946 EQU21..K3C615_A * xx3C308 - xx3C312 =e= 0;
947 EQU22..FC312 =e= VFC615*FC307;
948 EQU23..(hC308 - hC309) - UE640*AE640*FE640*dTE640 =e= 0;
949 EQU24..x4C308 - x4C309 =e= 0;
950 EQU25..x5C308 - x5C309 =e= 0;
951 EQU26..TC310 - TC311=e= 0;
952 EQU27..K4C616_A=e=0.13332*EXP(15.6782-2154.90/(TC310-
34.42))/PC310;
953 EQU28..PC310 -PC311 =e= 0;
954 EQU29..K5C616_A=e=0.13332*EXP(15.5338-2348.67/(TC310-
40.05))/PC310;
955 EQU30..K7C616_A=e=0.13332*EXP(15.7588-2633.90/(TC310-
46.30))/PC310;
956 EQU31..PC307 - PC312 =e= 0;
957 EQU32..PC307 - PC308 =e= 0;
958 EQU33..x7C317 - x7C323 =e= 0;
959 EQU34..LpC603=e=FC329 + qC603*FC316;
960 EQU35..VpC603=e=LpC603 - FC317;
961 EQU36..TnC603=e=(TC325+TC316)/2;
962 EQU37..x1C326 - x1C329 =e= 0;
963 EQU38..x3C326 - x3C329 =e= 0;
964 EQU39..x4C326 - x4C329 =e= 0;
```

965 EQU40..x5C326 - x5C329 =e= 0;
966 EQU41..x7C326 -x7C329 =e= 0;
967 EQU42..x1C403 + x3C403 + x4C403 + x5C403 + x7C403 =e= 1;
968 EQU43..x1C404 + x3C404 + x4C404 + x5C404 + x7C404 =e= 1;
969 EQU44..x1C405 + x3C405 + x4C405 + x5C405 + x7C405 =e= 1;

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```
970 EQU45..x1C406 + x3C406 + x4C406 + x5C406 + x7C406 =e= 1;
971 EQU46..x1C407 + x3C407 + x4C407 + x5C407 + x7C407 =e= 1;
972 EQU47..x1C408 + x3C408 + x4C408 + x5C408 + x7C408 =e= 1;
973 EQU48..x1C409 + x3C409 + x4C409 + x5C409 + x7C409 =e= 1;
974 EQU49..x1C410 + x3C410 + x4C410 + x5C410 + x7C410 =e= 1;
975 EQU50..x1C411 + x3C411 + x4C411 + x5C411 + x7C411 =e= 1;
976 EQU51..x1C412 + x3C412 + x4C412 + x5C412 + x7C412 =e= 1;
977 EQU52..x1C413 + x3C413 + x4C413 + x5C413 + x7C413 =e= 1;
978 EQU53..x1C414 + x3C414 + x4C414 + x5C414 + x7C414 =e= 1;
979 EQU54..x1C415 + x3C415 + x4C415 + x5C415 + x7C415 =e= 1;
980 EQU55..x1C417+ x3C417 + x4C417 + x5C417 + x7C417 =e= 1;
981 EQU56..x1C418 + x2C418 + x3C418 + x4C418 + x5C418 + x7C418 =e= 1;
982 EQU57..x1C419 + x2C419 + x3C419 + x4C419 + x5C419 + x7C419 =e= 1;
983 EQU58..x1C303 + x3C303 + x4C303 + x5C303 + x7C303 =e= 1;
984 EQU59..x1C306 + x3C306 + x4C306 + x5C306 + x7C306 =e= 1;
985 EQU60..x1C307 + x3C307 + x4C307 + x5C307 + x7C307 =e= 1;
986 EQU61..x1C308 + x3C308 + x4C308 +x5C308 + x7C308=e= 1;
987 EQU62..x1C309 + x3C309 + x4C309 + x5C309 + x7C309 =e= 1;
988 EQU63..x1C310 + x3C310 + x4C310 + x5C310 + x7C310 =e= 1;
989 EQU64..x1C311 + x3C311 + x4C311 + x5C311 + x7C311 =e= 1;
990 EQU65..x1C312 + x3C312 + x4C312 + x5C312 + x7C312 =e= 1;
991 EQU66..x1C315 + x3C315 + x4C315 + x5C315 + x7C315 =e= 1;
992 EQU67..x1C316 + x3C316 + x4C316 + x5C316 + x7C316 =e= 1;
993 EQU68..x1C317 + x3C317 + x4C317 + x5C317 + x7C317 =e= 1;
994 EQU69..x1C318 + x3C318 + x4C318 + x5C318 + x7C318 =e= 1;
995 EQU70..x1C319 + x3C319 + x4C319 + x5C319 + x7C319 =e= 1;
996 EQU71..x1C320 + x3C320 + x4C320 + x5C320 + x7C320 =e= 1;
997 EQU72..x1C321 + x3C321 + x4C321 + x5C321 + x7C321 =e= 1;
998 EQU73..x1C322 + x3C322 + x4C322 + x5C322 + x7C322 =e= 1;
999 EQU74..x1C323 + x3C323 + x4C323 + x5C323 + x7C323 =e= 1;
1000 EQU75..x1C324 + x3C324 + x4C324 + x5C324 + x7C324 =e= 1;
1001 EQU76..(hc406 - hc407) - Fcwe617*4.197*(TcwoutE617 - Tcwin) =e=
0;
1002 EQU77..(hc406 - hc407) - UE617*AE617*FE617*dTE617 =e= 0;
1003 EQU78..(hc405 - hc406) - (hc404 - hc403) =e= 0;
1004 EQU79..(hc405 - hc406) - UE616*AE616*dTE616*FE616 =e= 0;
1005 EQU80..(hc408vap - hc408) - FstmE695A * hstmE695 =e= 0;
1006 EQU81..(hc408vap - hc408) - UE695A*AE695A*dTE695A =e= 0;
1007 EQU82..(hc410vap - hc410) - FstmE696A * hstmE696 =e= 0;
1008 EQU83..(hc410vap - hc410) - UE696A*AE696A*dTE696A =e= 0;
1009 EQU84..(hc412 - hc412liq) - Fcwe627A*4.197*(TcwotE627A - Tcwin)
=e= 0;
1010 EQU85..(hc412 - hc412liq) - UE627A*FE627A*AE627A*dTE627A =e= 0;
1011 EQU86..(hc414 - hc414liq) - Fcwe621A*4.197*(TcwotE621A - Tcwin)
=e= 0;
1012 EQU87..(hc414 - hc414liq) - UE621A*FE621A*AE621A*dTE621A =e= 0;
1013 EQU88..(hc418 - hc419) - Fcwe626*4.197*(TcwoutE626 - Tcwin) =e=
0;
1014 EQU89..(hc418 - hc419) - UE626*AE626*FE626*dTE626 =e= 0;
1015 EQU90..FC306 - FC307 =e= 0;
```

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```
1016 EQU91..x1C306 - x1C307 =e= 0;
1017 EQU92..FC414 - FC415 =e= 0;
1018 EQU93..x1C414 - x1C415 =e= 0;
1019 EQU94..x3C414 - x3C415 =e= 0;
1020 EQU95..x4C414 - x4C415 =e= 0;
1021 EQU96..x5C414 - x5C415 =e= 0;
1022 EQU97..FC418 - FC419 =e= 0;
1023 EQU98..x1C418 - x1C419 =e= 0;
1024 EQU99..x3C418 - x3C419 =e= 0;
1025 EQU100..x4C418 - x4C419 =e= 0;
1026 EQU101..x5C418 - x5C419 =e= 0;
1027 EQU102..hC431 - FC431*
1028 ((x3C431/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC431,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TC431/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1029 +(x4C431/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TC431/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1030 +(x5C431/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *

((1-TC431/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1031 +(x7C431/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC431,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *

((1-TC431/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1032 EQU103..hC412 - FC412 *
1033 ((x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TC412/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1034 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TC412/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1035 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *

((1-TC412/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1036 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *

((1-TC412/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1037 EQU104..TmC603=e=(TC317+TC316)/2;
1038 EQU105..K1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TnC603-
5.261*LOG10(TnC603)+3.282E-11*TnC603+3.7349E-6*TnC603**2);
1039 EQU106..Kp1C603*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TmC603-
5.261*LOG10(TmC603)+3.282E-11*TmC603+3.7349E-6*TmC603**2);
```

```

1040 EQU107..K3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TnC603-
8.806*LOG10(TnC603)+8.9246E-11*TnC603+5.7501E-6*TnC603**2);
1041 EQU108..Kp3C603*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TmC603-
8.806*LOG10(TmC603)+8.9246E-11*TmC603+5.7501E-6*TmC603**2);
1042 EQU109..K4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TnC603-
7.1805*LOG10(TnC603)-6.6845E-11*TnC603+4.219E-6*TnC603**2);
1043 EQU110..Kp4C603*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TmC603-
7.1805*LOG10(TmC603)-6.6845E-11*TmC603+4.219E-6*TmC603**2);
1044 EQU111..K5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TnC603-
7.883*LOG10(TnC603)-4.6512E-11*TnC603+3.8997E-6*TnC603**2);
1045 EQU112..Kp5C603*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TmC603-
7.883*LOG10(TmC603)-4.6512E-11*TmC603+3.8997E-6*TmC603**2);
1046 EQU113..K7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TnC603-
9.042*LOG10(TnC603)-1.371E-12*TnC603+3.634E-6*TnC603**2);
1047 EQU114..Kp7C603*PC603 =e= 0.1333*10**(33.0162-2.583E3/TmC603-
9.042*LOG10(TmC603)-1.371E-12*TmC603+3.634E-6*TmC603**2);
1048 EQU115..Sn1C603 *FC329 =e= K1C603*FC325;
1049 EQU116..Sm1C603*LpC603=e= Kp1C603*VpC603;
1050 EQU117..Sn3C603 *FC329 =e= K3C603*FC325;
1051 EQU118..Sm3C603*LpC603=e= Kp3C603*VpC603;
1052 EQU119..Sn4C603 *FC329 =e= K4C603*FC325;
1053 EQU120..(hc306 - hc307) - FcwE634*4.197*(TcwoutE634 - Tcwin) =e=
0;

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```
1054 EQU121..(hC306 - hC307) - UE634*AE634*FE634*dTE634 =e= 0;
1055 EQU122..(hC312liq - hC315) - FcweE641B*4.197*(TcwotE641B - Tcwin)
=e= 0;
1056 EQU123..(hC312liq - hC315) - UE641*AE641*FE641*dTE641 =e= 0;
1057 EQU124..(hC325 - hC326) - FcweE613*4.197*(TcwoutE613 - Tcwin) =e=
0;
1058 EQU125..(hC325 - hC326) - UE613*AE613*dTE613 =e= 0;
1059 EQU126..(hC324 - hC323) - FstmE612 * hstmE612 =e= 0;
1060 EQU127..(hC324 - hC323) - UE612*AE612*dTE612 =e= 0;
1061 EQU128..FC325 - FC326 =e= 0;
1062 EQU129..FC405 - FC406 =e= 0;
1063 EQU130..hC409 - FC409 *
1064 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1065 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1066 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1067 +(x5C409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC409,ORD(Coeff))))
1068 +(x7C409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC409,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC409/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1069 EQU131..hC428 - FC428 *
1070 ((x3C428/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC428,ORD(Coeff))))
1071 +(x4C428/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC428/Enth_Vap("4","a2"))**Enth_Vap("4","a3"))))
1072 +(x5C428/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC428/Enth_Vap("5","a2"))**Enth_Vap("5","a3"))))
1073 +(x7C428/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC428,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC428/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1074 EQU132..Sm4C603*LpC603=e= Kp4C603*VpC603;
1075 EQU133..Sn5C603 *FC329 =e= K5C603*FC325;
1076 EQU134..Sm5C603*LpC603=e= Kp5C603*VpC603;
1077 EQU135..Sn7C603 *FC329 =e= K7C603*FC325;
1078 EQU136..Sm7C603*LpC603=e= Kp7C603*VpC603;
1079 EQU137..f1C603*((1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603) /1E2+
h1C603*Sn1C603**(40-17)*(1-Sm1C603**(17+1))/1E2) =e=
(1-Sn1C603**(40-17))/1E2+ RC603*(1-Sn1C603)/1E2;
1080 EQU138..f3C603*((1-Sn3C603**(40-17))+ RC603*(1-Sn3C603) +
h3C603*Sn3C603**(40-17)*(1-Sm3C603**(17+1))) =e= (1-Sn3C603**(40-1
```

```

7)) + RC603*(1-Sn3C603);
1081 EQU139..f4C603*((1-Sn4C603**(40-17)) + RC603*(1-Sn4C603) +
h4C603*Sn4C603**(40-17)*(1-Sm4C603**(17+1))) =e= (1-Sn4C603**(40-1
7)) + RC603*(1-Sn4C603);
1082 EQU140..f5C603*((1-Sn5C603**(40-17)) + RC603*(1-Sn5C603) +
h5C603*Sn5C603**(40-17)*(1-Sm5C603**(17+1))) =e= (1-Sn5C603**(40-1
7)) + RC603*(1-Sn5C603);
1083 EQU141..f7C603*((1-Sn7C603**(40-17)) + RC603*(1-Sn7C603) +
h7C603*Sn7C603**(40-17)*(1-Sm7C603**(17+1))) =e= (1-Sn7C603**(40-1
7)) + RC603*(1-Sn7C603);
1084 EQU142..f1C603 * x1C316 * FC316 =e= x1C317 * FC317;
1085 EQU143..f3C603 * x3C316 * FC316 =e= x3C317 * FC317;
1086 EQU144..f4C603 * x4C316 * FC316 =e= x4C317 * FC317;
1087 EQU145..f5C603 * x5C316 * FC316 =e= x5C317 * FC317;
1088 EQU146..f7C603 * x7C316 * FC316 =e= x7C317 * FC317;
1089 EQU147..h1C603*K1C603*LpC603*(1-Sm1C603) =e= Kp1C603*FC329*(1-
Sn1C603);
1090 EQU148..h3C603*K3C603*LpC603*(1-Sm3C603) =e= Kp3C603*FC329*(1-
Sn3C603);

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```
1091 EQU149..h4C603*K4C603*LpC603*(1-Sm4C603) =e= Kp4C603*FC329*(1-
Sn4C603);
1092 EQU150..h5C603*K5C603*LpC603*(1-Sm5C603) =e= Kp5C603*FC329*(1-
Sn5C603);
1093 EQU151..h7C603*K7C603*LpC603*(1-Sm7C603) =e= Kp7C603*FC329*(1-
Sn7C603);
1094 EQU152..K1C323*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC323-
5.261*LOG10(TC323)+3.282E-11*TC323+3.7349E-6*TC323**2);
1095 EQU153..K3C323*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC323-
8.806*LOG10(TC323)+8.9246E-11*TC323+5.7501E-6*TC323**2);
1096 EQU154..K4C323*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC323-
7.1805*LOG10(TC323)-6.6845E-11*TC323+4.219E-6*TC323**2);
1097 EQU155..K5C323*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC323-
7.883*LOG10(TC323)-4.6512E-11*TC323+3.8997E-6*TC323**2);
1098 EQU156..K7C323*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC323-
9.042*LOG10(TC323)-1.371E-12*TC323+3.634E-6*TC323**2);
1099
EQU157..K1C323*xx1C323+K3C323*xx3C323+K4C323*xx4C323+K5C323*xx5C323+K7C
323*xx7C323 =e= 1;
1100 EQU158..FmC323 - FC323 * (x1C323/MW1 + x3C323/MW3 + x4C323/MW4 +
x5C323/MW5 + x7C323/MW7)=e= 0;
1101 EQU159..xx1C323 * MW1 * FmC323 - FC323 *x1C323=e= 0;
1102 EQU160..xx3C323 * MW3 * FmC323 - FC323 *x3C323=e= 0;
1103 EQU161..xx4C323 * MW4 * FmC323 - FC323 *x4C323=e= 0;
1104 EQU162..xx5C323 * MW5 * FmC323 - FC323 *x5C323=e= 0;
1105 EQU163..xx1C323+xx3C323+xx4C323+xx5C323+xx7C323 =e= 1;
1106 EQU164..dTE613*2 =e=
1107 (TC325-TcwoutE613) + (TC326-Tcwin);
1108 EQU165..x1C325 -x1C326 =e=0;
1109 EQU166..x3C325 -x3C326 =e=0;
1110 EQU167..x4C325 -x4C326 =e=0;
1111 EQU168..FC418 - FC417 - FC415 =e= 0;
1112 EQU169..(hC317 - hC318) - (hC316 - hC315) =e= 0;
1113 EQU170..(hC317 - hC318) - UE610*AE610*dTE610*FE610 =e= 0;
1114 EQU171..(hC318 - hC319) - Fcwe611*4.197*(TcwoutE611 - Tcwin) =e=
0;
1115 EQU172..(hC318 - hC319) - UE611*AE611*FE611*dTE611 =e= 0;
1116 EQU173..FC317 - FC318 =e= 0;
1117 EQU174..FC318 - FC319 =e= 0;
1118 EQU175..x1C318 - x1C319 =e= 0;
1119 EQU176..x3C318 - x3C319 =e= 0;
1120 EQU177..x4C318 - x4C319 =e= 0;
1121 EQU178..x5C318 - x5C319 =e= 0;
1122 EQU179..x1C405 - x1C406 =e= 0;
1123 EQU180..x5C325 -x5C326 =e=0;
1124 EQU181..x1C325 + x3C325 +x4C325 +x5C325 +x7C325 =e= 1;
1125 EQU182..x1C326 + x3C326 +x4C326 +x5C326 +x7C326 =e= 1;
1126 EQU183..TC325-TC326 =e= 0;
1127 EQU184..x1C326 -x1C328 =e= 0;
1128 EQU185..x3C326 -x3C328 =e= 0;
1129 EQU186..x4C326 -x4C328 =e= 0;
```

1130 EQU187..x5C326 -x5C328 =e= 0;
1131 EQU188..x7C326 -x7C328 =e= 0;
1132 EQU189..K1C325*PC603 =e= 0.1333*10**(21.4469-1.4627E3/TC325-
5.261*LOG10(TC325)+3.282E-11*TC325+3.7349E-6*TC325**2);
1133 EQU190..K3C325*PC603 =e= 0.1333*10**(31.2541-1.9532E3/TC325-
8.806*LOG10(TC325)+8.9246E-11*TC325+5.7501E-6*TC325**2);
1134 EQU191..K4C325*PC603 =e= 0.1333*10**(27.0441-1.9049E3/TC325-
7.1805*LOG10(TC325)-6.6845E-11*TC325+4.219E-6*TC325**2);
1135 EQU192..K5C325*PC603 =e= 0.1333*10**(29.2963-2.1762E3/TC325-
7.883*LOG10(TC325)-4.6512E-11*TC325+3.8997E-6*TC325**2);
1136 EQU193..K7C325*PC603 =e= 0.1333*10**(33.0162-2.583E3/TC325-
9.042*LOG10(TC325)-1.371E-12*TC325+3.634E-6*TC325**2);

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1137
EQU194..xx1C325/K1C325+xx3C325/K3C325+xx4C325/K4C325+xx5C325/K5C325+xx7
C325/K7C325 =e= 1;
1138 EQU195..FmC325 - FC325 * (x1C325/MW1 + x3C325/MW3 + x4C325/MW4 +
x5C325/MW5 + x7C325/MW7)=e= 0;
1139 EQU196..xx1C325 * MW1 * FmC325 - FC325 *x1C325=e= 0;
1140 EQU197..xx3C325 * MW3 * FmC325 - FC325 *x3C325=e= 0;
1141 EQU198..xx4C325 * MW4 * FmC325 - FC325 *x4C325=e= 0;
1142 EQU199..xx5C325 * MW5 * FmC325 - FC325 *x5C325=e= 0;
1143 EQU200..xx1C325+xx3C325+xx4C325+xx5C325+xx7C325 =e= 1;
1144 EQU201..hC309-hC310-hC311=e=0;
1145 EQU202..FAC07*x11AC07 - FAC09*x11AC09 -
0.06*2.02*FHC07*x2HC07/(rho2HC07/1000) =e= 0;
1146 EQU203..1000*FAC09*xiC11AC09 -riC11C623 * VaC623 * MWiC11 =e= 0;
1147 EQU204..1000*FAC09*xiC10AC09 - riC10C623*VaC623*MWiC10 =e= 0;
1148 EQU205..FHC07 +FHC34 + FAC07 =e= FAC09;
1149 EQU206..1000*FAC09*x10AC09 - r10C623*VaC623*MW10 =e= 0;
1150 EQU207..1000*FAC09*x9AC09 - r9C623*VaC623*MW9 =e= 0;
1151 EQU208..1000*FAC09*x8AC09 - r8C623*VaC623*MW8 =e= 0;
1152 EQU209..1000*(FHC07*x7HC07 + FHC34*x7HC34 - FAC09*x7AC09) +
r7C623*VaC623*MW7 =e= 0;
1153 EQU210..FC326 - FC328 - FC329 =e= 0;
1154 EQU211..TC326 - TC328 =e= 0;
1155 EQU212..TC326 - TC329 =e= 0;
1156 EQU213..1000*(FHC07*x5HC07 + FHC34*x5HC34 - FAC09*x5AC09) +
r5C623*VaC623*MW5 =e= 0;
1157 EQU214..1000*(FHC07*x4HC07 + FHC34*x4HC34 - FAC09*x4AC09) +
r4C623*VaC623*MW4 =e= 0;
1158 EQU215..1000*(FHC07*x3HC07 + FHC34*x3HC34 - FAC09*x3AC09) -
r3C623*VaC623*MW3 =e= 0;
1159 EQU216..FHC07*x1HC07 + FHC34*x1HC34 - FAC09*x1AC09 =e= 0;
1160 EQU217..r4C623 =e= k2/1E12*C4pC623*C3C623;
1161 EQU218..r5C623 =e= k3/1E12*C5pC623*C3C623;
1162 EQU219..r7C623 =e= k4/1E14*C7pC623 * C3C623;
1163 EQU220..r9C623 =e= k6/1E12*C9pC623 * C3C623;
1164 EQU221..r10C623 =e= k7/1E12*C10pC623 * C3C623;
1165 EQU222..riC10C623 =e= k8/1E12* CiC10pC623 * C3C623;
1166 EQU223..r8C623 =e= k5/1E12*C8pC623*C3C623;
1167 EQU224..riC11C623 =e=k18/1E12*CiC11pC623*C3C623;
1168 EQU225..-r3C623 + r4C623 + r5C623 + r7C623 + r8C623 + r9C623 +
r10C623 + riC10C623+ riC11C623 =e= 0;
1169 EQU226..1000*(FHC07*x2HC07 - FAC09*x2AC09) - r2C623*VaC623*MW2
=e= 0;
1170 EQU227..-r2C623 + k1/1E6*C2C623*CHXC623 + k11/(1E9*1E6)*C3pC623
*C2C623 + k15/(1E12*1E6)*C8pC623*C2C623 + k19/(1E14*1E6)
*C7pC623*C2C623=e=0;
1171 EQU228..k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623 =e= 0;
1172 EQU229..k13/(1E11*1E9)*CiC8eC623*C3pC623 +k17/1E12*CiC11pC623 -
k14/1E11*CiC5eC623*CHXC623 - k16/(1E11*1E9)*CiC5eC623*C3pC623


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=e= 0;
1173 EQU230..k12/1E12*C9pC623 - k13/(1E11*1E9)*CiC8eC623*C3pC623 =e=0;
1174 EQU231..k1/1E6*C2C623*CHXC623 - k2/1E12*C4pC623*C3C623 =e= 0;
1175 EQU232..r3C623 - k9/1E9*C3pC623 - k10/(1E6*1E9)*CiC4eC623*C3pC623
- k11/(1E6*1E9)*C3pC623*C2C623 - k13/(1E11*1E9)

*CiC8eC623*C3pC623 - k16/(1E11*1E9) * CiC5eC623*C3pC623 =e= 0;
1176 EQU233..k14/1E11*CiC5eC623*CHXC623 - k3/1E12*C5pC623*C3C623 =e=0;
1177 EQU234..k17/1E12*CiC11pC623 - k4/1E14*C7pC623*C3C623 -
k19/(1E6*1E14)*C7pC623*C2C623 =e= 0;
1178 EQU235..C2C623 /1E6=e= rhoAC09*x2AC09/MW2;
1179 EQU236..C3C623 =e= rhoAC09*x3AC09/MW3;

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1180 EQU237..CHXC623 =e= rhoAC09*x11AC09/MW11;
1181 EQU238..FAC09*x1AC09 - FHC27*x1HC27 =e=0;
1182 EQU239..FAC09*x2AC09 - FHC27*x2HC27 =e=0;
1183 EQU240..FAC09*x3AC09 - FHC27*x3HC27 =e=0;
1184 EQU241..FAC09*x4AC09 - FHC27*x4HC27 =e=0;
1185 EQU242..FAC09*x5AC09 - FHC27*x5HC27 =e=0;
1186 EQU243..x11AC05 - x11AC12 =e=0;
1187 EQU244..FAC05*x11AC05 - sfc631*FAC09*x11AC09 =e=0;
1188 EQU245..FAC05*x12AC05 - sfc631*FAC09*x12AC09 =e=0;
1189 EQU246..FAC09*(x11AC09 + x12AC09) - FAC05 - FAC12 =e=0;
1190 EQU247..FAC09*(x7AC09+x8AC09+x9AC09+x10AC09+xiC10AC09+xiC11AC09)
- FHC27*x7HC27 =e= 0;
1191 EQU248..x11AC07 + x12AC07 =e= 1;
1192 EQU249..K3C616_A * xx3C311 - xx3C310 =e= 0;
1193 EQU250..FC310 =e= VFC616*FC309;
1194 EQU251..FC309 - FC310 - FC311 =e= 0;
1195 EQU252..FC309 * x1C309 - FC311 * x1C311 - FC310 * x1C310 =e= 0;
1196 EQU253..FC309 * x3C309 - FC310 * x3C310 - FC311 * x3C311 =e= 0;
1197 EQU254..FC309 * x4C309 - FC310 * x4C310 - FC311 * x4C311 =e= 0;
1198 EQU255..FC309 * x5C309 - FC310 * x5C310 - FC311 * x5C311 =e= 0;
1199 EQU256..K1C616_A* xx1C311 - xx1C310 =e= 0;
1200 EQU257..K7C616_A * xx7C311 - xx7C310 =e= 0;
1201 EQU258..K4C616_A * xx4C311 - xx4C310 =e= 0;
1202 EQU259..x1AC09 + x2AC09 + x3AC09 + x4AC09 + x5AC09 +x7AC09 +
x8AC09 + x9AC09 + x10AC09 + x11AC09 + x12AC09 + xiC10AC09 +
xiC11AC09 =e= 1;
1203 EQU260..FAC07 -FAC05 - FAC02 =e= 0;
1204 EQU261..FAC07*x11AC07 -FAC05*x11AC05 - FAC02*x11AC02 =e= 0;
1205 EQU262..x11AC05+x12AC05 =e=1;
1206 EQU263..x11AC02+x12AC02 =e=1;
1207 EQU264..k13/(1E11*1E9)*C3pC623*CiC8eC623 - k5/1E12*C8pC623*C3C623
-k15/(1E6*1E12)*C8pC623*C2C623 =e= 0;
1208 EQU265..k11/(1E6*1E9)*C2C623*C3pC623 +
k10/(1E6*1E9)*C3pC623*CiC4eC623 - k6/1E12*C9pC623*C3C623 -
k12/1E12*C9pC623 =e= 0;
1209 EQU266..k16/(1E11*1E9)*CiC5eC623*C3pC623 -
k7/1E12*C10pC623*C3C623 =e= 0;
1210 EQU267..k19/(1E6*1E14)*C7pC623*C2C623 - k8/1E12*CiC10pC623*C3C623
=e= 0;
1211 EQU268..k15/(1E6*1E12)*C8pC623*C2C623 -
k18/1E12*CiC11pC623*C3C623 - k17/1E12*CiC11pC623 =e= 0;
1212 EQU269..x7C325 -x7C326 =e=0;
1213 EQU270..TC323 - TC324 =e= 0;
1214 EQU271..dTE612 =e= 414.6 - TC323;
1215 EQU272..K1C615_A*PC308 =e= 0.1333*10**(21.4469-1.4627E3/TC308-
5.261*LOG10(TC308)+3.282E-11*TC308+3.7349E-6*TC308**2);
1216 EQU273..K3C615_A*PC308 =e= 0.1333*10**(31.2541-1.9532E3/TC308-
8.806*LOG10(TC308)+8.9246E-11*TC308+5.7501E-6*TC308**2);
1217 EQU274..K4C615_A=e=0.13332*EXP(15.6782-2154.90/(TC308-
34.42))/PC308;
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```
1218 EQU275..K5C615_A=e=0.13332*EXP(15.5338-2348.67/(TC308-
40.05))/PC308;
1219 EQU276..K7C615_A=e=0.13332*EXP(15.7588-2633.90/(TC308-
46.30))/PC308;
1220 EQU277..K1C616_A*PC310 =e= 0.1333*10**(21.4469-1.4627E3/TC310-
5.261*LOG10(TC310)+3.282E-11*TC310+3.7349E-6*TC310**2);
1221 EQU278..K3C616_A*PC310 =e= 0.1333*10**(31.2541-1.9532E3/TC310-
8.806*LOG10(TC310)+8.9246E-11*TC310+5.7501E-6*TC310**2);
1222 EQU279..x11AC12+x12AC12 =e=1;
1223 EQU280..FAC18 -FAC12 - FAC15 =e= 0;
1224 EQU281..FAC18*x11AC18 -FAC12*x11AC12 - FAC15*x11AC15 =e= 0;
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1225 EQU282..x11AC15+x12AC15 =e=1;
1226 EQU283..x11AC18 + x12AC18 =e= 1;
1227 EQU284..1000*(FHC11*x7HC11 + FHC38*x7HC38 - FAC20*x7AC20) +
r7C625*VaC623*MW7 =e= 0;
1228 EQU285..r10C625 =e= k7/1E12*C10pC625 * C3C625;
1229 EQU286..r9C625 =e= k6/1E12*C9pC625 * C3C625;
1230 EQU287..r7C625 =e= k4/1E14*C7pC625 * C3C625;
1231 EQU288..r5C625 =e= k3/1E12*C5pC625*C3C625;
1232 EQU289..K5C616_A * xx5C311 - xx5C310 =e= 0;
1233 EQU290..FmC310 - FC310 * (x1C310/MW1 + x3C310/MW3 +x4C310/MW4 +
x5C310/MW5 + x7C310/MW7)=e= 0;
1234 EQU291..xx1C310*MW1*FmC310 - FC310 * x1C310 =e= 0;
1235 EQU292..xx3C310 * MW3 * FmC310 - FC310 * x3C310 =e= 0;
1236 EQU293..xx4C310 * MW4 * FmC310 - FC310 * x4C310 =e= 0;
1237 EQU294..xx5C310 * MW5 * FmC310 - FC310 * x5C310 =e= 0;
1238 EQU295..xx1C310 + xx3C310 + xx4C310 + xx5C310 + xx7C310 =e=1
1239 ;
1240 EQU296..FmC311 - FC311 * (x1C311/MW1 + x3C311/MW3 + x4C311/MW4 +
x5C311/MW5 + x7C311/MW7 )=e= 0;
1241 EQU297..xx1C311 * MW1 * FmC311 - FC311 * x1C311 =e= 0;
1242 EQU298..xx3C311 * MW3 * FmC311 - FC311 * x3C311 =e= 0;
1243 EQU299..xx4C311 * MW4 * FmC311 - FC311 * x4C311 =e= 0;
1244 EQU300..xx5C311 * MW5 * FmC311 - FC311 * x5C311 =e= 0;
1245 EQU301..xx1C311+ xx3C311 + xx4C311 + xx5C311 + xx7C311 =e= 1;
1246 EQU302..FC306 * x1C306 - FC303 * x1C303 - FC310 * x1C310 =e= 0;
1247 EQU303..FC306 * x3C306 - FC303 * x3C303 - FC310 * x3C310 =e= 0;
1248 EQU304..FC306 * x4C306 - FC303 * x4C303 - FC310 * x4C310 =e= 0;
1249 EQU305..FC306 * x5C306 - FC303 * x5C303 - FC310 * x5C310 =e= 0;
1250 EQU306..r4C625 =e= k2/1E12*C4pC625*C3C625;
1251 EQU307..FHC11*x1HC11 + FHC38*x1HC38 - FAC20*x1AC20 =e= 0;
1252 EQU308..1000*(FHC11*x3HC11 + FHC38*x3HC38 - FAC20*x3AC20) -
r3C625*VaC623*MW3 =e= 0;
1253 EQU309..FAC18*x11AC18 - FAC20*x11AC20 -
0.06*2.02*FHC11*x2HC11/(rho2HC11/1000) =e= 0;
1254 EQU310..1000*(FHC11*x5HC11 + FHC38*x5HC38 - FAC20*x5AC20) +
r5C625*VaC623*MW5 =e= 0;
1255 EQU311..riC11C625 =e=k18/1E12*CiC11pC625*C3C625;
1256 EQU312..1000*FAC20*x8AC20 - r8C625*VaC623*MW8 =e= 0;
1257 EQU313..1000*FAC20*x9AC20 - r9C625*VaC623*MW9 =e= 0;
1258 EQU314..1000*FAC20*x10AC20 - r10C625*VaC623*MW10 =e= 0;
1259 EQU315..FHC11 +FHC38 + FAC18 =e= FAC20;
1260 EQU316..1000*FAC20*xiC10AC20 - riC10C625*VaC623*MWiC10 =e= 0;
1261 EQU317..1000*FAC20*xiC11AC20 -riC11C625 * VaC623 * MWiC11 =e= 0;
1262 EQU318..1000*(FHC11*x4HC11 + FHC38*x4HC38 - FAC20*x4AC20) +
r4C625*VaC623*MW4 =e= 0;
1263 EQU319..r3C625 - k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625
- k11/(1E6*1E9)*C3pC625*C2C625 - k13/(1E11*1E9)
*CiC8eC625*C3pC625 - k16/(1E11*1E9) * CiC5eC625*C3pC625 =e= 0;
1264 EQU320..k19/(1E6*1E14)*C7pC625*C2C625 - k8/1E12*CiC10pC625*C3C625
=e= 0;
```

1265 EQU321..k16/(1E11*1E9)*Ci5eC625*C3pC625 -
 k7/1E12*C10pC625*C3C625 =e= 0;
 1266 EQU322..k11/(1E6*1E9)*C2C625*C3pC625 +
 k10/(1E6*1E9)*C3pC625*Ci4eC625 - k6/1E12*C9pC625*C3C625 -
 k12/1E12*C9pC625 =e= 0;
 1267 EQU323..k13/(1E11*1E9)*C3pC625*Ci8eC625 - k5/1E12*C8pC625*C3C625
 -k15/(1E6*1E12)*C8pC625*C2C625 =e= 0;
 1268 EQU324..CHXC625 =e= rhoAC20*x11AC20/MW11;
 1269 EQU325..C3C625 =e= rhoAC20*x3AC20/MW3;

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1270 EQU326..C2C625/1E6 =e= rhoAC20*x2AC20/MW2;
1271 EQU327..riC10C625 =e= k8/1E12* CiC10pC625 * C3C625;
1272 EQU328..k14/1E11*CiC5eC625*CHXC625 - k3/1E12*C5pC625*C3C625 =e=0;
1273 EQU329..r8C625 =e= k5/1E12*C8pC625*C3C625;
1274 EQU330..k1/1E6*C2C625*CHXC625 - k2/1E12*C4pC625*C3C625 =e= 0;
1275 EQU331..k12/1E12*C9pC625 - k13/(1E11*1E9)*CiC8eC625*C3pC625 =e=0;
1276 EQU332..k13/(1E11*1E9)*CiC8eC625*C3pC625 +k17/1E12*CiC11pC625 -
k14/1E11*CiC5eC625*CHXC625 - k16/(1E11*1E9)*CiC5eC625*C3pC625

=e= 0;
1277 EQU333..k9/1E9*C3pC625 - k10/(1E6*1E9)*CiC4eC625*C3pC625 =e= 0;
1278 EQU334..-r2C625 + k1/1E6*C2C625*CHXC625 + k11/(1E9*1E6)*C3pC625
*C2C625 + k15/(1E12*1E6)*C8pC625*C2C625 + k19/(1E14*1E6)

*C7pC625*C2C625=e=0;
1279 EQU335..1000*(FHC11*x2HC11 - FAC20*x2AC20) - r2C625*VaC623*MW2
=e= 0;
1280 EQU336..-r3C625 + r4C625 + r5C625 + r7C625 + r8C625 + r9C625 +
r10C625 + riC10C625+ riC11C625 =e= 0;
1281 EQU337..k15/(1E6*1E12)*C8pC625*C2C625 -
k18/1E12*CiC11pC625*C3C625 - k17/1E12*CiC11pC625 =e= 0;
1282 EQU338..k17/1E12*CiC11pC625 - k4/1E14*C7pC625*C3C625 -
k19/(1E6*1E14)*C7pC625*C2C625 =e= 0;
1283 EQU339..x1HC08 + x2HC08 + x3HC08 + x4HC08 + x5HC08 + x7HC08 =e=
1;
1284 EQU340..FC307 - FC308 - FC312 =e= 0;
1285 EQU341..FC307 * x1C307 - FC308 * x1C308 - FC312 * x1C312 =e= 0;
1286 EQU342..FC307 * x3C307 - FC308 * x3C308 - FC312 * x3C312 =e= 0;
1287 EQU343..FC307 * x4C307 - FC308 * x4C308 - FC312 * x4C312 =e= 0;
1288 EQU344..FC307 * x5C307 - FC308 * x5C308 - FC312 * x5C312 =e= 0;
1289 EQU345..x1AC20 + x2AC20 + x3AC20 + x4AC20 + x5AC20 +x7AC20 +
x8AC20 + x9AC20 + x10AC20 + x11AC20 + x12AC20 + xiC10AC20 +

xiC11AC20 =e= 1;
1290 EQU346..FAC20*(x7AC20+x8AC20+x9AC20+x10AC20+xiC10AC20+xiC11AC20)
- FHC25*x7HC25 =e= 0;
1291 EQU347..FAC20*(x11AC20 + x12AC20) - FAC15 - FAC23 =e=0;
1292 EQU348..FAC15*x12AC15 - sfC632*FAC20*x12AC20 =e=0;
1293 EQU349..FAC15*x11AC15 - sfC632*FAC20*x11AC20 =e=0;
1294 EQU350..x11AC15 - x11AC23 =e=0;
1295 EQU351..FAC20*x5AC20 - FHC25*x5HC25 =e=0;
1296 EQU352..FAC20*x4AC20 - FHC25*x4HC25 =e=0;
1297 EQU353..FAC20*x3AC20 - FHC25*x3HC25 =e=0;
1298 EQU354..FAC20*x2AC20 - FHC25*x2HC25 =e=0;
1299 EQU355..FAC20*x1AC20 - FHC25*x1HC25 =e=0;
1300 EQU356..dTE641**3 - ((TC312-TcwotE641B)*(TC315-Tcwin)*
1301 ((TC312-TcwotE641B)+(TC315-Tcwin))/2) =e= 0;
1302 EQU357..dTE611**3 =e= ((TC318-TcwoutE611)*(TC319-Tcwin)*
1303 ((TC318-TcwoutE611)+(TC319-Tcwin))/2);
1304 EQU358..dTE610**3 =e= ((TC317-TC316)*(TC318-TC315)*
1305 ((TC317-TC316)+(TC318-TC315))/2);
```

```
1306 EQU359..x11AC23+x12AC23 =e=1;
1307 EQU360..x11AC29 + x12AC29 =e= 1;
1308 EQU361..x11AC26+x12AC26 =e=1;
1309 EQU362..x1AC31 + x2AC31 + x3AC31 + x4AC31 + x5AC31 +x7AC31 +
x8AC31 + x9AC31 + x10AC31 + x11AC31 + x12AC31 + xiC10AC31 +

xiC11AC31 =e= 1;
1310 EQU363..Q2HC14 - FHC14 * x2HC14/(rho2HC14/1000) =e= 0;
1311 EQU364..QHC14 - FHC14/0.575 =e= 0;
```

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```
1312 EQU365..x1HC14 + x2HC14 + x3HC14 + x4HC14 + x5HC14 + x7HC14 =e=
1;
1313 EQU366..QHC41 - FHC41/0.575 =e= 0;
1314 EQU367..x1HC41 +x3HC41 + x4HC41 + x5HC41 + x7HC41 =e= 1;
1315 EQU368..FAC29 -FAC23 - FAC26 =e= 0;
1316 EQU369..FAC29*x11AC29 -FAC23*x11AC23 - FAC26*x11AC26 =e= 0;
1317 EQU370..FAC31*x1AC31 - FHC23*x1HC23 =e=0;
1318 EQU371..FAC31*x2AC31 - FHC23*x2HC23 =e=0;
1319 EQU372..FAC31*x3AC31 - FHC23*x3HC23 =e=0;
1320 EQU373..FAC31*x4AC31 - FHC23*x4HC23 =e=0;
1321 EQU374..K1C615_A * xx1C308 - xx1C312 =e= 0;
1322 EQU375..K7C615_A * xx7C308 - xx7C312 =e= 0;
1323 EQU376..K4C615_A * xx4C308 - xx4C312 =e= 0;
1324 EQU377..K5C615_A * xx5C308 - xx5C312 =e= 0;
1325 EQU378..TC312 - TC308 =e= 0;
1326 EQU379..TC312 - TC307 =e= 0;
1327 EQU380..FmC312 - FC312 * (x1C312/MW1 + x3C312/MW3 + x4C312/MW4 +
x5C312/MW5 + x7C312/MW7)=e= 0;
1328 EQU381..xx1C312 * MW1 * FmC312 - FC312 * x1C312 =e= 0 ;
1329 EQU382..xx3C312 * MW3 * FmC312 - FC312 * x3C312 =e= 0 ;
1330 EQU383..xx4C312 * MW4 * FmC312 - FC312 * x4C312 =e= 0 ;
1331 EQU384..xx5C312 * MW5 * FmC312 - FC312 * x5C312 =e= 0 ;
1332 EQU385..FmC308 - FC308 * (x1C308/MW1 + x3C308/MW3 + x4C308/MW4 +
x5C308/MW5 + x7C308/MW7)=e= 0;
1333 EQU386..xx1C308 * MW1 * FmC308 - FC308 *x1C308=e= 0;
1334 EQU387..xx3C308 * MW3 * FmC308 - FC308 *x3C308=e= 0;
1335 EQU388..xx4C308 * MW4 * FmC308 - FC308 *x4C308=e= 0;
1336 EQU389..xx5C308 * MW5 * FmC308 - FC308 *x5C308=e= 0;
1337 EQU390..xx1C308+ xx3C308+ xx4C308+ xx5C308+ xx7C308=e=1;
1338 EQU391..FC306 - FC303 - FC310 =e= 0;
1339 EQU392..1000*kWad1=e= kK601/(kK601 -
1)*FC303*8314/55.5*TC303*((PC310/PC303)**((kK601 -1)/kK601) -1);
1340 EQU393..1000*kWad2=e= kK601/(kK601 -
1)*FC306*8314/55.5*TmK601*((PC306/PC310)**((kK601 -1)/kK601) -1);
1341 EQU394..hC307 - FC307 * ((x1C307/MW1)*(SUM(Coeff,1/ORD(Coeff)) *
Enth_liq("1",Coeff) *POWER(TC307,ORD(Coeff))))
1342 +(x3C307/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC307,ORD(Coeff))))
1343 +(x4C307/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC307,ORD(Coeff))))
1344 +(x5C307/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC307,ORD(Coeff))))
1345 +(x7C307/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC307,ORD(Coeff)))) =e= 0;
1346 EQU395..x4C306 - x4C307 =e= 0;
1347 EQU396..x5C306 - x5C307 =e= 0;
1348 EQU397..FC312 - FC315 =e= 0;
1349 EQU398..x1C312 - x1C315 =e= 0;
1350 EQU399..FC315 - FC316 =e= 0;
1351 EQU400..x1C315 - x1C316 =e= 0;
1352 EQU401..x3C315 - x3C316 =e= 0;
```



```
1353 EQU402..PC309=e=PC308-deltaPE640;  
1354 EQU403..dTE640**3=e= ((TC308-TcwoutE640)*(TC309-Tcwin)*  
1355 ((TC308-TcwoutE640)+(TC309-Tcwin))/2);  
1356 EQU404..x3C405 - x3C406 =e= 0;  
1357 EQU405..FC406 - FC407 =e= 0;
```

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```
1358 EQU406..x1C406 - x1C407 =e= 0;
1359 EQU407..FC410 - FC411 =e= 0;
1360 EQU408..x3C312 - x3C315 =e= 0;
1361 EQU409..x4C312 - x4C315 =e= 0;
1362 EQU410..x5C312 - x5C315 =e= 0;
1363 EQU411..FAC31*x5AC31 - FHC23*x5HC23 =e=0;
1364 EQU412..x11AC26 - x11AC34 =e=0;
1365 EQU413..FAC26*x11AC26 - sfc633*FAC31*x11AC31 =e=0;
1366 EQU414..FAC26*x12AC26 - sfc633*FAC31*x12AC31 =e=0;
1367 EQU415..FAC31*(x11AC31 + x12AC31) - FAC26 - FAC34 =e=0;
1368 EQU416..FAC31*(x7AC31+x8AC31+x9AC31+x10AC31+xiC10AC31+xiC11AC31)
- FHC23*x7HC23 =e= 0;
1369 EQU417..FAC29*x11AC29 - FAC31*x11AC31 -
0.06*2.02*FHC14*x2HC14/(rho2HC14/1000) =e= 0;
1370 EQU418..1000*(FHC14*x7HC14 + FHC41*x7HC41 - FAC31*x7AC31) +
r7C627*VaC623*MW7 =e= 0;
1371 EQU419..1000*FAC31*xiC11AC31 -riC11C627 * VaC623 * MWiC11 =e= 0;
1372 EQU420..1000*FAC31*xiC10AC31 - riC10C627*VaC623*MWiC10 =e= 0;
1373 EQU421..FHC14 +FHC41 + FAC29 =e= FAC31;
1374 EQU422..1000*FAC31*x10AC31 - r10C627*VaC623*MW10 =e= 0;
1375 EQU423..1000*FAC31*x9AC31 - r9C627*VaC623*MW9 =e= 0;
1376 EQU424..1000*FAC31*x8AC31 - r8C627*VaC623*MW8 =e= 0;
1377 EQU425..r3C627 - k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627
- k11/(1E6*1E9)*C3pC627*C2C627 - k13/(1E11*1E9)

*CiC8eC627*C3pC627 - k16/(1E11*1E9) * CiC5eC627*C3pC627 =e= 0;
1378 EQU426..1000*(FHC14*x5HC14 + FHC41*x5HC41 - FAC31*x5AC31) +
r5C627*VaC623*MW5 =e= 0;
1379 EQU427..k19/(1E6*1E14)*C7pC627*C2C627 - k8/1E12*CiC10pC627*C3C627
=e= 0;
1380 EQU428..1000*(FHC14*x3HC14 + FHC41*x3HC41 - FAC31*x3AC31) -
r3C627*VaC623*MW3 =e= 0;
1381 EQU429..FHC14*x1HC14 + FHC41*x1HC41 - FAC31*x1AC31 =e= 0;
1382 EQU430..r4C627 =e= k2/1E12*C4pC627*C3C627;
1383 EQU431..r5C627 =e= k3/1E12*C5pC627*C3C627;
1384 EQU432..r7C627 =e= k4/1E14*C7pC627 * C3C627;
1385 EQU433..r9C627 =e= k6/1E12*C9pC627 * C3C627;
1386 EQU434..r10C627 =e= k7/1E12*C10pC627 * C3C627;
1387 EQU435..riC11C627 =e=k18/1E12*CiC11pC627*C3C627;
1388 EQU436..k14/1E11*CiC5eC627*CHXC627 - k3/1E12*C5pC627*C3C627 =e=0;
1389 EQU437..k15/(1E6*1E12)*C8pC627*C2C627 -
k18/1E12*CiC11pC627*C3C627 - k17/1E12*CiC11pC627 =e= 0;
1390 EQU438..-r3C627 + r4C627 + r5C627 + r7C627 + r8C627 + r9C627 +
r10C627 + riC10C627+ riC11C627 =e= 0;
1391 EQU439..1000*(FHC14*x2HC14 - FAC31*x2AC31) - r2C627*VaC623*MW2
=e= 0;
1392 EQU440..-r2C627 + k1/1E6*C2C627*CHXC627 + k11/(1E9*1E6)*C3pC627
*C2C627 + k15/(1E12*1E6)*C8pC627*C2C627 + k19/(1E14*1E6)

*C7pC627*C2C627=e=0;
1393 EQU441..k9/1E9*C3pC627 - k10/(1E6*1E9)*CiC4eC627*C3pC627 =e= 0;
```

1394 EQU442..k13/(1E11*1E9)*CiC8eC627*C3pC627 +k17/1E12*CiC11pC627 -
k14/1E11*CiC5eC627*CHXC627 - k16/(1E11*1E9)*CiC5eC627*C3pC627

=e= 0;

1395 EQU443..k12/1E12*C9pC627 - k13/(1E11*1E9)*CiC8eC627*C3pC627 =e=0;

1396 EQU444..1000*(FHC14*x4HC14 + FHC41*x4HC41 - FAC31*x4AC31) +
r4C627*VaC623*MW4 =e= 0;

1397 EQU445..r8C627 =e= k5/1E12*C8pC627*C3C627;

1398 EQU446..k17/1E12*CiC11pC627 - k4/1E14*C7pC627*C3C627 -
k19/(1E6*1E14)*C7pC627*C2C627 =e= 0;

1399 EQU447..riC10C627 =e= k8/1E12* CiC10pC627 * C3C627;

1400 EQU448..C2C627/1E6 =e= rhoAC31*x2AC31/MW2;

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```
1401 EQU449..C3C627 =e= rhoAC31*x3AC31/MW3;
1402 EQU450..CHXC627 =e= rhoAC31*x11AC31/MW11;
1403 EQU451..k13/(1E11*1E9)*C3pC627*CiC8eC627 - k5/1E12*C8pC627*C3C627
-k15/(1E6*1E12)*C8pC627*C2C627 =e= 0;
1404 EQU452..k11/(1E6*1E9)*C2C627*C3pC627 +
k10/(1E6*1E9)*C3pC627*CiC4eC627 - k6/1E12*C9pC627*C3C627 -
k12/1E12*C9pC627 =e= 0;
1405 EQU453..x4C315 - x4C316 =e= 0;
1406 EQU454..x5C315 - x5C316 =e= 0;
1407 EQU455..x1C317 - x1C318 =e= 0;
1408 EQU456..x3C317 - x3C318 =e= 0;
1409 EQU457..x4C317 - x4C318 =e= 0;
1410 EQU458..x5C317 - x5C318 =e= 0;
1411 EQU459..FC319 - FC320 - FC321 - FC322 =e= 0;
1412 EQU460..FC319 * x1C319 - FC320 * x1C320 - FC321 * x1C321 - FC322
* x1C322 =e= 0;
1413 EQU461..FC319 * x3C319 - FC320 * x3C320 - FC321 * x3C321 - FC322
* x3C322 =e= 0;
1414 EQU462..FC319 * x4C319 - FC320 * x4C320 - FC321 * x4C321 - FC322
* x4C322 =e= 0;
1415 EQU463..FC319 * x5C319 - FC320 * x5C320 - FC321 * x5C321 - FC322
* x5C322 =e= 0;
1416 EQU464..FC319 * sf1S34 - FC320 =e= 0;
1417 EQU465..x1C319 - x1C320 =e= 0;
1418 EQU466..x3C319 - x3C320 =e= 0;
1419 EQU467..x4C319 - x4C320 =e= 0;
1420 EQU468..k16/(1E11*1E9)*CiC5eC627*C3pC627 -
k7/1E12*C10pC627*C3C627 =e= 0;
1421 EQU469..k1/1E6*C2C627*CHXC627 - k2/1E12*C4pC627*C3C627 =e= 0;
1422 EQU470..x1HC23+x2HC23+x3HC23+x4HC23+x5HC23+x7HC23 =e=1;
1423 EQU471..x11AC34+x12AC34 =e=1;
1424 EQU472..x1HC22+x2HC22+x3HC22+x4HC22+x5HC22+x7HC22 =e=1;
1425 EQU473..x11AC37+x12AC37 =e=1;
1426 EQU474..x11AC40 + x12AC40 =e= 1;
1427 EQU475..x1AC42 + x2AC42 + x3AC42 + x4AC42 + x5AC42 +x7AC42 +
x8AC42 + x9AC42 + x10AC42 + x11AC42 + x12AC42 + xiC10AC42 +
xiC11AC42 =e= 1;
1428 EQU476..x11AC45+x12AC45 =e=1;
1429 EQU477..Q2HC16 - FHC16 * x2HC16/(rho2HC16/1000) =e= 0;
1430 EQU478..QHC16 - FHC16/0.575 =e= 0;
1431 EQU479..x1HC16 + x2HC16 + x3HC16 + x4HC16 + x5HC16 + x7HC16 =e=
1;
1432 EQU480..FAC40 -FAC34 - FAC37 =e= 0;
1433 EQU481..FAC40*x11AC40 -FAC34*x11AC34 - FAC37*x11AC37 =e= 0;
1434 EQU482..FAC42*(x7AC42+x8AC42+x9AC42+x10AC42+xiC10AC42+xiC11AC42)
- FHC22*x7HC22 =e= 0;
1435 EQU483..FAC42*(x11AC42 + x12AC42) - FAC37 - FAC45 =e=0;
1436 EQU484..FAC37*x12AC37 - sfc634*FAC42*x12AC42 =e=0;
1437 EQU485..FAC37*x11AC37 - sfc634*FAC42*x11AC42 =e=0;
1438 EQU486..x11AC37 - x11AC45 =e=0;
```

1439 EQU487..FAC42*x5AC42 - FHC22*x5HC22 =e=0;
1440 EQU488..FAC42*x4AC42 - FHC22*x4HC22 =e=0;
1441 EQU489..FAC42*x3AC42 - FHC22*x3HC22 =e=0;
1442 EQU490..FAC42*x2AC42 - FHC22*x2HC22 =e=0;
1443 EQU491..FAC42*x1AC42 - FHC22*x1HC22 =e=0;
1444 EQU492..r3C629 - k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629
- k11/(1E6*1E9)*C3pC629*C2C629 - k13/(1E11*1E9)

*CiC8eC629*C3pC629 - k16/(1E11*1E9) * CiC5eC629*C3pC629 =e= 0;

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1445 EQU493..FAC40*x11AC40 - FAC42*x11AC42 -
0.06*2.02*FHC16*x2HC16/(rho2HC16/1000) =e= 0;
1446 EQU494..r9C629 =e= k6/1E12*C9pC629 * C3C629;
1447 EQU495..r7C629 =e= k4/1E14*C7pC629 * C3C629;
1448 EQU496..x5C319 - x5C320 =e= 0;
1449 EQU497..x1C319 - x1C321 =e= 0;
1450 EQU498..x3C319 - x3C321 =e= 0;
1451 EQU499..x4C319 - x4C321 =e= 0;
1452 EQU500..x5C319 - x5C321 =e= 0;
1453 EQU501..FC308 - FC309 =e= 0;
1454 EQU502..x1C308 - x1C309 =e= 0;
1455 EQU503..(hC308 - hC309) - Fcwe640*4.197*(TcwoutE640 - Tcwin) =e=
0;
1456 EQU504..FC316 + FC329 - FC317 - FC325 =e= 0;
1457 EQU505..FC316 * x1C316 + FC329*x1C329 - FC317 * x1C317 -
FC325*x1C325 =e= 0;
1458 EQU506..r5C629 =e= k3/1E12*C5pC629*C3C629;
1459 EQU507..r4C629 =e= k2/1E12*C4pC629*C3C629;
1460 EQU508..FHC16*x1HC16 + FHC45*x1HC45 - FAC42*x1AC42 =e= 0;
1461 EQU509..1000*(FHC16*x3HC16 + FHC45*x3HC45 - FAC42*x3AC42) -
r3C629*VaC623*MW3 =e= 0;
1462 EQU510..riC11C629 =e=k18/1E12*CiC11pC629*C3C629;
1463 EQU511..1000*(FHC16*x5HC16 + FHC45*x5HC45 - FAC42*x5AC42) +
r5C629*VaC623*MW5 =e= 0;
1464 EQU512..k14/1E11*CiC5eC629*CHXC629 - k3/1E12*C5pC629*C3C629 =e=0;
1465 EQU513..1000*FAC42*x8AC42 - r8C629*VaC623*MW8 =e= 0;
1466 EQU514..1000*FAC42*x9AC42 - r9C629*VaC623*MW9 =e= 0;
1467 EQU515..1000*FAC42*x10AC42 - r10C629*VaC623*MW10 =e= 0;
1468 EQU516..FHC16 +FHC45 + FAC40 =e= FAC42;
1469 EQU517..1000*FAC42*xiC10AC42 - riC10C629*VaC623*MWiC10 =e= 0;
1470 EQU518..1000*FAC42*xiC11AC42 -riC11C629 * VaC623 * MWiC11 =e= 0;
1471 EQU519..1000*(FHC16*x7HC16 + FHC45*x7HC45 - FAC42*x7AC42) +
r7C629*VaC623*MW7 =e= 0;
1472 EQU520..k19/(1E14*1E6)*C7pC629*C2C629 - k8/1E12*CiC10pC629*C3C629
=e= 0;
1473 EQU521..1000*(FHC16*x4HC16 + FHC45*x4HC45 - FAC42*x4AC42) +
r4C629*VaC623*MW4 =e= 0;
1474 EQU522..k16/(1E11*1E9)*CiC5eC629*C3pC629 -
k7/1E12*C10pC629*C3C629 =e= 0;
1475 EQU523..k11/(1E6*1E9)*C2C629*C3pC629 +
k10/(1E6*1E9)*C3pC629*CiC4eC629 - k6/1E12*C9pC629*C3C629 -
k12/1E12*C9pC629 =e= 0;
1476 EQU524..k13/(1E11*1E9)*C3pC629*CiC8eC629 - k5/1E12*C8pC629*C3C629
-k15/(1E6*1E12)*C8pC629*C2C629 =e= 0;
1477 EQU525..CHXC629 =e= rhoAC42*x11AC42/MW11;
1478 EQU526..C3C629 =e= rhoAC42*x3AC42/MW3;
1479 EQU527..C2C629/1E6 =e= rhoAC42*x2AC42/MW2;
1480 EQU528..riC10C629 =e= k8/1E12* CiC10pC629 * C3C629;
1481 EQU529..r10C629 =e= k7/1E12*C10pC629 * C3C629;
1482 EQU530..r8C629 =e= k5/1E12*C8pC629*C3C629;
1483 EQU531..k1/1E6*C2C629*CHXC629 - k2/1E12*C4pC629*C3C629 =e= 0;

1484 EQU532..k12/1E12*C9pC629 - k13/(1E11*1E9)*CiC8eC629*C3pC629 =e=0;
 1485 EQU533..k13/(1E11*1E9)*CiC8eC629*C3pC629 +k17/1E12*CiC11pC629 -
 k14/1E11*CiC5eC629*CHXC629 - k16/(1E11*1E9)*CiC5eC629*C3pC629

 =e= 0;
 1486 EQU534..k9/1E9*C3pC629 - k10/(1E6*1E9)*CiC4eC629*C3pC629 =e= 0;
 1487 EQU535..-r2C629 + k1/1E6*C2C629*CHXC629 + k11/(1E9*1E6)*C3pC629
 *C2C629 + k15/(1E12*1E6)*C8pC629*C2C629 + k19/(1E14*1E6)

 *C7pC629*C2C629=e=0;
 1488 EQU536..1000*(FHC16*x2HC16 - FAC42*x2AC42) - r2C629*VaC623*MW2
 =e= 0;

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1489 EQU537..-r3C629 + r4C629 + r5C629 + r7C629 + r8C629 + r9C629 +
r10C629 + riC10C629+ riC11C629 =e= 0;
1490 EQU538..k15/(1E6*1E12)*C8pC629*C2C629 -
k18/1E12*CiC11pC629*C3C629 - k17/1E12*CiC11pC629 =e= 0;
1491 EQU539..k17/1E12*CiC11pC629 - k4/1E14*C7pC629*C3C629 -
k19/(1E6*1E14)*C7pC629*C2C629 =e= 0;
1492 EQU540..FC316 * x3C316 + FC329*x3C329 - FC317 * x3C317 -
FC325*x3C325 =e= 0;
1493 EQU541..FC316 * x4C316 + FC329*x4C329 - FC317 * x4C317 -
FC325*x4C325 =e= 0;
1494 EQU542..FC316 * x5C316 + FC329*x5C329 - FC317 * x5C317 -
FC325*x5C325 =e= 0;
1495 EQU543..x1C317 - x1C323 =e= 0;
1496 EQU544..x3C317 - x3C323 =e= 0;
1497 EQU545..x4C317 - x4C323 =e= 0;
1498 EQU546..x5C317 - x5C323 =e= 0;
1499 EQU547..FHC03 - FC419 - FC321 =e= 0;
1500 EQU548..FHC03 * x1HC03 - FC419 * x1C419 - FC321 * x1C321 =e= 0;
1501 EQU549..FHC03 * x3HC03 - FC419 * x3C419 - FC321 * x3C321 =e= 0;
1502 EQU550..FHC03 * x4HC03 - FC419 * x4C419 - FC321 * x4C321 =e= 0;
1503 EQU551..FHC03 * x5HC03 - FC419 * x5C419 - FC321 * x5C321 =e= 0;
1504 EQU552..hHC03 - hc419 - hc321 =e= 0;
1505 EQU553..FHC24 -FHC23 - FHC22 =e= 0;
1506 EQU554..FHC24*x1HC24 -FHC23*x1HC23 - FHC22*x1HC22 =e= 0;
1507 EQU555..FHC24*x3HC24 -FHC23*x3HC23 - FHC22*x3HC22 =e= 0;
1508 EQU556..FHC24*x4HC24 -FHC23*x4HC23 - FHC22*x4HC22 =e= 0;
1509 EQU557..FHC24*x5HC24 -FHC23*x5HC23 - FHC22*x5HC22 =e= 0;
1510 EQU558..FHC24*x7HC24 -FHC23*x7HC23 - FHC22*x7HC22 =e= 0;
1511 EQU559..x1HC24+x2HC24+x3HC24+x4HC24+x5HC24+x7HC24 =e=1;
1512 EQU560..x1HC25+x2HC25+x3HC25+x4HC25+x5HC25+x7HC25 =e=1;
1513 EQU561..FHC26 -FHC25 - FHC24 =e= 0;
1514 EQU562..FHC26*x1HC26 -FHC25*x1HC25 - FHC24*x1HC24 =e= 0;
1515 EQU563..FHC26*x3HC26 -FHC25*x3HC25 - FHC24*x3HC24 =e= 0;
1516 EQU564..FHC26*x4HC26 -FHC25*x4HC25 - FHC24*x4HC24 =e= 0;
1517 EQU565..FHC26*x5HC26 -FHC25*x5HC25 - FHC24*x5HC24 =e= 0;
1518 EQU566..FHC26*x7HC26 -FHC25*x7HC25 - FHC24*x7HC24 =e= 0;
1519 EQU567..x1HC26+x2HC26+x3HC26+x4HC26+x5HC26+x7HC26 =e=1;
1520 EQU568..x1HC27+x2HC27+x3HC27+x4HC27+x5HC27+x7HC27 =e=1;
1521 EQU569..FHC28 -FHC27 - FHC26 =e= 0;
1522 EQU570..F1HC28*x1HC28 + FvHC28*y1HC28 - FHC27*x1HC27 -
FHC26*x1HC26 =e= 0;
1523 EQU571..F1HC28*x3HC28 + FvHC28*y3HC28 - FHC27*x3HC27 -
FHC26*x3HC26 =e= 0;
1524 EQU572..F1HC28*x4HC28 + FvHC28*y4HC28 - FHC27*x4HC27 -
FHC26*x4HC26 =e= 0;
1525 EQU573..F1HC28*x5HC28 + FvHC28*y5HC28 - FHC27*x5HC27 -
FHC26*x5HC26 =e= 0;
1526 EQU574..F1HC28*x7HC28 + FvHC28*y7HC28 - FHC27*x7HC27 -
FHC26*x7HC26 =e= 0;
1527 EQU575..x1HC28+x2HC28+x3HC28+x4HC28+x5HC28+x7HC28 =e=1;
1528 EQU576..FHC28 - FHC29 - FR1 =e= 0;

1529 EQU577..FR1 - FHC28*sfs2 =e=0;
1530 EQU578..FlHC28 - FlHC29 - FlR1 =e= 0;
1531 EQU579..FvHC28 - FvHC29 - FvR1 =e= 0;
1532 EQU580..FlR1 - FlHC28*sfs2 =e=0;
1533 EQU581..FvR1 - FvHC28*sfs2 =e=0;
1534 EQU582..FHC15 - FHC14 - FHC16 =e= 0;

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```
1535 EQU583..FHC15*sfs11 - FHC14 =e= 0;
1536 EQU584..x1HC15 - x1HC14 =e= 0;
1537 EQU585..x2HC15 - x2HC16 =e= 0;
1538 EQU586..x2HC15 - x2HC14 =e= 0;
1539 EQU587..LpC606A=e=FC322 + qC606A*FC404;
1540 EQU588..VpC606A=e=FC432;
1541 EQU589..TnC606A=e=(TC414+TC404)/2;
1542 EQU590..TmC606A=e=(TC430+TC404)/2;
1543 EQU591..FC418 * x1C418 - FC417 * x1C417 - FC415 * x1C415 =e= 0;
1544 EQU592..FC418 * x3C418 - FC417 * x3C417 - FC415 * x3C415 =e= 0;
1545 EQU593..FC418 * x4C418 - FC417 * x4C417 - FC415 * x4C415 =e= 0;
1546 EQU594..FC418 * x5C418 - FC417 * x5C417 - FC415 * x5C415 =e= 0;
1547 EQU595..hC418 - hC417 - hC415 =e= 0;
1548 EQU596..x4C405 - x4C406 =e= 0;
1549 EQU597..x5C405 - x5C406 =e= 0;
1550 EQU598..FC403 - FC404 =e= 0;
1551 EQU599..x1C403 - x1C404 =e= 0;
1552 EQU600..x3C403 - x3C404 =e= 0;
1553 EQU601..x4C403 - x4C404 =e= 0;
1554 EQU602..x5C403 - x5C404 =e= 0;
1555 EQU603..x3C406 - x3C407 =e= 0;
1556 EQU604..x4C406 - x4C407 =e= 0;
1557 EQU605..x5C406 - x5C407 =e= 0;
1558 EQU606..FC431 - FC412 - FC432 =e= 0;
1559 EQU607..FC432 - sfs41 * FC431 =e= 0;
1560 EQU608..x1C431 - x1C412 =e= 0;
1561 EQU609..x3C431 - x3C412 =e= 0;
1562 EQU610..x4C431 - x4C412 =e= 0;
1563 EQU611..x5C431 - x5C412 =e= 0;
1564 EQU612..TC319 - TC320 =e= 0;
1565 EQU613..TC319 - TC321 =e= 0;
1566 EQU614..TC319 - TC322 =e= 0;
1567 EQU615..x1C431 - x1C432 =e= 0;
1568 EQU616..x3C431 - x3C432 =e= 0;
1569 EQU617..x4C431 - x4C432 =e= 0;
1570 EQU618..x5C431 - x5C432 =e= 0;
1571 EQU619..FC430 + FC427 - FC431 - FC425 =e= 0;
1572 EQU620..FC430 * x1C430 + FC427 * x3C427 - FC431 * x1C431 - FC425
* x1C425 =e= 0;
1573 EQU621..FC430 * x3C430 + FC427 * x3C427 - FC431 * x3C431 - FC425
* x3C425 =e= 0;
1574 EQU622..FC430 * x4C430 + FC427 * x4C427 - FC431 * x4C431 - FC425
* x4C425 =e= 0;
1575 EQU623..FC430 * x5C430 + FC427 * x5C427 - FC431 * x5C431 - FC425
* x5C425 =e= 0;
1576 EQU624..x3HC15 - x3HC14 =e= 0;
1577 EQU625..x4HC15 - x4HC14 =e= 0;
1578 EQU626..x5HC15 - x5HC14 =e= 0;
1579 EQU627..x3HC15 - x3HC16 =e= 0;
1580 EQU628..x4HC15 - x4HC16 =e= 0;
```

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1581 EQU629..x5HC15 - x5HC16 =e= 0;
1582 EQU630..x1HC15 - x1HC16 =e= 0;
1583 EQU631..x1HC15 + x2HC15 + x3HC15 + x4HC15 + x5HC15 + x7HC15 =e=
1;
1584 EQU632..FHC08 - FHC11 - FHC15 =e= 0;
1585 EQU633..FHC08*sfs7 - FHC11 =e= 0;
1586 EQU634..x1HC08 - x1HC11 =e= 0;
1587 EQU635..x2HC08 - x2HC11 =e= 0;
1588 EQU636..x3HC08 - x3HC11 =e= 0;
1589 EQU637..x4HC08 - x4HC11 =e= 0;
1590 EQU638..x5HC08 - x5HC11 =e= 0;
1591 EQU639..x1HC08 - x1HC15 =e= 0;
1592 EQU640..x2HC08 - x2HC15 =e= 0;
1593 EQU641..x3HC08 - x3HC15 =e= 0;
1594 EQU642..x4HC08 - x4HC15 =e= 0;
1595 EQU643..x5HC08 - x5HC15 =e= 0;
1596 EQU644..Q2HC11 - FHC11 * x2HC11/(rho2HC11/1000) =e= 0;
1597 EQU645..QHC11 - FHC11/0.575 =e= 0;
1598 EQU646..x1HC11 + x2HC11 + x3HC11 + x4HC11 + x5HC11 + x7HC11 =e=
1;
1599 EQU647..FHC06 - FHC07 - FHC08 =e= 0;
1600 EQU648..FHC06*sfs5 - FHC07 =e= 0;
1601 EQU649..x1HC06 - x1HC07 =e= 0;
1602 EQU650..FC425 - FC410 - FC426 =e= 0;
1603 EQU651..FC426 - sfs42 * FC425 =e= 0;
1604 EQU652..x1C425 - x1C410 =e= 0;
1605 EQU653..x3C425 - x3C410 =e= 0;
1606 EQU654..x4C425 - x4C410 =e= 0;
1607 EQU655..x5C425 - x5C410 =e= 0;
1608 EQU656..x1C425 - x1C426 =e= 0;
1609 EQU657..x3C425 - x3C426 =e= 0;
1610 EQU658..x4C425 - x4C426 =e= 0;
1611 EQU659..x5C425 - x5C426 =e= 0;
1612 EQU660..x1C410 - x1C411 =e= 0;
1613 EQU661..x3C410 - x3C411 =e= 0;
1614 EQU662..x4C410 - x4C411 =e= 0;
1615 EQU663..x5C410 - x5C411 =e= 0;
1616 EQU664..hc427 - hc428 - hc411 =e= 0;
1617 EQU665..FC427 * x1C427 - FC428 * x1C428 - FC411 * x1C411 =e= 0;
1618 EQU666..FC427 * x3C427 - FC428 * x3C428 - FC411 * x3C411 =e= 0;
1619 EQU667..FC427 * x4C427 - FC428 * x4C428 - FC411 * x4C411 =e= 0;
1620 EQU668..FC427 * x5C427 - FC428 * x5C428 - FC411 * x5C411 =e= 0;
1621 EQU669..FC426 - FC428 - FC405 =e= 0;
1622 EQU670..x2HC06 - x2HC07 =e= 0;
1623 EQU671..x3HC06 - x3HC07 =e= 0;
1624 EQU672..x4HC06 - x4HC07 =e= 0;
1625 EQU673..x5HC06 - x5HC07 =e= 0;
1626 EQU674..x1HC06 - x1HC08 =e= 0;

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```
1627 EQU675..x2HC06 - x2HC08 =e= 0;
1628 EQU676..x3HC06 - x3HC08 =e= 0;
1629 EQU677..x4HC06 - x4HC08 =e= 0;
1630 EQU678..x5HC06 - x5HC08 =e= 0;
1631 EQU679..x1HC07 + x2HC07 + x3HC07 + x4HC07 + x5HC07 + x7HC07 =e=
1;
1632 EQU680..QHC07 - FHC07/0.575 =e= 0;
1633 EQU681..Q2HC07 - FHC07 * x2HC07/(rho2HC07/1000) =e= 0;
1634 EQU682..x1HC06 + x2HC06 + x3HC06 + x4HC06 + x5HC06 + x7HC06 =e=
1;
1635 EQU683..FHC06 -FHC02 - FHC05 =e= 0;
1636 EQU684..FHC06*x1HC06 - FHC02*x1HC02 - FHC05*x1HC05 =e= 0;
1637 EQU685..FHC06*x2HC06 - FHC02*x2HC02 - FHC05*x2HC05 =e= 0;
1638 EQU686..FHC06*x3HC06 - FHC02*x3HC02 - FHC05*x3HC05 =e= 0;
1639 EQU687..FHC06*x4HC06 - FHC02*x4HC02 - FHC05*x4HC05 =e= 0;
1640 EQU688..FHC06*x5HC06 - FHC02*x5HC02 - FHC05*x5HC05 =e= 0;
1641 EQU689..FHC40 - FHC41 - FHC45 =e= 0;
1642 EQU690..FHC40*sfS27 - FHC41 =e= 0;
1643 EQU691..x1HC40 - x1HC41 =e= 0;
1644 EQU692..x3HC40 - x3HC41 =e= 0;
1645 EQU693..x4HC40 - x4HC41 =e= 0;
1646 EQU694..x5HC40 - x5HC41 =e= 0;
1647 EQU695..x1HC40 - x1HC45 =e= 0;
1648 EQU696..x3HC40 - x3HC45 =e= 0;
1649 EQU697..x4HC40 - x4HC45 =e= 0;
1650 EQU698..x1HC32 - x1HC33 =e= 0;
1651 EQU699..FC426 * x1C426- FC428 * x1C428 - FC405 * x1C405 =e= 0;
1652 EQU700..FC426 * x3C426- FC428 * x3C428 - FC405 * x3C405 =e= 0;
1653 EQU701..FC426 * x4C426- FC428 * x4C428 - FC405 * x4C405 =e= 0;
1654 EQU702..FC426 * x5C426- FC428 * x5C428 - FC405 * x5C405 =e= 0;
1655 EQU703..FC408 - FC409 =e= 0;
1656 EQU704..x1C408 - x1C409 =e= 0;
1657 EQU705..x3C408 - x3C409 =e= 0;
1658 EQU706..x4C408 - x4C409 =e= 0;
1659 EQU707..x5C408 - x5C409 =e= 0;
1660 EQU708..x5HC40 - x5HC45 =e= 0;
1661 EQU709..FHC32 - FHC33 - FHC40 =e= 0;
1662 EQU710..x1HC45 +x3HC45 + x4HC45 + x5HC45 + x7HC45 =e= 1;
1663 EQU711..QHC45 - FHC45/0.575 =e= 0;
1664 EQU712..x1HC40 +x3HC40 + x4HC40 + x5HC40 + x7HC40 =e= 1;
1665 EQU713..FHC32*sfS19 - FHC33 =e= 0;
1666 EQU714..x3HC32 - x3HC33 =e= 0;
1667 EQU715..x4HC32 - x4HC33 =e= 0;
1668 EQU716..x5HC32 - x5HC33 =e= 0;
1669 EQU717..x1HC32 - x1HC40 =e= 0;
1670 EQU718..x3HC32 - x3HC40 =e= 0;
1671 EQU719..x4HC32 - x4HC40 =e= 0;
1672 EQU720..x5HC32 - x5HC40 =e= 0;
```

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```
1673 EQU721..x1HC33 +x3HC33 + x4HC33 + x5HC33 + x7HC33 =e= 1;
1674 EQU722..FHC33 - FHC34 - FHC38 =e= 0;
1675 EQU723..FHC33*sfs23 - FHC34 =e= 0;
1676 EQU724..x1HC33 - x1HC34 =e= 0;
1677 EQU725..x3HC33 - x3HC34 =e= 0;
1678 EQU726..x4HC33 - x4HC34 =e= 0;
1679 EQU727..x5HC33 - x5HC34 =e= 0;
1680 EQU728..x1HC33 - x1HC38 =e= 0;
1681 EQU729..x3HC33 - x3HC38 =e= 0;
1682 EQU730..x4HC33 - x4HC38 =e= 0;
1683 EQU731..x5HC33 - x5HC38 =e= 0;
1684 EQU732..x1HC34 +x3HC34 + x4HC34 + x5HC34 + x7HC34 =e= 1;
1685 EQU733..QHC34 - FHC34/0.575 =e= 0;
1686 EQU734..QHC38 - FHC38/0.575 =e= 0;
1687 EQU735..x1HC38 +x3HC38 + x4HC38 + x5HC38 + x7HC38 =e= 1;
1688 EQU736..FC412 - FC413 =e= 0;
1689 EQU737..x1C412 - x1C413 =e= 0;
1690 EQU738..x3C412 - x3C413 =e= 0;
1691 EQU739..x4C412 - x4C413 =e= 0;
1692 EQU740..x5C412 - x5C413 =e= 0;
1693 EQU741..x1C319 - x1C322 =e= 0;
1694 EQU742..x3C319 - x3C322 =e= 0;
1695 EQU743..x4C319 - x4C322 =e= 0;
1696 EQU744..x5C319 - x5C322 =e= 0;
1697 EQU745..hc414liq - FC414 *
((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff))))
1698 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff))))
1699 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff))))
1700 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff))))
1701 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff)))) =e= 0;
1702 EQU746..dTE621A*2 =e=
1703 (TC414-TcwotE621A) + (TC414-Tcwin);
1704 EQU747..(hc414liq - hc415) - Fcwe621B*4.197*(TcwotE621B - Tcwin)
=e= 0;
1705 EQU748..(hc414liq - hc415) - UE621B*FE621B*AE621B*dTE621B =e= 0;
1706 EQU749..dTE621B**3 =e= ((TC414-TcwotE621B)*(TC415-Tcwin)*
1707 ((TC414-TcwotE621B)+(TC415-Tcwin))/2);
1708 EQU750..hc412liq - FC412 *
((x1C412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC412,ORD(Coeff))))
1709 +(x3C412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC412,ORD(Coeff))))
1710 +(x4C412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC412,ORD(Coeff))))
1711 +(x5C412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC412,ORD(Coeff))))
```

```

1712 +(x7C412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC412,ORD(Coeff)))) =e= 0;
1713 EQU751..dTE627A*2 =e=
1714 (TC412-TcwotE621A) + (TC412-Tcwin);
1715 EQU752..(hC412liq - hC413) - FcwE627B*4.197*(TcwotE627B - Tcwin)
=e= 0;
1716 EQU753..(hC412liq - hC413) - UE627B*FE627B*AE627B*dTE627B =e= 0;
1717 EQU754..dTE627B **3 =e= ((TC412-TcwotE627B)*(TC413-Tcwin)*
1718 ((TC412-TcwotE627B)+(TC413-Tcwin))/2);

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```
1719 EQU755..hc411 - FC411 *
1720 ((x1C411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC411,ORD(Coeff))))
1721 +(x3C411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC411,ORD(Coeff))))
1722 +(x4C411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC411/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1723 +(x5C411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC411/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1724 +(x7C411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC411,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC411/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1725 EQU756..hc410vap - FC410 *
1726 ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC410/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1727 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC410/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1728 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC410/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1729 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC410/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1730 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))+Enth_Vap("7","a1")*1000 *
((1-TC410/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1731 EQU757..dTE696A =e= 414.6 - TC410;
1732 EQU758..(hc411 - hc410vap) - FstmE696B * hstmE696 =e= 0;
1733 EQU759..(hc411 - hc410vap) - UE696B*AE696B*dTE696B =e= 0;
1734 EQU760..dTE696B*2 =e=
1735 (414.6-TC410) + (414.6-TC411);
1736 EQU761..dTE626**3 =e= ((TC418-TcwoutE626)*(TC419-Tcwin)*
1737 ((TC418-TcwoutE626)+(TC419-Tcwin))/2);
1738 EQU762..dTE617 **3=e= ((TC406-TcwoutE617)*(TC407-Tcwin)*
1739 ((TC406-TcwoutE617)+(TC407-Tcwin))/2);
1740 EQU763..dTE616**3 =e= ((TC405-TC404)*(TC406-TC403)*
1741 ((TC405-TC404)+(TC406-TC403))/2);
1742 EQU764..hc408vap - FC408 *
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1743 ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC408,ORD(Coeff))))
1744 )
1745 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
1746 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
1747 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1748 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1749 EQU765..dTE695A =e= 481 - TC408;
1750 EQU766..(hc409 - hc408vap) - FstmE695B * hstmE695 =e= 0;
1751 EQU767..(hc409 - hc408vap) - UE695B*AE695B*dTE695B =e= 0;
1752 EQU768..dTE695B*2 =e=
1753 (481-TC408) + (481-TC409);
1754 EQU769..hvr1 - Fvr1*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff)))+ Enth_Vap("1","a1")

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*1000 * ((1-TR1/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1755 +(y3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR1/Enth_Vap(
"3","a2"))**Enth_Vap("3","a3")))
1756 +(y4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR1/Enth_Vap("
4","a2"))**Enth_Vap("4","a3")))
1757 +(y5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR1/Enth_Vap("
5","a2"))**Enth_Vap("5","a3")))
1758 +(y7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR1/Enth_Vap("
7","a2"))**Enth_Vap("7","a3")))) =e= 0;
1759 EQU770..y1R1 + y2R1 + y3R1 + y4R1 + y5R1 + y7R1 =e= 1;
1760 EQU771..h1R1 - Fl1R1* ((x1R1/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR1,ORD(Coeff)))))
1761 +(x3R1/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR1,ORD(Coeff)))))
1762 +(x4R1/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR1,ORD(Coeff)))))
1763 +(x5R1/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR1,ORD(Coeff)))))
1764 +(x7R1/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR1,ORD(Coeff))))) =e= 0;
1765 EQU772..x1R1 + x2R1 + x3R1 + x4R1 + x5R1 + x7R1 =e= 1;
1766 EQU773..hr1 - h1R1 - hvR1 =e= 0;
1767 EQU774..hvHC29 - FvHC29*((y1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1768 +(y3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC29/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1769 +(y4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC29/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1770 +(y5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC29/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1771 +(y7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-THC29/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
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1772 EQU775..hHC29 - h1HC29 - hvHC29 =e= 0;
1773 EQU776..FHC29 - F1HC29 - FvHC29 =e= 0;
1774 EQU777..h1HC29 - F1HC29*((x1HC29/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC29,ORD(Coeff))))
1775 +(x3HC29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC29,ORD(Coeff))))
1776 +(x4HC29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC29,ORD(Coeff))))
1777 +(x5HC29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC29,ORD(Coeff))))
1778 +(x7HC29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC29,ORD(Coeff)))) =e= 0;
1779 EQU778..xx7HC32 * MW7 * FmHC32 - FHC32 * x7HC32 =e= 0;
1780 EQU779..xx5HC32 * MW5 * FmHC32 - FHC32 * x5HC32 =e= 0;
1781 EQU780..FR1 - F1R1 -FvR1 =e= 0;
1782 EQU781..hC303 - FC303 *
1783 ((x1C303/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC303/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1784 +(x3C303/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC303,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC303/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1785 +(x4C303/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC303/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1786 +(x5C303/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC303/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))

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1787 +(x7C303/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC303,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC303/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1788 EQU782..hC306 - FC306 *
1789 ((x1C306/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC306/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1790 +(x3C306/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC306,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC306/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1791 +(x4C306/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC306/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1792 +(x5C306/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC306/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1793 +(x7C306/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC306,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC306/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1794 EQU783..hC308 - FC308* ((x1C308/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC308,ORD(Coeff))))
1795 +(x3C308/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC308,ORD(Coeff))))
1796 +(x4C308/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC308,ORD(Coeff))))
1797 +(x5C308/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC308,ORD(Coeff))))
1798 +(x7C308/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC308,ORD(Coeff)))) =e= 0;
1799 EQU784..hC310 - FC310 *
1800 ((x1C310/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC310/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1801 +(x3C310/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC310,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC310/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1802 +(x4C310/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC310/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1803 +(x5C310/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
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((1-TC310/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1804 +(x7C310/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC310,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC310/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1805 EQU785..hC311 - FC311 * ((x1C311/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC311,ORD(Coeff))))
1806 +(x3C311/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC311,ORD(Coeff))))
1807 +(x4C311/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC311,ORD(Coeff))))
1808 +(x5C311/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC311,ORD(Coeff))))
1809 +(x7C311/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC311,ORD(Coeff)))) =e= 0;
1810 EQU786..hC312 - FC312*
1811 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC312/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1812 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC312/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1813 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC312/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1814 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC312/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1815 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC312/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1816 EQU787..hC315 - FC315 * ((x1C315/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC315,ORD(Coeff))))

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1817 +(x3C315/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC315,ORD(Coeff))))
1818 +(x4C315/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC315,ORD(Coeff))))
1819 +(x5C315/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC315,ORD(Coeff))))
1820 +(x7C315/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC315,ORD(Coeff)))) =e= 0;
1821 EQU788..hC316 - FC316 * ((x1C316/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC316,ORD(Coeff))))
1822 +(x3C316/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC316,ORD(Coeff))))
1823 +(x4C316/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC316,ORD(Coeff))))
1824 +(x5C316/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC316,ORD(Coeff))))
1825 +(x7C316/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC316,ORD(Coeff)))) =e= 0;
1826 EQU789..hC317 - FC317 * ((x1C317/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC317,ORD(Coeff))))
1827 +(x3C317/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC317,ORD(Coeff))))
1828 +(x4C317/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC317,ORD(Coeff))))
1829 +(x5C317/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC317,ORD(Coeff))))
1830 +(x7C317/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC317,ORD(Coeff)))) =e= 0;
1831 EQU790..hC318 - FC318 * ((x1C318/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC318,ORD(Coeff))))
1832 +(x3C318/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC318,ORD(Coeff))))
1833 +(x4C318/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC318,ORD(Coeff))))
1834 +(x5C318/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC318,ORD(Coeff))))
1835 +(x7C318/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC318,ORD(Coeff)))) =e= 0;
1836 EQU791..hC319 - FC319 * ((x1C319/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC319,ORD(Coeff))))
1837 +(x3C319/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC319,ORD(Coeff))))
1838 +(x4C319/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC319,ORD(Coeff))))
1839 +(x5C319/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC319,ORD(Coeff))))
1840 +(x7C319/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC319,ORD(Coeff)))) =e= 0;
1841 EQU792..hC403 - FC403 * ((x1C403/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC403,ORD(Coeff))))
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1842 +(x3C403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC403,ORD(Coeff))))
1843 +(x4C403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC403,ORD(Coeff))))
1844 +(x5C403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC403,ORD(Coeff))))
1845 +(x7C403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC403,ORD(Coeff)))) =e= 0;
1846 EQU793..xx4HC32 * MW4 * FmHC32 - FHC32 * x4HC32 =e= 0;
1847 EQU794..xx3HC32 * MW3 * FmHC32 - FHC32 * x3HC32 =e= 0;
1848 EQU795..FmHC32 - FHC32 * (x1HC32/MW1 + x3HC32/MW3 + x4HC32/MW4 +
x5HC32/MW5 + x7HC32/MW7) =e= 0;
1849 EQU796..hHC32 - FHC32 * ((x1HC32/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC32,ORD(Coeff))))
1850 +(x3HC32/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC32,ORD(Coeff))))
1851 +(x4HC32/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC32,ORD(Coeff))))
1852 +(x5HC32/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC32,ORD(Coeff))))
1853 +(x7HC32/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC32,ORD(Coeff)))) =e= 0;
1854 EQU797..x1HC32 + x3HC32 + x4HC32 + x5HC32 + x7HC32 =e= 1;
1855 EQU798..xx1HC32 + xx3HC32 + xx4HC32 + xx5HC32 + xx7HC32 =e= 1;
1856 EQU799..hC302 - FC302 *
1857 ((x1C302/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC302/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1858 +(x3C302/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC302,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC302/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1859 +(x4C302/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC302/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))

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1860 +(x5C302/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC302/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1861 +(x7C302/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC302,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC302/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1862 EQU800..xx7C302 * MW7 * FmC302 - FC302 * x7C302 =e= 0;
1863 EQU801..xx5C302 * MW5 * FmC302 - FC302 * x5C302 =e= 0;
1864 EQU802..xx4C302 * MW4 * FmC302 - FC302 * x4C302 =e= 0;
1865 EQU803..xx3C302 * MW3 * FmC302 - FC302 * x3C302 =e= 0;
1866 EQU804..FmC302 - FC302 * (x1C302/MW1 + x3C302/MW3 + x4C302/MW4 +
x5C302/MW5 + x7C302/MW7) =e= 0;
1867 EQU805..x1C302 + x3C302 + x4C302 + x5C302 + x7C302 =e= 1;
1868 EQU806..xx1C302 + xx3C302 + xx4C302 + xx5C302 + xx7C302 =e= 1;
1869 EQU807..x1C301 + x2C301 + x3C301 + x4C301 + x5C301 + x7C301 =e=
1;
1870 EQU808..hC301 - FC301 *
1871 ((x1C301/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC301/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
1872 +(x3C301/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC301,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC301/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
1873 +(x4C301/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC301/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
1874 +(x5C301/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC301/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
1875 +(x7C301/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC301,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC301/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
1876 EQU809..hC303 - hC302 - hC301 =e= 0;
1877 EQU810..FC303 * x5C303 - FC302 * x5C302 - FC301 * x5C301 =e= 0;
1878 EQU811..FC303 * x4C303 - FC302 * x4C302 - FC301 * x4C301 =e= 0;
1879 EQU812..FC303 * x3C303 - FC302 * x3C302 - FC301 * x3C301 =e= 0;
1880 EQU813..FC303 * x1C303 - FC302 * x1C302 - FC301 * x1C301 =e= 0;
1881 EQU814..FC303 - FC302 - FC301 =e= 0;
1882 EQU815..x1HC02 + x2HC02 + x3HC02 + x4HC02 + x5HC02 + x7HC02 =e=
1;
1883 EQU816..hHC02 - FHC02 * ((x1HC02/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC02,ORD(Coeff))))
1884 +(x2HC02/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC02,ORD(Coeff))))
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1885 +(x3HC02/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC02,ORD(Coeff))))
1886 +(x4HC02/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC02,ORD(Coeff))))
1887 +(x5HC02/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC02,ORD(Coeff))))
1888 +(x7HC02/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC02,ORD(Coeff)))) =e= 0;
1889 EQU817..x1HC05 + x2HC05 + x3HC05 + x4HC05 + x5HC05 + x7HC05 =e=
1;
1890 EQU818..hHC05 - FHC05 * ((x1HC05/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC05,ORD(Coeff))))
1891 +(x2HC05/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC05,ORD(Coeff))))
1892 +(x3HC05/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC05,ORD(Coeff))))
1893 +(x4HC05/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC05,ORD(Coeff))))
1894 +(x5HC05/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC05,ORD(Coeff))))
1895 +(x7HC05/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC05,ORD(Coeff)))) =e= 0;
1896 EQU819..x1HC04 + x2HC04 + x3HC04 + x4HC04 + x5HC04 + x7HC04 =e=
1;
1897 EQU820..hHC04 - FHC04 * ((x1HC04/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC04,ORD(Coeff))))
1898 +(x2HC04/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC04,ORD(Coeff))))

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1899 +(x3HC04/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC04,ORD(Coeff))))
1900 +(x4HC04/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC04,ORD(Coeff))))
1901 +(x5HC04/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC04,ORD(Coeff))))
1902 +(x7HC04/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC04,ORD(Coeff)))) =e= 0;
1903 EQU821..hC402 - FC402 * ((x1C402/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC402,ORD(Coeff))))
1904 +(x3C402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC402,ORD(Coeff))))
1905 +(x4C402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC402,ORD(Coeff))))
1906 +(x5C402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC402,ORD(Coeff))))
1907 +(x7C402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC402,ORD(Coeff)))) =e= 0;
1908 EQU822..x1C402 + x3C402 + x4C402 + x5C402 + x7C402 =e= 1;
1909 EQU823..FHC01 - FHC02 =e= 0;
1910 EQU824..FC401 - FC402 =e= 0;
1911 EQU825..(hHC02 - hHC01) - (hC401 - hC402) =e= 0;
1912 EQU826..(hHC01 - hHC02) - UE628*AE628*FE628*dTE628 =e= 0;
1913 EQU827..x1HC01 - x1HC02 =e= 0;
1914 EQU828..x2HC01 - x2HC02 =e= 0;
1915 EQU829..x3HC01 - x3HC02 =e= 0;
1916 EQU830..x4HC01 - x4HC02 =e= 0;
1917 EQU831..x5HC01 - x5HC02 =e= 0;
1918 EQU832..hC321 - FC321 * ((x1C321/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC321,ORD(Coeff))))
1919 +(x3C321/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC321,ORD(Coeff))))
1920 +(x4C321/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC321,ORD(Coeff))))
1921 +(x5C321/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC321,ORD(Coeff))))
1922 +(x7C321/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC321,ORD(Coeff)))) =e= 0;
1923 EQU833..FmC322 - FC322 * (x1C322/MW1 + x3C322/MW3 + x4C322/MW4 +
x5C322/MW5 + x7C322/MW7)=e= 0;
1924 EQU834..hC323 - FC323 * ((x1C323/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC323,ORD(Coeff))))
1925 +(x3C323/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC323,ORD(Coeff))))
1926 +(x4C323/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC323,ORD(Coeff))))
1927 +(x5C323/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC323,ORD(Coeff))))
1928 +(x7C323/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC323,ORD(Coeff)))) =e= 0;
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1929 EQU835..hc326 - (FC326/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC326,ORD(Coeff))))
1930 =e= 0;
1931 EQU836..hc329 - (FC329/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC329,ORD(Coeff))))
1932 =e= 0;
1933 EQU837..x1C401 - x1C402 =e= 0;
1934 EQU838..x3C401 - x3C402 =e= 0;
1935 EQU839..x4C401 - x4C402 =e= 0;
1936 EQU840..x5C401 - x5C402 =e= 0;
1937 EQU841..(hc403 - hc402) - UE629*AE629*FE629*dTE629 =e= 0;
1938 EQU842..(hc402 - hc403) - (hHC04 - hHC03) =e= 0;
1939 EQU843..FHC03 - FHC04 =e= 0;
1940 EQU844..FC402 - FC403 =e= 0;
1941 EQU845..x5C402 - x5C403 =e= 0;
1942 EQU846..x4C402 - x4C403 =e= 0;
1943 EQU847..x3C402 - x3C403 =e= 0;
1944 EQU848..x1C402 - x1C403 =e= 0;

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1945 EQU849..x5HC03 - x5HC04 =e= 0;
1946 EQU850..x4HC03 - x4HC04 =e= 0;
1947 EQU851..x3HC03 - x3HC04 =e= 0;
1948 EQU852..x2HC03 - x2HC04 =e= 0;
1949 EQU853..x1HC03 - x1HC04 =e= 0;
1950 EQU854..FHC04 - FHC05 =e= 0;
1951 EQU855..THC29 - THC30 =e= 0;
1952 EQU856..(FlHC29*x5HC29 + FvHC29*y5HC29) - (FlHC30*x5HC30 +
FvHC30*y5HC30) =e= 0;
1953 EQU857..(FlHC29*x4HC29 + FvHC29*y4HC29) - (FlHC30*x4HC30 +
FvHC30*y4HC30) =e= 0;
1954 EQU858..(FlHC29*x3HC29 + FvHC29*y3HC29) - (FlHC30*x3HC30 +
FvHC30*y3HC30) =e= 0;
1955 EQU859..(FlHC29*x1HC29 + FvHC29*y1HC29) - (FlHC30*x1HC30 +
FvHC30*y1HC30) =e= 0;
1956 EQU860..(hHC04 - hHC05) - UE633*AE633*dTE633 =e= 0;
1957 EQU861..(hHC04 - hHC05) - (hHC30 - hHC29) =e= 0;
1958 EQU862..(FlHC29 + FvHC29) - (FlHC30 + FvHC30) =e= 0;
1959 EQU863..x5HC04 - x5HC05 =e= 0;
1960 EQU864..x4HC04 - x4HC05 =e= 0;
1961 EQU865..x3HC04 - x3HC05 =e= 0;
1962 EQU866..x2HC04 - x2HC05 =e= 0;
1963 EQU867..x1HC04 - x1HC05 =e= 0;
1964 EQU868..dTE628 **3=e= ((THC02-TC401)*(THC01-TC402)*
1965 ((THC02-TC401)+(THC01-TC402))/2);
1966 EQU869..dTE629 **3=e= ((THC03-TC403)*(THC04-TC402)*
1967 ((THC03-TC403)*(THC04-TC402))/2);
1968 EQU870..hC309 - FC309 * ((x1C309/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC309,ORD(Coeff))))
1969 +(x3C309/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC309,ORD(Coeff))))
1970 +(x4C309/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC309,ORD(Coeff))))
1971 +(x5C309/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC309,ORD(Coeff))))
1972 +(x7C309/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC309,ORD(Coeff)))) =e= 0;
1973 EQU871..THC34 - THC32 =e= 0;
1974 EQU872..hHC34 - FHC34 * ((x1HC34/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC34,ORD(Coeff))))
1975 +(x3HC34/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC34,ORD(Coeff))))
1976 +(x4HC34/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC34,ORD(Coeff))))
1977 +(x5HC34/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC34,ORD(Coeff))))
1978 +(x7HC34/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC34,ORD(Coeff)))) =e= 0;
1979 EQU873..hHC38 - FHC38 * ((x1HC38/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC38,ORD(Coeff))))
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1980 +(x3HC38/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC38,ORD(Coeff))))
1981 +(x4HC38/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC38,ORD(Coeff))))
1982 +(x5HC38/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC38,ORD(Coeff))))
1983 +(x7HC38/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC38,ORD(Coeff)))) =e= 0;
1984 EQU874..THC38 - THC32 =e=0;
1985 EQU875..THC32 - THC41 =e= 0;
1986 EQU876..hHC41 - FHC41 * ((x1HC41/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC41,ORD(Coeff))))
1987 +(x3HC41/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC41,ORD(Coeff))))
1988 +(x4HC41/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC41,ORD(Coeff))))
1989 +(x5HC41/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC41,ORD(Coeff))))
1990 +(x7HC41/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC41,ORD(Coeff)))) =e= 0;

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1991 EQU877..THC32 - THC45 =e=0;
1992 EQU878..hHC45 - FHC45 * ((x1HC45/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC45,ORD(Coeff))))
1993 +(x3HC45/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC45,ORD(Coeff))))
1994 +(x4HC45/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC45,ORD(Coeff))))
1995 +(x5HC45/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC45,ORD(Coeff))))
1996 +(x7HC45/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC45,ORD(Coeff)))) =e= 0;
1997 EQU879..hHC06 - FHC06 * ((x1HC06/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC06,ORD(Coeff))))
1998 +(x2HC06/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC06,ORD(Coeff))))
1999 +(x3HC06/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC06,ORD(Coeff))))
2000 +(x4HC06/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC06,ORD(Coeff))))
2001 +(x5HC06/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC06,ORD(Coeff))))
2002 +(x7HC06/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC06,ORD(Coeff)))) =e= 0;
2003 EQU880..hHC06 -hHC02 - hHC05 =e= 0;
2004 EQU881..THC06 - THC07 =e= 0;
2005 EQU882..hHC07 - FHC07 * ((x1HC07/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC07,ORD(Coeff))))
2006 +(x2HC07/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC07,ORD(Coeff))))
2007 +(x3HC07/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC07,ORD(Coeff))))
2008 +(x4HC07/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC07,ORD(Coeff))))
2009 +(x5HC07/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC07,ORD(Coeff))))
2010 +(x7HC07/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC07,ORD(Coeff)))) =e= 0;
2011 EQU883..THC06 -THC11 =e=0;
2012 EQU884..hHC11 - FHC11 * ((x1HC11/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC11,ORD(Coeff))))
2013 +(x2HC11/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC11,ORD(Coeff))))
2014 +(x3HC11/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC11,ORD(Coeff))))
2015 +(x4HC11/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC11,ORD(Coeff))))
2016 +(x5HC11/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC11,ORD(Coeff))))
2017 +(x7HC11/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC11,ORD(Coeff)))) =e= 0;
2018 EQU885..THC06 -THC14 =e=0;
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2019 EQU886..hHC14 - FHC14 * ((x1HC14/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC14,ORD(Coeff))))
2020 +(x2HC14/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC14,ORD(Coeff))))
2021 +(x3HC14/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC14,ORD(Coeff))))
2022 +(x4HC14/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC14,ORD(Coeff))))
2023 +(x5HC14/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC14,ORD(Coeff))))
2024 +(x7HC14/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC14,ORD(Coeff)))) =e= 0;
2025 EQU887..THC06 -THC16 =e=0;
2026 EQU888..hHC16 - FHC16 * ((x1HC16/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC16,ORD(Coeff))))
2027 +(x2HC16/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC16,ORD(Coeff))))
2028 +(x3HC16/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC16,ORD(Coeff))))
2029 +(x4HC16/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC16,ORD(Coeff))))
2030 +(x5HC16/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC16,ORD(Coeff))))
2031 +(x7HC16/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC16,ORD(Coeff)))) =e= 0;
2032 EQU889..hc432 - FC432 *
2033 ((x3C432/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC432,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC432/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2034 +(x4C432/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC432,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC432/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))

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2035 +(x5C432/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC432,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC432/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2036 +(x7C432/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC432,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC432/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2037 EQU890..x1C432 + x3C432 + x4C432 + x5C432 + x7C432 =e= 1;
2038 EQU891..FmC432 - FC432 * (x1C432/MW1 + x3C432/MW3 + x4C432/MW4 +
x5C432/MW5 + x7C432/MW7)=e= 0;
2039 EQU892..xx3C432 * FmC432 * MW3 - FC432 * x3C432 =e= 0;
2040 EQU893..xx4C432 * FmC432 * MW4 - FC432 * x4C432 =e= 0;
2041 EQU894..x1C430 + x3C430 + x4C430 + x5C430 + x7C430 =e= 1;
2042 EQU895..FmC430 - FC430 * (x1C430/MW1 + x3C430/MW3 + x4C430/MW4 +
x5C430/MW5 + x7C430/MW7)=e= 0;
2043 EQU896..xx3C430 * FmC430 * MW3 - FC430 * x3C430 =e= 0;
2044 EQU897..hC430 - FC430 * ((x1C430/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC430,ORD(Coeff))))
2045 +(x3C430/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC430,ORD(Coeff))))
2046 +(x4C430/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC430,ORD(Coeff))))
2047 +(x5C430/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC430,ORD(Coeff))))
2048 +(x7C430/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC430,ORD(Coeff)))) =e= 0;
2049 EQU898..xx4C430 * FmC430 * MW4 - FC430 * x4C430 =e= 0;
2050 EQU899..xx1HC28 + xx2HC28 + xx3HC28 + xx4HC28 + xx5HC28 + xx7HC28
=e= 1;
2051 EQU900..Fm1HC28 - F1HC28 * (x1HC28/MW1 + x2HC28/MW2 + x3HC28/MW3
+ x4HC28/MW4 + x5HC28/MW5 + x7HC28/MW7)=e= 0;
2052 EQU901..yy1HC28 + yy2HC28 + yy3HC28 + yy4HC28 + yy5HC28 + yy7HC28
=e= 1;
2053 EQU902..FmvHC28 - FvHC28 * (y1HC28/MW1 + y2HC28/MW2 + y3HC28/MW3
+ y4HC28/MW4 + y5HC28/MW5 + y7HC28/MW7)=e= 0;
2054 EQU903..y1HC28+y2HC28+y3HC28+y4HC28+y5HC28+y7HC28 =e=1;
2055 EQU904..xx1HC28 * MW1 * Fm1HC28 - F1HC28 * x1HC28 =e= 0 ;
2056 EQU905..xx3HC28 * MW3 * Fm1HC28 - F1HC28 * x3HC28 =e= 0 ;
2057 EQU906..xx4HC28 * MW4 * Fm1HC28 - F1HC28 * x4HC28 =e= 0;
2058 EQU907..xx5HC28 * MW5 * Fm1HC28 - F1HC28 * x5HC28 =e= 0;
2059 EQU908..xx7HC28 * MW7 * Fm1HC28 - F1HC28 * x7HC28 =e= 0;
2060 EQU909..yy7HC28 * MW7 * FmvHC28 - FvHC28 * y7HC28 =e= 0;
2061 EQU910..yy5HC28 * MW5 * FmvHC28 - FvHC28 * y5HC28 =e= 0;
2062 EQU911..yy4HC28 * MW4 * FmvHC28 - FvHC28 * y4HC28 =e= 0;
2063 EQU912..yy3HC28 * MW3 * FmvHC28 - FvHC28 * y3HC28 =e= 0;
2064 EQU913..yy1HC28 * MW1 * FmvHC28 - FvHC28 * y1HC28 =e= 0;
2065 EQU914..FHC28 - F1HC28 - FvHC28 =e= 0;
2066 EQU915..FvHC28 - VFM3* FHC28 =e= 0;
2067 EQU916..xx1HC28 * K1M3 =e= yy1HC28;
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2068 EQU917..K1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TnC606A-
5.261*LOG10(TnC606A)+3.282E-11*TnC606A+3.7349E-6*TnC606A**2);
2069 EQU918..xx2HC28 * K2M3 =e= yy2HC28;
2070 EQU919..xx3HC28 * K3M3 =e= yy3HC28;
2071 EQU920..xx4HC28 * K4M3 =e= yy4HC28;
2072 EQU921..xx5HC28 * K5M3 =e= yy5HC28;
2073 EQU922..xx7HC28 * K7M3 =e= yy7HC28;
2074 EQU923..hC427 - FC427 *
2075 ((x3C427/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC427,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TC427/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2076 +(x4C427/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC427,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TC427/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))

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2077 +(x5C427/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC427,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC427/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2078 +(x7C427/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC427,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC427/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2079 EQU924..x1C427 + x3C427 + x4C427 + x5C427 + x7C427 =e= 1;
2080 EQU925..FmC427 - FC427 * (x1C427/MW1 + x3C427/MW3 + x4C427/MW4 +
x5C427/MW5 + x7C427/MW7)=e= 0;
2081 EQU926..xx4C427 * FmC427 * MW4 - FC427 * x4C427 =e= 0;
2082 EQU927..K3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TnC606A-
8.806*LOG10(TnC606A)+8.9246E-11*TnC606A+5.7501E-6*TnC606A**2);
2083 EQU928..Kp3C606A*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TmC606A-
8.806*LOG10(TmC606A)+8.9246E-11*TmC606A+5.7501E-6*TmC606A**2)
;
2084 EQU929..K4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TnC606A-
7.1805*LOG10(TnC606A)-6.6845E-11*TnC606A+4.219E-6*TnC606A**2);
2085 EQU930..Kp4C606A*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TmC606A-
7.1805*LOG10(TmC606A)-6.6845E-11*TmC606A+4.219E-6*TmC606A**2)
;
2086 EQU931..K5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TnC606A-
7.883*LOG10(TnC606A)-4.6512E-11*TnC606A+3.8997E-6*TnC606A**2);
2087 EQU932..Kp5C606A*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TmC606A-
7.883*LOG10(TmC606A)-4.6512E-11*TmC606A+3.8997E-6*TmC606A**2)
;
2088 EQU933..K7C606A*PC606A =e= 0.1333*10**(33.0162-2.583E3/TnC606A-
9.042*LOG10(TnC606A)-1.371E-12*TnC606A+3.634E-6*TnC606A**2);
2089 EQU934..Kp7C606A*PC606A =e= 0.1333*10**(33.0162-2.583E3/TmC606A-
9.042*LOG10(TmC606A)-1.371E-12*TmC606A+3.634E-6*TmC606A**2);
2090 EQU935..Sn1C606A *FC322 =e= K1C606A*FC414;
2091 EQU936..SmlC606A*LpC606A=e= Kp1C606A*VpC606A;
2092 EQU937..Sn3C606A *FC322 =e= K3C606A*FC414;
2093 EQU938..Sm3C606A*LpC606A=e= Kp3C606A*VpC606A;
2094 EQU939..Sn4C606A *FC322 =e= K4C606A*FC414;
2095 EQU940..Sm4C606A*LpC606A=e= Kp4C606A*VpC606A;
2096 EQU941..Sn5C606A *FC322 =e= K5C606A*FC414;
2097 EQU942..Sm5C606A*LpC606A=e= Kp5C606A*VpC606A;
2098 EQU943..Sn7C606A *FC322 =e= K7C606A*FC414;
2099 EQU944..Sm7C606A*LpC606A=e= Kp7C606A*VpC606A;
2100 EQU945..f1C606A*((1-Sn1C606A**(56-47))/1E20+
h1C606A*Sn1C606A**(56-47)*(1-SmlC606A**(47+1))/1E20) =e= (1-
Sn1C606A**(56-47))
/1E20+ qS1C606A*(Sn1C606A**(56-47)-
Sn1C606A)/1E20+qFp1C606A*h1C606A*Sn1C606A**(56-47)*(1-
SmlC606A**47)/1E20
2101 ;
```

2102 EQU946..f3C606A*((1-Sn3C606A**(56-47))/1E10+
h3C606A*Sn3C606A**(56-47)*(1-Sm3C606A**(47+1))/1E10) =e= (1-
Sn3C606A**(56-47))
/1E10+ qS3C606A*(Sn3C606A**(56-47)-
Sn3C606A)/1E10+qFp3C606A*h3C606A*Sn3C606A**(56-47)*(1-
Sm3C606A**47)/1E10
2103 ;
2104 EQU947..f4C606A*((1-Sn4C606A**(56-47))+ h4C606A*Sn4C606A**(56-
47)*(1-Sm4C606A**(47+1))) =e= (1-Sn4C606A**(56-47))+
qS4C606A*(Sn4C606A**(56-47)-
Sn4C606A)+qFp4C606A*h4C606A*Sn4C606A**(56-47)*(1-Sm4C606A**47)
2105 ;
2106 EQU948..f5C606A*((1-Sn5C606A**(56-47))+ h5C606A*Sn5C606A**(56-
47)*(1-Sm5C606A**(47+1))) =e= (1-Sn5C606A**(56-47))+
qS5C606A*(Sn5C606A**(56-47)-
Sn5C606A)+qFp5C606A*h5C606A*Sn5C606A**(56-47)*(1-Sm5C606A**47)
2107 ;
2108 EQU949..f7C606A*((1-Sn7C606A**(56-47))+ h7C606A*Sn7C606A**(56-
47)*(1-Sm7C606A**(47+1))) =e= (1-Sn7C606A**(56-47))+
qS7C606A*(Sn7C606A**(56-47)-
Sn7C606A)+qFp7C606A*h7C606A*Sn7C606A**(56-47)*(1-Sm7C606A**47)
2109 ;
2110 EQU950..f1C606A * (x1C404 * FC404 + x1C322 * FC322 + x1C432 *
FC432) =e= x1C430 * FC430;
2111 EQU951..f3C606A * (x3C404 * FC404 + x3C322 * FC322 + x3C432 *
FC432) =e= x3C430 * FC430;
2112 EQU952..f4C606A * (x4C404 * FC404 + x4C322 * FC322 + x4C432 *
FC432) =e= x4C430 * FC430;

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2113 EQU953..f5C606A * (x5C404 * FC404 + x5C322 * FC322 + x5C432 *
FC432) =e= x5C430 * FC430;
2114 EQU954..f7C606A * (x7C404 * FC404 + x7C322 * FC322 + x7C432 *
FC432) =e= x7C430 * FC430;
2115 EQU955..h1C606A*LpC606A*(1-Sm1C606A) =e= FC322*(1-Sn1C606A);
2116 EQU956..h3C606A*LpC606A*(1-Sm3C606A) =e= FC322*(1-Sn3C606A);
2117 EQU957..h4C606A*LpC606A*(1-Sm4C606A) =e= FC322*(1-Sn4C606A);
2118 EQU958..Kp1C606A*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TmC606A-
5.261*LOG10(TmC606A)+3.282E-11*TmC606A+3.7349E-6*TmC606A**2);
2119 EQU959..FmC414 - FC414 * (x1C414/MW1 + x3C414/MW3 + x4C414/MW4 +
x5C414/MW5 + x7C414/MW7 )=e= 0;
2120 EQU960..xx3C414 * FmC414 * MW3 - FC414 * x3C414 =e= 0;
2121 EQU961..hC322 - FC322 * ((x1C322/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC322,ORD(Coeff))))
2122 +(x3C322/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC322,ORD(Coeff))))
2123 +(x4C322/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC322,ORD(Coeff))))
2124 +(x5C322/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC322,ORD(Coeff))))
2125 +(x7C322/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC322,ORD(Coeff)))) =e= 0;
2126 EQU962..xx3C322 * FmC322 * MW3 - FC322 * x3C322 =e= 0;
2127 EQU963..FC427 -FC431 =e= 0;
2128 EQU964..TC431 - TC425 =e= 0;
2129 EQU965..x1C428 + x3C428 + x4C428 + x5C428 + x7C428 =e= 1;
2130 EQU966..FmC428 - FC428 * (x1C428/MW1 + x3C428/MW3 + x4C428/MW4 +
x5C428/MW5 + x7C428/MW7)=e= 0;
2131 EQU967..xx4C428 * FmC428 * MW4 - FC428 * x4C428 =e= 0;
2132 EQU968..x1C425 + x3C425 + x4C425 + x5C425 + x7C425 =e= 1;
2133 EQU969..FmC425 - FC425 * (x1C425/MW1 + x3C425/MW3 + x4C425/MW4 +
x5C425/MW5 + x7C425/MW7)=e= 0;
2134 EQU970..xx4C425 * FmC425 * MW4 - FC425 * x4C425 =e= 0;
2135 EQU971..x1C408 - x1C405 =e= 0;
2136 EQU972..x3C408 - x3C405 =e= 0;
2137 EQU973..x4C408 - x4C405 =e= 0;
2138 EQU974..x5C408 - x5C405 =e= 0;
2139 EQU975..xM1C606D * FC426**2 *(Sm1C606D-1)=e= FC405 * x1C405 *
(FC428*Kp1C606D*(Sm1C606D**(13-1)-1) + FC426*(Sm1C606D-1));
2140 EQU976..h5C606A*LpC606A*(1-Sm5C606A) =e= FC322*(1-Sn5C606A);
2141 EQU977..h7C606A*LpC606A*(1-Sm7C606A) =e= FC322*(1-Sn7C606A);
2142 EQU978..FC404 * x1C404 + FC432*x1C432 + FC322*x1C322- FC414 *
x1C414 - FC430*x1C430 =e= 0;
2143 EQU979..FC404 * x3C404 + FC432*x3C432 + FC322*x3C322- FC414 *
x3C414 - FC430*x3C430 =e= 0;
2144 EQU980..FC404 * x4C404 + FC432*x4C432 + FC322*x4C322- FC414 *
x4C414 - FC430*x4C430 =e= 0;
2145 EQU981..FC404 * x5C404 + FC432*x5C432 + FC322*x5C322- FC414 *
x5C414 - FC430*x5C430 =e= 0;
2146 EQU982..qS1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
=e= FC322*x1C322;
```

2147 EQU983..qS3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
 =e= FC322*x3C322;
 2148 EQU984..qS5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
 =e= FC322*x5C322;
 2149 EQU985..qS4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
 =e= FC322*x4C322;
 2150 EQU986..xAC02 * (2* x11AC02/98.08 + (1-x11AC02)/360)*98.08 -
 x11AC02 =e= 0;
 2151 EQU987..hAC02*(80.06*xAC02 + 360*(1- xAC02)) /1E2- FAC02 *
 4.184E3* (-145.8407 * x11AC02 /1E2+ 9.739e-03 * (TAC02-273) /1E2+
 8.024e-03 * (TAC02-273) *
 x11AC02 /1E2+ 83.615 * x11AC02 * x11AC02/1E2 + 65.3921/1E2) =e= 0;
 2152 EQU988..xAC05 * (2* x11AC05/98.08 + (1-x11AC05)/360) -
 x11AC05/98.08 =e= 0;
 2153 EQU989..hAC05*(80.06*xAC05 + 360*(1- xAC05))/1E2 - FAC05 *
 4.184E3* (-145.8407 * x11AC05/1E2 + 9.739e-03 * (TAC05-273)/1E2 +
 8.024e-03 * (TAC05-273) *
 x11AC05/1E2 + 83.615 * x11AC05 * x11AC05/1E2 + 65.3921/1E2) =e= 0;
 2154 EQU990..hAC07*(80.06*xAC07 + 360*(1- xAC07))/1E2 - FAC07 *
 4.184E3* (-145.8407 * x11AC07/1E2 + 9.739e-03 * (TAC07-273) /1E2+
 8.024e-03 * (TAC07-273) *
 x11AC07/1E2 + 83.615 * x11AC07 * x11AC07/1E2 + 65.3921/1E2) =e= 0;
 2155 EQU991..xAC07 * (2* x11AC07/98.08 + (1-x11AC07)/360) -
 x11AC07/98.08 =e= 0;

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2156 EQU992..hac09 - fac09 * ((x1ac09/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC09,ORD(Coeff))))
2157 +(x3ac09/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC09,ORD(Coeff))))
2158 +(x4ac09/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC09,ORD(Coeff))))
2159 +(x5ac09/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC09,ORD(Coeff))))
2160 +(x7ac09/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC09,ORD(Coeff))))
2161 +(x8ac09/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC09,ORD(Coeff))))
2162 +(x9ac09/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC09,ORD(Coeff))))
2163 + 3 * (x10ac09/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC09,ORD(Coeff)))) - hac09 =e= 0;
2164 EQU993..xac09 * (2* x11ac09/98.08 + (1-x11ac09)/360) -
x11ac09/98.08 =e= 0;
2165 EQU994..hac09*(80.06*xac09 + 360*(1- xac09))/1E2 - fac09 *
4.184E3* (-145.8407 * x11ac09/1E2 + 9.739e-03 * (TAC09-273)
/1E2+ 8.024e-03 * (TAC09-273) *
x11ac09 /1E2+ 83.615 * x11ac09 * x11ac09 /1E2+ 65.3921/1E2) =e= 0;
2166 EQU995..xac12 * (2* x11ac12/98.08 + (1-x11ac12)/360) -
x11ac12/98.08 =e= 0;
2167 EQU996..hac12*(80.06*xac12 + 360*(1- xac12)) /1E2- fac12 *
4.184E3* (-145.8407 * x11ac12 /1E2+ 9.739e-03 * (TAC12-273) /1E2+
8.024e-03 * (TAC12-273) *
x11ac12 /1E2+ 83.615 * x11ac12 * x11ac12 /1E2+ 65.3921/1E2) =e= 0;
2168 EQU997..hac15*(80.06*xac15 + 360*(1- xac15))/1E2 - fac15 *
4.184E3* (-145.8407 * x11ac15 /1E2+ 9.739e-03 * (TAC15-273) /1E2+
8.024e-03 * (TAC15-273) *
x11ac15 /1E2+ 83.615 * x11ac15 * x11ac15/1E2 + 65.3921/1E2) =e= 0;
2169 EQU998..xac15 * (2* x11ac15/98.08 + (1-x11ac15)/360) -
x11ac15/98.08 =e= 0;
2170 EQU999..hac18*(80.06*xac18 + 360*(1- xac18))/1E2 - fac18 *
4.184E3* (-145.8407 * x11ac18 /1E2+ 9.739e-03 * (TAC18-273)/1E2 +
8.024e-03 * (TAC18-273) *
x11ac18/1E2 + 83.615 * x11ac18 * x11ac18/1E2 + 65.3921/1E2) =e= 0;
2171 EQU1000..xac18 * (2* x11ac18/98.08 + (1-x11ac18)/360) -
x11ac18/98.08 =e= 0;
2172 EQU1001..hac20*(80.06*xac20 + 360*(1- xac20))/1E2 - fac20 *
4.184E3* (-145.8407 * x11ac20/1E2 + 9.739e-03 * (TAC20-273)
/1E2+ 8.024e-03 * (TAC20-273) *
x11ac20 /1E2+ 83.615 * x11ac20 * x11ac20 /1E2+ 65.3921/1E2) =e= 0;
2173 EQU1002..hac20 - fac20 * ((x1ac20/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC20,ORD(Coeff))))
2174 +(x3ac20/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC20,ORD(Coeff))))
2175 +(x4ac20/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC20,ORD(Coeff))))
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2176 +(x5AC20/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff) *POWER(TAC20,ORD(Coeff))))
2177 +(x7AC20/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff) *POWER(TAC20,ORD(Coeff))))
2178 +(x8AC20/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff) * POWER(TAC20,ORD(Coeff))))
2179 +(x9AC20/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff) *POWER(TAC20,ORD(Coeff))))
2180 + 3 * (x10AC20/MW10)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("10",Coeff) *POWER(TAC20,ORD(Coeff)))) - hacAC20 =e= 0;
2181 EQU1003..xAC20 * (2* x11AC20/98.08 + (1-x11AC20)/360) - x11AC20/98.08 =e= 0;
2182 EQU1004..hacAC23*(80.06*xAC23 + 360*(1- xAC23))/1E2 - FAC23 * 4.184E3* (-145.8407 * x11AC23 /1E2+ 9.739e-03 * (TAC23-273) /1E2+ 8.024e-03 * (TAC23-273) * x11AC23 /1E2+ 83.615 * x11AC23 * x11AC23 /1E2+ 65.3921/1E2) =e= 0;
2183 EQU1005..xAC23 * (2* x11AC23/98.08 + (1-x11AC23)/360) - x11AC23/98.08 =e= 0;
2184 EQU1006..hacAC26*(80.06*xAC26 + 360*(1- xAC26))/1E2 - FAC26 * 4.184E3* (-145.8407 * x11AC26 /1E2+ 9.739e-03 * (TAC26-273)/1E2 + 8.024e-03 * (TAC26-273) * x11AC23 /1E2+ 83.615 * x11AC26 * x11AC26 /1E2+ 65.3921/1E2) =e= 0;
2185 EQU1007..xAC26 * (2* x11AC26/98.08 + (1-x11AC26)/360) - x11AC26/98.08 =e= 0;
2186 EQU1008..hacAC29*(80.06*xAC29 + 360*(1- xAC29))/1E2 - FAC29 * 4.184E3* (-145.8407 * x11AC29 /1E2+ 9.739e-03 * (TAC29-273) /1E2+ 8.024e-03 * (TAC29-273) * x11AC29/1E2 + 83.615 * x11AC29 * x11AC29 /1E2+ 65.3921/1E2) =e= 0;
2187 EQU1009..xAC29 * (2* x11AC29/98.08 + (1-x11AC29)/360) - x11AC29/98.08 =e= 0;
2188 EQU1010..hacAC31*(80.06*xAC31 + 360*(1- xAC31))/1E2 - FAC31 * 4.184E3* (-145.8407 * x11AC31/1E2 + 9.739e-03 * (TAC31-273) /1E2+ 8.024e-03 * (TAC31-273) * x11AC31/1E2 + 83.615 * x11AC31 * x11AC31/1E2 + 65.3921/1E2) =e= 0;
2189 EQU1011..hacAC31 - FAC31 * ((x1AC31/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff) *POWER(TAC31,ORD(Coeff))))
2190 +(x3AC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) * POWER(TAC31,ORD(Coeff))))
2191 +(x4AC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff) *POWER(TAC31,ORD(Coeff))))
2192 +(x5AC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff) *POWER(TAC31,ORD(Coeff))))

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2193 +(x7AC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC31,ORD(Coeff))))
2194 +(x8AC31/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC31,ORD(Coeff))))
2195 +(x9AC31/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC31,ORD(Coeff))))
2196 + 3 * (x10AC31/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC31,ORD(Coeff)))) - hacAC31 =e= 0;
2197 EQU1012..xAC31 * (2* x11AC31/98.08 + (1-x11AC31)/360) -
x11AC31/98.08 =e= 0;
2198 EQU1013..hAC34*(80.06*xAC34 + 360*(1- xAC34)) /1E2- FAC34 *
4.184E3* (-145.8407 * x11AC34 /1E2+ 9.739e-03 * (TAC34-273) /1E2+
8.024e-03 * (TAC34-273) *
x11AC34/1E2 + 83.615 * x11AC34 * x11AC34 /1E2+ 65.3921/1E2) =e= 0;
2199 EQU1014..xAC34 * (2* x11AC34/98.08 + (1-x11AC34)/360) -
x11AC34/98.08 =e= 0;
2200 EQU1015..qS7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC322*x7C322;
2201 EQU1016..qFp1C606A*(FC404 * x1C404 + FC432*x1C432 + FC322*x1C322)
=e= FC432*x1C432;
2202 EQU1017..qFp3C606A*(FC404 * x3C404 + FC432*x3C432 + FC322*x3C322)
=e= FC432*x3C432;
2203 EQU1018..xM3C606D * FC426**2 * (Sm3C606D-1)=e= FC405 * x3C405 *
(FC428*Kp3C606D*(Sm3C606D**(13-1)-1) + FC426*(Sm3C606D-1));
2204 EQU1019..FmC409 - FC409 * (x1C409/MW1 + x3C409/MW3 + x4C409/MW4 +
x5C409/MW5 + x7C409/MW7)=e= 0;
2205 EQU1020..xx4C409 * FmC409 * MW4 - FC409 * x4C409 =e= 0;
2206 EQU1021..FmC408 - FC408 * (x1C408/MW1 + x3C408/MW3 + x4C408/MW4 +
x5C408/MW5 + x7C408/MW7)=e= 0;
2207 EQU1022..xx1C408 * FmC408 * MW1 - FC408 * x1C408 =e= 0;
2208 EQU1023..xx3C408 * FmC408 * MW3 - FC408 * x3C408 =e= 0;
2209 EQU1024..xx4C408 * FmC408 * MW4 - FC408 * x4C408 =e= 0;
2210 EQU1025..xx5C408 * FmC408 * MW5 - FC408 * x5C408 =e= 0;
2211 EQU1026..xx1C408 + xx3C408 + xx4C408 + xx5C408 + xx7C408 =e= 1;
2212 EQU1027..FmC405 - FC405 * (x1C405/MW1 + x3C405/MW3 + x4C405/MW4 +
x5C405/MW5 + x7C405/MW7)=e= 0;
2213 EQU1028..xx1C405 * FmC405 * MW1 - FC405 * x1C405 =e= 0;
2214 EQU1029..xx3C405 * FmC405 * MW3 - FC405 * x3C405 =e= 0;
2215 EQU1030..xx4C405 * FmC405 * MW4 - FC405 * x4C405 =e= 0;
2216 EQU1031..xx5C405 * FmC405 * MW5 - FC405 * x5C405 =e= 0;
2217 EQU1032..xx7C405 * FmC405 * MW7 - FC405 * x7C405 =e= 0;
2218 EQU1033..FC427 - FC428 - FC411 =e= 0;
2219 EQU1034..hAC37*(80.06*xAC37 + 360*(1- xAC37)) /1E2- FAC37 *
4.184E3* (-145.8407 * x11AC37/1E2 + 9.739e-03 * (TAC37-273)/1E2 +
8.024e-03 * (TAC37-273) *
x11AC37 /1E2+ 83.615 * x11AC37 * x11AC37/1E2 + 65.3921/1E2) =e= 0;
2220 EQU1035..xAC37 * (2* x11AC37/98.08 + (1-x11AC37)/360) -
x11AC37/98.08 =e= 0;
2221 EQU1036..hAC40*(80.06*xAC40 + 360*(1- xAC40))/1E2 - FAC40 *
4.184E3* (-145.8407 * x11AC40 /1E2+ 9.739e-03 * (TAC40-273)/1E2 +
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8.024e-03 * (TAC40-273) *
x11AC40/1E2 + 83.615 * x11AC40 * x11AC40/1E2 + 65.3921/1E2) =e= 0;
2222 EQU1037..hacAC42*(80.06*xAC42 + 360*(1- xAC42))/1E2 - FAC42 *
4.184E3* (-145.8407 * x11AC42/1E2 + 9.739e-03 * (TAC42-273)/1E2
+ 8.024e-03 * (TAC42-273) *
x11AC42/1E2 + 83.615 * x11AC42 * x11AC42/1E2 + 65.3921/1E2) =e= 0;
2223 EQU1038..xAC40 * (2* x11AC40/98.08 + (1-x11AC40)/360) -
x11AC40/98.08 =e= 0;
2224 EQU1039..xAC42 * (2* x11AC42/98.08 + (1-x11AC42)/360) -
x11AC42/98.08 =e= 0;
2225 EQU1040..hac42 - FAC42 * ((x1AC42/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TAC42,ORD(Coeff))))
2226 +(x3AC42/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TAC42,ORD(Coeff))))
2227 +(x4AC42/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TAC42,ORD(Coeff))))
2228 +(x5AC42/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TAC42,ORD(Coeff))))
2229 +(x7AC42/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TAC42,ORD(Coeff))))
2230 +(x8AC42/MW8)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("8",Coeff)
*POWER(TAC42,ORD(Coeff))))
2231 +(x9AC42/MW9)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("9",Coeff)
*POWER(TAC42,ORD(Coeff))))
2232 + 3 * (x10AC42/MW10)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("10",Coeff) *POWER(TAC42,ORD(Coeff)))) - hacAC42 =e= 0;
2233 EQU1041..x1HC28 -x1HC29 =e= 0;
2234 EQU1042..x2HC28 -x2HC29 =e= 0;

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2235 EQU1043..x3HC28 -x3HC29 =e= 0;
2236 EQU1044..x4HC28 -x4HC29 =e= 0;
2237 EQU1045..x5HC28 -x5HC29 =e= 0;
2238 EQU1046..x1HC28 -x1R1 =e= 0;
2239 EQU1047..x2HC28 -x2R1 =e= 0;
2240 EQU1048..x3HC28 -x3R1 =e= 0;
2241 EQU1049..x4HC28 -x4R1 =e= 0;
2242 EQU1050..x5HC28 -x5R1 =e= 0;
2243 EQU1051..y1HC28 -y1HC29 =e= 0;
2244 EQU1052..y2HC28 -y2HC29 =e= 0;
2245 EQU1053..y3HC28 -y3HC29 =e= 0;
2246 EQU1054..y4HC28 -y4HC29 =e= 0;
2247 EQU1055..y5HC28 -y5HC29 =e= 0;
2248 EQU1056..y1HC28 -y1R1 =e= 0;
2249 EQU1057..y2HC28 -y2R1 =e= 0;
2250 EQU1058..y3HC28 -y3R1 =e= 0;
2251 EQU1059..y4HC28 -y4R1 =e= 0;
2252 EQU1060..TC425 - TC410 =e= 0;
2253 EQU1061..TC425 - TC426 =e= 0;
2254 EQU1062..TC432 - TC431 =e= 0;
2255 EQU1063..TC431 - TC412 =e= 0;
2256 EQU1064..y5HC28 -y5R1 =e= 0;
2257 EQU1065..THC28 -TR1 =e= 0;
2258 EQU1066..THC28 -THC29 =e= 0;
2259 EQU1067..x1HC29 + x2HC29 + x3HC29 + x4HC29 + x5HC29 + x7HC29 =e=
1;
2260 EQU1068..y1HC29 + y2HC29 + y3HC29 + y4HC29 + y5HC29 + y7HC29 =e=
1;
2261 EQU1069..hvHC30 - FvHC30*((y1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff))))+ Enth_Vap("1",
"a1")*1000 * ((1-THC30/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2262 +(y3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *
((1-THC30/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2263 +(y4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *
((1-THC30/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2264 +(y5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *
((1-THC30/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2265 +(y7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff))))+ Enth_Vap("7","a1")*1000 *
((1-THC30/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2266 EQU1070..hHC30 - h1HC30 - hvHC30 =e= 0;
2267 EQU1071..FHC30 - F1HC30 - FvHC30 =e= 0;
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2268 EQU1072..h1HC30 - F1HC30*((x1HC30/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC30,ORD(Coeff))))
2269 +(x3HC30/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC30,ORD(Coeff))))
2270 +(x4HC30/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC30,ORD(Coeff))))
2271 +(x5HC30/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC30,ORD(Coeff))))
2272 +(x7HC30/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC30,ORD(Coeff)))) =e= 0;
2273 EQU1073..x1HC30 + x2HC30 + x3HC30 + x4HC30 + x5HC30 + x7HC30 =e=
1;
2274 EQU1074..y1HC30 + y2HC30 + y3HC30 + y4HC30 + y5HC30 + y7HC30 =e=
1;
2275 EQU1075..hVR29 - FVR29*((y1R1/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff)))+ Enth_Vap("1","a1")

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*1000 * ((1-TR29/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2276 +(y3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 * ((1-TR29/Enth_Va
ap("3","a2"))**Enth_Vap("3","a3")))
2277 +(y4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 * ((1-TR29/Enth_Va
p("4","a2"))**Enth_Vap("4","a3")))
2278 +(y5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 * ((1-TR29/Enth_Va
p("5","a2"))**Enth_Vap("5","a3")))
2279 +(y7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 * ((1-TR29/Enth_Va
p("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2280 EQU1076..y1R29 + y2R29 + y3R29 + y4R29 + y5R29 + y7R29 =e= 1;
2281 EQU1077..h1R29 - FlR29* ((x1R29/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TR29,ORD(Coeff))))
2282 +(x3R29/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TR29,ORD(Coeff))))
2283 +(x4R29/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TR29,ORD(Coeff))))
2284 +(x5R29/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TR29,ORD(Coeff))))
2285 +(x7R29/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TR29,ORD(Coeff)))) =e= 0;
2286 EQU1078..x1R29 + x2R29 + x3R29 + x4R29 + x5R29 + x7R29 =e= 1;
2287 EQU1079..hR29 - h1R29 - hvR29 =e= 0;
2288 EQU1080..FR29 - FlR29 -FvR29 =e= 0;
2289 EQU1081..hvHC31 - FvHC31*((y1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff)))+ Enth_Vap("1",
"a1")*1000 * ((1-THC31/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2290 +(y3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-THC31/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2291 +(y4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-THC31/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2292 +(y5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-THC31/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2293 +(y7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
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((1-THC31/Enth_Vap("7","a2"))**Enth_Vap("7","a3")) =e= 0;
2294 EQU1082..hHC31 - hlHC31 - hvHC31 =e= 0;
2295 EQU1083..FHC31 - FlHC31 - FvHC31 =e= 0;
2296 EQU1084..hlHC31 - FlHC31*((x1HC31/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(THC31,ORD(Coeff))))
2297 +(x3HC31/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC31,ORD(Coeff))))
2298 +(x4HC31/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC31,ORD(Coeff))))
2299 +(x5HC31/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(THC31,ORD(Coeff))))
2300 +(x7HC31/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC31,ORD(Coeff)))) =e= 0;
2301 EQU1085..x1HC31 + x2HC31 + x3HC31 + x4HC31 + x5HC31 + x7HC31 =e=
1;
2302 EQU1086..y1HC31 + y2HC31 + y3HC31 + y4HC31 + y5HC31 + y7HC31 =e=
1;
2303 EQU1087..qFp4C606A*(FC404 * x4C404 + FC432*x4C432 + FC322*x4C322)
=e= FC432*x4C432;
2304 EQU1088..qFp5C606A*(FC404 * x5C404 + FC432*x5C432 + FC322*x5C322)
=e= FC432*x5C432;
2305 EQU1089..qFp7C606A*(FC404 * x7C404 + FC432*x7C432 + FC322*x7C322)
=e= FC432*x7C432;
2306 EQU1090..K1C430*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TC430-
5.261*LOG10(TC430)+3.282E-11*TC430+3.7349E-6*TC430**2);
2307 EQU1091..K3C430*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TC430-
8.806*LOG10(TC430)+8.9246E-11*TC430+5.7501E-6*TC430**2);
2308 EQU1092..K4C430*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TC430-
7.1805*LOG10(TC430)-6.6845E-11*TC430+4.219E-6*TC430**2);
2309 EQU1093..K5C430*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC430-
7.883*LOG10(TC430)-4.6512E-11*TC430+3.8997E-6*TC430**2);
2310 EQU1094..K7C430*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC430-
9.042*LOG10(TC430)-1.371E-12*TC430+3.634E-6*TC430**2);
2311
EQU1095..K1C430*xx1C430+K3C430*xx3C430+K4C430*xx4C430+K5C430*xx5C430+K7
C430*xx7C430 =e= 1;

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2312 EQU1096..xx1C430+xx3C430+xx4C430+xx5C430+xx7C430 =e= 1;
2313 EQU1097..xx1C430 * FmC430 * MW1 - FC430 * x1C430 =e= 0;
2314 EQU1098..xx5C430 * FmC430 * MW5 - FC430 * x5C430 =e= 0;
2315 EQU1099..xx1C414+xx3C414+xx4C414+xx5C414+xx7C414 =e= 1;
2316 EQU1100..K1C414*PC606A =e= 0.1333*10**(21.4469-1.4627E3/TC414-
5.261*LOG10(TC414)+3.282E-11*TC414+3.7349E-6*TC414**2);
2317 EQU1101..K3C414*PC606A =e= 0.1333*10**(31.2541-1.9532E3/TC414-
8.806*LOG10(TC414)+8.9246E-11*TC414+5.7501E-6*TC414**2);
2318 EQU1102..K4C414*PC606A =e= 0.1333*10**(27.0441-1.9049E3/TC414-
7.1805*LOG10(TC414)-6.6845E-11*TC414+4.219E-6*TC414**2);
2319 EQU1103..K5C414*PC606A =e= 0.1333*10**(29.2963-2.1762E3/TC414-
7.883*LOG10(TC414)-4.6512E-11*TC414+3.8997E-6*TC414**2);
2320 EQU1104..K7C414*PC606A =e= 0.1333*10**(33.0162-2.583E3/TC414-
9.042*LOG10(TC414)-1.371E-12*TC414+3.634E-6*TC414**2);
2321
EQU1105..xx1C414/K1C414+xx3C414/K3C414+xx4C414/K4C414+xx5C414/K5C414+xx
7C414/K7C414 =e= 1;
2322 EQU1106..xx1C414 * FmC414 * MW1 - FC414 * x1C414 =e= 0;
2323 EQU1107..xx4C414 * FmC414 * MW4 - FC414 * x4C414 =e= 0;
2324 EQU1108..xx7C414 * FmC414 * MW7 - FC414 * x7C414 =e= 0;
2325 EQU1109..FC425 - FC430 =e=0;
2326 EQU1110..x1C431 + x3C431 + x4C431 + x5C431 + x7C431 =e= 1;
2327 EQU1111..FmC431 - FC431 * (x1C431/MW1 + x3C431/MW3 + x4C431/MW4 +
x5C431/MW5 + x7C431/MW7)=e= 0;
2328 EQU1112..xx4C431 * FmC431 * MW4 - FC431 * x4C431 =e= 0;
2329 EQU1113..xx1C425*K1C606C =e= xx1C431;
2330 EQU1114..xx3C425*K3C606C =e= xx3C431;
2331 EQU1115..xx4C425*K4C606C =e= xx4C431;
2332 EQU1116..xx5C425*K5C606C =e= xx5C431;
2333 EQU1117..xx1C431 * FmC431 * MW1 - FC431 * x1C431 =e= 0;
2334 EQU1118..xx3C431 * FmC431 * MW3 - FC431 * x3C431 =e= 0;
2335 EQU1119..xx5C431 * FmC431 * MW5 - FC431 * x5C431 =e= 0;
2336 EQU1120..xx1C431+ xx3C431+ xx4C431+ xx5C431+ xx7C431 =e= 1;
2337 EQU1121..xx1C425 * FmC425 * MW1 - FC425 * x1C425 =e= 0;
2338 EQU1122..xx3C425 * FmC425 * MW3 - FC425 * x3C425 =e= 0;
2339 EQU1123..xx5C425 * FmC425 * MW5 - FC425 * x5C425 =e= 0;
2340 EQU1124..xx1C425 + xx3C425 +xx4C425 +xx5C425 +xx7C425 =e=1 ;
2341 EQU1125..K1C606C*PC606C =e= 0.1333*10**(21.4469-1.4627E3/TC425-
5.261*LOG10(TC425)+3.282E-11*TC425+3.7349E-6*TC425**2);
2342 EQU1126..K3C606C*PC606C =e= 0.1333*10**(31.2541-1.9532E3/TC425-
8.806*LOG10(TC425)+8.9246E-11*TC425+5.7501E-6*TC425**2);
2343 EQU1127..K4C606C*PC606C =e= 0.1333*10**(27.0441-1.9049E3/TC425-
7.1805*LOG10(TC425)-6.6845E-11*TC425+4.219E-6*TC425**2);
2344 EQU1128..K5C606C*PC606C =e= 0.1333*10**(29.2963-2.1762E3/TC425-
7.883*LOG10(TC425)-4.6512E-11*TC425+3.8997E-6*TC425**2);
2345 EQU1129..xM4C606D * FC426**2 *(Sm4C606D-1)=e= FC405 * x4C405 *
(FC428*Kp4C606D*(Sm4C606D**(13-1)-1) + FC426*(Sm4C606D-1));
2346 EQU1130..xM5C606D * FC426**2 *(Sm5C606D-1)=e= FC405 * x5C405 *
(FC428*Kp5C606D*(Sm5C606D**(13-1)-1) + FC426*(Sm5C606D-1));
2347 EQU1131..xM7C606D * FC426**2 * (Sm7C606D-1)=e= FC405 * x7C405 *
(FC428*Kp7C606D*(Sm7C606D**(13-1)-1) + FC426*(Sm7C606D-1));
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2348 EQU1132..xM1C606D + xM3C606D + xM4C606D + xM5C606D + xM7C606D
 =e=1;
 2349 EQU1133..xx3C428 * FmC428 * MW3 - FC428 * x3C428 =e= 0;
 2350 EQU1134..xx1C428 * FmC428 * MW1 - FC428 * x1C428 =e= 0;
 2351 EQU1135..xx5C428 * FmC428 * MW5 - FC428 * x5C428 =e= 0;
 2352 EQU1136..xx1C428 + xx3C428 + xx4C428 + xx5C428 + xx7C428 =e=1;
 2353 EQU1137..K1C428*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC428-
 5.261*LOG10(TC428)+3.282E-11*TC428+3.7349E-6*TC428**2);
 2354 EQU1138..K3C428*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC428-
 8.806*LOG10(TC428)+8.9246E-11*TC428+5.7501E-6*TC428**2);
 2355 EQU1139..K4C428*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC428-
 7.1805*LOG10(TC428)-6.6845E-11*TC428+4.219E-6*TC428**2);
 2356 EQU1140..K5C428*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC428-
 7.883*LOG10(TC428)-4.6512E-11*TC428+3.8997E-6*TC428**2);
 2357 EQU1141..K7C428*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC428-
 9.042*LOG10(TC428)-1.371E-12*TC428+3.634E-6*TC428**2);

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2358 EQU1142..xM1C606D*K1C428 =e= xx1C428;
2359 EQU1143..xM3C606D*K3C428 =e= xx3C428;
2360 EQU1144..xM4C606D*K4C428 =e= xx4C428;
2361 EQU1145..xM5C606D*K5C428 =e= xx5C428;
2362 EQU1146..Kp1C606D*PC606D =e= 0.1333*10**(21.4469-
1.4627E3/TmC606D-5.261*LOG10(TmC606D)+3.282E-11*TmC606D+3.7349E-
6*TmC606D**2)

;
2363 EQU1147..Kp3C606D*PC606D =e= 0.1333*10**(31.2541-
1.9532E3/TmC606D-8.806*LOG10(TmC606D)+8.9246E-11*TmC606D+5.7501E-
6*TmC606D**2

);
2364 EQU1148..Kp4C606D*PC606D =e= 0.1333*10**(27.0441-
1.9049E3/TmC606D-7.1805*LOG10(TmC606D)-6.6845E-11*TmC606D+4.219E-
6*TmC606D**2

);
2365 EQU1149..Kp5C606D*PC606D =e= 0.1333*10**(29.2963-
2.1762E3/TmC606D-7.883*LOG10(TmC606D)-4.6512E-11*TmC606D+3.8997E-
6*TmC606D**2

);
2366 EQU1150..Kp7C606D*PC606D =e= 0.1333*10**(33.0162-2.583E3/TmC606D-
9.042*LOG10(TmC606D)-1.371E-12*TmC606D+3.634E-6*TmC606D**2);
2367 EQU1151..TmC606D * 2 =e= TC428 + TC405;
2368 EQU1152..Sm1C606D*FC426 =e= K1C428 * FC428;
2369 EQU1153..Sm3C606D*FC426 =e= K3C428 * FC428;
2370 EQU1154..Sm4C606D*FC426 =e= K4C428 * FC428;
2371 EQU1155..Sm5C606D*FC426 =e= K5C428 * FC428;
2372 EQU1156..Sm7C606D*FC426 =e= K7C428 * FC428;
2373 EQU1157..K1C408*PC606D =e= 0.1333*10**(21.4469-1.4627E3/TC408-
5.261*LOG10(TC408)+3.282E-11*TC408+3.7349E-6*TC408**2);
2374 EQU1158..K3C408*PC606D =e= 0.1333*10**(31.2541-1.9532E3/TC408-
8.806*LOG10(TC408)+8.9246E-11*TC408+5.7501E-6*TC408**2);
2375 EQU1159..K4C408*PC606D =e= 0.1333*10**(27.0441-1.9049E3/TC408-
7.1805*LOG10(TC408)-6.6845E-11*TC408+4.219E-6*TC408**2);
2376 EQU1160..K2E6XX*PR29 =e=1.05*PE633;
2377 EQU1161..K3E6XX*PR29 =e= 1.25*PE633;
2378 EQU1162..K4E6XX*PR29 =e=0.82*PE633;
2379 EQU1163..K5E6XX*PR29 =e=0.28*PE633;
2380 EQU1164..K7E6XX*PR29 =e=0.068*PE633;
2381 EQU1165..hc623 =e= hAC09 - hAC07 - hHC07 - hHC34 ;
2382 EQU1166..hc625 =e= hAC20 - hAC18 - hHC11 - hHC38;
2383 EQU1167..hc627 =e= hAC31 - hAC29 - hHC14 - hHC41;
2384 EQU1168..hc629 =e= hAC42 - hAC40 - hHC16 - hHC45;
2385 EQU1169..FHC30 + FR29 =e= FHC31;
2386 EQU1170..FvHC30 + FvR29 =e= FvHC31;
2387 EQU1171..FvHC30*y1HC30 + FvR29*y1R29 =e= FvHC31*y1HC31;
2388 EQU1172..FvHC30*y3HC30 + FvR29*y3R29 =e= FvHC31*y3HC31;
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2389 EQU1173..FvHC30*y4HC30 + FvR29*y4R29 =e= FvHC31*y4HC31;
2390 EQU1174..FvHC30*y5HC30 + FvR29*y5R29 =e= FvHC31*y5HC31;
2391 EQU1175..FvHC30*y7HC30 + FvR29*y7R29 =e= FvHC31*y7HC31;
2392 EQU1176..FlHC30*x1HC30 + FlR29*x1R29 =e= FlHC31*x1HC31;
2393 EQU1177..FlHC30*x3HC30 + FlR29*x3R29 =e= FlHC31*x3HC31;
2394 EQU1178..FlHC30*x4HC30 + FlR29*x4R29 =e= FlHC31*x4HC31;
2395 EQU1179..FlHC30*x5HC30 + FlR29*x5R29 =e= FlHC31*x5HC31;
2396 EQU1180..FlHC30*x7HC30 + FlR29*x7R29 =e= FlHC31*x7HC31;
2397 EQU1181..FC301 - FvHC31 =e= 0;
2398 EQU1182..x1C301 - y1HC31 =e=0;
2399 EQU1183..x7C301 - y7HC31 =e=0;

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2400 EQU1184..x3C301 - y3HC31 =e=0;
2401 EQU1185..x4C301 - y4HC31 =e=0;
2402 EQU1186..x5C301 - y5HC31 =e=0;
2403 EQU1187..FC401 - FlHC31 =e= 0;
2404 EQU1188..x1C401 - x1HC31 =e=0;
2405 EQU1189..x3C401 - x3HC31 =e=0;
2406 EQU1190..x4C401 - x4HC31 =e=0;
2407 EQU1191..x5C401 - x5HC31 =e=0;
2408 EQU1192..x7C401 - x7HC31 =e=0;
2409 EQU1193..THC32 - TC302 =e= 0;
2410 EQU1194..K4C614B=e=0.13332*EXP(15.6782-2154.90/(TC302-
34.42))/PC302;
2411 EQU1195..PC302 -PHC32 =e= 0;
2412 EQU1196..K5C614B=e=0.13332*EXP(15.5338-2348.67/(TC302-
40.05))/PC302;
2413 EQU1197..K7C614B=e=0.13332*EXP(15.7588-2633.90/(TC302-
46.30))/PC302;
2414 EQU1198..hC311-hC302-hHC32=e=0;
2415 EQU1199..K3C614B * xx3HC32 - xx3C302 =e= 0;
2416 EQU1200..K1C614B * xx1HC32 - xx1C302 =e= 0;
2417 EQU1201..K4C614B * xx4HC32 - xx4C302 =e= 0;
2418 EQU1202..K5C614B * xx5HC32 - xx5C302 =e= 0;
2419 EQU1203..x1C426 + x3C426 + x4C426 + x5C426 + x7C426 =e= 1;
2420 EQU1204..K5C408*PC606D =e= 0.1333*10**(29.2963-2.1762E3/TC408-
7.883*LOG10(TC408)-4.6512E-11*TC408+3.8997E-6*TC408**2);
2421 EQU1205..K7C408*PC606D =e= 0.1333*10**(33.0162-2.583E3/TC408-
9.042*LOG10(TC408)-1.371E-12*TC408+3.634E-6*TC408**2);
2422
EQU1206..K1C408*xx1C408+K3C408*xx3C408+K4C408*xx4C408+K5C408*xx5C408+K7
C408*xx7C408 =e= 1;
2423 EQU1207..dTE633*2 =e= (THC05-THC30) + (THC04-THC29);
2424 EQU1208..xx1HC29 + xx2HC29 + xx3HC29 + xx4HC29 + xx5HC29 +
xx7HC29 =e= 1;
2425 EQU1209..yy1HC29 + yy2HC29 + yy3HC29 + yy4HC29 + yy5HC29 +
yy7HC29 =e= 1;
2426 EQU1210..FmlHC29 - FlHC29 * (x1HC29/MW1 + x2HC29/MW2 + x3HC29/MW3
+ x4HC29/MW4 + x5HC29/MW5 + x7HC29/MW7)=e= 0;
2427 EQU1211..FmvHC29 - FvHC29 * (y1HC29/MW1 + y2HC29/MW2 + y3HC29/MW3
+ y4HC29/MW4 + y5HC29/MW5 + y7HC29/MW7)=e= 0;
2428 EQU1212..xx1HC29 * MW1 * FmlHC29 - FlHC29 * x1HC29 =e= 0;
2429 EQU1213..xx3HC29 * MW3 * FmlHC29 - FlHC29 * x3HC29 =e= 0;
2430 EQU1214..xx4HC29 * MW4 * FmlHC29 - FlHC29 * x4HC29 =e= 0;
2431 EQU1215..xx5HC29 * MW5 * FmlHC29 - FlHC29 * x5HC29 =e= 0;
2432 EQU1216..xx7HC29 * MW7 * FmlHC29 - FlHC29 * x7HC29 =e= 0;
2433 EQU1217..yy7HC29 * MW7 * FmvHC29 - FvHC29 * y7HC29 =e= 0;
2434 EQU1218..yy5HC29 * MW5 * FmvHC29 - FvHC29 * y5HC29 =e= 0;
2435 EQU1219..yy4HC29 * MW4 * FmvHC29 - FvHC29 * y4HC29 =e= 0;
2436 EQU1220..yy3HC29 * MW3 * FmvHC29 - FvHC29 * y3HC29 =e= 0;
2437 EQU1221..yy1HC29 * MW1 * FmvHC29 - FvHC29 * y1HC29 =e= 0;
2438 EQU1222..yy7R1 * MW7 * FmvR1 - FvR1 * y7R1 =e= 0;
2439 EQU1223..yy5R1 * MW5 * FmvR1 - FvR1 * y5R1 =e= 0;
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2440 EQU1224..yy4R1 * MW4 * FmvR1 - FvR1 * y4R1 =e= 0;
2441 EQU1225..yy3R1 * MW3 * FmvR1 - FvR1 * y3R1 =e= 0;
2442 EQU1226..yy1R1 * MW1 * FmvR1 - FvR1 * y1R1 =e= 0;
2443 EQU1227..xx7R1 * MW7 * FmlR1 - FlR1 * x7R1 =e= 0;
2444 EQU1228..xx5R1 * MW5 * FmlR1 - FlR1 * x5R1 =e= 0;
2445 EQU1229..xx4R1 * MW4 * FmlR1 - FlR1 * x4R1 =e= 0;

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2446 EQU1230..xx3R1 * MW3 * FmlR1 - FlR1 * x3R1 =e= 0;
2447 EQU1231..xx1R1 * MW1 * FmlR1 - FlR1 * x1R1 =e= 0;
2448 EQU1232..FmvR1 - FvR1 * (y1R1/MW1 + y2R1/MW2 + y3R1/MW3 +
y4R1/MW4 + y5R1/MW5 + y7R1/MW7)=e= 0;
2449 EQU1233..FmlR1 - FlR1 * (x1R1/MW1 + x2R1/MW2 + x3R1/MW3 +
x4R1/MW4 + x5R1/MW5 + x7R1/MW7)=e= 0;
2450 EQU1234..xx1R1 + xx2R1 + xx3R1 + xx4R1 + xx5R1 + xx7R1 =e= 1;
2451 EQU1235..yy1R1 + yy2R1 + yy3R1 + yy4R1 + yy5R1 + yy7R1 =e= 1;
2452 EQU1236..K1E633*PHC30 =e= 3.71*PE633;
2453 EQU1237..K2E633*PHC30 =e= 1.05*PE633;
2454 EQU1238..K3E633*PHC30 =e=1.25*PE633;
2455 EQU1239..K4E633*PHC30 =e=0.82*PE633;
2456 EQU1240..K5E633*PHC30 =e= 0.28*PE633;
2457 EQU1241..K7E633*PHC30 =e= 0.068*PE633;
2458 EQU1242..yy1HC30 * MW1 * FmvHC30 - FvHC30 * y1HC30 =e= 0;
2459 EQU1243..yy3HC30 * MW3 * FmvHC30 - FvHC30 * y3HC30 =e= 0;
2460 EQU1244..yy4HC30 * MW4 * FmvHC30 - FvHC30 * y4HC30 =e= 0;
2461 EQU1245..yy5HC30 * MW5 * FmvHC30 - FvHC30 * y5HC30 =e= 0;
2462 EQU1246..yy7HC30 * MW7 * FmvHC30 - FvHC30 * y7HC30 =e= 0;
2463 EQU1247..xx1HC30 * MW1 * FmlHC30 - FlHC30 * x1HC30 =e= 0;
2464 EQU1248..xx3HC30 * MW3 * FmlHC30 - FlHC30 * x3HC30 =e= 0;
2465 EQU1249..xx4HC30 * MW4 * FmlHC30 - FlHC30 * x4HC30 =e= 0;
2466 EQU1250..xx5HC30 * MW5 * FmlHC30 - FlHC30 * x5HC30 =e= 0;
2467 EQU1251..xx7HC30 * MW7 * FmlHC30 - FlHC30 * x7HC30 =e= 0;
2468 EQU1252..FmlHC30 - FlHC30 * (x1HC30/MW1 + x2HC30/MW2 + x3HC30/MW3
+ x4HC30/MW4 + x5HC30/MW5 + x7HC30/MW7)=e= 0;
2469 EQU1253..FmvHC30 - FvHC30 * (y1HC30/MW1 + y2HC30/MW2 + y3HC30/MW3
+ y4HC30/MW4 + y5HC30/MW5 + y7HC30/MW7)=e= 0;
2470 EQU1254..xx1HC30 + xx2HC30 + xx3HC30 + xx4HC30 + xx5HC30 +
xx7HC30 =e= 1;
2471 EQU1255..yy1HC30 + yy2HC30 + yy3HC30 + yy4HC30 + yy5HC30 +
yy7HC30 =e= 1;
2472 EQU1256..hc404 - FC404 * ((x1C404/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC404,ORD(Coeff))))
2473 +(x3C404/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC404,ORD(Coeff))))
2474 +(x4C404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC404,ORD(Coeff))))
2475 +(x5C404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC404,ORD(Coeff))))
2476 +(x7C404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC404,ORD(Coeff)))) =e= 0;
2477 EQU1257..hc405 - FC405 * ((x1C405/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC405,ORD(Coeff))))
2478 +(x3C405/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC405,ORD(Coeff))))
2479 +(x4C405/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC405,ORD(Coeff))))
2480 +(x5C405/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC405,ORD(Coeff))))
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2481 +(x7C405/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC405,ORD(Coeff)))) =e= 0;
2482 EQU1258..hc406 - FC406 * ((x1C406/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC406,ORD(Coeff))))
2483 +(x3C406/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC406,ORD(Coeff))))
2484 +(x4C406/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC406,ORD(Coeff))))
2485 +(x5C406/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC406,ORD(Coeff))))
2486 +(x7C406/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC406,ORD(Coeff)))) =e= 0;
2487 EQU1259..hc407 - FC407 * ((x1C407/MW1)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("1",Coeff) *POWER(TC407,ORD(Coeff))))
2488 +(x3C407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC407,ORD(Coeff))))
2489 +(x4C407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC407,ORD(Coeff))))
2490 +(x5C407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC407,ORD(Coeff))))
2491 +(x7C407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC407,ORD(Coeff)))) =e= 0;

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2492 EQU1260..hc408 - FC408 * ((x1C408/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC408,ORD(Coeff))))
2493 +(x3C408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC408,ORD(Coeff))))
2494 +(x4C408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC408,ORD(Coeff))))
2495 +(x5C408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC408,ORD(Coeff))))
2496 +(x7C408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC408,ORD(Coeff)))) =e= 0;
2497 EQU1261..hc410 - FC410 * ((x1C410/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC410,ORD(Coeff))))
2498 +(x3C410/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC410,ORD(Coeff))))
2499 +(x4C410/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC410,ORD(Coeff))))
2500 +(x5C410/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC410,ORD(Coeff))))
2501 +(x7C410/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC410,ORD(Coeff)))) =e= 0;
2502 EQU1262..hc413 - FC413 * ((x1C413/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC413,ORD(Coeff))))
2503 +(x3C413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC413,ORD(Coeff))))
2504 +(x4C413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC413,ORD(Coeff))))
2505 +(x5C413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC413,ORD(Coeff))))
2506 +(x7C413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC413,ORD(Coeff)))) =e= 0;
2507 EQU1263..hc414 - FC414 *
2508 ((x1C414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
((1-TC414/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2509 +(x3C414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC414,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
((1-TC414/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2510 +(x4C414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *
((1-TC414/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2511 +(x5C414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *
((1-TC414/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2512 +(x7C414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC414,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *
((1-TC414/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
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2513 EQU1264..hc415 - FC415 * ((x1C415/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC415,ORD(Coeff))))
2514 +(x3C415/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC415,ORD(Coeff))))
2515 +(x4C415/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC415,ORD(Coeff))))
2516 +(x5C415/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC415,ORD(Coeff))))
2517 +(x7C415/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC415,ORD(Coeff)))) =e= 0;
2518 EQU1265..hc417 - FC417 * ((x1C417/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC417,ORD(Coeff))))
2519 +(x3C417/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC417,ORD(Coeff))))
2520 +(x4C417/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC417,ORD(Coeff))))
2521 +(x5C417/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC417,ORD(Coeff))))
2522 +(x7C417/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC417,ORD(Coeff)))) =e= 0;
2523 EQU1266..hc418 - FC418 * ((x1C418/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC418,ORD(Coeff))))
2524 +(x3C418/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC418,ORD(Coeff))))
2525 +(x4C418/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC418,ORD(Coeff))))
2526 +(x5C418/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC418,ORD(Coeff))))
2527 +(x7C418/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC418,ORD(Coeff)))) =e= 0;
2528 EQU1267..hc419 - FC419 * ((x1C419/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC419,ORD(Coeff))))
2529 +(x3C419/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC419,ORD(Coeff))))
2530 +(x4C419/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC419,ORD(Coeff))))
2531 +(x5C419/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC419,ORD(Coeff))))
2532 +(x7C419/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC419,ORD(Coeff)))) =e= 0;

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2533 EQU1268..hc425 - FC425 * ((x1C425/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC425,ORD(Coeff))))
2534 +(x3C425/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC425,ORD(Coeff))))
2535 +(x4C425/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC425,ORD(Coeff))))
2536 +(x5C425/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC425,ORD(Coeff))))
2537 +(x7C425/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC425,ORD(Coeff)))) =e= 0;
2538 EQU1269..hc426 - FC426 * ((x1C426/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC426,ORD(Coeff))))
2539 +(x3C426/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC426,ORD(Coeff))))
2540 +(x4C426/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC426,ORD(Coeff))))
2541 +(x5C426/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC426,ORD(Coeff))))
2542 +(x7C426/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC426,ORD(Coeff)))) =e= 0;
2543 EQU1270..yy7R29 * MW7 * FmvR29 - FvR29 * y7R29 =e= 0;
2544 EQU1271..yy5R29 * MW5 * FmvR29 - FvR29 * y5R29 =e= 0;
2545 EQU1272..yy4R29 * MW4 * FmvR29 - FvR29 * y4R29 =e= 0;
2546 EQU1273..yy3R29 * MW3 * FmvR29 - FvR29 * y3R29 =e= 0;
2547 EQU1274..yy1R29 * MW1 * FmvR29 - FvR29 * y1R29 =e= 0;
2548 EQU1275..xx7R29 * MW7 * FmlR29 - FlR29 * x7R29 =e= 0;
2549 EQU1276..xx5R29 * MW5 * FmlR29 - FlR29 * x5R29 =e= 0;
2550 EQU1277..xx4R29 * MW4 * FmlR29 - FlR29 * x4R29 =e= 0;
2551 EQU1278..xx3R29 * MW3 * FmlR29 - FlR29 * x3R29 =e= 0;
2552 EQU1279..xx1R29 * MW1 * FmlR29 - FlR29 * x1R29 =e= 0;
2553 EQU1280..yy1R29 + yy2R29 + yy3R29 + yy4R29 + yy5R29 + yy7R29 =e=
1;
2554 EQU1281..xx1R29 + xx2R29 + xx3R29 + xx4R29 + xx5R29 + xx7R29 =e=
1;
2555 EQU1282..FmlR29 - FlR29 * (x1R29/MW1 + x2R29/MW2 + x3R29/MW3 +
x4R29/MW4 + x5R29/MW5 + x7R29/MW7)=e= 0;
2556 EQU1283..FmvR29 - FvR29 * (y1R29/MW1 + y2R29/MW2 + y3R29/MW3 +
y4R29/MW4 + y5R29/MW5 + y7R29/MW7)=e= 0;
2557 EQU1284..yy1HC30 =e= K1E633*xx1HC30;
2558 EQU1285..yy3HC30 =e= K3E633*xx3HC30;
2559 EQU1286..yy4HC30 =e= K4E633*xx4HC30;
2560 EQU1287..yy5HC30 =e= K5E633*xx5HC30;
2561 EQU1288..yy7HC30 =e= K7E633*xx7HC30;
2562 EQU1289..yy1R29 =e= K1E6XX*xx1R29;
2563 EQU1290..yy3R29 =e= K3E6XX*xx3R29;
2564 EQU1291..yy4R29 =e= K4E6XX*xx4R29;
2565 EQU1292..yy5R29 =e= K5E6XX*xx5R29;
2566 EQU1293..yy7R29 =e= K7E6XX*xx7R29;
2567 EQU1294..TR1-TR29 =e= 0;
2568 EQU1295..(FlHC29*x7HC29 + FvHC29*y7HC29) - (FlHC30*x7HC30 +
FvHC30*y7HC30) =e= 0;
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2569 EQU1296..(hC623+hC625+hC627+hC629) - (hR29 - hR1) =e= 0;
 2570 EQU1297..(F1R1*x7R1 + FvR1*y7R1) - (F1R29*x7R29 + FvR29*y7R29)
 =e= 0;
 2571 EQU1298..(F1R1*x5R1 + FvR1*y5R1) - (F1R29*x5R29 + FvR29*y5R29)
 =e= 0;
 2572 EQU1299..(F1R1*x1R1 + FvR1*y1R1) - (F1R29*x1R29 + FvR29*y1R29)
 =e= 0;
 2573 EQU1300..(F1R1*x3R1 + FvR1*y3R1) - (F1R29*x3R29 + FvR29*y3R29)
 =e= 0;
 2574 EQU1301..(F1R1*x4R1 + FvR1*y4R1) - (F1R29 *x4R29+ FvR29*y4R29)
 =e= 0;
 2575 EQU1302..(F1R1 + FvR1) - (F1R29 + FvR29) =e= 0;
 2576 EQU1303..(hC623+hC625+hC627+hC629) - UE6XX*AE6XX*dTE6XX =e= 0;
 2577 EQU1304..K1E6XX*PR29 =e= 3.71*PE633;
 2578 EQU1305..FC418 * x2C418 - FC417 * x1C417 =e= 0;

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2579 EQU1306..FC302 =e= VFC614B*FC311;
2580 EQU1307..FC311 - FC302 - FHC32 =e= 0;
2581 EQU1308..K1C614B*PC302 =e= 0.1333*10**(21.4469-1.4627E3/TC302-
5.261*LOG10(TC302)+3.282E-11*TC302+3.7349E-6*TC302**2);
2582 EQU1309..K3C614B*PC302 =e= 0.1333*10**(31.2541-1.9532E3/TC302-
8.806*LOG10(TC302)+8.9246E-11*TC302+5.7501E-6*TC302**2);
2583 EQU1310..FC311*x1C311 - FC302*x1C302 - FHC32*x1HC32 =e= 0;
2584 EQU1311..FC311*x3C311 - FC302*x3C302 - FHC32*x3HC32 =e= 0;
2585 EQU1312..FC311*x4C311 - FC302*x4C302 - FHC32*x4HC32 =e= 0;
2586 EQU1313..FC311*x7C311 - FC302*x7C302 - FHC32*x7HC32 =e= 0;
2587 EQU1314..hHC01 - FHC01 * ((x1HC01/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff)*POWER(THC01,ORD(Coeff))))
2588 +(x2HC01/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff) *
POWER(THC01,ORD(Coeff))))
2589 +(x3HC01/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(THC01,ORD(Coeff))))
2590 +(x4HC01/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(THC01,ORD(Coeff))))
2591 +(x5HC01/MW5)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("5",Coeff)*POWER(THC01,ORD(Coeff))))
2592 +(x7HC01/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(THC01,ORD(Coeff)))) =e= 0;
2593 EQU1315..x1HC01 + x2HC01 + x3HC01 + x4HC01 + x5HC01 + x7HC01
=e=1;
2594 EQU1316..hC401 - FC401 * ((x1C401/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff) *POWER(TC401,ORD(Coeff))))
2595 +(x3C401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC401,ORD(Coeff))))
2596 +(x4C401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC401,ORD(Coeff))))
2597 +(x5C401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC401,ORD(Coeff))))
2598 +(x7C401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC401,ORD(Coeff)))) =e= 0;
2599 EQU1317..x1C401 + x3C401 + x4C401 + x5C401 + x7C401 =e= 1;
2600 EQU1318..TAC09=e=TAC05;
2601 EQU1319..TAC09=e=TAC12;
2602 EQU1320..TAC09=e=THC27;
2603 EQU1321..hAC02 + hAC05 =e= hAC07;
2604 EQU1322..FHC27*THC27 + FHC26*THC26 =e= FHC28*THC28;
2605 EQU1323..TAC20 - TAC15 =e= 0;
2606 EQU1324..TAC20 - TAC23 =e= 0;
2607 EQU1325..TAC20 - THC25 =e= 0;
2608 EQU1326..hAC12 + hAC15 - hAC18 =e=0;
2609 EQU1327..FHC26*THC26 -FHC25 *THC25 - FHC24 *THC24 =e= 0;
2610 EQU1328..hAC23 + hAC26 - hAC29 =e= 0;
2611 EQU1329..TAC31 - TAC26 =e= 0;
2612 EQU1330..TAC31 - TAC34 =e= 0;
2613 EQU1331..TAC31 - THC23 =e= 0;
2614 EQU1332..FHC24*THC24 -FHC23 *THC23 - FHC22 *THC22 =e= 0;
2615 EQU1333..hAC34 + hAC37 - hAC40 =e= 0;
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2616 EQU1334..TAC42 =e= TAC37;
2617 EQU1335..TAC42 =e= TAC45;
2618 EQU1336..TAC42 =e= THC22;
2619 EQU1337..hHC30 + hR29 =e= hHC31;
2620 EQU1338..(hC312 - hC312liq) - FcwE641A*4.197*(TcwotE641A - Tcwin)
=e= 0;
2621 EQU1339..hC312liq - FC312*
2622 ((x1C312/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC312,ORD(Coeff))))
2623 +(x3C312/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC312,ORD(Coeff))))
2624 +(x4C312/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC312,ORD(Coeff))))

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2625 +(x5C312/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC312,ORD(Coeff))))
2626 +(x7C312/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC312,ORD(Coeff)))) =e= 0;
2627 EQU1340..THC31 =e= TC401;
2628 EQU1341..THC31 - TC301 =e=0;
2629 EQU1342..xx4C407 * FmC407 * MW4 - FC407 * x4C407 =e= 0;
2630 EQU1343..FmC407 - FC407 * (x1C407/MW1 + x3C407/MW3 + x4C407/MW4 +
x5C407/MW5 + x7C407/MW7 )=e= 0;
2631 EQU1344..xx5C407 * FmC407 * MW5 - FC407 * x5C407 =e= 0;
2632 EQU1345..xx3C407 * FmC407 * MW3 - FC407 * x3C407 =e= 0;
2633 EQU1346..FmC412 - FC412 * (x1C412/MW1 + x3C412/MW3 + x4C412/MW4 +
x5C412/MW5 + x7C412/MW7 )=e= 0;
2634 EQU1347..xx4C412 * FmC412 * MW4 - FC412 * x4C412 =e= 0;
2635 EQU1348..xx3C412 * FmC412 * MW3 - FC412 * x3C412 =e= 0;
2636 EQU1349..xx5C412 * FmC412 * MW5 - FC412 * x5C412 =e= 0;
2637 EQU1350..xx4C322 * FmC322 * MW4 - FC322 * x4C322 =e= 0;
2638 EQU1351..xx1C322 * FmC322 * MW1 - FC322 * x1C322 =e= 0;
2639 EQU1352..FmC317 - FC317 * (x1C317/MW1 + x3C317/MW3 + x4C317/MW4 +
x5C317/MW5 + x7C317/MW7 )=e= 0;
2640 EQU1353..xx4C317 * FmC317 * MW4 - FC317 * x4C317 =e= 0;
2641 EQU1354..xx3C317 * FmC317 * MW3 - FC317 * x3C317 =e= 0;
2642 EQU1355..FmHC01 - FHC01 * (x1HC01/MW1 + x2HC01/MW2+ x3HC01/MW3 +
x4HC01/MW4 + x5HC01/MW5 + x7HC01/MW7)=e= 0;
2643 EQU1356..xx1HC01 * MW1 * FmHC01 - FHC01 *x1HC01=e= 0;
2644 EQU1357..xx2HC01 * MW2 * FmHC01 - FHC01 *x2HC01=e= 0;
2645 EQU1358..xx3HC01 * MW3 * FmHC01 - FHC01 *x3HC01=e= 0;
2646 EQU1359..xx4HC01 * MW4 * FmHC01 - FHC01 *x4HC01=e= 0;
2647 EQU1360..x2C418 - x2C419 =e= 0;
2648 EQU1361..FHC03 * x2HC03 - FC419 * x2C419 =e= 0;
2649 EQU1362..FC417 - FSC414 - FSC413 =e= 0;
2650 EQU1363..FC417 * x1C417- FSC414* x1SC414 - FSC413* x1SC413 =e= 0;
2651 EQU1364..hc417 - hSC414 - hSC413 =e= 0;
2652 EQU1365..FC417 * x2C417- FSC414* x2SC414 - FSC413* x2SC413 =e= 0;
2653 EQU1366..FC417 * x3C417- FSC414* x3SC414 - FSC413* x3SC413 =e= 0;
2654 EQU1367..FC417 * x4C417- FSC414* x4SC414 - FSC413* x4SC413 =e= 0;
2655 EQU1368..FC417 * x5C417- FSC414* x5SC414 - FSC413* x5SC413 =e= 0;
2656 EQU1369..(hSC404 - hSC405) - UE603*AE603*FE603*dTE603 =e= 0;
2657 EQU1370..x3SC409 - x3SC412 =e= 0;
2658 EQU1371..x6SC409 - x6SC412 =e= 0;
2659 EQU1372..x6SC409 - x6SC411 =e= 0;
2660 EQU1373..x2SC409 - x2SC411 =e= 0;
2661 EQU1374..x1SC409 - x1SC411 =e= 0;
2662 EQU1375..x3SC409 - x3SC411 =e= 0;
2663 EQU1376..x4SC409 - x4SC411 =e= 0;
2664 EQU1377..x2SC409 - x2SC412 =e= 0;
2665 EQU1378..x7SC409 - x7SC411 =e= 0;
2666 EQU1379..x1SC409 - x1SC412 =e= 0;
2667 EQU1380..x4SC409 - x4SC412 =e= 0;
2668 EQU1381..x5SC409 - x5SC412 =e= 0;
2669 EQU1382..FSC409 - FSC411 - FSC412 =e= 0;
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2670 EQU1383..TSC409 - TSC412 =e= 0;

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2671 EQU1384..TSC409 - TSC411 =e= 0;
2672 EQU1385..x7SC409 - x7SC412 =e= 0;
2673 EQU1386..x5SC409 - x5SC411 =e= 0;
2674 EQU1387..RC601*FSC412 - FSC411 =e= 0;
2675 EQU1388..x3SC412 - x3SC413 =e= 0;
2676 EQU1389..dTE609A**3 =e= ((TSC412-TcwotE609A)*(TSC413-Tcwin)*
2677 ((TSC412-TcwotE609A)+(TSC413-Tcwin))/2);
2678 EQU1390..x4SC412 - x4SC413 =e= 0;
2679 EQU1391..x1SC412 - x1SC413 =e= 0;
2680 EQU1392..x2SC412 - x2SC413 =e= 0;
2681 EQU1393..x6SC412 - x6SC413 =e= 0;
2682 EQU1394..FSC412 - FSC413 =e= 0;
2683 EQU1395..(hSC412 - hSC413) - UE609A*AE609A*FE609A*dTE609A =e= 0;
2684 EQU1396..(hSC412 - hSC413) - FcweE609A*4.197*(TcwotE609A - Tcwin)
=e= 0;
2685 EQU1397..x5SC412 - x5SC413 =e= 0;
2686 EQU1398..(hSC408 - hSC409) - FcweE605*4.197*(TcwoutE605 - Tcwin)
=e= 0;
2687 EQU1399..x3SC408 -x3SC409 =e=0;
2688 EQU1400..x7SC408 -x7SC409 =e=0;
2689 EQU1401..FSC408 - FSC409=e= 0;
2690 EQU1402..TSC408 - TSC409 =e=0;
2691 EQU1403..(hSC408 - hSC409) - UE605*AE605*dTE605 =e= 0;
2692 EQU1404..dTE605*2 =e=
2693 (TSC408-TcwoutE605) + (TSC409-Tcwin);
2694 EQU1405..x1SC408 -x1SC409 =e=0;
2695 EQU1406..x5SC408 -x5SC409 =e=0;
2696 EQU1407..x4SC408 -x4SC409 =e=0;
2697 EQU1408..x2SC408 -x2SC409 =e=0;
2698 EQU1409..x6SC408 -x6SC409 =e=0;
2699 EQU1410..x5SC404 - x5SC405 =e= 0;
2700 EQU1411..x6SC404 - x6SC405 =e= 0;
2701 EQU1412..(hSC404 - hSC405) - FcweE603*4.197*(TcwoutE603 - Tcwin)
=e= 0;
2702 EQU1413..x4SC404 - x4SC405 =e= 0;
2703 EQU1414..x3SC404 - x3SC405 =e= 0;
2704 EQU1415..x1SC404 - x1SC405 =e= 0;
2705 EQU1416..dTE603**3 =e= ((TSC404-TcwoutE603)*(TSC405-Tcwin)*
2706 ((TSC404-TcwoutE603)+(TSC405-Tcwin))/2);
2707 EQU1417..FSC404 - FSC405 =e= 0;
2708 EQU1418..x2SC404 - x2SC405 =e= 0;
2709 EQU1419..TSC407 - TSC406 =e= 0;
2710 EQU1420..x3SC407 - x3SC406 =e= 0;
2711 EQU1421..x4SC407 - x4SC406 =e= 0;
2712 EQU1422..dTE602 =e= 414.6 - TSC406;
2713 EQU1423..x6SC407 - x6SC406 =e= 0;
2714 EQU1424..x1SC407 - x1SC406 =e= 0;
2715 EQU1425..(hSC407 - hSC406) - UE602*AE602*dTE602 =e= 0;
2716 EQU1426..(hSC407 - hSC406) - FstmE602 * hstmE602 =e= 0;
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2717 EQU1427..x2SC407 - x2SC406 =e= 0;
2718 EQU1428..FSC407 - FSC406 =e= 0;
2719 EQU1429..x5SC407 - x5SC406 =e= 0;
2720 EQU1430..x3SC401 - x3SC402 =e= 0;
2721 EQU1431..x4SC401 - x4SC402 =e= 0;
2722 EQU1432..x5SC403 - x5SC404 =e= 0;
2723 EQU1433..x3SC403 - x3SC404 =e= 0;
2724 EQU1434..x2SC403 - x2SC406 =e= 0;
2725 EQU1435..Sm4C601*LpC601=e= Kp4C601*VpC601;
2726 EQU1436..f4C601 * x4SC402 * FSC402 =e= x4SC403 * FSC403;
2727 EQU1437..x1SC403 - x1SC406 =e= 0;
2728 EQU1438..K3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TnC601-
8.806*LOG10(TnC601)+8.9246E-11*TnC601+5.7501E-6*TnC601**2);
2729 EQU1439..K6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TnC601-
9.2354*LOG10(TnC601)+9.0199E-11*TnC601+4.1050E-6*TnC601**2);
2730 EQU1440..K1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TnC601-
5.261*LOG10(TnC601)+3.282E-11*TnC601+3.7349E-6*TnC601**2);
2731 EQU1441..K2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TnC601-
10.048*LOG10(TnC601)+3.0198E-3*TnC601+2.9122E-6*TnC601**2);
2732 EQU1442..x5SC403 - x5SC406 =e= 0;
2733 EQU1443..Kp3C601*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TmC601-
8.806*LOG10(TmC601)+8.9246E-11*TmC601+5.7501E-6*TmC601**2);
2734 EQU1444..x3SC403 - x3SC406 =e= 0;
2735 EQU1445..Kp1C601*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TmC601-
5.261*LOG10(TmC601)+3.282E-11*TmC601+3.7349E-6*TmC601**2);
2736 EQU1446..FSC402 * x5SC402 + FSC411*x5SC411 - FSC403 * x5SC403 -
FSC408*x5SC408 =e= 0;
2737 EQU1447..Sn7C601 *FSC411 =e= K7C601*FSC408;
2738 EQU1448..FSC402 * x4SC402 + FSC411*x4SC411 - FSC403 * x4SC403 -
FSC408*x4SC408 =e= 0;
2739 EQU1449..FSC402 * x3SC402 + FSC411*x3SC411 - FSC403 * x3SC403 -
FSC408*x3SC408 =e= 0;
2740 EQU1450..FSC402 * x1SC402 + FSC411*x1SC411 - FSC403 * x1SC403 -
FSC408*x1SC408 =e= 0;
2741 EQU1451..FSC402 + FSC411 - FSC403 - FSC408 =e= 0;
2742 EQU1452..x4SC403 - x4SC406 =e= 0;
2743 EQU1453..TSC403 - TSC406 =e= 0;
2744 EQU1454..Kp4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TmC601-
7.1805*LOG10(TmC601)-6.6845E-11*TmC601+4.219E-6*TmC601**2);
2745 EQU1455..K5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TnC601-
7.883*LOG10(TnC601)-4.6512E-11*TnC601+3.8997E-6*TnC601**2);
2746 EQU1456..Kp5C601*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TmC601-
7.883*LOG10(TmC601)-4.6512E-11*TmC601+3.8997E-6*TmC601**2);
2747 EQU1457..K7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TnC601-
9.042*LOG10(TnC601)-1.371E-12*TnC601+3.634E-6*TnC601**2);
2748 EQU1458..Kp2C601*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TmC601-
10.048*LOG10(TmC601)+3.0198E-3*TmC601+2.9122E-6*TmC601**2);
2749 EQU1459..x6SC403 - x6SC406 =e= 0;
2750 EQU1460..x7SC403 - x7SC406 =e= 0;
2751 EQU1461..LpC601=e=FSC411 + qC601*FSC402;
2752 EQU1462..Sn1C601 *FSC411 =e= K1C601*FSC408;
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2753 EQU1463..K4C601*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TnC601-
7.1805*LOG10(TnC601)-6.6845E-11*TnC601+4.219E-6*TnC601**2);
2754 EQU1464..Kp7C601*PC601 =e= 0.1333*10**(33.0162-2.583E3/TmC601-
9.042*LOG10(TmC601)-1.371E-12*TmC601+3.634E-6*TmC601**2);
2755 EQU1465..TmC601=e=(TSC403+TSC402)/2;
2756 EQU1466..TnC601=e=(TSC408+TSC402)/2;
2757 EQU1467..VpC601=e=LpC601 - FSC403;
2758 EQU1468..x1SC413 + x2SC413 + x3SC413 +x4SC413 +x5SC413 + x6SC413
+ x7SC413=e= 1;
2759 EQU1469..hSC413 - FSC413 *
((x1SC413/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC413,ORD(Coeff))))
2760 +(x2SC413/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC413,ORD(Coeff))))
2761 +(x3SC413/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC413,ORD(Coeff))))
2762 +(x4SC413/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC413,ORD(Coeff))))

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2763 +(x5SC413/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC413,ORD(Coeff))))
2764 +(x6SC413/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC413,ORD(Coeff))))
2765 +(x7SC413/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC413,ORD(Coeff)))) =e= 0;
2766 EQU1470..hSC414 - FSC414 *
((x1SC414/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC414,ORD(Coeff))))
2767 +(x2SC414/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC414,ORD(Coeff))))
2768 +(x3SC414/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC414,ORD(Coeff))))
2769 +(x4SC414/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC414,ORD(Coeff))))
2770 +(x5SC414/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC414,ORD(Coeff))))
2771 +(x6SC414/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC414,ORD(Coeff))))
2772 +(x7SC414/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC414,ORD(Coeff)))) =e= 0;
2773 EQU1471..x1SC414 + x2SC414 + x3SC414 +x4SC414 +x5SC414 + x6SC414
+ x7SC414=e= 1;
2774 EQU1472..hSC412 - FSC412 *
((x1SC412/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC412,ORD(Coeff))))
2775 +(x2SC412/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC412,ORD(Coeff))))
2776 +(x3SC412/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC412,ORD(Coeff))))
2777 +(x4SC412/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC412,ORD(Coeff))))
2778 +(x5SC412/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC412,ORD(Coeff))))
2779 +(x6SC412/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC412,ORD(Coeff))))
2780 +(x7SC412/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC412,ORD(Coeff)))) =e= 0;
2781 EQU1473..x1SC412 + x2SC412 + x3SC412 +x4SC412 +x5SC412 + x6SC412
+ x7SC412 =e= 1;
2782 EQU1474..hSC411 - FSC411 *
((x1SC411/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC411,ORD(Coeff))))
2783 +(x2SC411/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC411,ORD(Coeff))))
2784 +(x3SC411/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC411,ORD(Coeff))))
2785 +(x4SC411/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC411,ORD(Coeff))))
2786 +(x5SC411/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC411,ORD(Coeff))))
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2787 +(x6SC411/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC411,ORD(Coeff))))
2788 +(x7SC411/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC411,ORD(Coeff)))) =e= 0;
2789 EQU1475..hSC409 - FSC409 *
((x1SC409/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC409,ORD(Coeff))))
2790 +(x2SC409/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC409,ORD(Coeff))))
2791 +(x3SC409/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC409,ORD(Coeff))))
2792 +(x4SC409/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC409,ORD(Coeff))))
2793 +(x5SC409/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC409,ORD(Coeff))))
2794 +(x6SC409/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC409,ORD(Coeff))))
2795 +(x7SC409/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC409,ORD(Coeff)))) =e= 0;
2796 EQU1476..x1SC409 + x2SC409 + x3SC409 +x4SC409 +x5SC409 + x6SC409
+x7SC409 =e= 1;
2797 EQU1477..xx1SC408 * MW1 * FmSC408 - FSC408 *x1SC408=e= 0;
2798 EQU1478..K6SC408*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC408-
9.2354*LOG10(TSC408)+9.0199E-11*TSC408+4.1050E-6*TSC408**2);
2799 EQU1479..xx6SC408 * MW6 * FmSC408 - FSC408 *x6SC408=e= 0;
2800 EQU1480..xx2SC408 * MW2 * FmSC408 - FSC408 *x2SC408=e= 0;
2801
EQU1481..xx1SC408+xx2SC408+xx3SC408+xx4SC408+xx5SC408+xx6SC408+xx7SC408
=e= 1;
2802 EQU1482..xx5SC408 * MW5 * FmSC408 - FSC408 *x5SC408=e= 0;
2803 EQU1483..K2SC408*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC408-
10.048*LOG10(TSC408)+3.0198E-3*TSC408+2.9122E-6*TSC408**2);
2804 EQU1484..xx3SC408 * MW3 * FmSC408 - FSC408 *x3SC408=e= 0;
2805 EQU1485..K3SC408*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC408-
8.806*LOG10(TSC408)+8.9246E-11*TSC408+5.7501E-6*TSC408**2);
2806 EQU1486..FmSC408 - FSC408 * (x1SC408/MW1 + x2SC408/MW2 +
x3SC408/MW3 + x4SC408/MW4 + x5SC408/MW5 + x6SC408/MW6 + x7SC408/MW7)

=e= 0;
2807
EQU1487..xx1SC408/K1SC408+xx2SC408/K2SC408+xx3SC408/K3SC408+xx4SC408/K4
SC408+xx5SC408/K5SC408+xx6SC408/K6SC408+xx7SC408/K7SC40

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8 =e= 1;
2808 EQU1488..K7SC408*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC408-
9.042*LOG10(TSC408)-1.371E-12*TSC408+3.634E-6*TSC408**2);
2809 EQU1489..K5SC408*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC408-
7.883*LOG10(TSC408)-4.6512E-11*TSC408+3.8997E-6*TSC408**2);
2810 EQU1490..K4SC408*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC408-
7.1805*LOG10(TSC408)-6.6845E-11*TSC408+4.219E-6*TSC408**2);
2811 EQU1491..K1SC408*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC408-
5.261*LOG10(TSC408)+3.282E-11*TSC408+3.7349E-6*TSC408**2);
2812 EQU1492..x1SC408 + x2SC408 + x3SC408 +x4SC408 +x5SC408 + x6SC408
+x7SC408 =e= 1;
2813 EQU1493..xx4SC408 * MW4 * FmSC408 - FSC408 *x4SC408=e= 0;
2814 EQU1494..x1SC407 + x2SC407 + x3SC407 + x4SC407 + x5SC407 +
x6SC407 + x7SC407 =e= 1;
2815
EQU1495..xx1SC406+xx2SC406+xx3SC406+xx4SC406+xx5SC406+xx6SC406+xx7SC406
=e= 1;
2816 EQU1496..K7SC406*PC601 =e= 0.1333*10**(33.0162-2.583E3/TSC406-
9.042*LOG10(TSC406)-1.371E-12*TSC406+3.634E-6*TSC406**2);
2817
EQU1497..K1SC406*xx1SC406+K2SC406*xx2SC406+K3SC406*xx3SC406+K4SC406*xx4
SC406+K5SC406*xx5SC406+K6SC406*xx6SC406+K7SC406*xx7SC406

6 =e= 1;
2818 EQU1498..FmSC406 - FSC406 * (x1SC406/MW1 + x2SC406/MW2 +
x3SC406/MW3 + x4SC406/MW4 + x5SC406/MW5 + x6SC406/MW6 + x7SC406/MW7)
=e= 0;
2819 EQU1499..xx2SC406 * MW2 * FmSC406 - FSC406 *x2SC406=e= 0;
2820 EQU1500..xx6SC406 * MW6 * FmSC406 - FSC406 *x6SC406=e= 0;
2821 EQU1501..K2SC406*PC601 =e= 0.1333*10**(33.9868-2.0916E3/TSC406-
10.048*LOG10(TSC406)+3.0198E-3*TSC406+2.9122E-6*TSC406**2);
2822 EQU1502..K6SC406*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TSC406-
9.2354*LOG10(TSC406)+9.0199E-11*TSC406+4.1050E-6*TSC406**2);
2823 EQU1503..xx1SC406 * MW1 * FmSC406 - FSC406 *x1SC406=e= 0;
2824 EQU1504..xx3SC406 * MW3 * FmSC406 - FSC406 *x3SC406=e= 0;
2825 EQU1505..xx4SC406 * MW4 * FmSC406 - FSC406 *x4SC406=e= 0;
2826 EQU1506..K5SC406*PC601 =e= 0.1333*10**(29.2963-2.1762E3/TSC406-
7.883*LOG10(TSC406)-4.6512E-11*TSC406+3.8997E-6*TSC406**2);
2827 EQU1507..xx5SC406 * MW5 * FmSC406 - FSC406 *x5SC406=e= 0;
2828 EQU1508..x1SC406 + x2SC406 + x3SC406 + x4SC406+ x5SC406 + x6SC406
+ x7SC406 =e= 1;
2829 EQU1509..K4SC406*PC601 =e= 0.1333*10**(27.0441-1.9049E3/TSC406-
7.1805*LOG10(TSC406)-6.6845E-11*TSC406+4.219E-6*TSC406**2);
2830 EQU1510..K3SC406*PC601 =e= 0.1333*10**(31.2541-1.9532E3/TSC406-
8.806*LOG10(TSC406)+8.9246E-11*TSC406+5.7501E-6*TSC406**2);
2831 EQU1511..K1SC406*PC601 =e= 0.1333*10**(21.4469-1.4627E3/TSC406-
5.261*LOG10(TSC406)+3.282E-11*TSC406+3.7349E-6*TSC406**2);
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2832 EQU1512..hSC406 - FSC406 *
((x1SC406/MW1)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("1",Coeff)
*POWER(TSC406,ORD(Coeff))))
2833 +(x2SC406/MW2)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("2",Coeff)
*POWER(TSC406,ORD(Coeff))))
2834 +(x3SC406/MW3)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("3",Coeff) *
POWER(TSC406,ORD(Coeff))))
2835 +(x4SC406/MW4)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("4",Coeff)
*POWER(TSC406,ORD(Coeff))))
2836 +(x5SC406/MW5)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("5",Coeff)
*POWER(TSC406,ORD(Coeff))))
2837 +(x6SC406/MW6)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("6",Coeff)*POWER(TSC406,ORD(Coeff))))
2838 +(x7SC406/MW7)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("7",Coeff)
*POWER(TSC406,ORD(Coeff)))) =e= 0;
2839 EQU1513..x1SC405 + x2SC405 + x3SC405 + x4SC405 + x5SC405 +
x6SC405 + x7SC405 =e= 1;
2840 EQU1514..hSC405 - FSC405 *
((x1SC405/MW1)*(SUM(Coeff,1/ORD(Coeff))*
Enth_liq("1",Coeff)*POWER(TSC405,ORD(Coeff))))
2841 +(x2SC405/MW2)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("2",Coeff)
*POWER(TSC405,ORD(Coeff))))
2842 +(x3SC405/MW3)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("3",Coeff) *
POWER(TSC405,ORD(Coeff))))
2843 +(x4SC405/MW4)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("4",Coeff)
*POWER(TSC405,ORD(Coeff))))
2844 +(x5SC405/MW5)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("5",Coeff)
*POWER(TSC405,ORD(Coeff))))
2845 +(x6SC405/MW6)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("6",Coeff)
*POWER(TSC405,ORD(Coeff))))
2846 +(x7SC405/MW7)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("7",Coeff)
*POWER(TSC405,ORD(Coeff)))) =e= 0;
2847 EQU1515..x1SC404 + x2SC404 + x3SC404 + x4SC404 + x5SC404 +
x6SC404 + x7SC404 =e= 1;
2848 EQU1516..hSC404 - FSC404 *
((x1SC404/MW1)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("1",Coeff)
*POWER(TSC404,ORD(Coeff))))
2849 +(x2SC404/MW2)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("2",Coeff)
*POWER(TSC404,ORD(Coeff))))
2850 +(x3SC404/MW3)*(SUM(Coeff,1/ORD(Coeff))* Enth_liq("3",Coeff) *
POWER(TSC404,ORD(Coeff))))

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2851 +(x4SC404/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC404,ORD(Coeff))))
2852 +(x5SC404/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC404,ORD(Coeff))))
2853 +(x6SC404/MW6)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("6",Coeff)*POWER(TSC404,ORD(Coeff))))
2854 +(x7SC404/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC404,ORD(Coeff)))) =e= 0;
2855 EQU1517..x1SC403 + x2SC403 + x3SC403 + x4SC403 + x5SC403 +
x6SC403 + x7SC403 =e= 1;
2856 EQU1518..FmSC403 - FSC403* (x1SC403/MW1 + x2SC403/MW2 +
x3SC403/MW3 + x4SC403/MW4 + x5SC403/MW5 + x6SC403/MW6 + x7SC403/MW7 )
=e= 0;
2857 EQU1519..hSC403 - FSC403 *
((x1SC403/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC403,ORD(Coeff))))
2858 +(x2SC403/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC403,ORD(Coeff))))
2859 +(x3SC403/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC403,ORD(Coeff))))
2860 +(x4SC403/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC403,ORD(Coeff))))
2861 +(x5SC403/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC403,ORD(Coeff))))
2862 +(x6SC403/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC403,ORD(Coeff))))
2863 +(x7SC403/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC403,ORD(Coeff)))) =e= 0;
2864 EQU1520..x1SC402 + x2SC402 + x3SC402 + x4SC402 + x5SC402 +
x6SC402 + x7SC402 =e= 1;
2865 EQU1521..hSC402 - FSC402 *
((x1SC402/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC402,ORD(Coeff))))
2866 +(x2SC402/MW2)*(SUM(Coeff,1/ORD(Coeff)*
Enth_liq("2",Coeff)*POWER(TSC402,ORD(Coeff))))
2867 +(x3SC402/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC402,ORD(Coeff))))
2868 +(x4SC402/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC402,ORD(Coeff))))
2869 +(x5SC402/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC402,ORD(Coeff))))
2870 +(x6SC402/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC402,ORD(Coeff))))
2871 +(x7SC402/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC402,ORD(Coeff)))) =e= 0;
2872 EQU1522..x1SC401 + x2SC401 + x3SC401 + x4SC401 + x5SC401 +
x6SC401 + x7SC401 =e= 1;
2873 EQU1523..hSC401 - FSC401 *
((x1SC401/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC401,ORD(Coeff))))
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2874 +(x2SC401/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC401,ORD(Coeff))))
2875 +(x3SC401/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC401,ORD(Coeff))))
2876 +(x4SC401/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC401,ORD(Coeff))))
2877 +(x5SC401/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC401,ORD(Coeff))))
2878 +(x6SC401/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC401,ORD(Coeff))))
2879 +(x7SC401/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC401,ORD(Coeff)))) =e= 0;
2880 EQU1524..VpC601=e=FSC406;
2881 EQU1525..VpC603=e=FC323;
2882 EQU1526..Cost =e= FHC01 * 143.4402*0.9071847 + FSC414 *
160.4628*0.9071847 + FAC02 * 110*0.9071847 + FSC401 *25;
2883 EQU1527..Earnings =e= FC407 * 214.1463*0.9071847;
2884 EQU1528..Utilities =e= (FstmE612 +FstmE602+
(FstmE696A+FstmE696B)) * 1.25*0.9071847 + (FstmE695A+ FstmE695B)*
1.8*0.9071847 +

0.67e-3 *22.35* WK601;
2885 EQU1529..Profit =e= Earnings - Cost - Utilities;
2886 EQU1530..hSC408 - FSC408 *
2887 ((x1SC408/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC408,ORD(Coeff))))+ Enth_Vap("1","a1")*1000 *

((1-TSC408/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2888 +(x3SC408/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC408,ORD(Coeff))))+ Enth_Vap("3","a1")*1000 *

((1-TSC408/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2889 +(x4SC408/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC408,ORD(Coeff))))+ Enth_Vap("4","a1")*1000 *

((1-TSC408/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2890 +(x5SC408/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC408,ORD(Coeff))))+ Enth_Vap("5","a1")*1000 *

((1-TSC408/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))

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2891 +(x7SC408/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC408,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TSC408/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2892 EQU1531..hc325 - FC325 *
2893 ((x1C325/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *

((1-TC325/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2894 +(x3C325/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC325,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC325/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2895 +(x4C325/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC325/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2896 +(x5C325/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC325/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2897 +(x7C325/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC325,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC325/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2898 EQU1532..hSC407 - FSC407 *
2899 ((x1SC407/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
2900 +(x2SC407/MW2)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("2",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("2","a1")*1000 *
2901 +(x3SC407/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TSC407,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *
2902 +(x4SC407/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TSC407/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2903 +(x5SC407/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TSC407/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2904 +(x6SC407/MW6)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("6",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("6","a1")*1000 *

((1-TSC407/Enth_Vap("6","a2"))**Enth_Vap("6","a3")))
2905 +(x7SC407/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TSC407,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TSC407/Enth_Vap("7","a2"))**Enth_Vap("7","a3"))) =e= 0;
2906 EQU1533..hc324 - FC324 *
2907 ((x1C324/MW1)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("1",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("1","a1")*1000 *
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((1-TC324/Enth_Vap("1","a2"))**Enth_Vap("1","a3")))
2908 +(x3C324/MW3)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("3",Coeff) *
POWER(TC324,ORD(Coeff)))+ Enth_Vap("3","a1")*1000 *

((1-TC324/Enth_Vap("3","a2"))**Enth_Vap("3","a3")))
2909 +(x4C324/MW4)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("4",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("4","a1")*1000 *

((1-TC324/Enth_Vap("4","a2"))**Enth_Vap("4","a3")))
2910 +(x5C324/MW5)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("5",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("5","a1")*1000 *

((1-TC324/Enth_Vap("5","a2"))**Enth_Vap("5","a3")))
2911 +(x7C324/MW7)*(SUM(Coeff,1/ORD(Coeff)* Enth_liq("7",Coeff)
*POWER(TC324,ORD(Coeff)))+ Enth_Vap("7","a1")*1000 *

((1-TC324/Enth_Vap("7","a2"))**Enth_Vap("7","a3")))) =e= 0;
2912 EQU1534..x1SC403 - x1SC404 =e= 0;
2913 EQU1535..FSC403 - FSC404 =e= 0;
2914 EQU1536..x1SC401 - x1SC402 =e= 0;
2915 EQU1537..FSC401 - FSC402 =e= 0;
2916 EQU1538..(hSC403 - hSC404) - (hSC402 - hSC401) =e= 0;
2917 EQU1539..(hSC403 - hSC404) - UE601*AE601*dTE601*FE601 =e= 0;
2918 EQU1540..dTE601**3 =e= ((TSC403-TSC402)*(TSC404-TSC401)*
2919 ((TSC403-TSC402)+(TSC404-TSC401))/2);
2920 EQU1541..x2SC401 - x2SC402 =e= 0;
2921 EQU1542..x6SC403 - x6SC404 =e= 0;

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2922 EQU1543..x2SC403 - x2SC404 =e= 0;
2923 EQU1544..x6SC401 - x6SC402 =e= 0;
2924 EQU1545..x4SC403 - x4SC404 =e= 0;
2925 EQU1546..x5SC401 - x5SC402 =e= 0;
2926 EQU1547..FSC402 * x2SC402 + FSC411*x2SC411 - FSC403 * x2SC403 -
FSC408*x2SC408 =e= 0;
2927 EQU1548..h6C601*K6C601*LpC601*(1-Sm6C601) =e= Kp6C601*FSC411*(1-
Sn6C601);
2928 EQU1549..h2C601*K2C601*LpC601*(1-Sm2C601) =e= Kp2C601*FSC411*(1-
Sn2C601);
2929 EQU1550..f6C601 * x6SC402 * FSC402 =e= x6SC403 * FSC403;
2930 EQU1551..Sn4C601 *FSC411 =e= K4C601*FSC408;
2931 EQU1552..Sn2C601 *FSC411 =e= K2C601*FSC408;
2932 EQU1553..Sm1C601*LpC601=e= Kp1C601*VpC601;
2933 EQU1554..Sn3C601 *FSC411 =e= K3C601*FSC408;
2934 EQU1555..Sn6C601 *FSC411 =e= K6C601*FSC408;
2935 EQU1556..Sn5C601 *FSC411 =e= K5C601*FSC408;
2936 EQU1557..f2C601 * x2SC402 * FSC402 =e= x2SC403 * FSC403;
2937 EQU1558..f6C601*((1-Sn6C601**(60-37))+ RC601*(1-Sn6C601) +
h6C601*Sn6C601**(60-37)*(1-Sm6C601**(37+1))) =e= (1-Sn6C601**(60-
37))+ RC601*(1-Sn6C601);
2938 EQU1559..f2C601*((1-Sn2C601**(60-37))+ RC601*(1-Sn2C601) +
h2C601*Sn2C601**(60-37)*(1-Sm2C601**(37+1))) =e= (1-Sn2C601**(60-
37))+ RC601*(1-Sn2C601);
2939 EQU1560..Sm6C601*LpC601=e= Kp6C601*VpC601;
2940 EQU1561..Sm2C601*LpC601=e= Kp2C601*VpC601;
2941 EQU1562..Sm3C601*LpC601=e= Kp3C601*VpC601;
2942 EQU1563..f7C601 * x7SC402 * FSC402 =e= x7SC403 * FSC403;
2943 EQU1564..Sm7C601*LpC601=e= Kp7C601*VpC601;
2944 EQU1565..f3C601*((1-Sn3C601**(60-37))+ RC601*(1-Sn3C601) +
h3C601*Sn3C601**(60-37)*(1-Sm3C601**(37+1))) =e= (1-Sn3C601**(60-
37))+ RC601*(1-Sn3C601);
2945 EQU1566..f4C601*((1-Sn4C601**(60-37))+ RC601*(1-Sn4C601) +
h4C601*Sn4C601**(60-37)*(1-Sm4C601**(37+1))) =e= (1-Sn4C601**(60-
37))+ RC601*(1-Sn4C601);
2946 EQU1567..f5C601*((1-Sn5C601**(60-37))+ RC601*(1-Sn5C601) +
h5C601*Sn5C601**(60-37)*(1-Sm5C601**(37+1))) =e= (1-Sn5C601**(60-
37))+ RC601*(1-Sn5C601);
2947 EQU1568..f7C601*((1-Sn7C601**(60-37))+ RC601*(1-Sn7C601) +
h7C601*Sn7C601**(60-37)*(1-Sm7C601**(37+1))) =e= (1-Sn7C601**(60-
37))+ RC601*(1-Sn7C601);
2948 EQU1569..f1C601 * x1SC402 * FSC402 =e= x1SC403 * FSC403;
2949 EQU1570..f3C601 * x3SC402 * FSC402 =e= x3SC403 * FSC403;
2950 EQU1571..FSC402 * x6SC402 + FSC411*x6SC411 - FSC403 * x6SC403 -
FSC408*x6SC408 =e= 0;
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2951 EQU1572..f5C601 * x5SC402 * FSC402 =e= x5SC403 * FSC403;
2952 EQU1573..Kp6C601*PC601 =e= 0.1333*10**(33.3239-2.4227E3/TmC601-
9.2354*LOG10(TmC601)+9.0199E-11*TmC601+4.1050E-6*TmC601**2);
2953 EQU1574..h1C601*K1C601*LpC601*(1-Sm1C601) =e= Kp1C601*FSC411*(1-
Sn1C601);
2954 EQU1575..h3C601*K3C601*LpC601*(1-Sm3C601) =e= Kp3C601*FSC411*(1-
Sn3C601);
2955 EQU1576..h4C601*K4C601*LpC601*(1-Sm4C601) =e= Kp4C601*FSC411*(1-
Sn4C601);
2956 EQU1577..h5C601*K5C601*LpC601*(1-Sm5C601) =e= Kp5C601*FSC411*(1-
Sn5C601);
2957 EQU1578..h7C601*K7C601*LpC601*(1-Sm7C601) =e= Kp7C601*FSC411*(1-
Sn7C601);
2958 EQU1579..Sm5C601*LpC601=e= Kp5C601*VpC601;
2959
2960 INEQU1..sf1S34 + sf2S34 =l= 1;
2961 INEQU2..TC306 - TcwoutE634 =g= 8;

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2962 INEQU3..TC308 - TcwoutE640 =g= 10;
2963 INEQU4..TC317-TC316 =g=10;
2964 INEQU5..TC318-TC315 =g=10;
2965 INEQU6..TC319-Tcwin =g=10;
2966 INEQU7..TC318-TcwoutE611 =g=10;
2967 INEQU8..414.6-TC323 =g=10;
2968 INEQU9..414.6-TC324 =g=10;
2969 INEQU10..TC326-Tcwin =g=10;
2970 INEQU11..TC325-TcwoutE613 =g=10;
2971 INEQU12..TC405-TC404 =g=10;
2972 INEQU13..TC406-TC403 =g=10;
2973 INEQU14..TC407-Tcwin =g=10;
2974 INEQU15..TC406-TcwoutE617 =g=10;
2975 INEQU16..TC414-Tcwin =g=10;
2976 INEQU17..TC414-TcwotE621A =g=10;
2977 INEQU18..TC415-Tcwin =g=10;
2978 INEQU19..TC414-TcwotE621B =g=10;
2979 INEQU20..TC419-Tcwin =g=10;
2980 INEQU21..TC418-TcwoutE626 =g=10;
2981 INEQU22..THC01-TC402 =g=10;
2982 INEQU23..THC02-TC401 =g=10;
2983 INEQU24..TC412-Tcwin =g=8;
2984 INEQU25..TC412-TcwotE627A =g=8;
2985 INEQU26..TC413-TcwotE627B =g=8;
2986 INEQU27..THC04-TC402 =g=8;
2987 INEQU28..THC03-TC403 =g=8;
2988 INEQU29..THC05-THC29 =g=8;
2989 INEQU30..THC04-THC30 =g=8;
2990 INEQU31..TC307-Tcwin =g=8;
2991 INEQU32..TC308-TcwoutE640 =g=10;
2992 INEQU33..TC308-Tcwin =g=10;
2993 INEQU34..TC308-TcwotE641A =g=10;
2994 INEQU35..TC309-TcwotE641B =g=10;
2995 INEQU36..481-TC408 =g=10;
2996 INEQU37..481-TC409 =g=10;
2997 INEQU38..414.6-TC410 =g=10;
2998 INEQU39..414.6-TC411 =g=10;
2999 INEQU40..TSC404-TSC401 =g=10;
3000 INEQU41..TSC403-TSC402 =g=10;
3001 INEQU42..414.6-TSC407 =g=10;
3002 INEQU43..414.6-TSC406 =g=10;
3003 INEQU44..TSC404-TcwoutE603 =g=10;
3004 INEQU45..TSC405-Tcwin =g=10;
3005 INEQU46..TSC408-TcwoutE605 =g=10;
3006 INEQU47..TSC409-Tcwin =g=10;
3007 INEQU48..TSC412 - TcwotE609A =g= 10;
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3008 INEQU49..TSC413 - Tcwin =g=10;
3009 INEQU50..f1C601=l=0.0001;
3010
3011 FAC02.L=0.155; FAC12.L=0.155; FAC23.L=0.155;
3012 FAC34.L=0.155; FAC45.L=0.155; FC308.L=3.196;
3013 FC316.L=1.7; FC320.L=0.043; FC322.L=1.5;
3014 FC328.L=0.047; FC329.L=0.665; FC403.L=2.302;
3015 FC407.L=0.911; FC412.L=0.042; FC417.L=0.139;
3016 FHC01.L=0.87; FHC32.L=1.943; FSC402.L=0.484;
3017 FSC405.L=0.344; FSC411.L=1.273; FSC413.L=0.139;
3018 FstmE612.L=0.142; PC302.L=101.847; PC310.L=261.214;
3019 PC601.L=625; PC603.L=1703.728; QHC07.L=1.739;
3020 QHC11.L=1.743; QHC14.L=1.739; QHC16.L=1.739;
3021 QHC34.L=1.079; QHC38.L=0.581; QHC41.L=0.857;
3022 QHC45.L=0.862; TAC09.L=280.004; TAC12.L=280.004;
3023 TAC23.L=280; TAC31.L=280.105; TAC34.L=280.105;
3024 TAC42.L=281.963; TAC45.L=281.963; TC303.L=280.411;
3025 TC306.L=349.007; TC307.L=328.661; TC308.L=328.661;
3026 TC315.L=308.238; TC316.L=345.659; TC317.L=359;
3027 TC321.L=301.113; TC324.L=359; TC325.L=322.937;
3028 TC404.L=305; TC405.L=410; TC407.L=302.95;
3029 TC408.L=405; TC410.L=363.414; TC414.L=336.829;
3030 TC418.L=305.918; TC419.L=303.525; THC32.L=259.254;
3031 TSC402.L=324.98; TSC403.L=336.03; TSC405.L=301.256;
3032 TSC408.L=318.852; TSC413.L=300; x11AC12.L=0.971;
3033 x11AC23.L=0.944; x11AC34.L=0.917; x11AC45.L=0.89;
3034 x1C316.L=0.119; x1C325.L=1; x1C417.L=0.02;
3035 x1HC32.L=0.023; x1SC402.L=0.006; x1SC403.L=0.0000081;
3036 x1SC408.L=0.02; x2SC402.L=0.009; x2SC403.L=0.012;
3037 x2SC408.L=0.00031; x3C316.L=0.79; x3C325.L=0.00000166;
3038 x3C417.L=0.967; x3HC32.L=0.774; x3SC402.L=0.293;
3039 x3SC403.L=0.021; x3SC408.L=0.967; x4C316.L=0.08;
3040 x4C417.L=0.013; x4HC32.L=0.127; x4SC402.L=0.562;
3041 x4SC403.L=0.784; x4SC408.L=0.013; x5C316.L=0.006;
3042 x5C417.L=0; x5HC32.L=0.03; x5SC402.L=0.052;
3043 x5SC403.L=0.073; x5SC408.L=0; x6SC402.L=0.071;
3044 x6SC403.L=0.1; x6SC408.L=0; x7HC32.L=0.046;
3045 x7SC402.L=0.007; x7SC403.L=0.01; x7SC408.L=0;
3046 xx1C322.L=0.12; xx1C414.L=0.079; xx1HC01.L=0.09;
3047 xx2HC01.L=0.13; xx3C317.L=0.792; xx3C322.L=0.792;
3048 xx3C407.L=0.00000975; xx3C412.L=0.000875; xx3C414.L=0.818;
3049 xx3HC01.L=0.013; xx4C317.L=0.08; xx4C322.L=0.08;
3050 xx4C407.L=0.083; xx4C412.L=0.867; xx4C414.L=0.094;
3051 xx4HC01.L=0.107; xx5C407.L=0.158; xx5C412.L=0.061;
3052 xx5C414.L=0.001; xx7C414.L=0.008;
3053 FAC02.LO=0.09; FAC12.LO=0.01; FAC23.LO=0.01;
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3054 FAC34.LO=0.01; FAC45.LO=0.01; FC308.LO=1;
3055 FC316.LO=0.1; FC320.LO=0.01; FC322.LO=0.1;
3056 FC328.LO=0.01; FC329.LO=0.1; FC403.LO=0.1;
3057 FC407.LO=0.75; FC412.LO=0.01; FC417.LO=0.1;
3058 FHC01.LO=0.795; FHC32.LO=0.5; FSC402.LO=0.1;
3059 FSC405.LO=0; FSC411.LO=0.1; FSC413.LO=0.1;
3060 FstmE612.LO=0.05; PC302.LO=101; PC310.LO=230;
3061 PC601.LO=600; PC603.LO=1600; QHC07.LO=0.1;
3062 QHC11.LO=0.1; QHC14.LO=0.1; QHC16.LO=0.1;
3063 QHC34.LO=0.1; QHC38.LO=0.1; QHC41.LO=0.1;
3064 QHC45.LO=0.1; TAC09.LO=280; TAC12.LO=280;
3065 TAC23.LO=280; TAC31.LO=280; TAC34.LO=280;
3066 TAC42.LO=280; TAC45.LO=280; TC303.LO=260;
3067 TC306.LO=320; TC307.LO=300; TC308.LO=270;
3068 TC315.LO=300; TC316.LO=335; TC317.LO=300;
3069 TC321.LO=250; TC324.LO=359; TC325.LO=300;
3070 TC404.LO=305; TC405.LO=410; TC407.LO=298;
3071 TC408.LO=405; TC410.LO=345; TC414.LO=300;
3072 TC418.LO=301; TC419.LO=298; THC32.LO=250;
3073 TSC402.LO=310; TSC403.LO=320; TSC405.LO=300;
3074 TSC408.LO=300; TSC413.LO=295; x11AC12.LO=0.88;
3075 x11AC23.LO=0.88; x11AC34.LO=0.88; x11AC45.LO=0.88;
3076 x1C316.LO=0.01; x1C325.LO=0.5; x1C417.LO=0.02;
3077 x1HC32.LO=0; x1SC402.LO=0; x1SC403.LO=0;
3078 x1SC408.LO=0; x2SC402.LO=0; x2SC403.LO=0;
3079 x2SC408.LO=0; x3C316.LO=0.5; x3C325.LO=0;
3080 x3C417.LO=0.35; x3HC32.LO=0.1; x3SC402.LO=0.2;
3081 x3SC403.LO=0; x3SC408.LO=0.5; x4C316.LO=0.001;
3082 x4C417.LO=0.001; x4HC32.LO=0; x4SC402.LO=0.48;
3083 x4SC403.LO=0.5; x4SC408.LO=0; x5C316.LO=0;
3084 x5C417.LO=0; x5HC32.LO=0; x5SC402.LO=0;
3085 x5SC403.LO=0; x5SC408.LO=0; x6SC402.LO=0;
3086 x6SC403.LO=0; x6SC408.LO=0; x7HC32.LO=0;
3087 x7SC402.LO=0; x7SC403.LO=0; x7SC408.LO=0;
3088 xx1C322.LO=0; xx1C414.LO=0; xx1HC01.LO=0;
3089 xx2HC01.LO=0.1; xx3C317.LO=0.5; xx3C322.LO=0.5;
3090 xx3C407.LO=0; xx3C412.LO=0; xx3C414.LO=0.5;
3091 xx3HC01.LO=0; xx4C317.LO=0; xx4C322.LO=0;
3092 xx4C407.LO=0.01; xx4C412.LO=0.5; xx4C414.LO=0;
3093 xx4HC01.LO=0; xx5C407.LO=0.01; xx5C412.LO=0;
3094 xx5C414.LO=0; xx7C414.LO=0;
3095 FAC02.UP=0.16; FAC12.UP=0.9; FAC23.UP=0.9;
3096 FAC34.UP=0.9; FAC45.UP=0.9; FC308.UP=6;
3097 FC316.UP=1.8; FC320.UP=1.5; FC322.UP=1.6;
3098 FC328.UP=1; FC329.UP=3; FC403.UP=5;
3099 FC407.UP=5; FC412.UP=1; FC417.UP=2;

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3100 FHC01.UP=1.5; FHC32.UP=5; FSC402.UP=4;
3101 FSC405.UP=3; FSC411.UP=3.2; FSC413.UP=0.5;
3102 FstmE612.UP=1; PC302.UP=187; PC310.UP=360;
3103 PC601.UP=625; PC603.UP=1800; QHC07.UP=5;
3104 QHC11.UP=5; QHC14.UP=5; QHC16.UP=5;
3105 QHC34.UP=5; QHC38.UP=5; QHC41.UP=5;
3106 QHC45.UP=5; TAC09.UP=300; TAC12.UP=300;
3107 TAC23.UP=300; TAC31.UP=300; TAC34.UP=300;
3108 TAC42.UP=300; TAC45.UP=300; TC303.UP=300;
3109 TC306.UP=368; TC307.UP=330; TC308.UP=350;
3110 TC315.UP=320; TC316.UP=370; TC317.UP=420;
3111 TC321.UP=350; TC324.UP=385; TC325.UP=360;
3112 TC404.UP=325; TC405.UP=440; TC407.UP=350;
3113 TC408.UP=440; TC410.UP=369; TC414.UP=368;
3114 TC418.UP=350; TC419.UP=310; THC32.UP=310;
3115 TSC402.UP=340; TSC403.UP=350; TSC405.UP=360;
3116 TSC408.UP=330; TSC413.UP=350; x11AC12.UP=0.999;
3117 x11AC23.UP=0.999; x11AC34.UP=0.999; x11AC45.UP=0.999;
3118 x1C316.UP=0.5; x1C325.UP=1; x1C417.UP=0.2;
3119 x1HC32.UP=0.1; x1SC402.UP=0.1; x1SC403.UP=0.1;
3120 x1SC408.UP=0.1; x2SC402.UP=0.1; x2SC403.UP=0.1;
3121 x2SC408.UP=0.1; x3C316.UP=1; x3C325.UP=0.1;
3122 x3C417.UP=1; x3HC32.UP=1; x3SC402.UP=0.42;
3123 x3SC403.UP=0.1; x3SC408.UP=1; x4C316.UP=0.2;
3124 x4C417.UP=0.4; x4HC32.UP=0.5; x4SC402.UP=0.7;
3125 x4SC403.UP=1; x4SC408.UP=0.1; x5C316.UP=0.01;
3126 x5C417.UP=0.15; x5HC32.UP=2.5; x5SC402.UP=0.1;
3127 x5SC403.UP=0.1; x5SC408.UP=0.1; x6SC402.UP=0.1;
3128 x6SC403.UP=0.12; x6SC408.UP=0.1; x7HC32.UP=2;
3129 x7SC402.UP=0.1; x7SC403.UP=0.1; x7SC408.UP=0.1;
3130 xx1C322.UP=0.12; xx1C414.UP=0.08; xx1HC01.UP=0.5;
3131 xx2HC01.UP=0.6; xx3C317.UP=1; xx3C322.UP=1;
3132 xx3C407.UP=0.1; xx3C412.UP=0.15; xx3C414.UP=1;
3133 xx3HC01.UP=0.55; xx4C317.UP=0.2; xx4C322.UP=0.2;
3134 xx4C407.UP=0.3; xx4C412.UP=1; xx4C414.UP=0.2;
3135 xx4HC01.UP=0.3; xx5C407.UP=0.5; xx5C412.UP=0.1;
3136 xx5C414.UP=0.1; xx7C414.UP=0.008;
3137
3138 C10pC623.L=0.0000338; C10pC625.L=0.0000735; C10pC627.L=0.000214;
3139 C10pC629.L=0.000152; C2C623.L=0.015; C2C625.L=0.015;
3140 C2C627.L=0.015; C2C629.L=0.015; C3C623.L=3.85;
3141 C3C625.L=2.584; C3C627.L=1.5; C3C629.L=1.801;
3142 C3pC623.L=1.173; C3pC625.L=1.198; C3pC627.L=1.215;
3143 C3pC629.L=1.19; C4pC623.L=0.027; C4pC625.L=0.041;
3144 C4pC627.L=0.071; C4pC629.L=0.058; C5pC623.L=0.000408;
3145 C5pC625.L=0.00091; C5pC627.L=0.003; C5pC629.L=0.002;

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3146 C7pC623.L=0.0000378; C7pC625.L=0.000179; C7pC627.L=0.001;
3147 C7pC629.L=0.000743; C8pC623.L=0.001; C8pC625.L=0.003;
3148 C8pC627.L=0.01; C8pC629.L=0.007; C9pC623.L=0.419;
3149 C9pC625.L=0.625; C9pC627.L=1.074; C9pC629.L=0.895;
3150 CHXC623.L=13.606; CHXC625.L=14.201; CHXC627.L=14.702;
3151 CHXC629.L=14.035; CiC10pC623.L=0; CiC10pC625.L=0;
3152 CiC10pC627.L=0; CiC10pC629.L=0; CiC11pC623.L=0.0000132;
3153 CiC11pC625.L=0.000042; CiC11pC627.L=0.000202;
CiC11pC629.L=0.000121;
3154 CiC4eC623.L=0.003; CiC4eC625.L=0.003; CiC4eC627.L=0.003;
3155 CiC4eC629.L=0.003; CiC5eC623.L=0.000594; CiC5eC625.L=0.00085;
3156 CiC5eC627.L=0.001; CiC5eC629.L=0.001; CiC8eC623.L=0.018;
3157 CiC8eC625.L=0.026; CiC8eC627.L=0.044; CiC8eC629.L=0.037;
3158 Cost.L=148.943; dTE601.L=10.516; dTE602.L=78.57;
3159 dTE603.L=10.825; dTE605.L=22.741; dTE609A.L=10;
3160 dTE610.L=13.533; dTE611.L=16.018; dTE612.L=55.6;
3161 dTE613.L=25; dTE616.L=98.994; dTE617.L=33.53;
3162 dTE621A.L=28.414; dTE621B.L=25.722; dTE626.L=11.674;
3163 dTE627A.L=55; dTE627B.L=31.592; dTE628.L=10.806;
3164 dTE629.L=16.246; dTE633.L=11.452; dTE634.L=19.324;
3165 dTE640.L=25.062; dTE641.L=16.152; dTE695A.L=76;
3166 dTE695B.L=48; dTE696A.L=51.186; dTE696B.L=30.593;
3167 dTE6XX.L=1; Earnings.L=176.97; f1C601.L=0.001;
3168 f1C603.L=0.765; f1C606A.L=0.001; f2C601.L=0.99;
3169 f3C601.L=0.05; f3C603.L=1; f3C606A.L=0.000997;
3170 f4C601.L=0.994; f4C603.L=1; f4C606A.L=0.898;
3171 f5C601.L=1; f5C603.L=1; f5C606A.L=0.989;
3172 f6C601.L=1; f7C601.L=1; f7C603.L=1;
3173 f7C606A.L=0.999; FAC05.L=6.653; FAC07.L=6.808;
3174 FAC09.L=8.428; FAC15.L=8.574; FAC18.L=8.729;
3175 FAC20.L=10.065; FAC26.L=18.057; FAC29.L=18.212;
3176 FAC31.L=19.705; FAC37.L=14.803; FAC40.L=14.958;
3177 FAC42.L=16.454; FC301.L=3.643; FC302.L=0.428;
3178 FC303.L=4.071; FC306.L=4.896; FC307.L=4.896;
3179 FC309.L=3.196; FC310.L=0.825; FC311.L=2.371;
3180 FC312.L=1.7; FC315.L=1.7; FC317.L=1.653;
3181 FC318.L=1.653; FC319.L=1.653; FC321.L=0.11;
3182 FC323.L=0.712; FC324.L=0.712; FC325.L=0.712;
3183 FC326.L=0.712; FC401.L=2.302; FC402.L=2.302;
3184 FC404.L=2.302; FC405.L=0.911; FC406.L=0.911;
3185 FC408.L=3.271; FC409.L=3.271; FC410.L=0.833;
3186 FC411.L=0.833; FC413.L=0.042; FC414.L=2.883;
3187 FC415.L=2.883; FC418.L=3.023; FC419.L=3.023;
3188 FC425.L=3.767; FC426.L=2.934; FC427.L=2.856;
3189 FC428.L=2.023; FC430.L=3.767; FC431.L=2.856;
3190 FC432.L=2.814; Fcwe603.L=0.199; Fcwe605.L=0.949;
3191 Fcwe609A.L=0.083; Fcwe611.L=2.139; Fcwe613.L=1.618;

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3192 FcweE617.L=1.551; FcweE621A.L=5.225; FcweE621B.L=6.898;
3193 FcweE626.L=0.724; FcweE627A.L=0.55; FcweE627B.L=0.536;
3194 FcweE634.L=7.241; FcweE640.L=0.4; FcweE641A.L=4.111;
3195 FcweE641B.L=0.881; FHC02.L=0.87; FHC03.L=3.132;
3196 FHC04.L=3.132; FHC05.L=3.132; FHC06.L=4.002;
3197 FHC07.L=1; FHC08.L=3.002; FHC11.L=1.002;
3198 FHC14.L=1; FHC15.L=2; FHC16.L=1;
3199 FHC22.L=1.496; FHC23.L=1.493; FHC24.L=2.989;
3200 FHC25.L=1.336; FHC26.L=4.325; FHC27.L=1.62;
3201 FHC28.L=5.945; FHC29.L=0.679; FHC30.L=0.679;
3202 FHC31.L=5.945; FHC33.L=0.954; FHC34.L=0.62;
3203 FHC38.L=0.334; FHC40.L=0.989; FHC41.L=0.493;
3204 FHC45.L=0.496; FlHC28.L=3.019; FlHC29.L=0.345;
3205 FlHC30.L=0.198; FlHC31.L=2.302; Flr1.L=2.675;
3206 Flr29.L=2.105; FmC302.L=0.007; FmC308.L=0.055;
3207 FmC310.L=0.015; FmC311.L=0.04; FmC312.L=0.03;
3208 FmC317.L=0.029; FmC322.L=0.027; FmC323.L=0.013;
3209 FmC325.L=0.016; FmC405.L=0.011; FmC407.L=0.011;
3210 FmC408.L=0.04; FmC409.L=0.04; FmC412.L=0.000684;
3211 FmC414.L=0.05; FmC425.L=0.056; FmC427.L=0.045;
3212 FmC428.L=0.032; FmC430.L=0.058; FmC431.L=0.047;
3213 FmC432.L=0.046; FmHC01.L=0.012; FmHC32.L=0.033;
3214 FmlHC28.L=0.047; FmlHC29.L=0.005; FmlHC30.L=0.003;
3215 Fmlr1.L=0.042; Fmlr29.L=0.032; FmSC403.L=0.006;
3216 FmSC406.L=0.023; FmSC408.L=0.024; FmvHC28.L=0.051;
3217 FmvHC29.L=0.006; FmvHC30.L=0.008; FmvR1.L=0.045;
3218 FmvR29.L=0.055; FR1.L=5.266; FR29.L=5.266;
3219 FSC401.L=0.484; FSC403.L=0.344; FSC404.L=0.344;
3220 FSC406.L=1.412; FSC407.L=1.412; FSC408.L=1.412;
3221 FSC409.L=1.412; FSC412.L=0.139; FSC414.L=0;
3222 FstmE602.L=0.401; FstmE695A.L=0.409; FstmE695B.L=0.1;
3223 FstmE696A.L=0.111; FstmE696B.L=0.019; FvHC28.L=2.926;
3224 FvHC29.L=0.334; FvHC30.L=0.481; FvHC31.L=3.643;
3225 FvR1.L=2.592; FvR29.L=3.162; h1C601.L=1.083;
3226 h1C603.L=-0.308; h1C606A.L=0.988; h2C601.L=0.551;
3227 h3C601.L=3.047; h3C603.L=0.237; h3C606A.L=-65;
3228 h4C601.L=0.576; h4C603.L=0.303; h4C606A.L=0;
3229 h5C601.L=0.893; h5C603.L=0.4; h5C606A.L=0.484;
3230 h6C601.L=0.919; h7C601.L=0.963; h7C603.L=0.466;
3231 h7C606A.L=0.548; hAC02.L=9.363; hAC05.L=345.67;
3232 hAC07.L=355.032; hAC09.L=1238.893; hAC12.L=8.054;
3233 hAC15.L=381.455; hAC18.L=389.509; hAC20.L=1095.317;
3234 hAC23.L=6.896; hAC26.L=712.123; hAC29.L=719.019;
3235 hAC31.L=1498.7; hAC34.L=6.108; hAC37.L=550.6;
3236 hAC40.L=556.708; hAC42.L=1479.085; hacAC09.L=400.225;
3237 hacAC20.L=404.239; hacAC31.L=725.831; hacAC42.L=698.262;

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3238 hC301.L=3202.309; hC302.L=362.16; hC303.L=3564.469;
3239 hC306.L=4694.871; hC307.L=3144.814; hC308.L=2047.223;
3240 hC309.L=2011.834; hC310.L=732.158; hC311.L=1279.676;
3241 hC312.L=1592.117; hC312liq.L=1097.591; hC315.L=1007.31;
3242 hC316.L=1177.087; hC317.L=1206.034; hC318.L=1036.258;
3243 hC319.L=948.614; hC321.L=63.005; hC322.L=861.064;
3244 hC323.L=519.83; hC324.L=824.202; hC325.L=576.997;
3245 hC326.L=469.229; hC329.L=437.948; hC401.L=1191.06;
3246 hC402.L=1195.852; hC403.L=1256.207; hC404.L=1308.674;
3247 hC405.L=732.132; hC406.L=679.665; hC407.L=494.768;
3248 hC408.L=2583.757; hC408vap.L=3369.113; hC409.L=3561.113;
3249 hC410.L=589.132; hC410vap.L=826.439; hC411.L=866.516;
3250 hC412.L=41.665; hC412liq.L=30.115; hC413.L=23.373;
3251 hC414.L=2726.349; hC414liq.L=1918.758; hC415.L=1687.138;
3252 hC417.L=79.433; hC418.L=1766.572; hC419.L=1748.594;
3253 hC425.L=2663.701; hC426.L=2074.569; hC427.L=2889.353;
3254 hC428.L=2022.838; hC430.L=2637.618; hC431.L=2855.907;
3255 hC432.L=2814.242; hC623.L=54.051; hC625.L=10;
3256 hC627.L=10; hC629.L=151.308; hHC01.L=454.527;
3257 hHC02.L=449.735; hHC03.L=1811.6; hHC04.L=1751.245;
3258 hHC05.L=1699.117; hHC06.L=2148.851; hHC07.L=536.914;
3259 hHC11.L=538.109; hHC14.L=536.914; hHC16.L=536.914;
3260 hHC29.L=469.914; hHC30.L=522.042; hHC31.L=4393.369;
3261 hHC32.L=917.516; hHC34.L=292.895; hHC38.L=157.699;
3262 hHC41.L=232.767; hHC45.L=234.155; hlHC29.L=177.154;
3263 hlHC30.L=100.685; hlHC31.L=1191.06; hlR1.L=1374.506;
3264 hlR29.L=1077.84; hR1.L=3645.969; hR29.L=3871.327;
3265 hSC401.L=298.275; hSC402.L=301.683; hSC403.L=223.217;
3266 hSC404.L=219.81; hSC405.L=193.288; hSC406.L=915.321;
3267 hSC407.L=1775.662; hSC408.L=921.092; hSC409.L=872.425;
3268 hSC411.L=786.391; hSC412.L=86.033; hSC413.L=79.433;
3269 hSC414.L=0; hvHC29.L=292.759; hvHC30.L=421.357;
3270 hvHC31.L=3202.309; hvR1.L=2271.462; hvR29.L=2793.488;
3271 K1C323.L=2.018; K1C325.L=1; K1C408.L=7.956;
3272 K1C414.L=2.523; K1C428.L=4.259; K1C430.L=3.799;
3273 K1C601.L=2.666; K1C603.L=1.267; K1C606A.L=1.812;
3274 K1C606C.L=4.173; K1C614B.L=2.98; K1C615_A.L=2.404;
3275 K1C616_A.L=2.852; K1E633.L=4.427; K1E6XX.L=3.982;
3276 K1SC406.L=3.576; K1SC408.L=2.493; K2C601.L=0.784;
3277 K2E633.L=1.253; K2E6XX.L=1.127; K2SC406.L=1.122;
3278 K2SC408.L=0.723; K3C323.L=0.887; K3C325.L=0.401;
3279 K3C408.L=3.836; K3C414.L=1.052; K3C428.L=1.897;
3280 K3C430.L=1.668; K3C601.L=1.067; K3C603.L=0.525;
3281 K3C606A.L=0.723; K3C606C.L=1.851; K3C614B.L=0.93;
3282 K3C615_A.L=0.981; K3C616_A.L=1.021; K3E633.L=1.492;
3283 K3E6XX.L=1.342; K3SC406.L=1.488; K3SC408.L=0.989;

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3284 K4C323.L=0.673; K4C325.L=0.29; K4C408.L=3.023;
3285 K4C414.L=0.776; K4C428.L=1.45; K4C430.L=1.266;
3286 K4C601.L=0.769; K4C603.L=0.386; K4C606A.L=0.52;
3287 K4C606C.L=1.413; K4C614B.L=0.58; K4C615_A.L=0.708;
3288 K4C616_A.L=0.686; K4E633.L=0.978; K4E6XX.L=0.88;
3289 K4SC406.L=1.096; K4SC408.L=0.709; K5C323.L=0.308;
3290 K5C325.L=0.12; K5C408.L=1.509; K5C414.L=0.335;
3291 K5C428.L=0.673; K5C430.L=0.579; K5C601.L=0.317;
3292 K5C603.L=0.165; K5C606A.L=0.213; K5C606C.L=0.653;
3293 K5C614B.L=0.162; K5C615_A.L=0.272; K5C616_A.L=0.225;
3294 K5E633.L=0.334; K5E6XX.L=0.301; K5SC406.L=0.472;
3295 K5SC408.L=0.289; K6C601.L=0.247; K6SC406.L=0.375;
3296 K6SC408.L=0.224; K7C323.L=0.12; K7C325.L=0.04;
3297 K7C408.L=0.674; K7C414.L=0.12; K7C428.L=0.268;
3298 K7C430.L=0.226; K7C601.L=0.105; K7C603.L=0.058;
3299 K7C606A.L=0.071; K7C614B.L=0.039; K7C615_A.L=0.103;
3300 K7C616_A.L=0.068; K7E633.L=0.081; K7E6XX.L=0.073;
3301 K7SC406.L=0.168; K7SC408.L=0.095; Kp1C601.L=3.197;
3302 Kp1C603.L=1.79; Kp1C606A.L=2.282; Kp1C606D.L=6.131;
3303 Kp2C601.L=0.979; Kp3C601.L=1.311; Kp3C603.L=0.775;
3304 Kp3C606A.L=0.939; Kp3C606D.L=2.859; Kp4C601.L=0.958;
3305 Kp4C603.L=0.584; Kp4C606A.L=0.688; Kp4C606D.L=2.23;
3306 Kp5C601.L=0.406; Kp5C603.L=0.263; Kp5C606A.L=0.292;
3307 Kp5C606D.L=1.082; Kp6C601.L=0.32; Kp7C601.L=0.141;
3308 Kp7C603.L=0.1; Kp7C606A.L=0.102; Kp7C606D.L=0.462;
3309 kWad1.L=171.048; kWad2.L=288.952; LpC601.L=1.757;
3310 LpC603.L=2.365; LpC606A.L=2.651; PC303.L=101;
3311 PC306.L=870; PC307.L=800; PC308.L=800;
3312 PC309.L=780; PC311.L=261.214; PC312.L=800;
3313 PHC30.L=121.513; PHC32.L=101.847; PR29.L=135.084;
3314 Profit.L=20; Q2HC07.L=0.035; Q2HC11.L=0.035;
3315 Q2HC14.L=0.035; Q2HC16.L=0.035; qFp1C606A.L=0.007;
3316 qFp3C606A.L=0.00098; qFp4C606A.L=0.865; qFp5C606A.L=0.6;
3317 qFp7C606A.L=0.278; qS1C606A.L=0.796; qS3C606A.L=0.509;
3318 qS4C606A.L=0.046; qS5C606A.L=0.027; qS7C606A.L=0.008;
3319 r10C623.L=0; r10C625.L=0; r10C627.L=0.00000137;
3320 r10C629.L=0.00000117; r2C623.L=0.009; r2C625.L=0.009;
3321 r2C627.L=0.009; r2C629.L=0.009; r3C623.L=0.01;
3322 r3C625.L=0.01; r3C627.L=0.01; r3C629.L=0.01;
3323 r4C623.L=0.001; r4C625.L=0.001; r4C627.L=0.001;
3324 r4C629.L=0.001; r5C623.L=0.00000781; r5C625.L=0.0000117;
3325 r5C627.L=0.0000201; r5C629.L=0.0000167; r7C623.L=0;
3326 r7C625.L=0; r7C627.L=0; r7C629.L=0;
3327 r8C623.L=0.00000817; r8C625.L=0.0000121; r8C627.L=0.0000203;
3328 r8C629.L=0.000017; r9C623.L=0.009; r9C625.L=0.009;
3329 r9C627.L=0.009; r9C629.L=0.009; rho2HC07.L=650;

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3330 rho2HC11.L=650; rho2HC14.L=650; rho2HC16.L=650;
3331 rhoAC09.L=1700; rhoAC20.L=1700; rhoAC31.L=1700;
3332 rhoAC42.L=1700; riC10C623.L=0; riC10C625.L=0;
3333 riC10C627.L=0; riC10C629.L=0; riC11C623.L=0;
3334 riC11C625.L=0; riC11C627.L=0.00000114; riC11C629.L=0;
3335 sf1S34.L=0.026; sf2S34.L=0.066; sfS11.L=0.5;
3336 sfS19.L=0.491; sfS2.L=0.886; sfS23.L=0.65;
3337 sfS27.L=0.499; sfS41.L=0.985; sfS42.L=0.779;
3338 sfS5.L=0.25; sfS7.L=0.334; SmlC601.L=2.57;
3339 SmlC603.L=0.539; SmlC606A.L=2.422; SmlC606D.L=2.936;
3340 Sm2C601.L=0.787; Sm3C601.L=1.054; Sm3C603.L=0.233;
3341 Sm3C606A.L=0.997; Sm3C606D.L=1.308; Sm4C601.L=0.77;
3342 Sm4C603.L=0.176; Sm4C606A.L=0.73; Sm4C606D.L=1;
3343 Sm5C601.L=0.326; Sm5C603.L=0.079; Sm5C606A.L=0.31;
3344 Sm5C606D.L=0.464; Sm6C601.L=0.257; Sm7C601.L=0.113;
3345 Sm7C603.L=0.03; Sm7C606A.L=0.108; Sm7C606D.L=0.185;
3346 Sn1C601.L=2.958; Sn1C603.L=1.358; Sn1C606A.L=3.483;
3347 Sn2C601.L=0.87; Sn3C601.L=1.184; Sn3C603.L=0.562;
3348 Sn3C606A.L=1.39; Sn4C601.L=0.853; Sn4C603.L=0.413;
3349 Sn4C606A.L=1; Sn5C601.L=0.351; Sn5C603.L=0.177;
3350 Sn5C606A.L=0.41; Sn6C601.L=0.274; Sn7C601.L=0.117;
3351 Sn7C603.L=0.062; Sn7C606A.L=0.136; TAC02.L=276;
3352 TAC05.L=280.004; TAC07.L=279.99; TAC15.L=280;
3353 TAC18.L=280.063; TAC20.L=280; TAC26.L=280.105;
3354 TAC29.L=280.224; TAC37.L=281.963; TAC40.L=281.981;
3355 TC301.L=282.932; TC302.L=259.254; TC309.L=324.429;
3356 TC310.L=288.704; TC311.L=288.704; TC312.L=328.661;
3357 TC318.L=321.965; TC319.L=301.113; TC320.L=301.113;
3358 TC322.L=301.113; TC323.L=359; TC326.L=322.937;
3359 TC328.L=322.937; TC329.L=322.937; TC401.L=282.932;
3360 TC402.L=283.85; TC403.L=295.279; TC406.L=388.5;
3361 TC409.L=461; TC411.L=404.6; TC412.L=363.414;
3362 TC413.L=301; TC415.L=305.99; TC417.L=299.989;
3363 TC425.L=363.414; TC426.L=363.414; TC427.L=375.65;
3364 TC428.L=365.245; TC430.L=358.683; TC431.L=363.414;
3365 TC432.L=363.414; TcwotE609A.L=308.852; TcwotE621A.L=326.829;
3366 TcwotE621B.L=298; TcwotE627A.L=295; TcwotE627B.L=293;
3367 TcwotE641A.L=318.661; TcwotE641B.L=314.429; TcwoutE603.L=321.814;
3368 TcwoutE605.L=302.221; TcwoutE611.L=299.764; TcwoutE613.L=305.874;
3369 TcwoutE617.L=318.399; TcwoutE626.L=295.918; TcwoutE634.L=341.007;
3370 TcwoutE640.L=311.08; THC01.L=295.504; THC02.L=292.932;
3371 THC03.L=303.279; THC04.L=295.426; THC05.L=288.522;
3372 THC06.L=289.396; THC07.L=289.396; THC11.L=289.396;
3373 THC14.L=289.396; THC16.L=289.396; THC22.L=281.963;
3374 THC23.L=280.105; THC24.L=281.035; THC25.L=280;
3375 THC26.L=280.715; THC27.L=280.004; THC28.L=280.522;

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3376 THC29.L=280.522; THC30.L=280.522; THC31.L=282.932;
3377 THC34.L=259.254; THC38.L=259.254; THC41.L=259.254;
3378 THC45.L=259.254; TmC601.L=330.505; TmC603.L=352.33;
3379 TmC606A.L=331.841; TmC606D.L=387.623; TmK601.L=306.796;
3380 TnC601.L=321.916; TnC603.L=334.298; TnC606A.L=320.914;
3381 TR1.L=280.522; TR29.L=280.522; TSC401.L=322.219;
3382 TSC404.L=332.219; TSC406.L=336.03; TSC407.L=336.03;
3383 TSC409.L=318.852; TSC411.L=318.852; TSC412.L=318.852;
3384 TSC414.L=320; Utilities.L=8.027; VFC614B.L=0.181;
3385 VFC615.L=0.347; VFC616.L=0.258; VFM3.L=0.492;
3386 VpC601.L=1.412; VpC603.L=0.712; VpC606A.L=2.814;
3387 x10AC09.L=0; x10AC20.L=0; x10AC31.L=0;
3388 x10AC42.L=0; x11AC02.L=0.998; x11AC05.L=0.971;
3389 x11AC07.L=0.972; x11AC09.L=0.784; x11AC15.L=0.944;
3390 x11AC18.L=0.944; x11AC20.L=0.819; x11AC26.L=0.917;
3391 x11AC29.L=0.917; x11AC31.L=0.848; x11AC37.L=0.89;
3392 x11AC40.L=0.89; x11AC42.L=0.809; x12AC02.L=0.002;
3393 x12AC05.L=0.029; x12AC07.L=0.028; x12AC09.L=0.023;
3394 x12AC12.L=0.029; x12AC15.L=0.056; x12AC18.L=0.056;
3395 x12AC20.L=0.049; x12AC23.L=0.056; x12AC26.L=0.083;
3396 x12AC29.L=0.083; x12AC31.L=0.077; x12AC34.L=0.083;
3397 x12AC37.L=0.11; x12AC40.L=0.11; x12AC42.L=0.1;
3398 x12AC45.L=0.11; x1AC09.L=0.009; x1AC20.L=0.007;
3399 x1AC31.L=0.004; x1AC42.L=0.004; x1C301.L=0.068;
3400 x1C302.L=0.069; x1C303.L=0.068; x1C306.L=0.072;
3401 x1C307.L=0.072; x1C308.L=0.048; x1C309.L=0.048;
3402 x1C310.L=0.094; x1C311.L=0.031; x1C312.L=0.119;
3403 x1C315.L=0.119; x1C317.L=0.094; x1C318.L=0.094;
3404 x1C319.L=0.094; x1C320.L=0.094; x1C321.L=0.094;
3405 x1C322.L=0.094; x1C323.L=0.094; x1C324.L=0.094;
3406 x1C326.L=1; x1C328.L=1; x1C329.L=1;
3407 x1C401.L=0.015; x1C402.L=0.015; x1C403.L=0.015;
3408 x1C404.L=0.015; x1C405.L=0; x1C406.L=0;
3409 x1C407.L=0; x1C408.L=0; x1C409.L=0;
3410 x1C410.L=0.0001; x1C411.L=0.0001; x1C412.L=0.000463;
3411 x1C413.L=0.000463; x1C414.L=0.061; x1C415.L=0.061;
3412 x1C418.L=0.059; x1C419.L=0.059; x1C425.L=0.0001;
3413 x1C426.L=0.0001; x1C427.L=0.000132; x1C428.L=0.000145;
3414 x1C430.L=0.0000468; x1C431.L=0.000463; x1C432.L=0.000463;
3415 x1HC01.L=0.055; x1HC02.L=0.055; x1HC03.L=0.06;
3416 x1HC04.L=0.06; x1HC05.L=0.06; x1HC06.L=0.059;
3417 x1HC07.L=0.059; x1HC08.L=0.059; x1HC11.L=0.059;
3418 x1HC14.L=0.059; x1HC15.L=0.059; x1HC16.L=0.059;
3419 x1HC22.L=0.047; x1HC23.L=0.047; x1HC24.L=0.047;
3420 x1HC25.L=0.05; x1HC26.L=0.048; x1HC27.L=0.045;
3421 x1HC28.L=0.019; x1HC29.L=0.019; x1HC30.L=0.012;

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3422 x1HC31.L=0.015; x1HC33.L=0.023; x1HC34.L=0.023;
3423 x1HC38.L=0.023; x1HC40.L=0.023; x1HC41.L=0.023;
3424 x1HC45.L=0.023; x1R1.L=0.019; x1R29.L=0.015;
3425 x1SC401.L=0.006; x1SC404.L=0.0000081; x1SC405.L=0.0000081;
3426 x1SC406.L=0.0000081; x1SC407.L=0.0000081; x1SC409.L=0.02;
3427 x1SC411.L=0.02; x1SC412.L=0.02; x1SC413.L=0.02;
3428 x1SC414.L=0.1; x2AC09.L=0; x2AC20.L=0;
3429 x2AC31.L=0; x2AC42.L=0; x2C301.L=0;
3430 x2C417.L=0.00031; x2C418.L=0.000922; x2C419.L=0.000922;
3431 x2HC01.L=0.1; x2HC02.L=0.1; x2HC03.L=0.000889;
3432 x2HC04.L=0.000889; x2HC05.L=0.000889; x2HC06.L=0.022;
3433 x2HC07.L=0.022; x2HC08.L=0.022; x2HC11.L=0.022;
3434 x2HC14.L=0.022; x2HC15.L=0.022; x2HC16.L=0.022;
3435 x2HC22.L=0; x2HC23.L=0; x2HC24.L=0;
3436 x2HC25.L=0; x2HC26.L=0; x2HC27.L=0;
3437 x2HC28.L=0; x2HC29.L=0; x2HC30.L=0;
3438 x2HC31.L=0; x2R1.L=0; x2R29.L=0;
3439 x2SC401.L=0.009; x2SC404.L=0.012; x2SC405.L=0.012;
3440 x2SC406.L=0.012; x2SC407.L=0.012; x2SC409.L=0.00031;
3441 x2SC411.L=0.00031; x2SC412.L=0.00031; x2SC413.L=0.00031;
3442 x2SC414.L=0.1; x3AC09.L=0.132; x3AC20.L=0.088;
3443 x3AC31.L=0.051; x3AC42.L=0.062; x3C301.L=0.781;
3444 x3C302.L=0.71; x3C303.L=0.774; x3C306.L=0.78;
3445 x3C307.L=0.78; x3C308.L=0.775; x3C309.L=0.775;
3446 x3C310.L=0.812; x3C311.L=0.762; x3C312.L=0.79;
3447 x3C315.L=0.79; x3C317.L=0.813; x3C318.L=0.813;
3448 x3C319.L=0.813; x3C320.L=0.813; x3C321.L=0.813;
3449 x3C322.L=0.813; x3C323.L=0.813; x3C324.L=0.813;
3450 x3C326.L=0.00000166; x3C328.L=0.00000166; x3C329.L=0.00000166;
3451 x3C401.L=0.51; x3C402.L=0.51; x3C403.L=0.51;
3452 x3C404.L=0.51; x3C405.L=0.00000694; x3C406.L=0.00000694;
3453 x3C407.L=0.00000694; x3C408.L=0.00000694; x3C409.L=0.00000694;
3454 x3C410.L=0.000406; x3C411.L=0.000406; x3C412.L=0.000834;
3455 x3C413.L=0.000834; x3C414.L=0.83; x3C415.L=0.83;
3456 x3C418.L=0.837; x3C419.L=0.837; x3C425.L=0.000406;
3457 x3C426.L=0.000406; x3C427.L=0.000533; x3C428.L=0.000586;
3458 x3C430.L=0.000634; x3C431.L=0.000834; x3C432.L=0.000834;
3459 x3HC01.L=0.01; x3HC02.L=0.01; x3HC03.L=0.836;
3460 x3HC04.L=0.836; x3HC05.L=0.836; x3HC06.L=0.656;
3461 x3HC07.L=0.656; x3HC08.L=0.656; x3HC11.L=0.656;
3462 x3HC14.L=0.656; x3HC15.L=0.656; x3HC16.L=0.656;
3463 x3HC22.L=0.677; x3HC23.L=0.677; x3HC24.L=0.677;
3464 x3HC25.L=0.665; x3HC26.L=0.673; x3HC27.L=0.684;
3465 x3HC28.L=0.568; x3HC29.L=0.568; x3HC30.L=0.446;
3466 x3HC31.L=0.51; x3HC33.L=0.774; x3HC34.L=0.774;
3467 x3HC38.L=0.774; x3HC40.L=0.774; x3HC41.L=0.774;

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3468 x3HC45.L=0.774; x3R1.L=0.568; x3R29.L=0.516;
3469 x3SC401.L=0.293; x3SC404.L=0.021; x3SC405.L=0.021;
3470 x3SC406.L=0.021; x3SC407.L=0.021; x3SC409.L=0.967;
3471 x3SC411.L=0.967; x3SC412.L=0.967; x3SC413.L=0.967;
3472 x3SC414.L=0.5; x4AC09.L=0.02; x4AC20.L=0.014;
3473 x4AC31.L=0.008; x4AC42.L=0.01; x4C301.L=0.105;
3474 x4C302.L=0.073; x4C303.L=0.101; x4C306.L=0.099;
3475 x4C307.L=0.099; x4C308.L=0.108; x4C309.L=0.108;
3476 x4C310.L=0.084; x4C311.L=0.117; x4C312.L=0.08;
3477 x4C315.L=0.08; x4C317.L=0.082; x4C318.L=0.082;
3478 x4C319.L=0.082; x4C320.L=0.082; x4C321.L=0.082;
3479 x4C322.L=0.082; x4C323.L=0.082; x4C324.L=0.082;
3480 x4C325.L=0; x4C326.L=0; x4C328.L=0;
3481 x4C329.L=0; x4C401.L=0.104; x4C402.L=0.104;
3482 x4C403.L=0.104; x4C404.L=0.104; x4C405.L=0.059;
3483 x4C406.L=0.059; x4C407.L=0.059; x4C408.L=0.059;
3484 x4C409.L=0.059; x4C410.L=0.527; x4C411.L=0.527;
3485 x4C412.L=0.826; x4C413.L=0.826; x4C414.L=0.095;
3486 x4C415.L=0.095; x4C418.L=0.092; x4C419.L=0.092;
3487 x4C425.L=0.527; x4C426.L=0.527; x4C427.L=0.676;
3488 x4C428.L=0.738; x4C430.L=0.641; x4C431.L=0.826;
3489 x4C432.L=0.826; x4HC01.L=0.085; x4HC02.L=0.085;
3490 x4HC03.L=0.091; x4HC04.L=0.091; x4HC05.L=0.091;
3491 x4HC06.L=0.09; x4HC07.L=0.09; x4HC08.L=0.09;
3492 x4HC11.L=0.09; x4HC14.L=0.09; x4HC15.L=0.09;
3493 x4HC16.L=0.09; x4HC22.L=0.105; x4HC23.L=0.105;
3494 x4HC24.L=0.105; x4HC25.L=0.102; x4HC26.L=0.104;
3495 x4HC27.L=0.106; x4HC28.L=0.109; x4HC29.L=0.109;
3496 x4HC30.L=0.096; x4HC31.L=0.104; x4HC33.L=0.127;
3497 x4HC34.L=0.127; x4HC38.L=0.127; x4HC40.L=0.127;
3498 x4HC41.L=0.127; x4HC45.L=0.127; x4R1.L=0.109;
3499 x4R29.L=0.105; x4SC401.L=0.562; x4SC404.L=0.784;
3500 x4SC405.L=0.784; x4SC406.L=0.784; x4SC407.L=0.784;
3501 x4SC409.L=0.013; x4SC411.L=0.013; x4SC412.L=0.013;
3502 x4SC413.L=0.013; x4SC414.L=0.1; x5AC09.L=0.006;
3503 x5AC20.L=0.004; x5AC31.L=0.002; x5AC42.L=0.003;
3504 x5C301.L=0.019; x5C302.L=0.005; x5C303.L=0.017;
3505 x5C306.L=0.015; x5C307.L=0.015; x5C308.L=0.021;
3506 x5C309.L=0.021; x5C310.L=0.006; x5C311.L=0.026;
3507 x5C312.L=0.006; x5C315.L=0.006; x5C317.L=0.006;
3508 x5C318.L=0.006; x5C319.L=0.006; x5C320.L=0.006;
3509 x5C321.L=0.006; x5C322.L=0.006; x5C323.L=0.006;
3510 x5C324.L=0.006; x5C325.L=0; x5C326.L=0;
3511 x5C328.L=0; x5C329.L=0; x5C401.L=0.054;
3512 x5C402.L=0.054; x5C403.L=0.054; x5C404.L=0.054;
3513 x5C405.L=0.14; x5C406.L=0.14; x5C407.L=0.14;

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3514 x5C408.L=0.14; x5C409.L=0.14; x5C410.L=0.099;
3515 x5C411.L=0.099; x5C412.L=0.072; x5C413.L=0.072;
3516 x5C414.L=0.001; x5C415.L=0.001; x5C418.L=0.001;
3517 x5C419.L=0.001; x5C425.L=0.099; x5C426.L=0.099;
3518 x5C427.L=0.086; x5C428.L=0.08; x5C430.L=0.088;
3519 x5C431.L=0.072; x5C432.L=0.072; x5HC01.L=0.15;
3520 x5HC02.L=0.15; x5HC03.L=0.001; x5HC04.L=0.001;
3521 x5HC05.L=0.001; x5HC06.L=0.034; x5HC07.L=0.034;
3522 x5HC08.L=0.034; x5HC11.L=0.034; x5HC14.L=0.034;
3523 x5HC15.L=0.034; x5HC16.L=0.034; x5HC22.L=0.033;
3524 x5HC23.L=0.033; x5HC24.L=0.033; x5HC25.L=0.033;
3525 x5HC26.L=0.033; x5HC27.L=0.032; x5HC28.L=0.049;
3526 x5HC29.L=0.049; x5HC30.L=0.058; x5HC31.L=0.054;
3527 x5HC33.L=0.03; x5HC34.L=0.03; x5HC38.L=0.03;
3528 x5HC40.L=0.03; x5HC41.L=0.03; x5HC45.L=0.03;
3529 x5R1.L=0.049; x5R29.L=0.054; x5SC401.L=0.052;
3530 x5SC404.L=0.073; x5SC405.L=0.073; x5SC406.L=0.073;
3531 x5SC407.L=0.073; x5SC409.L=0; x5SC411.L=0;
3532 x5SC412.L=0; x5SC413.L=0; x5SC414.L=0;
3533 x6SC401.L=0.071; x6SC404.L=0.1; x6SC405.L=0.1;
3534 x6SC406.L=0.1; x6SC407.L=0.1; x6SC409.L=0;
3535 x6SC411.L=0; x6SC412.L=0; x6SC413.L=0;
3536 x6SC414.L=0.1; x7AC09.L=0.02; x7AC20.L=0.015;
3537 x7AC31.L=0.008; x7AC42.L=0.01; x7C301.L=0.027;
3538 x7C302.L=0.144; x7C303.L=0.039; x7C306.L=0.033;
3539 x7C307.L=0.033; x7C308.L=0.048; x7C309.L=0.048;
3540 x7C310.L=0.005; x7C311.L=0.064; x7C312.L=0.005;
3541 x7C315.L=0.005; x7C316.L=0.005; x7C317.L=0.005;
3542 x7C318.L=0.005; x7C319.L=0.005; x7C320.L=0.005;
3543 x7C321.L=0.005; x7C322.L=0.005; x7C323.L=0.005;
3544 x7C324.L=0.005; x7C325.L=0; x7C326.L=0;
3545 x7C328.L=0; x7C329.L=0; x7C401.L=0.316;
3546 x7C402.L=0.316; x7C403.L=0.316; x7C404.L=0.316;
3547 x7C405.L=0.801; x7C406.L=0.801; x7C407.L=0.801;
3548 x7C408.L=0.801; x7C409.L=0.801; x7C410.L=0.374;
3549 x7C411.L=0.374; x7C412.L=0.101; x7C413.L=0.101;
3550 x7C414.L=0.012; x7C415.L=0.012; x7C417.L=0.00031;
3551 x7C418.L=0.011; x7C419.L=0.011; x7C425.L=0.374;
3552 x7C426.L=0.374; x7C427.L=0.238; x7C428.L=0.181;
3553 x7C430.L=0.271; x7C431.L=0.101; x7C432.L=0.101;
3554 x7HC01.L=0.6; x7HC02.L=0.6; x7HC03.L=0.01;
3555 x7HC04.L=0.01; x7HC05.L=0.01; x7HC06.L=0.139;
3556 x7HC07.L=0.139; x7HC08.L=0.139; x7HC11.L=0.139;
3557 x7HC14.L=0.139; x7HC15.L=0.139; x7HC16.L=0.139;
3558 x7HC22.L=0.138; x7HC23.L=0.139; x7HC24.L=0.139;
3559 x7HC25.L=0.15; x7HC26.L=0.142; x7HC27.L=0.131;

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3560 x7HC28.L=0.255; x7HC29.L=0.255; x7HC30.L=0.389;
3561 x7HC31.L=0.316; x7HC33.L=0.046; x7HC34.L=0.046;
3562 x7HC38.L=0.046; x7HC40.L=0.046; x7HC41.L=0.046;
3563 x7HC45.L=0.046; x7R1.L=0.255; x7R29.L=0.31;
3564 x7SC401.L=0.007; x7SC404.L=0.01; x7SC405.L=0.01;
3565 x7SC406.L=0.01; x7SC407.L=0.01; x7SC409.L=0;
3566 x7SC411.L=0; x7SC412.L=0; x7SC413.L=0;
3567 x7SC414.L=0.1; x8AC09.L=0.00000448; x8AC20.L=0.00000554;
3568 x8AC31.L=0.00000475; x8AC42.L=0.00000478; x9AC09.L=0.005;
3569 x9AC20.L=0.005; x9AC31.L=0.002; x9AC42.L=0.003;
3570 xAC02.L=0.5; xAC05.L=0.498; xAC07.L=0.498;
3571 xAC09.L=0.482; xAC12.L=0.498; xAC15.L=0.496;
3572 xAC18.L=0.496; xAC20.L=0.485; xAC23.L=0.496;
3573 xAC26.L=0.494; xAC29.L=0.494; xAC31.L=0.488;
3574 xAC34.L=0.494; xAC37.L=0.492; xAC40.L=0.492;
3575 xAC42.L=0.484; xiC10AC09.L=0; xiC10AC20.L=0;
3576 xiC10AC31.L=0; xiC10AC42.L=0; xiC11AC09.L=0;
3577 xiC11AC20.L=0; xiC11AC31.L=0; xiC11AC42.L=0;
3578 xM1C606D.L=0.0000485; xM3C606D.L=0.000334; xM4C606D.L=0.55;
3579 xM5C606D.L=0.104; xM7C606D.L=0.346; xx1C302.L=0.093;
3580 xx1C308.L=0.063; xx1C310.L=0.12; xx1C311.L=0.042;
3581 xx1C312.L=0.151; xx1C323.L=0.12; xx1C325.L=1;
3582 xx1C405.L=0; xx1C408.L=0; xx1C425.L=0.000153;
3583 xx1C428.L=0.000207; xx1C430.L=0.0000689; xx1C431.L=0.000064;
3584 xx1HC28.L=0.027; xx1HC29.L=0.027; xx1HC30.L=0.018;
3585 xx1HC32.L=0.031; xx1R1.L=0.027; xx1R29.L=0.023;
3586 xx1SC406.L=0.0000111; xx1SC408.L=0.026; xx2HC28.L=0;
3587 xx2HC29.L=0; xx2HC30.L=0; xx2R1.L=0;
3588 xx2R29.L=0; xx2SC406.L=0.013; xx2SC408.L=0.000319;
3589 xx3C302.L=0.729; xx3C308.L=0.779; xx3C310.L=0.791;
3590 xx3C311.L=0.774; xx3C312.L=0.764; xx3C323.L=0.792;
3591 xx3C325.L=0.00000126; xx3C405.L=0.00000975; xx3C408.L=0.00000975;
3592 xx3C425.L=0.000473; xx3C428.L=0.000633; xx3C430.L=0.000709;
3593 xx3C431.L=0.000875; xx3C432.L=0.000875; xx3HC28.L=0.621;
3594 xx3HC29.L=0.621; xx3HC30.L=0.515; xx3HC32.L=0.784;
3595 xx3R1.L=0.621; xx3R29.L=0.578; xx3SC406.L=0.021;
3596 xx3SC408.L=0.961; xx4C302.L=0.075; xx4C308.L=0.109;
3597 xx4C310.L=0.082; xx4C311.L=0.119; xx4C312.L=0.077;
3598 xx4C323.L=0.08; xx4C325.L=0; xx4C405.L=0.083;
3599 xx4C408.L=0.083; xx4C409.L=0.083; xx4C425.L=0.613;
3600 xx4C427.L=0.746; xx4C428.L=0.797; xx4C430.L=0.716;
3601 xx4C431.L=0.867; xx4C432.L=0.867; xx4HC28.L=0.12;
3602 xx4HC29.L=0.12; xx4HC30.L=0.11; xx4HC32.L=0.129;
3603 xx4R1.L=0.12; xx4R29.L=0.117; xx4SC406.L=0.814;
3604 xx4SC408.L=0.012; xx5C302.L=0.004; xx5C308.L=0.017;
3605 xx5C310.L=0.005; xx5C311.L=0.021; xx5C312.L=0.005;

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3606 xx5C323.L=0.005; xx5C325.L=0; xx5C405.L=0.158;
3607 xx5C408.L=0.158; xx5C425.L=0.093; xx5C428.L=0.07;
3608 xx5C430.L=0.079; xx5C431.L=0.061; xx5HC28.L=0.044;
3609 xx5HC29.L=0.044; xx5HC30.L=0.054; xx5HC32.L=0.025;
3610 xx5R1.L=0.044; xx5R29.L=0.049; xx5SC406.L=0.061;
3611 xx5SC408.L=0; xx6SC406.L=0.084; xx6SC408.L=0;
3612 xx7C302.L=0.1; xx7C308.L=0.033; xx7C310.L=0.003;
3613 xx7C311.L=0.044; xx7C312.L=0.003; xx7C323.L=0.004;
3614 xx7C325.L=0; xx7C405.L=0.759; xx7C408.L=0.759;
3615 xx7C425.L=0.293; xx7C428.L=0.132; xx7C430.L=0.204;
3616 xx7C431.L=0.071; xx7HC28.L=0.188; xx7HC29.L=0.188;
3617 xx7HC30.L=0.303; xx7HC32.L=0.031; xx7R1.L=0.188;
3618 xx7R29.L=0.234; xx7SC406.L=0.007; xx7SC408.L=0;
3619 y1HC28.L=0.077; y1HC29.L=0.077; y1HC30.L=0.062;
3620 y1HC31.L=0.068; y1R1.L=0.077; y1R29.L=0.069;
3621 y2HC28.L=0; y2HC29.L=0; y2HC30.L=0;
3622 y2HC31.L=0; y2R1.L=0; y2R29.L=0;
3623 y3HC28.L=0.789; y3HC29.L=0.789; y3HC30.L=0.771;
3624 y3HC31.L=0.781; y3R1.L=0.789; y3R29.L=0.783;
3625 y4HC28.L=0.1; y4HC29.L=0.1; y4HC30.L=0.108;
3626 y4HC31.L=0.105; y4R1.L=0.1; y4R29.L=0.104;
3627 y5HC28.L=0.015; y5HC29.L=0.015; y5HC30.L=0.022;
3628 y5HC31.L=0.019; y5R1.L=0.015; y5R29.L=0.018;
3629 y7HC28.L=0.019; y7HC29.L=0.019; y7HC30.L=0.037;
3630 y7HC31.L=0.027; y7R1.L=0.019; y7R29.L=0.026;
3631 yy1HC28.L=0.1; yy1HC29.L=0.1; yy1HC30.L=0.081;
3632 yy1R1.L=0.1; yy1R29.L=0.09; yy2HC28.L=0;
3633 yy2HC29.L=0; yy2HC30.L=0; yy2R1.L=0;
3634 yy2R29.L=0; yy3HC28.L=0.777; yy3HC29.L=0.777;
3635 yy3HC30.L=0.768; yy3R1.L=0.777; yy3R29.L=0.775;
3636 yy4HC28.L=0.098; yy4HC29.L=0.098; yy4HC30.L=0.108;
3637 yy4R1.L=0.098; yy4R29.L=0.103; yy5HC28.L=0.012;
3638 yy5HC29.L=0.012; yy5HC30.L=0.018; yy5R1.L=0.012;
3639 yy5R29.L=0.015; yy7HC28.L=0.013; yy7HC29.L=0.013;
3640 yy7HC30.L=0.025; yy7R1.L=0.013; yy7R29.L=0.017;
3641 C10pC623.LO=0; C10pC625.LO=0; C10pC627.LO=0;
3642 C10pC629.LO=0; C2C623.LO=0; C2C625.LO=0;
3643 C2C627.LO=0; C2C629.LO=0; C3C623.LO=0;
3644 C3C625.LO=0; C3C627.LO=0; C3C629.LO=0;
3645 C3pC623.LO=0; C3pC625.LO=0; C3pC627.LO=0;
3646 C3pC629.LO=0; C4pC623.LO=0; C4pC625.LO=0;
3647 C4pC627.LO=0; C4pC629.LO=0; C5pC623.LO=0;
3648 C5pC625.LO=0; C5pC627.LO=0; C5pC629.LO=0;
3649 C7pC623.LO=0; C7pC625.LO=0; C7pC627.LO=0;
3650 C7pC629.LO=0; C8pC623.LO=0; C8pC625.LO=0;
3651 C8pC627.LO=0; C8pC629.LO=0; C9pC623.LO=0;

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3652 C9pC625.LO=0; C9pC627.LO=0; C9pC629.LO=0;
3653 CHXC623.LO=2.5; CHXC625.LO=2.5; CHXC627.LO=2.5;
3654 CHXC629.LO=2.5; CiC10pC623.LO=0; CiC10pC625.LO=0;
3655 CiC10pC627.LO=0; CiC10pC629.LO=0; CiC11pC623.LO=0;
3656 CiC11pC625.LO=0; CiC11pC627.LO=0; CiC11pC629.LO=0;
3657 CiC4eC623.LO=0; CiC4eC625.LO=0; CiC4eC627.LO=0;
3658 CiC4eC629.LO=0; CiC5eC623.LO=0; CiC5eC625.LO=0;
3659 CiC5eC627.LO=0; CiC5eC629.LO=0; CiC8eC623.LO=0;
3660 CiC8eC625.LO=0; CiC8eC627.LO=0; CiC8eC629.LO=0;
3661 Cost.LO=-10000; dTE601.LO=5; dTE602.LO=5;
3662 dTE603.LO=5; dTE605.LO=5; dTE609A.LO=5;
3663 dTE610.LO=5; dTE611.LO=5; dTE612.LO=10;
3664 dTE613.LO=4; dTE616.LO=10; dTE617.LO=5;
3665 dTE621A.LO=5; dTE621B.LO=5; dTE626.LO=5;
3666 dTE627A.LO=5; dTE627B.LO=5; dTE628.LO=5;
3667 dTE629.LO=5; dTE633.LO=5; dTE634.LO=5;
3668 dTE640.LO=5; dTE641.LO=5; dTE695A.LO=5;
3669 dTE695B.LO=5; dTE696A.LO=10; dTE696B.LO=10;
3670 dTE6XX.LO=1; Earnings.LO=-10000; f1C601.LO=0;
3671 f1C603.LO=0; f1C606A.LO=0; f2C601.LO=0.5;
3672 f3C601.LO=0.05; f3C603.LO=0; f3C606A.LO=0;
3673 f4C601.LO=0.95; f4C603.LO=0; f4C606A.LO=0;
3674 f5C601.LO=0.5; f5C603.LO=0.5; f5C606A.LO=0.5;
3675 f6C601.LO=0.5; f7C601.LO=0.5; f7C603.LO=0.5;
3676 f7C606A.LO=0.5; FAC05.LO=0.1; FAC07.LO=0.1;
3677 FAC09.LO=0.01; FAC15.LO=0.1; FAC18.LO=0.1;
3678 FAC20.LO=0.01; FAC26.LO=0.1; FAC29.LO=0.1;
3679 FAC31.LO=0.01; FAC37.LO=0.1; FAC40.LO=0.1;
3680 FAC42.LO=0.01; FC301.LO=1; FC302.LO=0.1;
3681 FC303.LO=2; FC306.LO=0.1; FC307.LO=0.0001;
3682 FC309.LO=0.0001; FC310.LO=0.0001; FC311.LO=0;
3683 FC312.LO=0.0001; FC315.LO=0.0001; FC317.LO=0.1;
3684 FC318.LO=0.0001; FC319.LO=0.0001; FC321.LO=0;
3685 FC323.LO=0.5; FC324.LO=0.5; FC325.LO=0.5;
3686 FC326.LO=0.01; FC401.LO=0.1; FC402.LO=0.1;
3687 FC404.LO=0; FC405.LO=0.1; FC406.LO=0;
3688 FC408.LO=0; FC409.LO=0; FC410.LO=0.1;
3689 FC411.LO=0; FC413.LO=0; FC414.LO=0.1;
3690 FC415.LO=0; FC418.LO=0.1; FC419.LO=0.0001;
3691 FC425.LO=1; FC426.LO=0; FC427.LO=0;
3692 FC428.LO=0; FC430.LO=1; FC431.LO=0;
3693 FC432.LO=1; Fcwe603.LO=0.1; Fcwe605.LO=0.1;
3694 Fcwe609A.LO=0.01; Fcwe611.LO=0.1; Fcwe613.LO=0.1;
3695 Fcwe617.LO=1; Fcwe621A.LO=0.1; Fcwe621B.LO=0.1;
3696 Fcwe626.LO=0.1; Fcwe627A.LO=0.1; Fcwe627B.LO=0.1;
3697 Fcwe634.LO=4; Fcwe640.LO=0.4; Fcwe641A.LO=0.1;

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3698 FcwE641B.LO=0.1; FHC02.LO=0.01; FHC03.LO=1;
3699 FHC04.LO=1; FHC05.LO=1; FHC06.LO=1;
3700 FHC07.LO=1; FHC08.LO=1; FHC11.LO=1;
3701 FHC14.LO=1; FHC15.LO=1; FHC16.LO=1;
3702 FHC22.LO=1; FHC23.LO=1; FHC24.LO=1;
3703 FHC25.LO=1; FHC26.LO=1; FHC27.LO=1;
3704 FHC28.LO=1; FHC29.LO=0; FHC30.LO=0;
3705 FHC31.LO=0; FHC33.LO=0; FHC34.LO=0;
3706 FHC38.LO=0; FHC40.LO=0; FHC41.LO=0;
3707 FHC45.LO=0; FlHC28.LO=1; FlHC29.LO=0;
3708 FlHC30.LO=0; FlHC31.LO=0; Flr1.LO=0;
3709 Flr29.LO=0; FmC302.LO=0; FmC308.LO=0.0001;
3710 FmC310.LO=0; FmC311.LO=0; FmC312.LO=0;
3711 FmC317.LO=0.001; FmC322.LO=0; FmC323.LO=0;
3712 FmC325.LO=0.01; FmC405.LO=0; FmC407.LO=0;
3713 FmC408.LO=0; FmC409.LO=0; FmC412.LO=0;
3714 FmC414.LO=0.0001; FmC425.LO=0; FmC427.LO=0;
3715 FmC428.LO=0; FmC430.LO=0; FmC431.LO=0;
3716 FmC432.LO=0; FmHC01.LO=0; FmHC32.LO=0;
3717 FmlHC28.LO=0.01; FmlHC29.LO=0; FmlHC30.LO=0;
3718 Fmlr1.LO=0; Fmlr29.LO=0; FmSC403.LO=0.001;
3719 FmSC406.LO=0; FmSC408.LO=0; FmvHC28.LO=0;
3720 FmvHC29.LO=0; FmvHC30.LO=0; Fmvr1.LO=0;
3721 Fmvr29.LO=0; FR1.LO=0; FR29.LO=0;
3722 FSC401.LO=0.1; FSC403.LO=0.1; FSC404.LO=0.1;
3723 FSC406.LO=0; FSC407.LO=0; FSC408.LO=0.05;
3724 FSC409.LO=0.05; FSC412.LO=0.102; FSC414.LO=0;
3725 FstmE602.LO=0.1; FstmE695A.LO=0; FstmE695B.LO=0.1;
3726 FstmE696A.LO=0.01; FstmE696B.LO=0.01; FvHC28.LO=0;
3727 FvHC29.LO=0; FvHC30.LO=0; FvHC31.LO=0;
3728 Fvr1.LO=0; Fvr29.LO=0; h1C601.LO=0.8;
3729 h1C603.LO=-3; h1C606A.LO=0; h2C601.LO=0.395;
3730 h3C601.LO=0.5; h3C603.LO=0; h3C606A.LO=-65;
3731 h4C601.LO=0.45; h4C603.LO=0; h4C606A.LO=-10;
3732 h5C601.LO=0.5; h5C603.LO=0; h5C606A.LO=-5;
3733 h6C601.LO=0.5; h7C601.LO=0.5; h7C603.LO=0;
3734 h7C606A.LO=0; hAC02.LO=0; hAC05.LO=10;
3735 hAC07.LO=10; hAC09.LO=10; hAC12.LO=0;
3736 hAC15.LO=10; hAC18.LO=10; hAC20.LO=10;
3737 hAC23.LO=0; hAC26.LO=10; hAC29.LO=10;
3738 hAC31.LO=10; hAC34.LO=0; hAC37.LO=10;
3739 hacAC0.LO=10; hacAC2.LO=10; hacAC09.LO=10;
3740 hacAC20.LO=10; hacAC31.LO=10; hacAC42.LO=10;
3741 hc301.LO=10; hc302.LO=0; hc303.LO=0.0001;
3742 hc306.LO=0.0001; hc307.LO=0.0001; hc308.LO=0.0001;
3743 hc309.LO=0.0001; hc310.LO=0.0001; hc311.LO=0.001;

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3744 hC312.LO=0.0001; hC312liq.LO=0; hC315.LO=0.0001;
3745 hC316.LO=0.0001; hC317.LO=0.0001; hC318.LO=0.0001;
3746 hC319.LO=0.0001; hC321.LO=0; hC322.LO=0.0001;
3747 hC323.LO=0; hC324.LO=0.0001; hC325.LO=0.0001;
3748 hC326.LO=0.0001; hC329.LO=0.0001; hC401.LO=0;
3749 hC402.LO=10; hC403.LO=0.0001; hC404.LO=0.0001;
3750 hC405.LO=0.0001; hC406.LO=0.0001; hC407.LO=0.0001;
3751 hC408.LO=0.0001; hC408vap.LO=10; hC409.LO=0.0001;
3752 hC410.LO=0.0001; hC410vap.LO=10; hC411.LO=10;
3753 hC412.LO=0.0001; hC412liq.LO=1; hC413.LO=0.0001;
3754 hC414.LO=0.0001; hC414liq.LO=10; hC415.LO=0.0001;
3755 hC417.LO=0.0001; hC418.LO=0.0001; hC419.LO=0.0001;
3756 hC425.LO=10; hC426.LO=10; hC427.LO=0;
3757 hC428.LO=10; hC430.LO=10; hC431.LO=10;
3758 hC432.LO=10; hC623.LO=10; hC625.LO=10;
3759 hC627.LO=10; hC629.LO=10; hHC01.LO=0;
3760 hHC02.LO=0; hHC03.LO=1; hHC04.LO=10;
3761 hHC05.LO=10; hHC06.LO=10; hHC07.LO=10;
3762 hHC11.LO=10; hHC14.LO=10; hHC16.LO=10;
3763 hHC29.LO=20; hHC30.LO=20; hHC31.LO=100;
3764 hHC32.LO=0; hHC34.LO=0; hHC38.LO=0;
3765 hHC41.LO=0; hHC45.LO=0; hlHC29.LO=0;
3766 hlHC30.LO=0; hlHC31.LO=20; hLR1.LO=0;
3767 hLR29.LO=10; hR1.LO=0; hR29.LO=20;
3768 hSC401.LO=10; hSC402.LO=10; hSC403.LO=10;
3769 hSC404.LO=10; hSC405.LO=10; hSC406.LO=0.1;
3770 hSC407.LO=10; hSC408.LO=10; hSC409.LO=10;
3771 hSC411.LO=10; hSC412.LO=10; hSC413.LO=10;
3772 hSC414.LO=0; hvHC29.LO=10; hvHC30.LO=10;
3773 hvHC31.LO=20; hvR1.LO=0; hvR29.LO=10;
3774 K1C323.LO=1; K1C325.LO=0.5; K1C408.LO=1;
3775 K1C414.LO=1; K1C428.LO=0; K1C430.LO=1;
3776 K1C601.LO=1.5; K1C603.LO=1; K1C606A.LO=1;
3777 K1C606C.LO=1; K1C614B.LO=2; K1C615_A.LO=0.5;
3778 K1C616_A.LO=0.5; K1E633.LO=1; K1E6XX.LO=1;
3779 K1SC406.LO=2; K1SC408.LO=1.5; K2C601.LO=0.5;
3780 K2E633.LO=0.2; K2E6XX.LO=0.2; K2SC406.LO=0.5;
3781 K2SC408.LO=0.5; K3C323.LO=0.5; K3C325.LO=0.01;
3782 K3C408.LO=1; K3C414.LO=0.5; K3C428.LO=0;
3783 K3C430.LO=1; K3C601.LO=0.5; K3C603.LO=0.5;
3784 K3C606A.LO=0.5; K3C606C.LO=1; K3C614B.LO=0.6;
3785 K3C615_A.LO=0.1; K3C616_A.LO=0.1; K3E633.LO=0.3;
3786 K3E6XX.LO=0.3; K3SC406.LO=1; K3SC408.LO=0.7;
3787 K4C323.LO=0.5; K4C325.LO=0.03; K4C408.LO=1;
3788 K4C414.LO=0.5; K4C428.LO=0; K4C430.LO=0.5;
3789 K4C601.LO=0.2; K4C603.LO=0.1; K4C606A.LO=0.1;

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3790 K4C606C.LO=1; K4C614B.LO=0.5; K4C615_A.LO=0.05;
3791 K4C616_A.LO=0.05; K4E633.LO=0.2; K4E6XX.LO=0.2;
3792 K4SC406.LO=0.8; K4SC408.LO=0.5; K5C323.LO=0.1;
3793 K5C325.LO=0.1; K5C408.LO=0.5; K5C414.LO=0.1;
3794 K5C428.LO=0; K5C430.LO=0.2; K5C601.LO=0.1;
3795 K5C603.LO=0.01; K5C606A.LO=0.1; K5C606C.LO=0.1;
3796 K5C614B.LO=0.05; K5C615_A.LO=0.002; K5C616_A.LO=0.002;
3797 K5E633.LO=0.05; K5E6XX.LO=0.05; K5SC406.LO=0.1;
3798 K5SC408.LO=0.2; K6C601.LO=0.1; K6SC406.LO=0;
3799 K6SC408.LO=0.1; K7C323.LO=0.1; K7C325.LO=0.001;
3800 K7C408.LO=0.1; K7C414.LO=0.05; K7C428.LO=0;
3801 K7C430.LO=0; K7C601.LO=0.01; K7C603.LO=0.01;
3802 K7C606A.LO=0.05; K7C614B.LO=0.001; K7C615_A.LO=0.001;
3803 K7C616_A.LO=0.011; K7E633.LO=0.01; K7E6XX.LO=0.01;
3804 K7SC406.LO=0.1; K7SC408.LO=0.05; Kp1C601.LO=1;
3805 Kp1C603.LO=1; Kp1C606A.LO=1; Kp1C606D.LO=1;
3806 Kp2C601.LO=0.5; Kp3C601.LO=1; Kp3C603.LO=0.5;
3807 Kp3C606A.LO=0.5; Kp3C606D.LO=1; Kp4C601.LO=0.5;
3808 Kp4C603.LO=0.2; Kp4C606A.LO=0.1; Kp4C606D.LO=1;
3809 Kp5C601.LO=0.1; Kp5C603.LO=0.1; Kp5C606A.LO=0.1;
3810 Kp5C606D.LO=1; Kp6C601.LO=0.1; Kp7C601.LO=0.01;
3811 Kp7C603.LO=0.01; Kp7C606A.LO=0.05; Kp7C606D.LO=0.1;
3812 kWad1.LO=50; kWad2.LO=105; LpC601.LO=1;
3813 LpC603.LO=1; LpC606A.LO=0.5; PC303.LO=101;
3814 PC306.LO=650; PC307.LO=600; PC308.LO=600;
3815 PC309.LO=580; PC311.LO=260; PC312.LO=600;
3816 PHC30.LO=101; PHC32.LO=101; PR29.LO=101;
3817 Profit.LO=10; Q2HC07.LO=0; Q2HC11.LO=0;
3818 Q2HC14.LO=0; Q2HC16.LO=0; qFp1C606A.LO=0;
3819 qFp3C606A.LO=0; qFp4C606A.LO=0; qFp5C606A.LO=0;
3820 qFp7C606A.LO=0; qS1C606A.LO=0; qS3C606A.LO=0;
3821 qS4C606A.LO=0; qS5C606A.LO=0; qS7C606A.LO=0;
3822 r10C623.LO=0; r10C625.LO=0; r10C627.LO=0;
3823 r10C629.LO=0; r2C623.LO=0; r2C625.LO=0;
3824 r2C627.LO=0; r2C629.LO=0; r3C623.LO=0;
3825 r3C625.LO=0; r3C627.LO=0; r3C629.LO=0;
3826 r4C623.LO=0; r4C625.LO=0; r4C627.LO=0;
3827 r4C629.LO=0; r5C623.LO=0; r5C625.LO=0;
3828 r5C627.LO=0; r5C629.LO=0; r7C623.LO=0;
3829 r7C625.LO=0; r7C627.LO=0; r7C629.LO=0;
3830 r8C623.LO=0; r8C625.LO=0; r8C627.LO=0;
3831 r8C629.LO=0; r9C623.LO=0; r9C625.LO=0;
3832 r9C627.LO=0; r9C629.LO=0; rho2HC07.LO=610;
3833 rho2HC11.LO=610; rho2HC14.LO=610; rho2HC16.LO=610;
3834 rhoAC09.LO=1500; rhoAC20.LO=1500; rhoAC31.LO=1500;
3835 rhoAC42.LO=1500; riC10C623.LO=0; riC10C625.LO=0;

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3836 riC10C627.LO=0; riC10C629.LO=0; riC11C623.LO=0;
3837 riC11C625.LO=0; riC11C627.LO=0; riC11C629.LO=0;
3838 sf1S34.LO=0.0001; sf2S34.LO=0; sfS11.LO=0.1;
3839 sfS19.LO=0.1; sfS2.LO=0.1; sfS23.LO=0.1;
3840 sfS27.LO=0.1; sfS41.LO=0.0001; sfS42.LO=0.0001;
3841 sfS5.LO=0.1; sfS7.LO=0.1; SmlC601.LO=1;
3842 SmlC603.LO=0.05; SmlC606A.LO=0.1; SmlC606D.LO=1;
3843 Sm2C601.LO=0.5; Sm3C601.LO=0.5; Sm3C603.LO=0.001;
3844 Sm3C606A.LO=0.1; Sm3C606D.LO=1; Sm4C601.LO=0.4;
3845 Sm4C603.LO=0.01; Sm4C606A.LO=0.1; Sm4C606D.LO=0.5;
3846 Sm5C601.LO=0.1; Sm5C603.LO=0.01; Sm5C606A.LO=0.05;
3847 Sm5C606D.LO=0.1; Sm6C601.LO=0.1; Sm7C601.LO=0.01;
3848 Sm7C603.LO=0.001; Sm7C606A.LO=0.001; Sm7C606D.LO=0.1;
3849 SnlC601.LO=1; SnlC603.LO=1; SnlC606A.LO=1;
3850 Sn2C601.LO=0.5; Sn3C601.LO=0.5; Sn3C603.LO=0.5;
3851 Sn3C606A.LO=1; Sn4C601.LO=0.5; Sn4C603.LO=0.2;
3852 Sn4C606A.LO=0.8; Sn5C601.LO=0.1; Sn5C603.LO=0.1;
3853 Sn5C606A.LO=0.3; Sn6C601.LO=0.1; Sn7C601.LO=0.01;
3854 Sn7C603.LO=0.01; Sn7C606A.LO=0.1; TAC02.LO=276;
3855 TAC05.LO=273; TAC07.LO=273; TAC15.LO=273;
3856 TAC18.LO=273; TAC20.LO=280; TAC26.LO=273;
3857 TAC29.LO=273; TAC37.LO=273; TAC40.LO=273;
3858 TC301.LO=200; TC302.LO=250; TC309.LO=270;
3859 TC310.LO=200; TC311.LO=270; TC312.LO=300;
3860 TC318.LO=250; TC319.LO=250; TC320.LO=250;
3861 TC322.LO=250; TC323.LO=300; TC326.LO=300;
3862 TC328.LO=300; TC329.LO=300; TC401.LO=260;
3863 TC402.LO=270; TC403.LO=280; TC406.LO=298;
3864 TC409.LO=400; TC411.LO=300; TC412.LO=330;
3865 TC413.LO=250; TC415.LO=250; TC417.LO=275;
3866 TC425.LO=300; TC426.LO=300; TC427.LO=360;
3867 TC428.LO=300; TC430.LO=300; TC431.LO=300;
3868 TC432.LO=350; TcwotE609A.LO=298; TcwotE621A.LO=298;
3869 TcwotE621B.LO=298; TcwotE627A.LO=295; TcwotE627B.LO=293;
3870 TcwotE641A.LO=295; TcwotE641B.LO=295; TcwoutE603.LO=296.836;
3871 TcwoutE605.LO=298; TcwoutE611.LO=295; TcwoutE613.LO=298;
3872 TcwoutE617.LO=295; TcwoutE626.LO=295; TcwoutE634.LO=295;
3873 TcwoutE640.LO=295; THC01.LO=295; THC02.LO=275;
3874 THC03.LO=290; THC04.LO=280; THC05.LO=270;
3875 THC06.LO=273; THC07.LO=273; THC11.LO=273;
3876 THC14.LO=273; THC16.LO=273; THC22.LO=273;
3877 THC23.LO=273; THC24.LO=273; THC25.LO=273;
3878 THC26.LO=273; THC27.LO=273; THC28.LO=270;
3879 THC29.LO=270; THC30.LO=250; THC31.LO=260;
3880 THC34.LO=250; THC38.LO=250; THC41.LO=250;
3881 THC45.LO=250; TmC601.LO=315; TmC603.LO=350;

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3882 TmC606A.LO=327; TmC606D.LO=370; TmK601.LO=273;
3883 TnC601.LO=310; TnC603.LO=320; TnC606A.LO=310;
3884 TR1.LO=270; TR29.LO=260; TSC401.LO=280;
3885 TSC404.LO=310; TSC406.LO=320; TSC407.LO=320;
3886 TSC409.LO=308; TSC411.LO=308; TSC412.LO=308;
3887 TSC414.LO=275; Utilities.LO=-10000; VFC614B.LO=0.1;
3888 VFC615.LO=0.001; VFC616.LO=0.05; VFM3.LO=0;
3889 VpC601.LO=1; VpC603.LO=0.01; VpC606A.LO=0.1;
3890 x10AC09.LO=0; x10AC20.LO=0; x10AC31.LO=0;
3891 x10AC42.LO=0; x11AC02.LO=0.97; x11AC05.LO=0.89;
3892 x11AC07.LO=0.89; x11AC09.LO=0; x11AC15.LO=0.89;
3893 x11AC18.LO=0.89; x11AC20.LO=0; x11AC26.LO=0.89;
3894 x11AC29.LO=0.89; x11AC31.LO=0; x11AC37.LO=0.89;
3895 x11AC40.LO=0.89; x11AC42.LO=0; x12AC02.LO=0.002;
3896 x12AC05.LO=0.001; x12AC07.LO=0.001; x12AC09.LO=0;
3897 x12AC12.LO=0.001; x12AC15.LO=0.001; x12AC18.LO=0.001;
3898 x12AC20.LO=0; x12AC23.LO=0.001; x12AC26.LO=0.001;
3899 x12AC29.LO=0.001; x12AC31.LO=0; x12AC34.LO=0.001;
3900 x12AC37.LO=0.001; x12AC40.LO=0.001; x12AC42.LO=0;
3901 x12AC45.LO=0.001; x1AC09.LO=0; x1AC20.LO=0;
3902 x1AC31.LO=0; x1AC42.LO=0; x1C301.LO=0;
3903 x1C302.LO=0; x1C303.LO=0.05; x1C306.LO=0;
3904 x1C307.LO=0; x1C308.LO=0; x1C309.LO=0;
3905 x1C310.LO=0; x1C311.LO=0; x1C312.LO=0;
3906 x1C315.LO=0.0001; x1C317.LO=0; x1C318.LO=0.0001;
3907 x1C319.LO=0.0001; x1C320.LO=0; x1C321.LO=0.0001;
3908 x1C322.LO=0; x1C323.LO=0; x1C324.LO=0;
3909 x1C326.LO=0.4; x1C328.LO=0.4; x1C329.LO=0.4;
3910 x1C401.LO=0; x1C402.LO=0; x1C403.LO=0;
3911 x1C404.LO=0; x1C405.LO=0; x1C406.LO=0;
3912 x1C407.LO=0; x1C408.LO=0; x1C409.LO=0;
3913 x1C410.LO=0.0001; x1C411.LO=0; x1C412.LO=0;
3914 x1C413.LO=0; x1C414.LO=0; x1C415.LO=0;
3915 x1C418.LO=0; x1C419.LO=0.0001; x1C425.LO=0;
3916 x1C426.LO=0; x1C427.LO=0; x1C428.LO=0;
3917 x1C430.LO=0; x1C431.LO=0; x1C432.LO=0;
3918 x1HC01.LO=0.001; x1HC02.LO=0; x1HC03.LO=0.0001;
3919 x1HC04.LO=0; x1HC05.LO=0; x1HC06.LO=0;
3920 x1HC07.LO=0; x1HC08.LO=0; x1HC11.LO=0;
3921 x1HC14.LO=0; x1HC15.LO=0; x1HC16.LO=0;
3922 x1HC22.LO=0; x1HC23.LO=0; x1HC24.LO=0;
3923 x1HC25.LO=0; x1HC26.LO=0; x1HC27.LO=0;
3924 x1HC28.LO=0; x1HC29.LO=0; x1HC30.LO=0;
3925 x1HC31.LO=0; x1HC33.LO=0; x1HC34.LO=0;
3926 x1HC38.LO=0; x1HC40.LO=0; x1HC41.LO=0;
3927 x1HC45.LO=0; x1R1.LO=0; x1R29.LO=0;

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3928 x1SC401.LO=0; x1SC404.LO=0; x1SC405.LO=0;
3929 x1SC406.LO=0; x1SC407.LO=0; x1SC409.LO=0;
3930 x1SC411.LO=0; x1SC412.LO=0; x1SC413.LO=0;
3931 x1SC414.LO=0; x2AC09.LO=0; x2AC20.LO=0;
3932 x2AC31.LO=0; x2AC42.LO=0; x2C301.LO=0;
3933 x2C417.LO=0; x2C418.LO=0; x2C419.LO=0;
3934 x2HC01.LO=0.1; x2HC02.LO=0.1; x2HC03.LO=0;
3935 x2HC04.LO=0; x2HC05.LO=0; x2HC06.LO=0;
3936 x2HC07.LO=0; x2HC08.LO=0; x2HC11.LO=0;
3937 x2HC14.LO=0; x2HC15.LO=0; x2HC16.LO=0;
3938 x2HC22.LO=0; x2HC23.LO=0; x2HC24.LO=0;
3939 x2HC25.LO=0; x2HC26.LO=0; x2HC27.LO=0;
3940 x2HC28.LO=0; x2HC29.LO=0; x2HC30.LO=0;
3941 x2HC31.LO=0; x2R1.LO=0; x2R29.LO=0;
3942 x2SC401.LO=0; x2SC404.LO=0; x2SC405.LO=0;
3943 x2SC406.LO=0; x2SC407.LO=0; x2SC409.LO=0;
3944 x2SC411.LO=0; x2SC412.LO=0; x2SC413.LO=0;
3945 x2SC414.LO=0; x3AC09.LO=0; x3AC20.LO=0;
3946 x3AC31.LO=0; x3AC42.LO=0; x3C301.LO=0.5;
3947 x3C302.LO=0.45; x3C303.LO=0.5; x3C306.LO=0;
3948 x3C307.LO=0; x3C308.LO=0; x3C309.LO=0.2;
3949 x3C310.LO=0; x3C311.LO=0; x3C312.LO=0;
3950 x3C315.LO=0.0001; x3C317.LO=0.5; x3C318.LO=0.0001;
3951 x3C319.LO=0.0001; x3C320.LO=0.0001; x3C321.LO=0.0001;
3952 x3C322.LO=0; x3C323.LO=0.5; x3C324.LO=0.5;
3953 x3C326.LO=0; x3C328.LO=0; x3C329.LO=0;
3954 x3C401.LO=0; x3C402.LO=0; x3C403.LO=0.0001;
3955 x3C404.LO=0.0001; x3C405.LO=0; x3C406.LO=0;
3956 x3C407.LO=0; x3C408.LO=0; x3C409.LO=0;
3957 x3C410.LO=0.0001; x3C411.LO=0.0001; x3C412.LO=0;
3958 x3C413.LO=0; x3C414.LO=0.5; x3C415.LO=0;
3959 x3C418.LO=0.0001; x3C419.LO=0.0001; x3C425.LO=0;
3960 x3C426.LO=0.0001; x3C427.LO=0; x3C428.LO=0;
3961 x3C430.LO=0; x3C431.LO=0; x3C432.LO=0;
3962 x3HC01.LO=0.01; x3HC02.LO=0; x3HC03.LO=0.1;
3963 x3HC04.LO=0.1; x3HC05.LO=0.1; x3HC06.LO=0.3;
3964 x3HC07.LO=0.3; x3HC08.LO=0.3; x3HC11.LO=0.3;
3965 x3HC14.LO=0.3; x3HC15.LO=0.3; x3HC16.LO=0.3;
3966 x3HC22.LO=0.1; x3HC23.LO=0.1; x3HC24.LO=0.1;
3967 x3HC25.LO=0.1; x3HC26.LO=0.1; x3HC27.LO=0.1;
3968 x3HC28.LO=0.1; x3HC29.LO=0.1; x3HC30.LO=0.1;
3969 x3HC31.LO=0.1; x3HC33.LO=0.1; x3HC34.LO=0.1;
3970 x3HC38.LO=0.1; x3HC40.LO=0.1; x3HC41.LO=0.1;
3971 x3HC45.LO=0.1; x3R1.LO=0; x3R29.LO=0.1;
3972 x3SC401.LO=0.2; x3SC404.LO=0; x3SC405.LO=0;
3973 x3SC406.LO=0; x3SC407.LO=0; x3SC409.LO=0.5;

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3974 x3SC411.LO=0.5; x3SC412.LO=0.5; x3SC413.LO=0.5;
3975 x3SC414.LO=0.5; x4AC09.LO=0; x4AC20.LO=0;
3976 x4AC31.LO=0; x4AC42.LO=0; x4C301.LO=0;
3977 x4C302.LO=0; x4C303.LO=0.05; x4C306.LO=0;
3978 x4C307.LO=0; x4C308.LO=0; x4C309.LO=0;
3979 x4C310.LO=0; x4C311.LO=0; x4C312.LO=0;
3980 x4C315.LO=0.0001; x4C317.LO=0; x4C318.LO=0.0001;
3981 x4C319.LO=0.0001; x4C320.LO=0.0001; x4C321.LO=0.0001;
3982 x4C322.LO=0; x4C323.LO=0.01; x4C324.LO=0.01;
3983 x4C325.LO=0; x4C326.LO=0; x4C328.LO=0;
3984 x4C329.LO=0; x4C401.LO=0.001; x4C402.LO=0.001;
3985 x4C403.LO=0.0001; x4C404.LO=0.0001; x4C405.LO=0.0001;
3986 x4C406.LO=0; x4C407.LO=0.01; x4C408.LO=0;
3987 x4C409.LO=0; x4C410.LO=0.0001; x4C411.LO=0;
3988 x4C412.LO=0.5; x4C413.LO=0.0001; x4C414.LO=0.01;
3989 x4C415.LO=0.0001; x4C418.LO=0.0001; x4C419.LO=0.0001;
3990 x4C425.LO=0; x4C426.LO=0.0001; x4C427.LO=0;
3991 x4C428.LO=0; x4C430.LO=0.5; x4C431.LO=0.0001;
3992 x4C432.LO=0.5; x4HC01.LO=0; x4HC02.LO=0;
3993 x4HC03.LO=0; x4HC04.LO=0; x4HC05.LO=0;
3994 x4HC06.LO=0; x4HC07.LO=0; x4HC08.LO=0;
3995 x4HC11.LO=0; x4HC14.LO=0; x4HC15.LO=0;
3996 x4HC16.LO=0; x4HC22.LO=0; x4HC23.LO=0;
3997 x4HC24.LO=0; x4HC25.LO=0; x4HC26.LO=0;
3998 x4HC27.LO=0; x4HC28.LO=0; x4HC29.LO=0;
3999 x4HC30.LO=0; x4HC31.LO=0; x4HC33.LO=0;
4000 x4HC34.LO=0; x4HC38.LO=0; x4HC40.LO=0;
4001 x4HC41.LO=0; x4HC45.LO=0; x4R1.LO=0;
4002 x4R29.LO=0.01; x4SC401.LO=0.5; x4SC404.LO=0.48;
4003 x4SC405.LO=0.48; x4SC406.LO=0.7; x4SC407.LO=0.7;
4004 x4SC409.LO=0; x4SC411.LO=0; x4SC412.LO=0;
4005 x4SC413.LO=0; x4SC414.LO=0; x5AC09.LO=0;
4006 x5AC20.LO=0; x5AC31.LO=0; x5AC42.LO=0;
4007 x5C301.LO=0; x5C302.LO=0; x5C303.LO=0;
4008 x5C306.LO=0; x5C307.LO=0; x5C308.LO=0;
4009 x5C309.LO=0; x5C310.LO=0; x5C311.LO=0;
4010 x5C312.LO=0; x5C315.LO=0.0001; x5C317.LO=0;
4011 x5C318.LO=0.0001; x5C319.LO=0.0001; x5C320.LO=0;
4012 x5C321.LO=0.0001; x5C322.LO=0; x5C323.LO=0.002;
4013 x5C324.LO=0.002; x5C325.LO=0; x5C326.LO=0;
4014 x5C328.LO=0; x5C329.LO=0; x5C401.LO=0;
4015 x5C402.LO=0; x5C403.LO=0.0001; x5C404.LO=0;
4016 x5C405.LO=0; x5C406.LO=0; x5C407.LO=0;
4017 x5C408.LO=0; x5C409.LO=0; x5C410.LO=0.0001;
4018 x5C411.LO=0; x5C412.LO=0; x5C413.LO=0;
4019 x5C414.LO=0; x5C415.LO=0; x5C418.LO=0;

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4020 x5C419.LO=0.0001; x5C425.LO=0; x5C426.LO=0.0001;
4021 x5C427.LO=0; x5C428.LO=0; x5C430.LO=0;
4022 x5C431.LO=0; x5C432.LO=0; x5HC01.LO=0;
4023 x5HC02.LO=0; x5HC03.LO=0; x5HC04.LO=0;
4024 x5HC05.LO=0; x5HC06.LO=0; x5HC07.LO=0;
4025 x5HC08.LO=0; x5HC11.LO=0; x5HC14.LO=0;
4026 x5HC15.LO=0; x5HC16.LO=0; x5HC22.LO=0;
4027 x5HC23.LO=0; x5HC24.LO=0; x5HC25.LO=0;
4028 x5HC26.LO=0; x5HC27.LO=0; x5HC28.LO=0;
4029 x5HC29.LO=0.01; x5HC30.LO=0; x5HC31.LO=0;
4030 x5HC33.LO=0; x5HC34.LO=0; x5HC38.LO=0;
4031 x5HC40.LO=0; x5HC41.LO=0; x5HC45.LO=0;
4032 x5R1.LO=0; x5R29.LO=0.01; x5SC401.LO=0.008;
4033 x5SC404.LO=0; x5SC405.LO=0; x5SC406.LO=0.01;
4034 x5SC407.LO=0.01; x5SC409.LO=0; x5SC411.LO=0;
4035 x5SC412.LO=0; x5SC413.LO=0; x5SC414.LO=0;
4036 x6SC401.LO=0; x6SC404.LO=0; x6SC405.LO=0;
4037 x6SC406.LO=0; x6SC407.LO=0; x6SC409.LO=0;
4038 x6SC411.LO=0; x6SC412.LO=0; x6SC413.LO=0;
4039 x6SC414.LO=0; x7AC09.LO=0; x7AC20.LO=0;
4040 x7AC31.LO=0; x7AC42.LO=0; x7C301.LO=0;
4041 x7C302.LO=0; x7C303.LO=0; x7C306.LO=0;
4042 x7C307.LO=0; x7C308.LO=0; x7C309.LO=0;
4043 x7C310.LO=0; x7C311.LO=0; x7C312.LO=0;
4044 x7C315.LO=0; x7C316.LO=0; x7C317.LO=0;
4045 x7C318.LO=0; x7C319.LO=0; x7C320.LO=0;
4046 x7C321.LO=0; x7C322.LO=0; x7C323.LO=0;
4047 x7C324.LO=0; x7C325.LO=0; x7C326.LO=0;
4048 x7C328.LO=0; x7C329.LO=0; x7C401.LO=0;
4049 x7C402.LO=0; x7C403.LO=0.0001; x7C404.LO=0.0001;
4050 x7C405.LO=0.0001; x7C406.LO=0.001; x7C407.LO=0.01;
4051 x7C408.LO=0; x7C409.LO=0; x7C410.LO=0.0001;
4052 x7C411.LO=0; x7C412.LO=0; x7C413.LO=0;
4053 x7C414.LO=0; x7C415.LO=0; x7C417.LO=0.0001;
4054 x7C418.LO=0.0001; x7C419.LO=0; x7C425.LO=0.2;
4055 x7C426.LO=0.0001; x7C427.LO=0; x7C428.LO=0;
4056 x7C430.LO=0; x7C431.LO=0; x7C432.LO=0;
4057 x7HC01.LO=0; x7HC02.LO=0; x7HC03.LO=0;
4058 x7HC04.LO=0; x7HC05.LO=0; x7HC06.LO=0;
4059 x7HC07.LO=0; x7HC08.LO=0; x7HC11.LO=0;
4060 x7HC14.LO=0; x7HC15.LO=0; x7HC16.LO=0;
4061 x7HC22.LO=0; x7HC23.LO=0; x7HC24.LO=0;
4062 x7HC25.LO=0; x7HC26.LO=0; x7HC27.LO=0;
4063 x7HC28.LO=0; x7HC29.LO=0.1; x7HC30.LO=0.1;
4064 x7HC31.LO=0.1; x7HC33.LO=0; x7HC34.LO=0;
4065 x7HC38.LO=0; x7HC40.LO=0; x7HC41.LO=0;

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4066 x7HC45.LO=0; x7R1.LO=0; x7R29.LO=0.1;
4067 x7SC401.LO=0; x7SC404.LO=0; x7SC405.LO=0;
4068 x7SC406.LO=0; x7SC407.LO=0; x7SC409.LO=0;
4069 x7SC411.LO=0; x7SC412.LO=0; x7SC413.LO=0;
4070 x7SC414.LO=0; x8AC09.LO=0; x8AC20.LO=0;
4071 x8AC31.LO=0; x8AC42.LO=0; x9AC09.LO=0;
4072 x9AC20.LO=0; x9AC31.LO=0; x9AC42.LO=0;
4073 xAC02.LO=0.4; xAC05.LO=0.4; xAC07.LO=0.4;
4074 xAC09.LO=0.4; xAC12.LO=0.4; xAC15.LO=0.4;
4075 xAC18.LO=0.4; xAC20.LO=0.4; xAC23.LO=0.4;
4076 xAC26.LO=0.4; xAC29.LO=0.4; xAC31.LO=0.4;
4077 xAC34.LO=0.4; xAC37.LO=0.4; xAC40.LO=0.4;
4078 xAC42.LO=0.4; xiC10AC09.LO=0; xiC10AC20.LO=0;
4079 xiC10AC31.LO=0; xiC10AC42.LO=0; xiC11AC09.LO=0;
4080 xiC11AC20.LO=0; xiC11AC31.LO=0; xiC11AC42.LO=0;
4081 xM1C606D.LO=0; xM3C606D.LO=0; xM4C606D.LO=0;
4082 xM5C606D.LO=0; xM7C606D.LO=0; xx1C302.LO=0;
4083 xx1C308.LO=0; xx1C310.LO=0; xx1C311.LO=0;
4084 xx1C312.LO=0; xx1C323.LO=0; xx1C325.LO=0.4;
4085 xx1C405.LO=0; xx1C408.LO=0; xx1C425.LO=0;
4086 xx1C428.LO=0; xx1C430.LO=0; xx1C431.LO=0;
4087 xx1HC29.LO=0.01; xx1HC30.LO=0.01; xx1HC32.LO=0.01;
4088 xx1R1.LO=0; xx1R29.LO=0;
4089 xx1SC406.LO=0; xx1SC408.LO=0; xx2HC28.LO=0;
4090 xx2HC29.LO=0; xx2HC30.LO=0; xx2R1.LO=0;
4091 xx2R29.LO=0; xx2SC406.LO=0; xx2SC408.LO=0;
4092 xx3C302.LO=0.5; xx3C308.LO=0; xx3C310.LO=0;
4093 xx3C311.LO=0; xx3C312.LO=0; xx3C323.LO=0.5;
4094 xx3C325.LO=0; xx3C405.LO=0; xx3C408.LO=0;
4095 xx3C425.LO=0; xx3C428.LO=0; xx3C430.LO=0;
4096 xx3C431.LO=0; xx3C432.LO=0; xx3HC28.LO=0.2;
4097 xx3HC29.LO=0.1; xx3HC30.LO=0.1; xx3HC32.LO=0.3;
4098 xx3R1.LO=0.1; xx3R29.LO=0.1; xx3SC406.LO=0;
4099 xx3SC408.LO=0.5; xx4C302.LO=0; xx4C308.LO=0;
4100 xx4C310.LO=0; xx4C311.LO=0; xx4C312.LO=0;
4101 xx4C323.LO=0.08; xx4C325.LO=0; xx4C405.LO=0.0001;
4102 xx4C408.LO=0; xx4C409.LO=0.0001; xx4C425.LO=0;
4103 xx4C427.LO=0; xx4C428.LO=0; xx4C430.LO=0.5;
4104 xx4C431.LO=0.0001; xx4C432.LO=0.5; xx4HC28.LO=0.01;
4105 xx4HC29.LO=0.01; xx4HC30.LO=0.01; xx4HC32.LO=0;
4106 xx4R1.LO=0; xx4R29.LO=0.01; xx4SC406.LO=0.6;
4107 xx4SC408.LO=0; xx5C302.LO=0; xx5C308.LO=0;
4108 xx5C310.LO=0; xx5C311.LO=0; xx5C312.LO=0;
4109 xx5C323.LO=0.001; xx5C325.LO=0; xx5C405.LO=0.0001;
4110 xx5C408.LO=0; xx5C425.LO=0; xx5C428.LO=0;
4111 xx5C430.LO=0; xx5C431.LO=0; xx5HC28.LO=0.01;

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4112 xx5HC29.LO=0; xx5HC30.LO=0; xx5HC32.LO=0;
4113 xx5R1.LO=0; xx5R29.LO=0; xx5SC406.LO=0;
4114 xx5SC408.LO=0; xx6SC406.LO=0; xx6SC408.LO=0;
4115 xx7C302.LO=0; xx7C308.LO=0; xx7C310.LO=0;
4116 xx7C311.LO=0; xx7C312.LO=0; xx7C323.LO=0.002;
4117 xx7C325.LO=0; xx7C405.LO=0.0001; xx7C408.LO=0;
4118 xx7C425.LO=0; xx7C428.LO=0; xx7C430.LO=0;
4119 xx7C431.LO=0; xx7HC28.LO=0.1; xx7HC29.LO=0;
4120 xx7HC30.LO=0.1; xx7HC32.LO=0; xx7R1.LO=0.1;
4121 xx7R29.LO=0.1; xx7SC406.LO=0; xx7SC408.LO=0;
4122 y1HC28.LO=0.05; y1HC29.LO=0.05; y1HC30.LO=0.05;
4123 y1HC31.LO=0.05; y1R1.LO=0; y1R29.LO=0.05;
4124 y2HC28.LO=0; y2HC29.LO=0; y2HC30.LO=0;
4125 y2HC31.LO=0; y2R1.LO=0; y2R29.LO=0;
4126 y3HC28.LO=0.2; y3HC29.LO=0.1; y3HC30.LO=0.1;
4127 y3HC31.LO=0.1; y3R1.LO=0.1; y3R29.LO=0.1;
4128 y4HC28.LO=0; y4HC29.LO=0; y4HC30.LO=0.01;
4129 y4HC31.LO=0; y4R1.LO=0; y4R29.LO=0;
4130 y5HC28.LO=0; y5HC29.LO=0; y5HC30.LO=0;
4131 y5HC31.LO=0; y5R1.LO=0; y5R29.LO=0;
4132 y7HC28.LO=0.01; y7HC29.LO=0; y7HC30.LO=0;
4133 y7HC31.LO=0; y7R1.LO=0; y7R29.LO=0;
4134 yy1HC28.LO=0.1; yy1HC29.LO=0.1; yy1HC30.LO=0.05;
4135 yy1R1.LO=0.1; yy1R29.LO=0.05; yy2HC28.LO=0;
4136 yy2HC29.LO=0; yy2HC30.LO=0; yy2R1.LO=0;
4137 yy2R29.LO=0; yy3HC28.LO=0.1; yy3HC29.LO=0.1;
4138 yy3HC30.LO=0.1; yy3R1.LO=0.1; yy3R29.LO=0.1;
4139 yy4HC28.LO=0.01; yy4HC29.LO=0.01; yy4HC30.LO=0.01;
4140 yy4R1.LO=0; yy4R29.LO=0.01; yy5HC28.LO=0.001;
4141 yy5HC29.LO=0; yy5HC30.LO=0; yy5R1.LO=0;
4142 yy5R29.LO=0; yy7HC28.LO=0; yy7HC29.LO=0;
4143 yy7HC30.LO=0; yy7R1.LO=0; yy7R29.LO=0;
4144 C10pC623.UP=0.5; C10pC625.UP=0.5; C10pC627.UP=0.5;
4145 C10pC629.UP=0.5; C2C623.UP=0.1; C2C625.UP=0.1;
4146 C2C627.UP=0.1; C2C629.UP=0.1; C3C623.UP=6;
4147 C3C625.UP=6; C3C627.UP=6; C3C629.UP=6;
4148 C3pC623.UP=10; C3pC625.UP=10; C3pC627.UP=10;
4149 C3pC629.UP=10; C4pC623.UP=1; C4pC625.UP=1;
4150 C4pC627.UP=1; C4pC629.UP=1; C5pC623.UP=0.1;
4151 C5pC625.UP=0.1; C5pC627.UP=0.1; C5pC629.UP=0.1;
4152 C7pC623.UP=0.1; C7pC625.UP=0.1; C7pC627.UP=0.1;
4153 C7pC629.UP=0.1; C8pC623.UP=0.1; C8pC625.UP=0.1;
4154 C8pC627.UP=0.1; C8pC629.UP=0.1; C9pC623.UP=10;
4155 C9pC625.UP=10; C9pC627.UP=10; C9pC629.UP=10;
4156 CHXC623.UP=15; CHXC625.UP=15; CHXC627.UP=15;
4157 CHXC629.UP=15; CiC10pC623.UP=1; CiC10pC625.UP=1;

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4158 CiC10pC627.UP=1; CiC10pC629.UP=1; CiC11pC623.UP=0.1;
4159 CiC11pC625.UP=0.1; CiC11pC627.UP=0.1; CiC11pC629.UP=0.1;
4160 CiC4eC623.UP=0.1; CiC4eC625.UP=0.1; CiC4eC627.UP=0.1;
4161 CiC4eC629.UP=0.1; CiC5eC623.UP=0.1; CiC5eC625.UP=0.1;
4162 CiC5eC627.UP=0.1; CiC5eC629.UP=0.1; CiC8eC623.UP=0.3;
4163 CiC8eC625.UP=0.3; CiC8eC627.UP=0.3; CiC8eC629.UP=0.3;
4164 Cost.UP=10000; dTE601.UP=50; dTE602.UP=90;
4165 dTE603.UP=50; dTE605.UP=50; dTE609A.UP=20;
4166 dTE610.UP=50; dTE611.UP=50; dTE612.UP=90;
4167 dTE613.UP=30; dTE616.UP=120; dTE617.UP=50;
4168 dTE621A.UP=50; dTE621B.UP=40; dTE626.UP=50;
4169 dTE627A.UP=55; dTE627B.UP=50; dTE628.UP=60;
4170 dTE629.UP=80; dTE633.UP=50; dTE634.UP=20;
4171 dTE640.UP=50; dTE641.UP=50; dTE695A.UP=90;
4172 dTE695B.UP=60; dTE696A.UP=90; dTE696B.UP=90;
4173 dTE6XX.UP=50; Earnings.UP=10000; f1C601.UP=0.1;
4174 f1C603.UP=1; f1C606A.UP=1; f2C601.UP=1;
4175 f3C601.UP=1; f3C603.UP=1; f3C606A.UP=1;
4176 f4C601.UP=1; f4C603.UP=1; f4C606A.UP=1;
4177 f5C601.UP=1; f5C603.UP=1; f5C606A.UP=1;
4178 f6C601.UP=1; f7C601.UP=1; f7C603.UP=1;
4179 f7C606A.UP=1; FAC05.UP=20; FAC07.UP=20;
4180 FAC09.UP=20; FAC15.UP=20; FAC18.UP=20;
4181 FAC20.UP=20; FAC26.UP=20; FAC29.UP=20;
4182 FAC31.UP=20; FAC37.UP=20; FAC40.UP=20;
4183 FAC42.UP=20; FC301.UP=6; FC302.UP=5;
4184 FC303.UP=6; FC306.UP=15; FC307.UP=15;
4185 FC309.UP=10; FC310.UP=3; FC311.UP=8;
4186 FC312.UP=5; FC315.UP=5; FC317.UP=3;
4187 FC318.UP=3; FC319.UP=3; FC321.UP=5;
4188 FC323.UP=3; FC324.UP=3; FC325.UP=3;
4189 FC326.UP=3; FC401.UP=5; FC402.UP=5;
4190 FC404.UP=5; FC405.UP=2; FC406.UP=5;
4191 FC408.UP=10; FC409.UP=10; FC410.UP=10;
4192 FC411.UP=10; FC413.UP=1; FC414.UP=5;
4193 FC415.UP=10; FC418.UP=5; FC419.UP=10;
4194 FC425.UP=10; FC426.UP=5; FC427.UP=10;
4195 FC428.UP=5; FC430.UP=10; FC431.UP=10;
4196 FC432.UP=5; FcweE603.UP=20; FcweE605.UP=15;
4197 FcweE609A.UP=1; FcweE611.UP=20; FcweE613.UP=15;
4198 FcweE617.UP=25; FcweE621A.UP=10; FcweE621B.UP=20;
4199 FcweE626.UP=20; FcweE627A.UP=10; FcweE627B.UP=30;
4200 FcweE634.UP=60; FcweE640.UP=50; FcweE641A.UP=30;
4201 FcweE641B.UP=10; FHC02.UP=5; FHC03.UP=10;
4202 FHC04.UP=10; FHC05.UP=10; FHC06.UP=12;
4203 FHC07.UP=5; FHC08.UP=5; FHC11.UP=5;

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4204 FHC14.UP=5; FHC15.UP=5; FHC16.UP=5;
4205 FHC22.UP=6; FHC23.UP=6; FHC24.UP=6;
4206 FHC25.UP=6; FHC26.UP=6; FHC27.UP=10;
4207 FHC28.UP=12; FHC29.UP=12; FHC30.UP=12;
4208 FHC31.UP=12; FHC33.UP=1; FHC34.UP=1;
4209 FHC38.UP=1; FHC40.UP=1; FHC41.UP=1;
4210 FHC45.UP=1; FlHC28.UP=10; FlHC29.UP=12;
4211 FlHC30.UP=12; FlHC31.UP=12; FlR1.UP=10;
4212 FlR29.UP=12; FmC302.UP=0.1; FmC308.UP=0.5;
4213 FmC310.UP=0.8; FmC311.UP=0.5; FmC312.UP=0.1;
4214 FmC317.UP=0.1; FmC322.UP=1; FmC323.UP=0.4;
4215 FmC325.UP=1; FmC405.UP=0.1; FmC407.UP=0.1;
4216 FmC408.UP=2; FmC409.UP=0.2; FmC412.UP=0.1;
4217 FmC414.UP=0.1; FmC425.UP=2; FmC427.UP=0.2;
4218 FmC428.UP=0.1; FmC430.UP=0.2; FmC431.UP=1;
4219 FmC432.UP=0.1; FmHC01.UP=0.1; FmHC32.UP=0.1;
4220 FmlHC28.UP=0.2; FmlHC29.UP=0.1; FmlHC30.UP=0.1;
4221 FmlR1.UP=0.2; FmlR29.UP=0.1; FmSC403.UP=0.1;
4222 FmSC406.UP=0.1; FmSC408.UP=1; FmvHC28.UP=0.2;
4223 FmvHC29.UP=0.1; FmvHC30.UP=0.1; FmvR1.UP=0.2;
4224 FmvR29.UP=0.1; FR1.UP=12; FR29.UP=12;
4225 FSC401.UP=5; FSC403.UP=3; FSC404.UP=3;
4226 FSC406.UP=3; FSC407.UP=3; FSC408.UP=3.2;
4227 FSC409.UP=3.2; FSC412.UP=1; FSC414.UP=0.5;
4228 FstmE602.UP=1; FstmE695A.UP=10; FstmE695B.UP=10;
4229 FstmE696A.UP=10; FstmE696B.UP=10; FvHC28.UP=8;
4230 FvHC29.UP=12; FvHC30.UP=12; FvHC31.UP=12;
4231 FvR1.UP=12; FvR29.UP=12; h1C601.UP=2;
4232 h1C603.UP=1; h1C606A.UP=10; h2C601.UP=5;
4233 h3C601.UP=6; h3C603.UP=1; h3C606A.UP=-35;
4234 h4C601.UP=2; h4C603.UP=1; h4C606A.UP=1;
4235 h5C601.UP=1.5; h5C603.UP=1.5; h5C606A.UP=2;
4236 h6C601.UP=3; h7C601.UP=1.5; h7C603.UP=1.5;
4237 h7C606A.UP=1; hAC02.UP=10000; hAC05.UP=10000;
4238 hAC07.UP=10000; hAC09.UP=10000; hAC12.UP=10000;
4239 hAC15.UP=10000; hAC18.UP=10000; hAC20.UP=10000;
4240 hAC23.UP=10000; hAC26.UP=10000; hAC29.UP=10000;
4241 hAC31.UP=10000; hAC34.UP=10000; hAC37.UP=10000;
4242 hAC40.UP=10000; hAC42.UP=10000; hacAC09.UP=10000;
4243 hacAC20.UP=10000; hacAC31.UP=10000; hacAC42.UP=10000;
4244 hc301.UP=10000; hc302.UP=5000; hc303.UP=10000;
4245 hc306.UP=10000; hc307.UP=10000; hc308.UP=10000;
4246 hc309.UP=10000; hc310.UP=5000; hc311.UP=10000;
4247 hc312.UP=10000; hc312liq.UP=10000; hc315.UP=10000;
4248 hc316.UP=10000; hc317.UP=10000; hc318.UP=10000;
4249 hc319.UP=10000; hc321.UP=5000; hc322.UP=5000;

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4250 hC323.UP=10000; hC324.UP=10000; hC325.UP=10000;
4251 hC326.UP=5000; hC329.UP=5000; hC401.UP=5000;
4252 hC402.UP=10000; hC403.UP=10000; hC404.UP=10000;
4253 hC405.UP=5000; hC406.UP=5000; hC407.UP=5000;
4254 hC408.UP=10000; hC408vap.UP=10000; hC409.UP=10000;
4255 hC410.UP=10000; hC410vap.UP=10000; hC411.UP=10000;
4256 hC412.UP=5000; hC412liq.UP=1000; hC413.UP=5000;
4257 hC414.UP=10000; hC414liq.UP=10000; hC415.UP=5000;
4258 hC417.UP=5000; hC418.UP=10000; hC419.UP=10000;
4259 hC425.UP=10000; hC426.UP=5000; hC427.UP=10000;
4260 hC428.UP=10000; hC430.UP=10000; hC431.UP=10000;
4261 hC432.UP=10000; hC623.UP=5000; hC625.UP=5000;
4262 hC627.UP=5000; hC629.UP=5000; hHC01.UP=5000;
4263 hHC02.UP=5000; hHC03.UP=10000; hHC04.UP=10000;
4264 hHC05.UP=10000; hHC06.UP=10000; hHC07.UP=5000;
4265 hHC11.UP=5000; hHC14.UP=5000; hHC16.UP=5000;
4266 hHC29.UP=10000; hHC30.UP=10000; hHC31.UP=10000;
4267 hHC32.UP=5000; hHC34.UP=5000; hHC38.UP=5000;
4268 hHC41.UP=5000; hHC45.UP=5000; h1HC29.UP=10000;
4269 h1HC30.UP=10000; h1HC31.UP=10000; h1R1.UP=10000;
4270 h1R29.UP=10000; hR1.UP=10000; hR29.UP=10000;
4271 hSC401.UP=10000; hSC402.UP=10000; hSC403.UP=10000;
4272 hSC404.UP=10000; hSC405.UP=10000; hSC406.UP=10000;
4273 hSC407.UP=10000; hSC408.UP=10000; hSC409.UP=5000;
4274 hSC411.UP=5000; hSC412.UP=10000; hSC413.UP=10000;
4275 hSC414.UP=500; hvHC29.UP=10000; hvHC30.UP=10000;
4276 hvHC31.UP=10000; hvR1.UP=10000; hvR29.UP=10000;
4277 K1C323.UP=3; K1C325.UP=2; K1C408.UP=15;
4278 K1C414.UP=4; K1C428.UP=10; K1C430.UP=6;
4279 K1C601.UP=3; K1C603.UP=3; K1C606A.UP=3;
4280 K1C606C.UP=7; K1C614B.UP=3.5; K1C615_A.UP=4;
4281 K1C616_A.UP=5; K1E633.UP=5.5; K1E6XX.UP=5.5;
4282 K1SC406.UP=5; K1SC408.UP=3.5; K2C601.UP=1;
4283 K2E633.UP=1.5; K2E6XX.UP=1.5; K2SC406.UP=1.2;
4284 K2SC408.UP=1; K3C323.UP=1.5; K3C325.UP=1.5;
4285 K3C408.UP=6; K3C414.UP=3; K3C428.UP=5;
4286 K3C430.UP=5; K3C601.UP=2; K3C603.UP=1;
4287 K3C606A.UP=3; K3C606C.UP=5; K3C614B.UP=1.5;
4288 K3C615_A.UP=2; K3C616_A.UP=2; K3E633.UP=2;
4289 K3E6XX.UP=3; K3SC406.UP=2; K3SC408.UP=1.5;
4290 K4C323.UP=1; K4C325.UP=1; K4C408.UP=5;
4291 K4C414.UP=2; K4C428.UP=5; K4C430.UP=3;
4292 K4C601.UP=1; K4C603.UP=1; K4C606A.UP=3;
4293 K4C606C.UP=4; K4C614B.UP=1; K4C615_A.UP=1.5;
4294 K4C616_A.UP=1.5; K4E633.UP=1.5; K4E6XX.UP=1.5;
4295 K4SC406.UP=1.5; K4SC408.UP=1; K5C323.UP=0.6;

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4296 K5C325.UP=0.6; K5C408.UP=3; K5C414.UP=2;
4297 K5C428.UP=2; K5C430.UP=1.5; K5C601.UP=0.5;
4298 K5C603.UP=0.5; K5C606A.UP=1; K5C606C.UP=1.2;
4299 K5C614B.UP=0.8; K5C615_A.UP=1; K5C616_A.UP=1;
4300 K5E633.UP=1; K5E6XX.UP=1; K5SC406.UP=0.6;
4301 K5SC408.UP=0.6; K6C601.UP=1; K6SC406.UP=0.5;
4302 K6SC408.UP=0.5; K7C323.UP=0.3; K7C325.UP=0.2;
4303 K7C408.UP=1; K7C414.UP=1; K7C428.UP=2;
4304 K7C430.UP=1; K7C601.UP=0.5; K7C603.UP=0.5;
4305 K7C606A.UP=0.5; K7C614B.UP=0.1; K7C615_A.UP=1;
4306 K7C616_A.UP=1; K7E633.UP=0.1; K7E6XX.UP=0.1;
4307 K7SC406.UP=0.3; K7SC408.UP=0.2; Kp1C601.UP=5;
4308 Kp1C603.UP=3; Kp1C606A.UP=5; Kp1C606D.UP=12;
4309 Kp2C601.UP=1.5; Kp3C601.UP=2; Kp3C603.UP=1.5;
4310 Kp3C606A.UP=3; Kp3C606D.UP=5; Kp4C601.UP=1.5;
4311 Kp4C603.UP=1; Kp4C606A.UP=3; Kp4C606D.UP=5;
4312 Kp5C601.UP=1; Kp5C603.UP=0.5; Kp5C606A.UP=1;
4313 Kp5C606D.UP=5; Kp6C601.UP=1; Kp7C601.UP=1;
4314 Kp7C603.UP=0.3; Kp7C606A.UP=0.5; Kp7C606D.UP=5;
4315 kWad1.UP=300; kWad2.UP=355; LpC601.UP=5;
4316 LpC603.UP=10; LpC606A.UP=5; PC303.UP=140;
4317 PC306.UP=900; PC307.UP=850; PC308.UP=800;
4318 PC309.UP=780; PC311.UP=400; PC312.UP=850;
4319 PHC30.UP=140; PHC32.UP=200; PR29.UP=140;
4320 Profit.UP=10000; Q2HC07.UP=1; Q2HC11.UP=1;
4321 Q2HC14.UP=1; Q2HC16.UP=1; qFp1C606A.UP=1;
4322 qFp3C606A.UP=0.1; qFp4C606A.UP=1; qFp5C606A.UP=1;
4323 qFp7C606A.UP=1; qS1C606A.UP=1; qS3C606A.UP=1;
4324 qS4C606A.UP=0.5; qS5C606A.UP=0.55; qS7C606A.UP=0.16;
4325 r10C623.UP=0.1; r10C625.UP=0.1; r10C627.UP=0.1;
4326 r10C629.UP=0.1; r2C623.UP=0.832; r2C625.UP=0.832;
4327 r2C627.UP=0.832; r2C629.UP=0.832; r3C623.UP=0.15;
4328 r3C625.UP=0.15; r3C627.UP=0.15; r3C629.UP=0.15;
4329 r4C623.UP=0.03; r4C625.UP=0.03; r4C627.UP=0.03;
4330 r4C629.UP=0.03; r5C623.UP=0.3; r5C625.UP=0.3;
4331 r5C627.UP=0.3; r5C629.UP=0.3; r7C623.UP=0.05;
4332 r7C625.UP=0.05; r7C627.UP=0.05; r7C629.UP=0.05;
4333 r8C623.UP=0.1; r8C625.UP=0.1; r8C627.UP=0.1;
4334 r8C629.UP=0.1; r9C623.UP=0.1; r9C625.UP=0.1;
4335 r9C627.UP=0.1; r9C629.UP=0.1; rho2HC07.UP=650;
4336 rho2HC11.UP=650; rho2HC14.UP=650; rho2HC16.UP=650;
4337 rhoAC09.UP=1700; rhoAC20.UP=1700; rhoAC31.UP=1700;
4338 rhoAC42.UP=1700; riC10C623.UP=0.3; riC10C625.UP=0.3;
4339 riC10C627.UP=0.3; riC10C629.UP=0.3; riC11C623.UP=0.1;
4340 riC11C625.UP=0.1; riC11C627.UP=0.1; riC11C629.UP=0.1;
4341 sf1S34.UP=1; sf2S34.UP=1; sfS11.UP=0.8;

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4342 sfs19.UP=0.8; sfs2.UP=1; sfs23.UP=0.8;
4343 sfs27.UP=0.8; sfs41.UP=1; sfs42.UP=1;
4344 sfs5.UP=0.5; sfs7.UP=0.8; SmlC601.UP=5;
4345 SmlC603.UP=1; SmlC606A.UP=5; SmlC606D.UP=5;
4346 Sm2C601.UP=1; Sm3C601.UP=2; Sm3C603.UP=0.5;
4347 Sm3C606A.UP=5; Sm3C606D.UP=10; Sm4C601.UP=1.5;
4348 Sm4C603.UP=0.5; Sm4C606A.UP=5; Sm4C606D.UP=5;
4349 Sm5C601.UP=0.6; Sm5C603.UP=0.5; Sm5C606A.UP=5;
4350 Sm5C606D.UP=5; Sm6C601.UP=1; Sm7C601.UP=0.2;
4351 Sm7C603.UP=0.2; Sm7C606A.UP=5; Sm7C606D.UP=5;
4352 Sn1C601.UP=5; Sn1C603.UP=3; Sn1C606A.UP=20;
4353 Sn2C601.UP=1.5; Sn3C601.UP=1.5; Sn3C603.UP=1.5;
4354 Sn3C606A.UP=15; Sn4C601.UP=1; Sn4C603.UP=1;
4355 Sn4C606A.UP=10; Sn5C601.UP=0.8; Sn5C603.UP=0.4;
4356 Sn5C606A.UP=10; Sn6C601.UP=1; Sn7C601.UP=0.5;
4357 Sn7C603.UP=0.5; Sn7C606A.UP=5; TAC02.UP=290;
4358 TAC05.UP=300; TAC07.UP=300; TAC15.UP=300;
4359 TAC18.UP=300; TAC20.UP=300; TAC26.UP=300;
4360 TAC29.UP=300; TAC37.UP=300; TAC40.UP=300;
4361 TC301.UP=300; TC302.UP=290; TC309.UP=350;
4362 TC310.UP=310; TC311.UP=310; TC312.UP=369;
4363 TC318.UP=365; TC319.UP=400; TC320.UP=400;
4364 TC322.UP=400; TC323.UP=420; TC326.UP=360;
4365 TC328.UP=360; TC329.UP=375; TC401.UP=300;
4366 TC402.UP=305; TC403.UP=320; TC406.UP=400;
4367 TC409.UP=461; TC411.UP=418; TC412.UP=405;
4368 TC413.UP=350; TC415.UP=400; TC417.UP=350;
4369 TC425.UP=410; TC426.UP=410; TC427.UP=405;
4370 TC428.UP=405; TC430.UP=400; TC431.UP=405;
4371 TC432.UP=400; TcwotE609A.UP=320; TcwotE621A.UP=355;
4372 TcwotE621B.UP=325; TcwotE627A.UP=360; TcwotE627B.UP=310;
4373 TcwotE641A.UP=360; TcwotE641B.UP=325; TcwoutE603.UP=350;
4374 TcwoutE605.UP=320; TcwoutE611.UP=350; TcwoutE613.UP=320;
4375 TcwoutE617.UP=350; TcwoutE626.UP=310; TcwoutE634.UP=360;
4376 TcwoutE640.UP=330; THC01.UP=370; THC02.UP=302;
4377 THC03.UP=360; THC04.UP=310; THC05.UP=300;
4378 THC06.UP=300; THC07.UP=300; THC11.UP=300;
4379 THC14.UP=300; THC16.UP=300; THC22.UP=290;
4380 THC23.UP=290; THC24.UP=290; THC25.UP=290;
4381 THC26.UP=290; THC27.UP=290; THC28.UP=290;
4382 THC29.UP=290; THC30.UP=300; THC31.UP=310;
4383 THC34.UP=310; THC38.UP=310; THC41.UP=310;
4384 THC45.UP=310; TmC601.UP=360; TmC603.UP=375;
4385 TmC606A.UP=370; TmC606D.UP=400; TmK601.UP=333;
4386 TnC601.UP=340; TnC603.UP=375; TnC606A.UP=370;
4387 TR1.UP=290; TR29.UP=300; TSC401.UP=350;

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4388 TSC404.UP=365; TSC406.UP=360; TSC407.UP=400;
4389 TSC409.UP=360; TSC411.UP=375; TSC412.UP=360;
4390 TSC414.UP=320; Utilities.UP=10000; VFC614B.UP=0.8;
4391 VFC615.UP=0.6; VFC616.UP=1; VFM3.UP=0.55;
4392 VpC601.UP=5; VpC603.UP=3; VpC606A.UP=10;
4393 x10AC09.UP=0.1; x10AC20.UP=0.1; x10AC31.UP=0.1;
4394 x10AC42.UP=0.1; x11AC02.UP=0.998; x11AC05.UP=0.999;
4395 x11AC07.UP=0.999; x11AC09.UP=1; x11AC15.UP=0.999;
4396 x11AC18.UP=0.999; x11AC20.UP=1; x11AC26.UP=0.999;
4397 x11AC29.UP=0.999; x11AC31.UP=1; x11AC37.UP=0.999;
4398 x11AC40.UP=0.999; x11AC42.UP=1; x12AC02.UP=0.03;
4399 x12AC05.UP=0.11; x12AC07.UP=0.11; x12AC09.UP=0.1;
4400 x12AC12.UP=0.12; x12AC15.UP=0.11; x12AC18.UP=0.11;
4401 x12AC20.UP=0.1; x12AC23.UP=0.12; x12AC26.UP=0.11;
4402 x12AC29.UP=0.11; x12AC31.UP=0.1; x12AC34.UP=0.12;
4403 x12AC37.UP=0.11; x12AC40.UP=0.11; x12AC42.UP=0.1;
4404 x12AC45.UP=0.12; x1AC09.UP=0.1; x1AC20.UP=0.1;
4405 x1AC31.UP=0.1; x1AC42.UP=0.1; x1C301.UP=0.2;
4406 x1C302.UP=0.2; x1C303.UP=0.22; x1C306.UP=0.5;
4407 x1C307.UP=0.5; x1C308.UP=0.4; x1C309.UP=0.5;
4408 x1C310.UP=0.5; x1C311.UP=0.2; x1C312.UP=1;
4409 x1C315.UP=1; x1C317.UP=0.3; x1C318.UP=0.3;
4410 x1C319.UP=0.1; x1C320.UP=0.1; x1C321.UP=0.1;
4411 x1C322.UP=0.15; x1C323.UP=0.2; x1C324.UP=0.3;
4412 x1C326.UP=1; x1C328.UP=1; x1C329.UP=1;
4413 x1C401.UP=0.2; x1C402.UP=0.2; x1C403.UP=0.2;
4414 x1C404.UP=0.2; x1C405.UP=0.01; x1C406.UP=0.01;
4415 x1C407.UP=0.01; x1C408.UP=1; x1C409.UP=0.01;
4416 x1C410.UP=1; x1C411.UP=0.1; x1C412.UP=0.05;
4417 x1C413.UP=0.1; x1C414.UP=0.25; x1C415.UP=0.2;
4418 x1C418.UP=0.3; x1C419.UP=0.2; x1C425.UP=0.1;
4419 x1C426.UP=0.1; x1C427.UP=1; x1C428.UP=0.1;
4420 x1C430.UP=0.1; x1C431.UP=0.1; x1C432.UP=0.1;
4421 x1HC01.UP=0.3; x1HC02.UP=0.3; x1HC03.UP=0.2;
4422 x1HC04.UP=0.2; x1HC05.UP=0.2; x1HC06.UP=0.2;
4423 x1HC07.UP=0.2; x1HC08.UP=0.2; x1HC11.UP=0.2;
4424 x1HC14.UP=0.2; x1HC15.UP=0.2; x1HC16.UP=0.2;
4425 x1HC22.UP=0.5; x1HC23.UP=0.5; x1HC24.UP=0.5;
4426 x1HC25.UP=0.5; x1HC26.UP=0.5; x1HC27.UP=0.5;
4427 x1HC28.UP=0.2; x1HC29.UP=0.2; x1HC30.UP=0.2;
4428 x1HC31.UP=0.1; x1HC33.UP=0.1; x1HC34.UP=0.1;
4429 x1HC38.UP=0.1; x1HC40.UP=0.1; x1HC41.UP=0.1;
4430 x1HC45.UP=0.1; x1R1.UP=0.1; x1R29.UP=0.2;
4431 x1SC401.UP=0.1; x1SC404.UP=0.1; x1SC405.UP=0.1;
4432 x1SC406.UP=0.1; x1SC407.UP=0.1; x1SC409.UP=0.1;
4433 x1SC411.UP=0.1; x1SC412.UP=0.1; x1SC413.UP=0.1;

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4434 x1SC414.UP=0.1; x2AC09.UP=1; x2AC20.UP=1;
4435 x2AC31.UP=1; x2AC42.UP=1; x2C301.UP=0.01;
4436 x2C417.UP=0.1; x2C418.UP=0.1; x2C419.UP=0.1;
4437 x2HC01.UP=0.7; x2HC02.UP=1; x2HC03.UP=0.1;
4438 x2HC04.UP=0.1; x2HC05.UP=0.1; x2HC06.UP=0.15;
4439 x2HC07.UP=0.15; x2HC08.UP=0.15; x2HC11.UP=0.15;
4440 x2HC14.UP=0.15; x2HC15.UP=0.15; x2HC16.UP=0.15;
4441 x2HC22.UP=0.1; x2HC23.UP=0.1; x2HC24.UP=0.1;
4442 x2HC25.UP=0.1; x2HC26.UP=0.1; x2HC27.UP=0.1;
4443 x2HC28.UP=0.1; x2HC29.UP=0.1; x2HC30.UP=0.1;
4444 x2HC31.UP=0.1; x2R1.UP=0.1; x2R29.UP=0.1;
4445 x2SC401.UP=0.1; x2SC404.UP=0.1; x2SC405.UP=0.1;
4446 x2SC406.UP=0.1; x2SC407.UP=0.1; x2SC409.UP=0.1;
4447 x2SC411.UP=0.1; x2SC412.UP=0.1; x2SC413.UP=0.1;
4448 x2SC414.UP=0.1; x3AC09.UP=0.7; x3AC20.UP=0.7;
4449 x3AC31.UP=0.7; x3AC42.UP=0.7; x3C301.UP=1;
4450 x3C302.UP=1; x3C303.UP=0.8; x3C306.UP=1;
4451 x3C307.UP=1; x3C308.UP=1; x3C309.UP=0.8;
4452 x3C310.UP=1; x3C311.UP=1; x3C312.UP=1;
4453 x3C315.UP=1; x3C317.UP=1; x3C318.UP=1;
4454 x3C319.UP=1; x3C320.UP=1; x3C321.UP=1;
4455 x3C322.UP=1; x3C323.UP=0.95; x3C324.UP=0.95;
4456 x3C326.UP=0.5; x3C328.UP=0.5; x3C329.UP=0.5;
4457 x3C401.UP=1; x3C402.UP=0.8; x3C403.UP=1;
4458 x3C404.UP=1; x3C405.UP=0.1; x3C406.UP=0.01;
4459 x3C407.UP=0.01; x3C408.UP=1; x3C409.UP=0.01;
4460 x3C410.UP=0.1; x3C411.UP=0.2; x3C412.UP=0.1;
4461 x3C413.UP=0.1; x3C414.UP=1; x3C415.UP=1;
4462 x3C418.UP=1; x3C419.UP=1; x3C425.UP=0.1;
4463 x3C426.UP=0.1; x3C427.UP=1; x3C428.UP=0.3;
4464 x3C430.UP=0.1; x3C431.UP=0.1; x3C432.UP=0.1;
4465 x3HC01.UP=0.6; x3HC02.UP=0.5; x3HC03.UP=1;
4466 x3HC04.UP=1; x3HC05.UP=1; x3HC06.UP=1;
4467 x3HC07.UP=1; x3HC08.UP=1; x3HC11.UP=1;
4468 x3HC14.UP=1; x3HC15.UP=1; x3HC16.UP=1;
4469 x3HC22.UP=0.9; x3HC23.UP=0.9; x3HC24.UP=0.9;
4470 x3HC25.UP=0.9; x3HC26.UP=0.9; x3HC27.UP=0.9;
4471 x3HC28.UP=0.6; x3HC29.UP=0.6; x3HC30.UP=0.6;
4472 x3HC31.UP=0.6; x3HC33.UP=1; x3HC34.UP=1;
4473 x3HC38.UP=1; x3HC40.UP=1; x3HC41.UP=1;
4474 x3HC45.UP=1; x3R1.UP=0.6; x3R29.UP=0.6;
4475 x3SC401.UP=0.4; x3SC404.UP=0.1; x3SC405.UP=0.1;
4476 x3SC406.UP=0.1; x3SC407.UP=0.1; x3SC409.UP=1;
4477 x3SC411.UP=1; x3SC412.UP=1; x3SC413.UP=1;
4478 x3SC414.UP=1; x4AC09.UP=0.2; x4AC20.UP=0.2;
4479 x4AC31.UP=0.2; x4AC42.UP=0.2; x4C301.UP=0.5;

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4480 x4C302.UP=0.5; x4C303.UP=0.2; x4C306.UP=0.8;
4481 x4C307.UP=0.8; x4C308.UP=0.5; x4C309.UP=0.4;
4482 x4C310.UP=0.3; x4C311.UP=0.5; x4C312.UP=1;
4483 x4C315.UP=0.3; x4C317.UP=0.2; x4C318.UP=0.3;
4484 x4C319.UP=0.3; x4C320.UP=0.3; x4C321.UP=0.3;
4485 x4C322.UP=0.4; x4C323.UP=0.25; x4C324.UP=0.25;
4486 x4C325.UP=0.1; x4C326.UP=0.1; x4C328.UP=0.1;
4487 x4C329.UP=0.1; x4C401.UP=0.5; x4C402.UP=0.5;
4488 x4C403.UP=0.3; x4C404.UP=0.3; x4C405.UP=0.2;
4489 x4C406.UP=0.2; x4C407.UP=0.3; x4C408.UP=0.2;
4490 x4C409.UP=0.3; x4C410.UP=1; x4C411.UP=1;
4491 x4C412.UP=1; x4C413.UP=1; x4C414.UP=0.25;
4492 x4C415.UP=0.3; x4C418.UP=0.3; x4C419.UP=0.3;
4493 x4C425.UP=1; x4C426.UP=1; x4C427.UP=1;
4494 x4C428.UP=1; x4C430.UP=1; x4C431.UP=1;
4495 x4C432.UP=1; x4HC01.UP=0.25; x4HC02.UP=0.25;
4496 x4HC03.UP=0.3; x4HC04.UP=0.5; x4HC05.UP=0.5;
4497 x4HC06.UP=0.4; x4HC07.UP=0.4; x4HC08.UP=0.4;
4498 x4HC11.UP=0.4; x4HC14.UP=0.4; x4HC15.UP=0.4;
4499 x4HC16.UP=0.4; x4HC22.UP=0.5; x4HC23.UP=0.5;
4500 x4HC24.UP=0.5; x4HC25.UP=0.5; x4HC26.UP=0.5;
4501 x4HC27.UP=0.5; x4HC28.UP=0.5; x4HC29.UP=0.3;
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4503 x4HC34.UP=0.5; x4HC38.UP=0.5; x4HC40.UP=0.5;
4504 x4HC41.UP=0.5; x4HC45.UP=0.5; x4R1.UP=0.3;
4505 x4R29.UP=0.3; x4SC401.UP=0.7; x4SC404.UP=1;
4506 x4SC405.UP=1; x4SC406.UP=1; x4SC407.UP=1;
4507 x4SC409.UP=0.1; x4SC411.UP=0.1; x4SC412.UP=0.1;
4508 x4SC413.UP=0.1; x4SC414.UP=0.1; x5AC09.UP=0.1;
4509 x5AC20.UP=0.1; x5AC31.UP=0.1; x5AC42.UP=0.1;
4510 x5C301.UP=0.2; x5C302.UP=0.1; x5C303.UP=0.1;
4511 x5C306.UP=0.6; x5C307.UP=0.6; x5C308.UP=0.2;
4512 x5C309.UP=0.2; x5C310.UP=0.1; x5C311.UP=0.2;
4513 x5C312.UP=0.4; x5C315.UP=0.1; x5C317.UP=0.1;
4514 x5C318.UP=0.1; x5C319.UP=0.1; x5C320.UP=0.1;
4515 x5C321.UP=0.1; x5C322.UP=0.1; x5C323.UP=0.1;
4516 x5C324.UP=0.1; x5C325.UP=0.01; x5C326.UP=0.01;
4517 x5C328.UP=0.01; x5C329.UP=0.01; x5C401.UP=0.5;
4518 x5C402.UP=0.5; x5C403.UP=0.2; x5C404.UP=0.2;
4519 x5C405.UP=0.2; x5C406.UP=0.2; x5C407.UP=0.2;
4520 x5C408.UP=0.2; x5C409.UP=0.3; x5C410.UP=1;
4521 x5C411.UP=1; x5C412.UP=0.1; x5C413.UP=0.3;
4522 x5C414.UP=0.1; x5C415.UP=0.1; x5C418.UP=0.1;
4523 x5C419.UP=0.1; x5C425.UP=1; x5C426.UP=1;
4524 x5C427.UP=1; x5C428.UP=0.4; x5C430.UP=0.1;
4525 x5C431.UP=0.2; x5C432.UP=0.1; x5HC01.UP=0.15;

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4526 x5HC02.UP=0.15; x5HC03.UP=0.1; x5HC04.UP=0.3;
4527 x5HC05.UP=0.3; x5HC06.UP=0.3; x5HC07.UP=0.3;
4528 x5HC08.UP=0.3; x5HC11.UP=0.3; x5HC14.UP=0.3;
4529 x5HC15.UP=0.3; x5HC16.UP=0.3; x5HC22.UP=0.5;
4530 x5HC23.UP=0.5; x5HC24.UP=0.5; x5HC25.UP=0.5;
4531 x5HC26.UP=0.5; x5HC27.UP=0.5; x5HC28.UP=0.5;
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4533 x5HC33.UP=2.5; x5HC34.UP=2.5; x5HC38.UP=2.5;
4534 x5HC40.UP=2.5; x5HC41.UP=2.5; x5HC45.UP=2.5;
4535 x5R1.UP=0.3; x5R29.UP=0.4; x5SC401.UP=0.1;
4536 x5SC404.UP=0.1; x5SC405.UP=0.1; x5SC406.UP=0.1;
4537 x5SC407.UP=0.1; x5SC409.UP=0.1; x5SC411.UP=0.1;
4538 x5SC412.UP=0.1; x5SC413.UP=0.1; x5SC414.UP=0.1;
4539 x6SC401.UP=0.1; x6SC404.UP=0.12; x6SC405.UP=0.1;
4540 x6SC406.UP=0.1; x6SC407.UP=0.1; x6SC409.UP=0.1;
4541 x6SC411.UP=0.1; x6SC412.UP=0.1; x6SC413.UP=0.1;
4542 x6SC414.UP=0.1; x7AC09.UP=0.1; x7AC20.UP=0.1;
4543 x7AC31.UP=0.1; x7AC42.UP=0.1; x7C301.UP=0.1;
4544 x7C302.UP=0.3; x7C303.UP=0.1; x7C306.UP=0.8;
4545 x7C307.UP=0.8; x7C308.UP=0.3; x7C309.UP=0.3;
4546 x7C310.UP=0.2; x7C311.UP=1; x7C312.UP=0.5;
4547 x7C315.UP=0.01; x7C316.UP=0.01; x7C317.UP=0.1;
4548 x7C318.UP=0.15; x7C319.UP=0.15; x7C320.UP=0.1;
4549 x7C321.UP=0.1; x7C322.UP=0.1; x7C323.UP=0.02;
4550 x7C324.UP=0.1; x7C325.UP=0.2; x7C326.UP=0.2;
4551 x7C328.UP=0.2; x7C329.UP=0.1; x7C401.UP=1;
4552 x7C402.UP=0.6; x7C403.UP=1; x7C404.UP=1;
4553 x7C405.UP=1; x7C406.UP=1; x7C407.UP=1;
4554 x7C408.UP=1; x7C409.UP=1; x7C410.UP=1;
4555 x7C411.UP=1; x7C412.UP=0.2; x7C413.UP=0.3;
4556 x7C414.UP=0.1; x7C415.UP=0.1; x7C417.UP=0.08;
4557 x7C418.UP=0.1; x7C419.UP=0.1; x7C425.UP=1;
4558 x7C426.UP=1; x7C427.UP=1; x7C428.UP=0.5;
4559 x7C430.UP=0.35; x7C431.UP=0.3; x7C432.UP=0.3;
4560 x7HC01.UP=0.6; x7HC02.UP=0.6; x7HC03.UP=0.1;
4561 x7HC04.UP=0.25; x7HC05.UP=0.25; x7HC06.UP=0.3;
4562 x7HC07.UP=0.3; x7HC08.UP=0.3; x7HC11.UP=0.3;
4563 x7HC14.UP=0.3; x7HC15.UP=0.3; x7HC16.UP=0.3;
4564 x7HC22.UP=0.5; x7HC23.UP=0.5; x7HC24.UP=0.5;
4565 x7HC25.UP=0.5; x7HC26.UP=0.5; x7HC27.UP=0.5;
4566 x7HC28.UP=0.5; x7HC29.UP=0.5; x7HC30.UP=0.5;
4567 x7HC31.UP=0.6; x7HC33.UP=2; x7HC34.UP=2;
4568 x7HC38.UP=2; x7HC40.UP=2; x7HC41.UP=2;
4569 x7HC45.UP=2; x7R1.UP=0.5; x7R29.UP=0.6;
4570 x7SC401.UP=0.1; x7SC404.UP=0.12; x7SC405.UP=0.12;
4571 x7SC406.UP=0.01; x7SC407.UP=0.1; x7SC409.UP=0.1;

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4572 x7SC411.UP=0.1; x7SC412.UP=0.1; x7SC413.UP=0.1;
4573 x7SC414.UP=0.1; x8AC09.UP=0.1; x8AC20.UP=0.1;
4574 x8AC31.UP=0.1; x8AC42.UP=0.1; x9AC09.UP=0.3;
4575 x9AC20.UP=0.3; x9AC31.UP=0.3; x9AC42.UP=0.3;
4576 xAC02.UP=1; xAC05.UP=1; xAC07.UP=1;
4577 xAC09.UP=1; xAC12.UP=1; xAC15.UP=1;
4578 xAC18.UP=1; xAC20.UP=1; xAC23.UP=1;
4579 xAC26.UP=1; xAC29.UP=1; xAC31.UP=1;
4580 xAC34.UP=1; xAC37.UP=1; xAC40.UP=1;
4581 xAC42.UP=1; xiC10AC09.UP=1; xiC10AC20.UP=1;
4582 xiC10AC31.UP=1; xiC10AC42.UP=1; xiC11AC09.UP=1;
4583 xiC11AC20.UP=1; xiC11AC31.UP=1; xiC11AC42.UP=1;
4584 xM1C606D.UP=0.5; xM3C606D.UP=0.5; xM4C606D.UP=0.65;
4585 xM5C606D.UP=0.5; xM7C606D.UP=1; xx1C302.UP=0.25;
4586 xx1C308.UP=0.5; xx1C310.UP=0.5; xx1C311.UP=0.3;
4587 xx1C312.UP=1; xx1C323.UP=0.2; xx1C325.UP=1;
4588 xx1C405.UP=0.01; xx1C408.UP=1; xx1C425.UP=1;
4589 xx1C428.UP=1; xx1C430.UP=0.5; xx1C431.UP=0.1;
4590 xx1HC28.UP=0.2; xx1HC29.UP=0.2; xx1HC30.UP=0.2;
4591 xx1HC32.UP=0.1; xx1R1.UP=0.2; xx1R29.UP=0.1;
4592 xx1SC406.UP=0.2; xx1SC408.UP=0.1; xx2HC28.UP=0.1;
4593 xx2HC29.UP=0.1; xx2HC30.UP=0.1; xx2R1.UP=0.1;
4594 xx2R29.UP=0.1; xx2SC406.UP=0.1; xx2SC408.UP=1;
4595 xx3C302.UP=1; xx3C308.UP=1; xx3C310.UP=1;
4596 xx3C311.UP=1; xx3C312.UP=1; xx3C323.UP=0.92;
4597 xx3C325.UP=0.5; xx3C405.UP=0.1; xx3C408.UP=1;
4598 xx3C425.UP=1; xx3C428.UP=1; xx3C430.UP=0.1;
4599 xx3C431.UP=0.5; xx3C432.UP=0.15; xx3HC28.UP=0.8;
4600 xx3HC29.UP=0.8; xx3HC30.UP=0.6; xx3HC32.UP=1;
4601 xx3R1.UP=0.8; xx3R29.UP=0.6; xx3SC406.UP=0.1;
4602 xx3SC408.UP=1; xx4C302.UP=0.5; xx4C308.UP=0.5;
4603 xx4C310.UP=0.3; xx4C311.UP=0.5; xx4C312.UP=0.15;
4604 xx4C323.UP=0.28; xx4C325.UP=0.05; xx4C405.UP=0.2;
4605 xx4C408.UP=0.3; xx4C409.UP=0.3; xx4C425.UP=1;
4606 xx4C427.UP=1; xx4C428.UP=1; xx4C430.UP=1;
4607 xx4C431.UP=1; xx4C432.UP=1; xx4HC28.UP=0.3;
4608 xx4HC29.UP=0.3; xx4HC30.UP=0.3; xx4HC32.UP=0.5;
4609 xx4R1.UP=0.3; xx4R29.UP=0.3; xx4SC406.UP=1;
4610 xx4SC408.UP=0.05; xx5C302.UP=0.1; xx5C308.UP=0.8;
4611 xx5C310.UP=0.1; xx5C311.UP=0.1; xx5C312.UP=0.3;
4612 xx5C323.UP=0.15; xx5C325.UP=0.001; xx5C405.UP=0.2;
4613 xx5C408.UP=0.3; xx5C425.UP=1; xx5C428.UP=1;
4614 xx5C430.UP=1; xx5C431.UP=1; xx5HC28.UP=0.3;
4615 xx5HC29.UP=0.3; xx5HC30.UP=0.3; xx5HC32.UP=0.2;
4616 xx5R1.UP=0.3; xx5R29.UP=0.3; xx5SC406.UP=0.15;
4617 xx5SC408.UP=0.1; xx6SC406.UP=0.1; xx6SC408.UP=1;

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```
4618 xx7C302.UP=0.2; xx7C308.UP=0.1; xx7C310.UP=0.1;
4619 xx7C311.UP=0.3; xx7C312.UP=0.1; xx7C323.UP=0.1;
4620 xx7C325.UP=0.1; xx7C405.UP=1; xx7C408.UP=1;
4621 xx7C425.UP=1; xx7C428.UP=1; xx7C430.UP=1;
4622 xx7C431.UP=1; xx7HC28.UP=0.4; xx7HC29.UP=0.5;
4623 xx7HC30.UP=0.5; xx7HC32.UP=0.2; xx7R1.UP=0.5;
4624 xx7R29.UP=0.5; xx7SC406.UP=0.1; xx7SC408.UP=0.1;
4625 y1HC28.UP=0.5; y1HC29.UP=0.5; y1HC30.UP=0.5;
4626 y1HC31.UP=0.4; y1R1.UP=0.5; y1R29.UP=0.5;
4627 y2HC28.UP=0.1; y2HC29.UP=0.1; y2HC30.UP=0.1;
4628 y2HC31.UP=0.1; y2R1.UP=0.1; y2R29.UP=0.1;
4629 y3HC28.UP=0.9; y3HC29.UP=0.9; y3HC30.UP=0.85;
4630 y3HC31.UP=0.85; y3R1.UP=0.9; y3R29.UP=0.85;
4631 y4HC28.UP=0.5; y4HC29.UP=0.3; y4HC30.UP=0.4;
4632 y4HC31.UP=0.3; y4R1.UP=0.3; y4R29.UP=0.5;
4633 y5HC28.UP=0.2; y5HC29.UP=0.2; y5HC30.UP=0.2;
4634 y5HC31.UP=0.2; y5R1.UP=0.2; y5R29.UP=0.2;
4635 y7HC28.UP=0.5; y7HC29.UP=0.1; y7HC30.UP=0.1;
4636 y7HC31.UP=0.2; y7R1.UP=0.1; y7R29.UP=0.2;
4637 yy1HC28.UP=0.5; yy1HC29.UP=0.6; yy1HC30.UP=0.6;
4638 yy1R1.UP=0.6; yy1R29.UP=0.6; yy2HC28.UP=0.1;
4639 yy2HC29.UP=0.1; yy2HC30.UP=0.1; yy2R1.UP=0.1;
4640 yy2R29.UP=0.1; yy3HC28.UP=0.9; yy3HC29.UP=0.8;
4641 yy3HC30.UP=0.8; yy3R1.UP=0.8; yy3R29.UP=0.8;
4642 yy4HC28.UP=0.3; yy4HC29.UP=0.3; yy4HC30.UP=0.3;
4643 yy4R1.UP=0.3; yy4R29.UP=0.3; yy5HC28.UP=0.2;
4644 yy5HC29.UP=0.2; yy5HC30.UP=0.1; yy5R1.UP=0.2;
4645 yy5R29.UP=0.2; yy7HC28.UP=0.2; yy7HC29.UP=0.2;
4646 yy7HC30.UP=0.1; yy7R1.UP=0.1; yy7R29.UP=0.2;
4647
4648 MODEL Alkyl /ALL/;
4649 OPTION LIMCOL=0;
4650 OPTION LIMROW=0;
4651 OPTION ITERLIM= 10000;
4652 OPTION DOMLIM= 0;
4653 OPTION RESLIM= 10000;
4654
4655 OPTION NLP=CONOPT2;
4656 SOLVE Alkyl Using NLP Maximizing ObjVar;
4657
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COMPILATION TIME = 0.660 SECONDS 1.6 Mb WIN-18-097

Economic Optimization Program
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Model Statistics SOLVE ALKYL USING NLP FROM LINE 4656
GAMS 2.50A Windows NT/95/98

MODEL STATISTICS

BLOCKS OF EQUATIONS	1630	SINGLE EQUATIONS	1630
BLOCKS OF VARIABLES	1635	SINGLE VARIABLES	1635
NON ZERO ELEMENTS	6592	NON LINEAR N-Z	4104
DERIVATIVE POOL	17	CONSTANT POOL	199
CODE LENGTH	74192		

GENERATION TIME = 0.550 SECONDS 3.0 Mb WIN-18-097

EXECUTION TIME = 0.710 SECONDS 2.9 Mb WIN-18-097

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S O L V E S U M M A R Y

MODEL	ALKYL	OBJECTIVE	OBJVAR
TYPE	NLP	DIRECTION	MAXIMIZE
SOLVER	CONOPT2	FROM LINE	4656

**** SOLVER STATUS 1 NORMAL COMPLETION
**** MODEL STATUS 2 LOCALLY OPTIMAL
**** OBJECTIVE VALUE 29.1128

RESOURCE USAGE, LIMIT	9.949	10000.000
ITERATION COUNT, LIMIT	63	10000
EVALUATION ERRORS	0	0

C O N O P T Wintel version 2.070F-003-035
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Bagsvaerdvej 246 A
DK-2880 Bagsvaerd, Denmark

Using control program file C:\PROGRAM FILES\GAMSIDE\CONOPT2.OPT

Rtmaxj=1E9;
rtnwmi=1E-8;
*rtredg=1E-9;
*lslack =t;
lsscal= t;
*lstcrs =t;
lfstal =2000;

** Warning ** Rtmaxj is very large. Try to scale the model.
CONOPT may become unreliable and there are no
guaranties.

** Optimal solution. Reduced gradient less than tolerance.

CONOPT time Total	9.512 seconds
of which: Function evaluations	1.926 = 20.2%
Derivative evaluations	0.762 = 8.0%

Work length =	3.45 Mbytes
Estimate =	3.45 Mbytes
Max used =	1.93 Mbytes

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1
---- EQU EQU2 739.4425	.	.	.
---- EQU EQU3 0.0235	.	.	.
---- EQU EQU4 -10.5486	.	.	.
---- EQU EQU5 -31.4441	.	.	.
---- EQU EQU6 0.8396	.	.	.
---- EQU EQU7 0.1236	.	.	.
---- EQU EQU8 -0.7526	.	.	.
---- EQU EQU9 0.2006	.	.	.
---- EQU EQU10 0.0024	.	.	.
---- EQU EQU11 4.1594	1.0000	1.0000	1.0000
---- EQU EQU12 EPS	.	.	.
---- EQU EQU13 EPS	.	.	.
---- EQU EQU14 -0.0015	460.0000	460.0000	460.0000
---- EQU EQU15 0.0003	.	.	.
---- EQU EQU16 EPS	.	.	.
---- EQU EQU17 1145.6702	.	.	.
---- EQU EQU18 -0.0004	-70.0000	-70.0000	-70.0000
---- EQU EQU19 EPS	.	.	.
---- EQU EQU20 71.4458	1.0000	1.0000	1.0000
---- EQU EQU21 -0.7449	.	.	.
---- EQU EQU22 EPS	.	.	.
---- EQU EQU23 -0.0002	.	.	.
---- EQU EQU24 118.6951	.	.	.

---- EQU EQU25	.	.	.	
118.1386				
---- EQU EQU26	.	.	.	
-0.0002				
---- EQU EQU27	.	.	.	
-0.0490				
---- EQU EQU28	.	.	.	
-0.0001				
---- EQU EQU29	.	.	.	
0.0029				
---- EQU EQU30	.	.	.	
-0.0497				
---- EQU EQU31	.	.	.	
EPS				
---- EQU EQU32	.	.	.	
0.0004				
---- EQU EQU33	.	.	.	-
275.6855				
---- EQU EQU34	.	.	.	
8.0277				
---- EQU EQU35	.	.	.	
8.4063				
---- EQU EQU36	.	.	.	
0.0232				
---- EQU EQU37	.	.	.	-
115.8303				
---- EQU EQU38	.	.	.	
-82.6546				
---- EQU EQU39	.	.	.	
-64.7196				
---- EQU EQU40	.	.	.	
11.9525				
---- EQU EQU41	.	.	.	
EPS				
---- EQU EQU42	1.0000	1.0000	1.0000	
-4.8177				
---- EQU EQU43	1.0000	1.0000	1.0000	
480.6352				
---- EQU EQU44	1.0000	1.0000	1.0000	
-6.6694				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU45 0.6527	1.0000	1.0000	1.0000	
---- EQU EQU46 EPS	1.0000	1.0000	1.0000	
---- EQU EQU47 187.9903	1.0000	1.0000	1.0000	-
---- EQU EQU48 195.0964	1.0000	1.0000	1.0000	
---- EQU EQU49 1.5425	1.0000	1.0000	1.0000	
---- EQU EQU50 -0.2369	1.0000	1.0000	1.0000	
---- EQU EQU51 57.5949	1.0000	1.0000	1.0000	
---- EQU EQU52 -53.6290	1.0000	1.0000	1.0000	
---- EQU EQU53 599.6805	1.0000	1.0000	1.0000	-
---- EQU EQU54 -2.4033	1.0000	1.0000	1.0000	
---- EQU EQU55 38.1402	1.0000	1.0000	1.0000	
---- EQU EQU56 -0.6670	1.0000	1.0000	1.0000	
---- EQU EQU57 -0.5897	1.0000	1.0000	1.0000	
---- EQU EQU58 -1.4836	1.0000	1.0000	1.0000	
---- EQU EQU59 EPS	1.0000	1.0000	1.0000	
---- EQU EQU60 .	1.0000	1.0000	1.0000	
---- EQU EQU61 -4.1130	1.0000	1.0000	1.0000	
---- EQU EQU62 -0.4251	1.0000	1.0000	1.0000	
---- EQU EQU63 1.0731	1.0000	1.0000	1.0000	
---- EQU EQU64 88.6032	1.0000	1.0000	1.0000	
---- EQU EQU65 47.1447	1.0000	1.0000	1.0000	
---- EQU EQU66 1.9278	1.0000	1.0000	1.0000	
---- EQU EQU67 283.4007	1.0000	1.0000	1.0000	
---- EQU EQU68 .	1.0000	1.0000	1.0000	

---- EQU EQU69	1.0000	1.0000	1.0000	
-1.5441				
---- EQU EQU70	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU71	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU72	1.0000	1.0000	1.0000	
-0.1797				
---- EQU EQU73	1.0000	1.0000	1.0000	
268.1690				
---- EQU EQU74	1.0000	1.0000	1.0000	-
290.7238				
---- EQU EQU75	1.0000	1.0000	1.0000	
25.2985				
---- EQU EQU76	.	.	.	
EPS				
---- EQU EQU77	.	.	.	
EPS				
---- EQU EQU78	.	.	.	
0.0093				
---- EQU EQU79	.	.	.	
-0.0083				
---- EQU EQU80	.	.	.	
0.0009				
---- EQU EQU81	.	.	.	
0.0124				
---- EQU EQU82	.	.	.	
0.0005				
---- EQU EQU83	.	.	.	
-0.0056				
---- EQU EQU84	.	.	.	
EPS				
---- EQU EQU85	.	.	.	
0.8074				
---- EQU EQU86	.	.	.	
EPS				
---- EQU EQU87	.	.	.	
0.0129				
---- EQU EQU88	.	.	.	
EPS				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU89 0.0037	.	.	.
---- EQU EQU90 -6.1941	.	.	.
---- EQU EQU91 214.4071	.	.	.
---- EQU EQU92 0.5261	.	.	.
---- EQU EQU93 113.2581	.	.	.
---- EQU EQU94 710.4108	.	.	.
---- EQU EQU95 113.4234	.	.	.
---- EQU EQU96 113.5545	.	.	.
---- EQU EQU97 1.3817	.	.	.
---- EQU EQU98 118.3296	.	.	.
---- EQU EQU99 744.3364	.	.	.
---- EQU EQU100 118.6955	.	.	.
---- EQU EQU101 118.9888	.	.	.
---- EQU EQU102 EPS	.	.	.
---- EQU EQU103 -0.8074	.	.	.
---- EQU EQU104 0.0173	.	.	.
---- EQU EQU105 0.0005	.	.	.
---- EQU EQU106 0.0003	.	.	.
---- EQU EQU107 3.2816042E-7	.	.	.
---- EQU EQU108 EPS	.	.	.
---- EQU EQU109 EPS	.	.	.
---- EQU EQU110 EPS	.	.	.
---- EQU EQU111 EPS	.	.	.
---- EQU EQU112 EPS	.	.	.

----	EQU EQU113	.	.	.	
	EPS				
----	EQU EQU114	.	.	.	
	EPS				
----	EQU EQU115	.	.	.	
	1.4959				
----	EQU EQU116	.	.	.	
	0.3785				
----	EQU EQU117	.	.	.	
	0.0007				
----	EQU EQU118	.	.	.	
	7.1057781E-6				
----	EQU EQU119	.	.	.	
	EPS				
----	EQU EQU120	.	.	.	
	EPS				
----	EQU EQU121	.	.	.	
	EPS				
----	EQU EQU122	.	.	.	
	EPS				
----	EQU EQU123	.	.	.	
	-0.0007				
----	EQU EQU124	.	.	.	
	EPS				
----	EQU EQU125	.	.	.	
	-0.0074				
----	EQU EQU126	.	.	.	
	0.0005				
----	EQU EQU127	.	.	.	
	-0.0330				
----	EQU EQU128	.	.	.	-
	142.8070				
----	EQU EQU129	.	.	.	-
	194.9739				
----	EQU EQU130	.	.	.	
	0.0536				
----	EQU EQU131	.	.	.	
	EPS				
----	EQU EQU132	.	.	.	
	EPS				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU133 EPS	.	.	.	
---- EQU EQU134 EPS	.	.	.	
---- EQU EQU135 EPS	.	.	.	
---- EQU EQU136 EPS	.	.	.	
---- EQU EQU137 0.1337	0.1500	0.1500	0.1500	
---- EQU EQU138 -29.4541	15.0000	15.0000	15.0000	
---- EQU EQU139 1.1390	15.0000	15.0000	15.0000	
---- EQU EQU140 0.1338	15.0000	15.0000	15.0000	
---- EQU EQU141 0.0660	15.0000	15.0000	15.0000	
---- EQU EQU142 10.0266	.	.	.	
---- EQU EQU143 152.9267	.	.	.	
---- EQU EQU144 -67.1301	.	.	.	
---- EQU EQU145 170.0790	.	.	.	-
---- EQU EQU146 163.4739	.	.	.	-
---- EQU EQU147 -0.8182	.	.	.	
---- EQU EQU148 5.1171800E-5	.	.	.	
---- EQU EQU149 EPS	.	.	.	
---- EQU EQU150 EPS	.	.	.	
---- EQU EQU151 EPS	.	.	.	
---- EQU EQU152 -0.0003	.	.	.	
---- EQU EQU153 -0.0019	.	.	.	
---- EQU EQU154 -0.0002	.	.	.	
---- EQU EQU155 1.099730E-5	.	.	.	-
---- EQU EQU156 5.322803E-6	.	.	.	-

---- EQU EQU157	1.0000	1.0000	1.0000	
4.0764				
---- EQU EQU158	.	.	.	
253.2285				
---- EQU EQU159	.	.	.	
-12.5082				
---- EQU EQU160	.	.	.	
-3.8347				
---- EQU EQU161	.	.	.	
-2.7680				
---- EQU EQU162	.	.	.	
-0.7577				
---- EQU EQU163	1.0000	1.0000	1.0000	
-0.4944				
---- EQU EQU164	-290.0000	-290.0000	-290.0000	
-0.0409				
---- EQU EQU165	.	.	.	-
115.8303				
---- EQU EQU166	.	.	.	
-82.6546				
---- EQU EQU167	.	.	.	
-64.7196				
---- EQU EQU168	.	.	.	
201.1220				
---- EQU EQU169	.	.	.	
-0.0027				
---- EQU EQU170	.	.	.	
0.0011				
---- EQU EQU171	.	.	.	
EPS				
---- EQU EQU172	.	.	.	
EPS				
---- EQU EQU173	.	.	.	
0.9789				
---- EQU EQU174	.	.	.	
EPS				
---- EQU EQU175	.	.	.	
25.7544				
---- EQU EQU176	.	.	.	
349.7236				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU177 18.0425	.	.	.
---- EQU EQU178 14.8017	.	.	.
---- EQU EQU179 -0.1213	.	.	.
---- EQU EQU180 11.9525	.	.	.
---- EQU EQU181 -2.5433	1.0000	1.0000	1.0000
---- EQU EQU182 .	1.0000	1.0000	1.0000
---- EQU EQU183 0.0585	.	.	.
---- EQU EQU184 EPS	.	.	.
---- EQU EQU185 EPS	.	.	.
---- EQU EQU186 EPS	.	.	.
---- EQU EQU187 EPS	.	.	.
---- EQU EQU188 EPS	.	.	.
---- EQU EQU189 0.0012	.	.	.
---- EQU EQU190 EPS	.	.	.
---- EQU EQU191 EPS	.	.	.
---- EQU EQU192 EPS	.	.	.
---- EQU EQU193 EPS	.	.	.
---- EQU EQU194 1.9812	1.0000	1.0000	1.0000
---- EQU EQU195 853.0956	.	.	.
---- EQU EQU196 19.3446	.	.	.
---- EQU EQU197 11.9384	.	.	.
---- EQU EQU198 10.1690	.	.	.
---- EQU EQU199 0.9104	.	.	.
---- EQU EQU200 -17.8060	1.0000	1.0000	1.0000

---- EQU EQU201	.	.	.	
-0.0002				
---- EQU EQU202	.	.	.	-
4391.9189				
---- EQU EQU203	.	.	.	
4.1086				
---- EQU EQU204	.	.	.	
4.1086				
---- EQU EQU205	.	.	.	
3909.3001				
---- EQU EQU206	.	.	.	
4.1094				
---- EQU EQU207	.	.	.	
4.1089				
---- EQU EQU208	.	.	.	
4.1089				
---- EQU EQU209	.	.	.	
-4.1089				
---- EQU EQU210	.	.	.	-
147.6805				
---- EQU EQU211	.	.	.	
EPS				
---- EQU EQU212	.	.	.	
EPS				
---- EQU EQU213	.	.	.	
-4.0709				
---- EQU EQU214	.	.	.	
-4.0710				
---- EQU EQU215	.	.	.	
-3.8716				
---- EQU EQU216	.	.	.	-
4070.9701				
---- EQU EQU217	.	.	.	
11551.6039				
---- EQU EQU218	.	.	.	
14178.9548				
---- EQU EQU219	.	.	.	
16975.8098				
---- EQU EQU220	.	.	.	
22279.5462				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU221 24934.4914	.	.	.
---- EQU EQU222 27543.6260	.	.	.
---- EQU EQU223 19627.6738	.	.	.
---- EQU EQU224 30195.3153	.	.	.
---- EQU EQU225 647.9201	.	.	.
---- EQU EQU226 -4.3720	.	.	.
---- EQU EQU227 11306.9948	.	.	.
---- EQU EQU228 11262.3527	.	.	.
---- EQU EQU229 14160.3290	.	.	.
---- EQU EQU230 22752.7269	.	.	.
---- EQU EQU231 11551.6039	.	.	.
---- EQU EQU232 11017.6385	.	.	.
---- EQU EQU233 14178.9548	.	.	.
---- EQU EQU234 16973.8419	.	.	.
---- EQU EQU235 77.6883	.	.	.
---- EQU EQU236 -0.0011	.	.	.
---- EQU EQU237 0.0274	.	.	.
---- EQU EQU238 161.2654	.	.	.
---- EQU EQU239 197.0497	.	.	.
---- EQU EQU240 38.0952	.	.	.
---- EQU EQU241 161.2639	.	.	.
---- EQU EQU242 161.2624	.	.	.
---- EQU EQU243 704.6349	.	.	.
---- EQU EQU244 139.9478	.	.	.

---- EQU EQU245	.	.	.	-
4353.5409				
---- EQU EQU246	.	.	.	-
345.8274				
---- EQU EQU247	.	.	.	-
199.1877				
---- EQU EQU248	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU249	.	.	.	
-0.2353				
---- EQU EQU250	.	.	.	
EPS				
---- EQU EQU251	.	.	.	-
199.1939				
---- EQU EQU252	.	.	.	
43.1651				
---- EQU EQU253	.	.	.	
237.0142				
---- EQU EQU254	.	.	.	
38.0387				
---- EQU EQU255	.	.	.	
37.8675				
---- EQU EQU256	.	.	.	
1.4679				
---- EQU EQU257	.	.	.	
1.8240				
---- EQU EQU258	.	.	.	
0.3662				
---- EQU EQU259	1.0000	1.0000	1.0000	-
34655.3030				
---- EQU EQU260	.	.	.	-
3909.3001				
---- EQU EQU261	.	.	.	
4391.9189				
---- EQU EQU262	1.0000	1.0000	1.0000	
30152.2623				
---- EQU EQU263	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU264	.	.	.	-
19610.0364				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU265 22279.9911	.	.	.	-
---- EQU EQU266 24934.4914	.	.	.	-
---- EQU EQU267 27543.6260	.	.	.	-
---- EQU EQU268 30208.5612	.	.	.	-
---- EQU EQU269 EPS	.	.	.	
---- EQU EQU270 -0.0191	.	.	.	
---- EQU EQU271 -0.1133	414.6000	414.6000	414.6000	
---- EQU EQU272 -0.0002	.	.	.	
---- EQU EQU273 0.0007	.	.	.	
---- EQU EQU274 -0.2783	.	.	.	
---- EQU EQU275 0.0206	.	.	.	
---- EQU EQU276 -1.4778	.	.	.	
---- EQU EQU277 -0.0002	.	.	.	
---- EQU EQU278 0.0007	.	.	.	
---- EQU EQU279 EPS	1.0000	1.0000	1.0000	
---- EQU EQU280 3920.2789	.	.	.	-
---- EQU EQU281 4404.2166	.	.	.	
---- EQU EQU282 35904.5185	1.0000	1.0000	1.0000	
---- EQU EQU283 EPS	1.0000	1.0000	1.0000	
---- EQU EQU284 -4.1200	.	.	.	
---- EQU EQU285 25002.6937	.	.	.	
---- EQU EQU286 22339.1337	.	.	.	
---- EQU EQU287 17021.0679	.	.	.	
---- EQU EQU288 14217.0026	.	.	.	

---- EQU EQU289	.	.	.	
-0.1413				
---- EQU EQU290	.	.	.	
129.9365				
---- EQU EQU291	.	.	.	
-0.5838				
---- EQU EQU292	.	.	.	
-2.5624				
---- EQU EQU293	.	.	.	
-1.8140				
---- EQU EQU294	.	.	.	
-1.9706				
---- EQU EQU295	1.0000	1.0000	1.0000	
1.8240				
---- EQU EQU296	.	.	.	
-2.3847				
---- EQU EQU297	.	.	.	
-2.2866				
---- EQU EQU298	.	.	.	
0.1549				
---- EQU EQU299	.	.	.	
-0.0544				
---- EQU EQU300	.	.	.	
0.0532				
---- EQU EQU301	1.0000	1.0000	1.0000	
-0.1219				
---- EQU EQU302	.	.	.	
-44.0126				
---- EQU EQU303	.	.	.	-
235.1783				
---- EQU EQU304	.	.	.	
-36.9474				
---- EQU EQU305	.	.	.	
-36.1915				
---- EQU EQU306	.	.	.	
11582.5038				
---- EQU EQU307	.	.	.	-
4082.0793				
---- EQU EQU308	.	.	.	
-3.8827				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU309 4404.2166	.	.	.
---- EQU EQU310 -4.0820	.	.	.
---- EQU EQU311 30275.3750	.	.	.
---- EQU EQU312 4.1200	.	.	.
---- EQU EQU313 4.1200	.	.	.
---- EQU EQU314 4.1207	.	.	.
---- EQU EQU315 3920.2789	.	.	.
---- EQU EQU316 4.1196	.	.	.
---- EQU EQU317 4.1196	.	.	.
---- EQU EQU318 -4.0821	.	.	.
---- EQU EQU319 11048.5343	.	.	.
---- EQU EQU320 27616.6053	.	.	.
---- EQU EQU321 25002.6937	.	.	.
---- EQU EQU322 22339.8242	.	.	.
---- EQU EQU323 19655.1392	.	.	.
---- EQU EQU324 0.0248	.	.	.
---- EQU EQU325 -0.0023	.	.	.
---- EQU EQU326 87.8220	.	.	.
---- EQU EQU327 27616.6053	.	.	.
---- EQU EQU328 14217.0026	.	.	.
---- EQU EQU329 19680.0947	.	.	.
---- EQU EQU330 11582.5038	.	.	.
---- EQU EQU331 22806.4593	.	.	.
---- EQU EQU332 14199.8544	.	.	.

---- EQU EQU333	.	.	.	-
11291.2898				
---- EQU EQU334	.	.	.	
11339.8148				
---- EQU EQU335	.	.	.	
-4.3847				
---- EQU EQU336	.	.	.	-
649.0836				
---- EQU EQU337	.	.	.	-
30296.1156				
---- EQU EQU338	.	.	.	-
17018.2290				
---- EQU EQU339	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU340	.	.	.	-
197.7392				
---- EQU EQU341	.	.	.	
44.0126				
---- EQU EQU342	.	.	.	
235.1783				
---- EQU EQU343	.	.	.	
36.9474				
---- EQU EQU344	.	.	.	
36.1915				
---- EQU EQU345	1.0000	1.0000	1.0000	-
39032.9400				
---- EQU EQU346	.	.	.	-
199.1877				
---- EQU EQU347	.	.	.	-
231.0785				
---- EQU EQU348	.	.	.	-
4229.7093				
---- EQU EQU349	.	.	.	
257.6077				
---- EQU EQU350	.	.	.	-
706.9530				
---- EQU EQU351	.	.	.	-
161.2624				
---- EQU EQU352	.	.	.	-
161.2639				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU353 38.0952	.	.	.	
---- EQU EQU354 197.0497	.	.	.	-
---- EQU EQU355 161.2654	.	.	.	-
---- EQU EQU356 4.883566E-6	.	.	.	-
---- EQU EQU357 EPS	.	.	.	
---- EQU EQU358 2.3789940E-5	.	.	.	
---- EQU EQU359 EPS	1.0000	1.0000	1.0000	
---- EQU EQU360 EPS	1.0000	1.0000	1.0000	
---- EQU EQU361 74557.3811	1.0000	1.0000	1.0000	
---- EQU EQU362 78323.0110	1.0000	1.0000	1.0000	-
---- EQU EQU363 EPS	.	.	.	
---- EQU EQU364 EPS	.	.	.	
---- EQU EQU365 4132.5959	1.0000	1.0000	1.0000	
---- EQU EQU366 EPS	.	.	.	
---- EQU EQU367 2067.0435	1.0000	1.0000	1.0000	
---- EQU EQU368 3933.3380	.	.	.	-
---- EQU EQU369 4418.8414	.	.	.	
---- EQU EQU370 161.2654	.	.	.	-
---- EQU EQU371 197.0497	.	.	.	-
---- EQU EQU372 38.0952	.	.	.	
---- EQU EQU373 161.2639	.	.	.	-
---- EQU EQU374 2.4490	.	.	.	
---- EQU EQU375 71.4458	.	.	.	
---- EQU EQU376 2.2677	.	.	.	

---- EQU EQU377	.	.	.
-1.2644			
---- EQU EQU378	.	.	.
0.0011			
---- EQU EQU379	.	.	.
EPS			
---- EQU EQU380	.	.	.
2285.2246			
---- EQU EQU381	.	.	.
-50.1414			
---- EQU EQU382	.	.	.
-39.8209			
---- EQU EQU383	.	.	.
-38.1591			
---- EQU EQU384	.	.	.
-32.3196			
---- EQU EQU385	.	.	.
133.6911			-
---- EQU EQU386	.	.	.
0.6200			
---- EQU EQU387	.	.	.
2.5785			
---- EQU EQU388	.	.	.
1.8350			
---- EQU EQU389	.	.	.
1.9784			
---- EQU EQU390	1.0000	1.0000	1.0000
-7.3263			
---- EQU EQU391	.	.	.
197.7392			
---- EQU EQU392	.	.	.
1.4860127E-6			
---- EQU EQU393	.	.	.
1.4860127E-6			
---- EQU EQU394	.	.	.
EPS			
---- EQU EQU395	.	.	.
179.9891			
---- EQU EQU396	.	.	.
176.3066			

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU397 -4.0202	.	.	.	
---- EQU EQU398 33.6907	.	.	.	
---- EQU EQU399 -2.8400	.	.	.	
---- EQU EQU400 33.9158	.	.	.	
---- EQU EQU401 364.8746	.	.	.	
---- EQU EQU402	-20.0000	-20.0000	-20.0000	
EPS				
---- EQU EQU403 3.350189E-7	.	.	.	-
---- EQU EQU404 -0.0683	.	.	.	
---- EQU EQU405 194.2702	.	.	.	-
---- EQU EQU406 EPS	.	.	.	
---- EQU EQU407 172.9634	.	.	.	-
---- EQU EQU408 364.7427	.	.	.	
---- EQU EQU409 20.3835	.	.	.	
---- EQU EQU410 15.8714	.	.	.	
---- EQU EQU411 161.2624	.	.	.	-
---- EQU EQU412 710.9957	.	.	.	-
---- EQU EQU413 372.7427	.	.	.	
---- EQU EQU414 4084.8949	.	.	.	-
---- EQU EQU415 115.9677	.	.	.	-
---- EQU EQU416 199.1877	.	.	.	-
---- EQU EQU417 4418.8414	.	.	.	-
---- EQU EQU418 -4.1332	.	.	.	
---- EQU EQU419 4.1326	.	.	.	
---- EQU EQU420 4.1326	.	.	.	

---- EQU EQU421	.	.	.	
3933.3380				
---- EQU EQU422	.	.	.	
4.1342				
---- EQU EQU423	.	.	.	
4.1332				
---- EQU EQU424	.	.	.	
4.1332				
---- EQU EQU425	.	.	.	-
11083.5953				
---- EQU EQU426	.	.	.	
-4.0952				
---- EQU EQU427	.	.	.	-
27701.7091				
---- EQU EQU428	.	.	.	
-3.8959				
---- EQU EQU429	.	.	.	-
4095.2949				
---- EQU EQU430	.	.	.	
11617.5659				
---- EQU EQU431	.	.	.	
14260.5673				
---- EQU EQU432	.	.	.	
17073.2101				
---- EQU EQU433	.	.	.	
22408.3222				
---- EQU EQU434	.	.	.	
25082.1568				
---- EQU EQU435	.	.	.	
30368.9002				
---- EQU EQU436	.	.	.	-
14260.5673				
---- EQU EQU437	.	.	.	-
30403.8032				
---- EQU EQU438	.	.	.	-
648.7712				
---- EQU EQU439	.	.	.	
-4.3984				
---- EQU EQU440	.	.	.	
11375.1857				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU441 11325.8672	.	.	.	-
---- EQU EQU442 14243.7742	.	.	.	-
---- EQU EQU443 22860.7113	.	.	.	-
---- EQU EQU444 -4.0953	.	.	.	
---- EQU EQU445 19740.7576	.	.	.	
---- EQU EQU446 17068.4476	.	.	.	-
---- EQU EQU447 27701.7091	.	.	.	
---- EQU EQU448 176.0509	.	.	.	
---- EQU EQU449 -0.0062	.	.	.	
---- EQU EQU450 0.0243	.	.	.	
---- EQU EQU451 19700.5325	.	.	.	-
---- EQU EQU452 22409.4625	.	.	.	-
---- EQU EQU453 20.4920	.	.	.	
---- EQU EQU454 15.8856	.	.	.	
---- EQU EQU455 25.9485	.	.	.	
---- EQU EQU456 349.8365	.	.	.	
---- EQU EQU457 18.1369	.	.	.	
---- EQU EQU458 14.8149	.	.	.	
---- EQU EQU459 -1.2718	.	.	.	
---- EQU EQU460 14.4140	.	.	.	
---- EQU EQU461	
---- EQU EQU462	
---- EQU EQU463	
---- EQU EQU464	
EPS				

---- EQU EQU465	.	.	.	
-0.6613				
---- EQU EQU466	.	.	.	
EPS				
---- EQU EQU467	.	.	.	
EPS				
---- EQU EQU468	.	.	.	-
25082.1568				
---- EQU EQU469	.	.	.	-
11617.5659				
---- EQU EQU470	1.0000	1.0000	1.0000	-
295.6086				
---- EQU EQU471	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU472	1.0000	1.0000	1.0000	-
293.5564				
---- EQU EQU473	1.0000	1.0000	1.0000	
58924.7749				
---- EQU EQU474	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU475	1.0000	1.0000	1.0000	-
64821.9262				
---- EQU EQU476	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU477	.	.	.	
EPS				
---- EQU EQU478	.	.	.	
EPS				
---- EQU EQU479	1.0000	1.0000	1.0000	
4154.7871				
---- EQU EQU480	.	.	.	-
3955.4961				
---- EQU EQU481	.	.	.	
4443.8006				
---- EQU EQU482	.	.	.	-
199.1877				
---- EQU EQU483	.	.	.	
EPS				
---- EQU EQU484	.	.	.	-
3998.2660				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU485 493.5684	.	.	.
---- EQU EQU486 EPS	.	.	.
---- EQU EQU487 161.2624	.	.	.
---- EQU EQU488 161.2639	.	.	.
---- EQU EQU489 38.0952	.	.	.
---- EQU EQU490 197.0497	.	.	.
---- EQU EQU491 161.2654	.	.	.
---- EQU EQU492 11139.4872	.	.	.
---- EQU EQU493 4443.8006	.	.	.
---- EQU EQU494 22520.8873	.	.	.
---- EQU EQU495 17157.5170	.	.	.
---- EQU EQU496 EPS	.	.	.
---- EQU EQU497 1.9514	.	.	.
---- EQU EQU498 19.6953	.	.	.
---- EQU EQU499 3.1478	.	.	.
---- EQU EQU500 3.1478	.	.	.
---- EQU EQU501 -6.9218	.	.	.
---- EQU EQU502 134.7156	.	.	.
---- EQU EQU503 -0.0002	.	.	.
---- EQU EQU504
---- EQU EQU505 151.7068	.	.	.
---- EQU EQU506 14330.6321	.	.	.
---- EQU EQU507 11673.4641	.	.	.
---- EQU EQU508 4117.1693	.	.	.

---- EQU EQU509	.	.	.	
-3.9178				
---- EQU EQU510	.	.	.	
30525.6814				
---- EQU EQU511	.	.	.	
-4.1171				
---- EQU EQU512	.	.	.	-
14330.6321				
---- EQU EQU513	.	.	.	
4.1551				
---- EQU EQU514	.	.	.	
4.1551				
---- EQU EQU515	.	.	.	
4.1556				
---- EQU EQU516	.	.	.	
3955.4961				
---- EQU EQU517	.	.	.	
4.1548				
---- EQU EQU518	.	.	.	
4.1548				
---- EQU EQU519	.	.	.	
-4.1551				
---- EQU EQU520	.	.	.	-
27844.1751				
---- EQU EQU521	.	.	.	
-4.1172				
---- EQU EQU522	.	.	.	-
25205.6495				
---- EQU EQU523	.	.	.	-
22521.8442				
---- EQU EQU524	.	.	.	-
19804.5538				
---- EQU EQU525	.	.	.	
0.0250				
---- EQU EQU526	.	.	.	
-0.0044				
---- EQU EQU527	.	.	.	
144.4748				
---- EQU EQU528	.	.	.	
27844.1751				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU529 25205.6495	.	.	.
---- EQU EQU530 19839.1980	.	.	.
---- EQU EQU531 11673.4641	.	.	-
---- EQU EQU532 22978.3434	.	.	-
---- EQU EQU533 14313.2768	.	.	-
---- EQU EQU534 11382.3569	.	.	-
---- EQU EQU535 11430.5786	.	.	.
---- EQU EQU536 -4.4198	.	.	.
---- EQU EQU537 646.0399	.	.	-
---- EQU EQU538 30554.7466	.	.	-
---- EQU EQU539 17153.4775	.	.	-
---- EQU EQU540 108.2554	.	.	-
---- EQU EQU541 -84.7653	.	.	.
---- EQU EQU542 15.6546	.	.	.
---- EQU EQU543 264.3686	.	.	-
---- EQU EQU544 272.0867	.	.	-
---- EQU EQU545 274.0357	.	.	-
---- EQU EQU546 275.1186	.	.	-
---- EQU EQU547 201.5224	.	.	.
---- EQU EQU548 -37.6805	.	.	.
---- EQU EQU549 237.1473	.	.	-
---- EQU EQU550 -37.8083	.	.	.
---- EQU EQU551 -37.9108	.	.	.
---- EQU EQU552 -0.0041	.	.	.

---- EQU EQU553	.	.	.	
197.9946				
---- EQU EQU554	.	.	.	
-35.7843				
---- EQU EQU555	.	.	.	-
235.1449				
---- EQU EQU556	.	.	.	
-35.7858				
---- EQU EQU557	.	.	.	
-35.7873				
---- EQU EQU558	.	.	.	
2.1380				
---- EQU EQU559	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU560	1.0000	1.0000	1.0000	-
257.6948				
---- EQU EQU561	.	.	.	
197.9946				
---- EQU EQU562	.	.	.	
-35.7843				
---- EQU EQU563	.	.	.	-
235.1449				
---- EQU EQU564	.	.	.	
-35.7858				
---- EQU EQU565	.	.	.	
-35.7873				
---- EQU EQU566	.	.	.	
2.1380				
---- EQU EQU567	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU568	1.0000	1.0000	1.0000	-
350.4860				
---- EQU EQU569	.	.	.	
197.9946				
---- EQU EQU570	.	.	.	
-35.7843				
---- EQU EQU571	.	.	.	-
235.1449				
---- EQU EQU572	.	.	.	
-35.7858				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU573 -35.7873	.	.	.	
---- EQU EQU574 2.1380	.	.	.	
---- EQU EQU575 -5.8831	1.0000	1.0000	1.0000	
---- EQU EQU576 EPS	.	.	.	
---- EQU EQU577 247.0809	.	.	.	
---- EQU EQU578 -58.8576	.	.	.	
---- EQU EQU579 -6.5801	.	.	.	
---- EQU EQU580 247.0795	.	.	.	-
---- EQU EQU581 247.0823	.	.	.	-
---- EQU EQU582 -25.7024	.	.	.	
---- EQU EQU583 EPS	.	.	.	
---- EQU EQU584 37.9268	.	.	.	
---- EQU EQU585 563.7981	.	.	.	
---- EQU EQU586 558.6125	.	.	.	
---- EQU EQU587 1.6111	.	.	.	
---- EQU EQU588 -1.5056	.	.	.	
---- EQU EQU589 -0.0062	.	.	.	
---- EQU EQU590 -0.1020	.	.	.	
---- EQU EQU591 -37.7269	.	.	.	
---- EQU EQU592 237.1746	.	.	.	-
---- EQU EQU593 -37.8306	.	.	.	
---- EQU EQU594 -37.9137	.	.	.	
---- EQU EQU595 -0.0033	.	.	.	
---- EQU EQU596 -0.0592	.	.	.	

----	EQU	EQU597	.	.	.
-0.0110					
----	EQU	EQU598	.	.	.
-78.5463					
----	EQU	EQU599	.	.	.
96.5662					
----	EQU	EQU600	.	.	.
561.2303					
----	EQU	EQU601	.	.	.
85.6422					
----	EQU	EQU602	.	.	.
90.2179					
----	EQU	EQU603	.	.	.
EPS					
----	EQU	EQU604	.	.	.
EPS					
----	EQU	EQU605	.	.	.
EPS					
----	EQU	EQU606	.	.	.
162.6883					-
----	EQU	EQU607	.	.	.
EPS					
----	EQU	EQU608	.	.	.
-41.5681					
----	EQU	EQU609	.	.	.
-4.9088					
----	EQU	EQU610	.	.	.
-3.2363					
----	EQU	EQU611	.	.	.
-1.1134					
----	EQU	EQU612	.	.	.
EPS					
----	EQU	EQU613	.	.	.
0.0008					
----	EQU	EQU614	.	.	.
EPS					
----	EQU	EQU615	.	.	.
78.2407					
----	EQU	EQU616	.	.	.
696.7670					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU617 106.9964	.	.	.
---- EQU EQU618 111.9546	.	.	.
---- EQU EQU619 196.8561	.	.	.
---- EQU EQU620 8.5154	.	.	.
---- EQU EQU621 238.1716	.	.	.
---- EQU EQU622 36.9750	.	.	.
---- EQU EQU623 38.2620	.	.	.
---- EQU EQU624 237.2945	.	.	.
---- EQU EQU625 37.9263	.	.	.
---- EQU EQU626 37.9257	.	.	.
---- EQU EQU627 237.2919	.	.	.
---- EQU EQU628 37.9250	.	.	.
---- EQU EQU629 37.9255	.	.	.
---- EQU EQU630 37.9245	.	.	.
---- EQU EQU631 EPS	1.0000	1.0000	1.0000
---- EQU EQU632 -25.7024	.	.	.
---- EQU EQU633 EPS	.	.	.
---- EQU EQU634 37.9255	.	.	.
---- EQU EQU635 556.3881	.	.	.
---- EQU EQU636 237.2914	.	.	.
---- EQU EQU637 37.9256	.	.	.
---- EQU EQU638 37.9256	.	.	.
---- EQU EQU639 75.8513	.	.	.
---- EQU EQU640 1122.4106	.	.	.

---- EQU EQU641	.	.	.	
474.5864				
---- EQU EQU642	.	.	.	
75.8513				
---- EQU EQU643	.	.	.	
75.8513				
---- EQU EQU644	.	.	.	
EPS				
---- EQU EQU645	.	.	.	
EPS				
---- EQU EQU646	1.0000	1.0000	1.0000	
4119.5536				
---- EQU EQU647	.	.	.	
-25.7024				
---- EQU EQU648	.	.	.	
EPS				
---- EQU EQU649	.	.	.	
42.4560				
---- EQU EQU650	.	.	.	-
174.6816				
---- EQU EQU651	.	.	.	
EPS				
---- EQU EQU652	.	.	.	
0.6950				
---- EQU EQU653	.	.	.	
212.5271				
---- EQU EQU654	.	.	.	
31.9201				
---- EQU EQU655	.	.	.	
32.9969				
---- EQU EQU656	.	.	.	
-1.2253				
---- EQU EQU657	.	.	.	
757.1763				
---- EQU EQU658	.	.	.	
123.8732				
---- EQU EQU659	.	.	.	
118.4941				
---- EQU EQU660	.	.	.	
-0.0235				

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU661 212.2233	.	.	.	
---- EQU EQU662 31.8152	.	.	.	
---- EQU EQU663 32.9186	.	.	.	
---- EQU EQU664 EPS	.	.	.	
---- EQU EQU665 EPS	.	.	.	
---- EQU EQU666 246.6870	.	.	.	-
---- EQU EQU667 -36.9750	.	.	.	
---- EQU EQU668 -38.2620	.	.	.	
---- EQU EQU669 195.4356	.	.	.	-
---- EQU EQU670 622.1107	.	.	.	
---- EQU EQU671 265.6404	.	.	.	
---- EQU EQU672 42.4565	.	.	.	
---- EQU EQU673 42.4571	.	.	.	
---- EQU EQU674 113.7768	.	.	.	
---- EQU EQU675 1678.7987	.	.	.	
---- EQU EQU676 711.8778	.	.	.	
---- EQU EQU677 113.7768	.	.	.	
---- EQU EQU678 113.7769	.	.	.	
---- EQU EQU679 4599.5101	1.0000	1.0000	1.0000	
---- EQU EQU680 EPS	.	.	.	
---- EQU EQU681 EPS	.	.	.	
---- EQU EQU682 1.5602	1.0000	1.0000	1.0000	
---- EQU EQU683 199.7327	.	.	.	
---- EQU EQU684 -37.8848	.	.	.	

---- EQU EQU685	.	.	.	-
558.6050				
---- EQU EQU686	.	.	.	-
237.2673				
---- EQU EQU687	.	.	.	
-37.9063				
---- EQU EQU688	.	.	.	
-37.9233				
---- EQU EQU689	.	.	.	
-11.6175				
---- EQU EQU690	.	.	.	
EPS				
---- EQU EQU691	.	.	.	
18.9638				
---- EQU EQU692	.	.	.	
118.6847				
---- EQU EQU693	.	.	.	
18.9661				
---- EQU EQU694	.	.	.	
18.9689				
---- EQU EQU695	.	.	.	
18.5709				
---- EQU EQU696	.	.	.	
116.2140				
---- EQU EQU697	.	.	.	
18.5723				
---- EQU EQU698	.	.	.	
36.6645				
---- EQU EQU699	.	.	.	
-0.4015				
---- EQU EQU700	.	.	.	
248.1267				
---- EQU EQU701	.	.	.	
40.5932				
---- EQU EQU702	.	.	.	
38.8305				
---- EQU EQU703	.	.	.	
-58.4071				
---- EQU EQU704	.	.	.	
195.0964				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU705 195.0964	.	.	.
---- EQU EQU706 195.0964	.	.	.
---- EQU EQU707 26.4569	.	.	.
---- EQU EQU708 18.5741	.	.	.
---- EQU EQU709 -11.6175	.	.	.
---- EQU EQU710 2034.8564	1.0000	1.0000	1.0000
---- EQU EQU711 EPS	.	.	.
---- EQU EQU712 EPS	1.0000	1.0000	1.0000
---- EQU EQU713 EPS	.	.	.
---- EQU EQU714 229.4418	.	.	.
---- EQU EQU715 36.6677	.	.	.
---- EQU EQU716 36.6714	.	.	.
---- EQU EQU717 37.5346	.	.	.
---- EQU EQU718 234.8987	.	.	.
---- EQU EQU719 37.5384	.	.	.
---- EQU EQU720 37.5429	.	.	.
---- EQU EQU721 EPS	1.0000	1.0000	1.0000
---- EQU EQU722 -11.6175	.	.	.
---- EQU EQU723 EPS	.	.	.
---- EQU EQU724 24.9951	.	.	.
---- EQU EQU725 156.4133	.	.	.
---- EQU EQU726 24.9971	.	.	.
---- EQU EQU727 24.9994	.	.	.
---- EQU EQU728 11.6694	.	.	.

---- EQU EQU729	.	.	.
73.0285			
---- EQU EQU730	.	.	.
11.6706			
---- EQU EQU731	.	.	.
11.6719			
---- EQU EQU732	1.0000	1.0000	1.0000
2708.3250			
---- EQU EQU733	.	.	.
EPS			
---- EQU EQU734	.	.	.
EPS			
---- EQU EQU735	1.0000	1.0000	1.0000
1267.8697			
---- EQU EQU736	.	.	.
1335.9985			
---- EQU EQU737	.	.	.
6.0683			
---- EQU EQU738	.	.	.
3.5666			
---- EQU EQU739	.	.	.
2.9062			
---- EQU EQU740	.	.	.
0.3678			
---- EQU EQU741	.	.	.
.			
---- EQU EQU742	.	.	.
330.0284			
---- EQU EQU743	.	.	.
14.8947			
---- EQU EQU744	.	.	.
11.6539			
---- EQU EQU745	.	.	.
0.0111			
---- EQU EQU746	-290.0000	-290.0000	-290.0000
0.1887			
---- EQU EQU747	.	.	.
EPS			
---- EQU EQU748	.	.	.
0.0019			

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU749 7.5981224E-6	.	.	.
---- EQU EQU750 3.1867	.	.	.
---- EQU EQU751 -0.1887	-290.0000	-290.0000	-290.0000
---- EQU EQU752 EPS	.	.	.
---- EQU EQU753 -2.3793	.	.	.
---- EQU EQU754 -0.0002	.	.	.
---- EQU EQU755 -0.0003	.	.	.
---- EQU EQU756 0.0054	.	.	.
---- EQU EQU757 -0.0270	414.6000	414.6000	414.6000
---- EQU EQU758 0.0005	.	.	.
---- EQU EQU759 -0.0003	.	.	.
---- EQU EQU760 -0.0002	829.2000	829.2000	829.2000
---- EQU EQU761 1.0758167E-5	.	.	.
---- EQU EQU762 EPS	.	.	.
---- EQU EQU763 1.503969E-7	.	.	.
---- EQU EQU764 -0.0669	.	.	.
---- EQU EQU765 0.1268	481.0000	481.0000	481.0000
---- EQU EQU766 -0.1765	.	.	.
---- EQU EQU767 0.1229	.	.	.
---- EQU EQU768 0.2458	962.0000	962.0000	962.0000
---- EQU EQU769 0.0005	.	.	.
---- EQU EQU770 2.4347	1.0000	1.0000	1.0000
---- EQU EQU771 0.0005	.	.	.
---- EQU EQU772 3.8482	1.0000	1.0000	1.0000

----	EQU	EQU773	.	.	.
0.0005					
----	EQU	EQU774	.	.	.
0.0008					
----	EQU	EQU775	.	.	.
0.0008					
----	EQU	EQU776	.	.	.
.					
----	EQU	EQU777	.	.	.
0.0008					
----	EQU	EQU778	.	.	.
1.4840					
----	EQU	EQU779	.	.	.
1.7898					
----	EQU	EQU780	.	.	.
247.0809					-
----	EQU	EQU781	.	.	.
-0.0004					
----	EQU	EQU782	.	.	.
EPS					
----	EQU	EQU783	.	.	.
0.0004					
----	EQU	EQU784	.	.	.
-0.0002					
----	EQU	EQU785	.	.	.
3.2736710E-5					
----	EQU	EQU786	.	.	.
EPS					
----	EQU	EQU787	.	.	.
0.0020					
----	EQU	EQU788	.	.	.
-0.0027					
----	EQU	EQU789	.	.	.
0.0016					
----	EQU	EQU790	.	.	.
-0.0016					
----	EQU	EQU791	.	.	.
EPS					
----	EQU	EQU792	.	.	.
-0.0039					

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU793 2.1685	.	.	.
---- EQU EQU794 2.3503	.	.	.
---- EQU EQU795 130.4259	.	.	-
---- EQU EQU796 -0.0002	.	.	.
---- EQU EQU797 -74.4210	1.0000	1.0000	1.0000
---- EQU EQU798 -4.2485	1.0000	1.0000	1.0000
---- EQU EQU799 0.0002	.	.	.
---- EQU EQU800 -0.8963	.	.	.
---- EQU EQU801 -3.0854	.	.	.
---- EQU EQU802 -3.0636	.	.	.
---- EQU EQU803 -4.0226	.	.	.
---- EQU EQU804 205.0403	.	.	.
---- EQU EQU805 -13.7947	1.0000	1.0000	1.0000
---- EQU EQU806 1.2921	1.0000	1.0000	1.0000
---- EQU EQU807	1.0000	1.0000	1.0000
EPS			
---- EQU EQU808 0.0004	.	.	.
---- EQU EQU809 0.0004	.	.	.
---- EQU EQU810 -36.1925	.	.	.
---- EQU EQU811 -36.9649	.	.	.
---- EQU EQU812 235.1859	.	.	-
---- EQU EQU813 -44.0350	.	.	.
---- EQU EQU814 197.5278	.	.	.
---- EQU EQU815 -34.6338	1.0000	1.0000	1.0000
---- EQU EQU816 -0.0012	.	.	.

---- EQU EQU817	1.0000	1.0000	1.0000	
-0.6165				
---- EQU EQU818	.	.	.	
-0.0004				
---- EQU EQU819	1.0000	1.0000	1.0000	
2.2228				
---- EQU EQU820	.	.	.	
0.0013				
---- EQU EQU821	.	.	.	
-0.0026				
---- EQU EQU822	1.0000	1.0000	1.0000	
-3.1189				
---- EQU EQU823	.	.	.	-
129.8636				
---- EQU EQU824	.	.	.	
-75.0613				
---- EQU EQU825	.	.	.	
-0.0028				
---- EQU EQU826	.	.	.	
-0.0033				
---- EQU EQU827	.	.	.	
0.0262				
---- EQU EQU828	.	.	.	
-0.0395				
---- EQU EQU829	.	.	.	
179.0351				
---- EQU EQU830	.	.	.	
0.0125				
---- EQU EQU831	.	.	.	
0.0015				
---- EQU EQU832	.	.	.	
-0.0041				
---- EQU EQU833	.	.	.	
EPS				
---- EQU EQU834	.	.	.	
-0.0325				
---- EQU EQU835	.	.	.	
-0.0074				
---- EQU EQU836	.	.	.	
EPS				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU837 97.4240	.	.	.
---- EQU EQU838 561.7365	.	.	.
---- EQU EQU839 86.0476	.	.	.
---- EQU EQU840 90.2670	.	.	.
---- EQU EQU841 -0.0037	.	.	.
---- EQU EQU842 0.0017	.	.	.
---- EQU EQU843 2.4700	.	.	.
---- EQU EQU844 -76.4291	.	.	.
---- EQU EQU845 90.2491	.	.	.
---- EQU EQU846 85.8953	.	.	.
---- EQU EQU847 561.5435	.	.	.
---- EQU EQU848 97.0979	.	.	.
---- EQU EQU849 122.1607	.	.	.
---- EQU EQU850 122.0308	.	.	.
---- EQU EQU851 764.2605	.	.	.
---- EQU EQU852 1799.8378	.	.	.
---- EQU EQU853 121.8674	.	.	.
---- EQU EQU854 3.2051	.	.	.
---- EQU EQU855 0.0075	.	.	.
---- EQU EQU856 36.7935	.	.	.
---- EQU EQU857 36.5197	.	.	.
---- EQU EQU858 235.6900	.	.	.
---- EQU EQU859 43.8635	.	.	.
---- EQU EQU860 0.0012	.	.	.

---- EQU EQU861	.	.	.	
-0.0008				
---- EQU EQU862	.	.	.	-
197.5278				
---- EQU EQU863	.	.	.	
122.1752				
---- EQU EQU864	.	.	.	
122.1478				
---- EQU EQU865	.	.	.	
764.4052				
---- EQU EQU866	.	.	.	
1799.4677				
---- EQU EQU867	.	.	.	
122.1131				
---- EQU EQU868	.	.	.	-
5.583682E-6				
---- EQU EQU869	.	.	.	-
1.522649E-5				
---- EQU EQU870	.	.	.	
-0.0002				
---- EQU EQU871	.	.	.	
-0.0008				
---- EQU EQU872	.	.	.	
-0.0005				
---- EQU EQU873	.	.	.	
-0.0008				
---- EQU EQU874	.	.	.	
-0.0006				
---- EQU EQU875	.	.	.	
0.0012				
---- EQU EQU876	.	.	.	
-0.0011				
---- EQU EQU877	.	.	.	
0.0006				
---- EQU EQU878	.	.	.	
-0.0005				
---- EQU EQU879	.	.	.	
0.0007				
---- EQU EQU880	.	.	.	
-0.0007				

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MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU881 0.0014	.	.	.	
---- EQU EQU882 -0.0005	.	.	.	
---- EQU EQU883 0.0019	.	.	.	
---- EQU EQU884 -0.0008	.	.	.	
---- EQU EQU885 0.0026	.	.	.	
---- EQU EQU886 -0.0011	.	.	.	
---- EQU EQU887 0.0013	.	.	.	
---- EQU EQU888 -0.0005	.	.	.	
---- EQU EQU889 EPS	.	.	.	
---- EQU EQU890 580.9977	1.0000	1.0000	1.0000	
---- EQU EQU891 EPS	.	.	.	
---- EQU EQU892 EPS	.	.	.	
---- EQU EQU893 EPS	.	.	.	
---- EQU EQU894 775.7304	1.0000	1.0000	1.0000	-
---- EQU EQU895 -30.5486	.	.	.	
---- EQU EQU896 0.9622	.	.	.	
---- EQU EQU897 EPS	.	.	.	
---- EQU EQU898 0.6939	.	.	.	
---- EQU EQU899 -2.4466	1.0000	1.0000	1.0000	
---- EQU EQU900 -20.4102	.	.	.	
---- EQU EQU901 2.3301	1.0000	1.0000	1.0000	
---- EQU EQU902 17.6850	.	.	.	
---- EQU EQU903 -4.8969	1.0000	1.0000	1.0000	
---- EQU EQU904 6.3563	.	.	.	

---- EQU EQU905	.	.	.
0.0479			
---- EQU EQU906	.	.	.
0.2052			
---- EQU EQU907	.	.	.
0.4431			
---- EQU EQU908	.	.	.
0.5155			
---- EQU EQU909	.	.	.
0.2513			
---- EQU EQU910	.	.	.
0.1975			
---- EQU EQU911	.	.	.
-0.0239			
---- EQU EQU912	.	.	.
-0.1636			
---- EQU EQU913	.	.	.
-2.4210			
---- EQU EQU914	.	.	.
.			
---- EQU EQU915	.	.	.
EPS			
---- EQU EQU916	.	.	.
-3.1041			
---- EQU EQU917	.	.	.
EPS			
---- EQU EQU918	.	.	.
2.3301			
---- EQU EQU919	.	.	.
1.8464			
---- EQU EQU920	.	.	.
2.2595			
---- EQU EQU921	.	.	.
3.0548			
---- EQU EQU922	.	.	.
3.4327			
---- EQU EQU923	.	.	.
EPS			
---- EQU EQU924	1.0000	1.0000	1.0000
EPS			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU925 EPS	.	.	.
---- EQU EQU926 EPS	.	.	.
---- EQU EQU927 8.129644E-5	.	.	-
---- EQU EQU928 -0.0052	.	.	.
---- EQU EQU929 8.338969E-5	.	.	-
---- EQU EQU930 EPS	.	.	.
---- EQU EQU931 0.0002	.	.	.
---- EQU EQU932 3.2458764E-7	.	.	.
---- EQU EQU933 -0.0022	.	.	.
---- EQU EQU934 EPS	.	.	.
---- EQU EQU935 EPS	.	.	.
---- EQU EQU936 -0.0095	.	.	.
---- EQU EQU937 -0.0244	.	.	.
---- EQU EQU938 -1.5881	.	.	.
---- EQU EQU939 -0.0251	.	.	.
---- EQU EQU940 EPS	.	.	.
---- EQU EQU941 0.0553	.	.	.
---- EQU EQU942 9.9525061E-5	.	.	.
---- EQU EQU943 -0.6654	.	.	.
---- EQU EQU944 5.446712E-7	.	.	-
---- EQU EQU945 -0.0030	1.000000E-20	1.000000E-20	1.000000E-20
---- EQU EQU946 .	1.000000E-10	1.000000E-10	1.000000E-10
---- EQU EQU947 0.0723	1.0000	1.0000	1.0000
---- EQU EQU948 -3.0164	1.0000	1.0000	1.0000

---- EQU EQU949	1.0000	1.0000	1.0000	
201.7389				
---- EQU EQU950	.	.	.	
-35.6602				
---- EQU EQU951	.	.	.	
EPS				
---- EQU EQU952	.	.	.	
EPS				
---- EQU EQU953	.	.	.	
9.1457				
---- EQU EQU954	.	.	.	-
197.9394				
---- EQU EQU955	.	.	.	
EPS				
---- EQU EQU956	.	.	.	
0.0244				
---- EQU EQU957	.	.	.	
-0.0031				
---- EQU EQU958	.	.	.	-
3.105374E-5				
---- EQU EQU959	.	.	.	
849.9004				
---- EQU EQU960	.	.	.	
-12.2702				
---- EQU EQU961	.	.	.	
EPS				
---- EQU EQU962	.	.	.	
EPS				
---- EQU EQU963	.	.	.	
.				
---- EQU EQU964	.	.	.	
-0.1840				
---- EQU EQU965	1.0000	1.0000	1.0000	
5.8053				
---- EQU EQU966	.	.	.	
236.4038				
---- EQU EQU967	.	.	.	
-4.9447				
---- EQU EQU968	1.0000	1.0000	1.0000	
-6.1668				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU969 135.8837	.	.	-
---- EQU EQU970 3.6117	.	.	.
---- EQU EQU971 173.7968	.	.	-
---- EQU EQU972 -58.6936	.	.	.
---- EQU EQU973 -43.9023	.	.	.
---- EQU EQU974 -33.3131	.	.	.
---- EQU EQU975 3.3458312E-5	.	.	.
---- EQU EQU976 0.0002	.	.	.
---- EQU EQU977 9.868383E-7	.	.	-
---- EQU EQU978 156.5698	.	.	-
---- EQU EQU979 39.4413	.	.	.
---- EQU EQU980 161.4870	.	.	-
---- EQU EQU981 168.9435	.	.	-
---- EQU EQU982 EPS	.	.	.
---- EQU EQU983 EPS	.	.	.
---- EQU EQU984 3.7540	.	.	.
---- EQU EQU985 EPS	.	.	.
---- EQU EQU986 -0.0033	.	.	.
---- EQU EQU987 -0.0002	.	.	.
---- EQU EQU988 -12.2927	.	.	.
---- EQU EQU989 -0.0002	.	.	.
---- EQU EQU990 EPS	.	.	.
---- EQU EQU991 EPS	.	.	.
---- EQU EQU992 0.0005	.	.	.

----	EQU	EQU993	.	.	.
18.2882					
----	EQU	EQU994	.	.	.
0.0002					
----	EQU	EQU995	.	.	.
-0.4178					
----	EQU	EQU996	.	.	.
-0.0004					
----	EQU	EQU997	.	.	.
-0.0004					
----	EQU	EQU998	.	.	.
-19.5119					
----	EQU	EQU999	.	.	.
EPS					
----	EQU	EQU1000	.	.	.
EPS					
----	EQU	EQU1001	.	.	.
0.0004					
----	EQU	EQU1002	.	.	.
0.0008					
----	EQU	EQU1003	.	.	.
23.1579					
----	EQU	EQU1004	.	.	.
-0.0005					
----	EQU	EQU1005	.	.	.
-0.5101					
----	EQU	EQU1006	.	.	.
-0.0005					
----	EQU	EQU1007	.	.	.
-52.9250					
----	EQU	EQU1008	.	.	.
EPS					
----	EQU	EQU1009	.	.	.
EPS					
----	EQU	EQU1010	.	.	.
0.0005					
----	EQU	EQU1011	.	.	.
0.0011					
----	EQU	EQU1012	.	.	.
57.4111					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1013 -0.0002	.	.	.
---- EQU EQU1014 -0.2272	.	.	.
---- EQU EQU1015 -26.9557	.	.	.
---- EQU EQU1016 14.7139	.	.	.
---- EQU EQU1017 EPS	.	.	.
---- EQU EQU1018 -1.3083	.	.	.
---- EQU EQU1019 EPS	.	.	.
---- EQU EQU1020 EPS	.	.	.
---- EQU EQU1021 106.6872	.	.	.
---- EQU EQU1022 -53.9898	.	.	.
---- EQU EQU1023 -17.7963	.	.	.
---- EQU EQU1024 -13.2202	.	.	.
---- EQU EQU1025 -3.7871	.	.	.
---- EQU EQU1026 -8.7174	1.0000	1.0000	1.0000
---- EQU EQU1027 EPS	.	.	.
---- EQU EQU1028 EPS	.	.	.
---- EQU EQU1029 EPS	.	.	.
---- EQU EQU1030 EPS	.	.	.
---- EQU EQU1031 EPS	.	.	.
---- EQU EQU1032 EPS	.	.	.
---- EQU EQU1033 196.8561	.	.	.
---- EQU EQU1034 -0.0002	.	.	.
---- EQU EQU1035 -19.9284	.	.	.
---- EQU EQU1036 EPS	.	.	.

---- EQU EQU1037	.	.	.
0.0002			
---- EQU EQU1038	.	.	.
EPS			
---- EQU EQU1039	.	.	.
27.2255			
---- EQU EQU1040	.	.	.
0.0005			
---- EQU EQU1041	.	.	.
28.7143			
---- EQU EQU1042	.	.	.
0.8837			
---- EQU EQU1043	.	.	.
151.6290			
---- EQU EQU1044	.	.	.
24.0227			
---- EQU EQU1045	.	.	.
24.2086			
---- EQU EQU1046	.	.	.
109.0437			
---- EQU EQU1047	.	.	.
3.8482			
---- EQU EQU1048	.	.	.
597.3280			
---- EQU EQU1049	.	.	.
94.6296			
---- EQU EQU1050	.	.	.
95.4174			
---- EQU EQU1051	.	.	.
26.4268			
---- EQU EQU1052	.	.	.
0.9805			
---- EQU EQU1053	.	.	.
139.5615			
---- EQU EQU1054	.	.	.
22.1017			
---- EQU EQU1055	.	.	.
22.2811			
---- EQU EQU1056	.	.	.
76.7991			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1057 4.8345	.	.	.
---- EQU EQU1058 550.5377	.	.	.
---- EQU EQU1059 87.8279	.	.	.
---- EQU EQU1060 -0.0216	.	.	.
---- EQU EQU1061 EPS	.	.	.
---- EQU EQU1062 EPS	.	.	.
---- EQU EQU1063 0.1840	.	.	.
---- EQU EQU1064 88.1256	.	.	.
---- EQU EQU1065 0.0118	.	.	.
---- EQU EQU1066 0.0087	.	.	.
---- EQU EQU1067 0.8837	1.0000	1.0000	1.0000
---- EQU EQU1068 0.9805	1.0000	1.0000	1.0000
---- EQU EQU1069 -0.0023	.	.	.
---- EQU EQU1070 -0.0023	.	.	.
---- EQU EQU1071 197.3845	.	.	.
---- EQU EQU1072 -0.0023	.	.	.
---- EQU EQU1073 0.0671	1.0000	1.0000	1.0000
---- EQU EQU1074 EPS	1.0000	1.0000	1.0000
---- EQU EQU1075 -0.0021	.	.	.
---- EQU EQU1076 EPS	1.0000	1.0000	1.0000
---- EQU EQU1077 -0.0021	.	.	.
---- EQU EQU1078 EPS	1.0000	1.0000	1.0000
---- EQU EQU1079 -0.0021	.	.	.
---- EQU EQU1080 197.3845	.	.	.

---- EQU EQU1081	.	.	.	
0.0015				
---- EQU EQU1082	.	.	.	
0.0015				
---- EQU EQU1083	.	.	.	-
197.3845				
---- EQU EQU1084	.	.	.	
0.0015				
---- EQU EQU1085	1.0000	1.0000	1.0000	
.				
---- EQU EQU1086	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU1087	.	.	.	
EPS				
---- EQU EQU1088	.	.	.	
-0.0015				
---- EQU EQU1089	.	.	.	
1.7598832E-6				
---- EQU EQU1090	.	.	.	
1.7609987E-6				
---- EQU EQU1091	.	.	.	
4.5385072E-6				
---- EQU EQU1092	.	.	.	
0.0019				
---- EQU EQU1093	.	.	.	
0.0002				
---- EQU EQU1094	.	.	.	
0.0005				
---- EQU EQU1095	1.0000	1.0000	1.0000	
-2.3757				
---- EQU EQU1096	1.0000	1.0000	1.0000	
0.5264				
---- EQU EQU1097	.	.	.	
3.1443				
---- EQU EQU1098	.	.	.	
0.1897				
---- EQU EQU1099	1.0000	1.0000	1.0000	
54.7188				
---- EQU EQU1100	.	.	.	
-0.0002				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1101 -0.0148	.	.	.
---- EQU EQU1102 -0.0036	.	.	.
---- EQU EQU1103 -0.0002	.	.	.
---- EQU EQU1104 -0.0113	.	.	.
---- EQU EQU1105 -18.4516	1.0000	1.0000	1.0000
---- EQU EQU1106 -20.5752	.	.	.
---- EQU EQU1107 -10.2335	.	.	.
---- EQU EQU1108 204.8089	.	.	.
---- EQU EQU1109 1.4377	.	.	.
---- EQU EQU1110 5.5419	1.0000	1.0000	1.0000
---- EQU EQU1111 160.4563	.	.	.
---- EQU EQU1112 -3.0240	.	.	.
---- EQU EQU1113 4.3872	.	.	.
---- EQU EQU1114 -19.0896	.	.	.
---- EQU EQU1115 -8.6305	.	.	.
---- EQU EQU1116 -4.9457	.	.	.
---- EQU EQU1117 2.0252	.	.	.
---- EQU EQU1118 -6.6887	.	.	.
---- EQU EQU1119 -1.3964	.	.	.
---- EQU EQU1120 EPS	1.0000	1.0000	1.0000
---- EQU EQU1121 -7.1461	.	.	.
---- EQU EQU1122 10.4684	.	.	.
---- EQU EQU1123 0.7707	.	.	.
---- EQU EQU1124 EPS	1.0000	1.0000	1.0000

---- EQU EQU1125	.	.	.	-
2.391058E-6				
---- EQU EQU1126	.	.	.	
2.4527452E-5				
---- EQU EQU1127	.	.	.	
0.0060				
---- EQU EQU1128	.	.	.	
0.0005				
---- EQU EQU1129	.	.	.	
3.1975				
---- EQU EQU1130	.	.	.	
2.4430				
---- EQU EQU1131	.	.	.	
1.8439				
---- EQU EQU1132	1.0000	1.0000	1.0000	
13.9991				
---- EQU EQU1133	.	.	.	
-2.7660				
---- EQU EQU1134	.	.	.	
-2.2166				
---- EQU EQU1135	.	.	.	
-1.1048				
---- EQU EQU1136	1.0000	1.0000	1.0000	
EPS				
---- EQU EQU1137	.	.	.	
5.6286907E-7				
---- EQU EQU1138	.	.	.	-
9.772393E-6				
---- EQU EQU1139	.	.	.	
0.0015				
---- EQU EQU1140	.	.	.	
-0.0007				
---- EQU EQU1141	.	.	.	
-0.0013				
---- EQU EQU1142	.	.	.	
-3.3042				
---- EQU EQU1143	.	.	.	
-5.4321				
---- EQU EQU1144	.	.	.	
-9.7107				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1145 -2.6925	.	.	.
---- EQU EQU1146 EPS	.	.	.
---- EQU EQU1147 1.173723E-6	.	.	-
---- EQU EQU1148 EPS	.	.	.
---- EQU EQU1149 -0.0007	.	.	.
---- EQU EQU1150 -0.0033	.	.	.
---- EQU EQU1151 -0.0224	.	.	.
---- EQU EQU1152 1.0822804E-7	.	.	.
---- EQU EQU1153 -0.0062	.	.	.
---- EQU EQU1154 -1.9093	.	.	.
---- EQU EQU1155 -0.4248	.	.	.
---- EQU EQU1156 -0.5443	.	.	.
---- EQU EQU1157 EPS	.	.	.
---- EQU EQU1158 3.419010E-7	.	.	-
---- EQU EQU1159 -0.0012	.	.	.
---- EQU EQU1160 EPS	152.2500	152.2500	152.2500
---- EQU EQU1161 0.0024	181.2500	181.2500	181.2500
---- EQU EQU1162 -0.0023	118.9000	118.9000	118.9000
---- EQU EQU1163 0.0003	40.6000	40.6000	40.6000
---- EQU EQU1164 -0.0107	9.8600	9.8600	9.8600
---- EQU EQU1165 0.0005	.	.	.
---- EQU EQU1166 0.0008	.	.	.
---- EQU EQU1167 0.0011	.	.	.
---- EQU EQU1168 0.0005	.	.	.

---- EQU EQU1169	.	.	.	-
197.3845				
---- EQU EQU1170	.	.	.	
-0.1433				
---- EQU EQU1171	.	.	.	
42.2773				
---- EQU EQU1172	.	.	.	
233.4949				
---- EQU EQU1173	.	.	.	
35.2285				
---- EQU EQU1174	.	.	.	
34.5310				
---- EQU EQU1175	.	.	.	
-1.6571				
---- EQU EQU1176	.	.	.	
38.7692				
---- EQU EQU1177	.	.	.	
234.8470				
---- EQU EQU1178	.	.	.	
33.9297				
---- EQU EQU1179	.	.	.	
35.6850				
---- EQU EQU1180	.	.	.	
-2.4431				
---- EQU EQU1181	.	.	.	
8.4227				
---- EQU EQU1182	.	.	.	-
161.8800				
---- EQU EQU1183	.	.	.	
1.3499				
---- EQU EQU1184	.	.	.	-
870.8523				
---- EQU EQU1185	.	.	.	-
135.6765				
---- EQU EQU1186	.	.	.	-
132.8731				
---- EQU EQU1187	.	.	.	
73.6341				
---- EQU EQU1188	.	.	.	
-93.7551				

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1189 557.9297	.	.	.
---- EQU EQU1190 -82.1982	.	.	.
---- EQU EQU1191 -86.2782	.	.	.
---- EQU EQU1192 4.0072	.	.	.
---- EQU EQU1193 -0.0040	.	.	.
---- EQU EQU1194 -0.0140	.	.	.
---- EQU EQU1195 EPS	.	.	.
---- EQU EQU1196 0.0047	.	.	.
---- EQU EQU1197 EPS	.	.	.
---- EQU EQU1198 -0.0002	.	.	.
---- EQU EQU1199 -0.2754	.	.	.
---- EQU EQU1200 1.2921	.	.	.
---- EQU EQU1201 0.0983	.	.	.
---- EQU EQU1202 -0.1999	.	.	.
---- EQU EQU1203 EPS	1.0000	1.0000	1.0000
---- EQU EQU1204 -0.0022	.	.	.
---- EQU EQU1205 -0.0110	.	.	.
---- EQU EQU1206 12.9395	1.0000	1.0000	1.0000
---- EQU EQU1207 0.0029	.	.	.
---- EQU EQU1208 EPS	1.0000	1.0000	1.0000
---- EQU EQU1209 EPS	1.0000	1.0000	1.0000
---- EQU EQU1210 EPS	.	.	.
---- EQU EQU1211 EPS	.	.	.
---- EQU EQU1212 EPS	.	.	.

----	EQU	EQU1213	.	.	.
EPS					
----	EQU	EQU1214	.	.	.
EPS					
----	EQU	EQU1215	.	.	.
EPS					
----	EQU	EQU1216	.	.	.
EPS					
----	EQU	EQU1217	.	.	.
EPS					
----	EQU	EQU1218	.	.	.
EPS					
----	EQU	EQU1219	.	.	.
EPS					
----	EQU	EQU1220	.	.	.
EPS					
----	EQU	EQU1221	.	.	.
EPS					
----	EQU	EQU1222	.	.	.
EPS					
----	EQU	EQU1223	.	.	.
EPS					
----	EQU	EQU1224	.	.	.
EPS					
----	EQU	EQU1225	.	.	.
EPS					
----	EQU	EQU1226	.	.	.
13.1442					
----	EQU	EQU1227	.	.	.
EPS					
----	EQU	EQU1228	.	.	.
EPS					
----	EQU	EQU1229	.	.	.
EPS					
----	EQU	EQU1230	.	.	.
EPS					
----	EQU	EQU1231	.	.	.
EPS					
----	EQU	EQU1232	.	.	.
-57.9659					

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1233 EPS	.	.	.
---- EQU EQU1234 EPS	1.0000	1.0000	1.0000
---- EQU EQU1235 EPS	1.0000	1.0000	1.0000
---- EQU EQU1236 4.645815E-5	537.9500	537.9500	537.9500 -
---- EQU EQU1237 EPS	152.2500	152.2500	152.2500
---- EQU EQU1238 0.0006	181.2500	181.2500	181.2500
---- EQU EQU1239 -0.0006	118.9000	118.9000	118.9000
---- EQU EQU1240 0.0001	40.6000	40.6000	40.6000
---- EQU EQU1241 -0.0027	9.8600	9.8600	9.8600
---- EQU EQU1242 0.4930	.	.	.
---- EQU EQU1243 -0.1965	.	.	.
---- EQU EQU1244 0.7608	.	.	.
---- EQU EQU1245 -0.2993	.	.	.
---- EQU EQU1246 1.2931	.	.	.
---- EQU EQU1247 -3.8885	.	.	.
---- EQU EQU1248 0.3595	.	.	.
---- EQU EQU1249 -1.4025	.	.	.
---- EQU EQU1250 0.0583	.	.	.
---- EQU EQU1251 -0.2714	.	.	.
---- EQU EQU1252 8.0376	.	.	.
---- EQU EQU1253 EPS	.	.	.
---- EQU EQU1254 0.0576	1.0000	1.0000	1.0000
---- EQU EQU1255 EPS	1.0000	1.0000	1.0000
---- EQU EQU1256 0.0093	.	.	.

----	EQU	EQU1257	.	.	.
-0.0009					
----	EQU	EQU1258	.	.	.
0.0009					
----	EQU	EQU1259	.	.	.
EPS					
----	EQU	EQU1260	.	.	.
0.0133					
----	EQU	EQU1261	.	.	.
-0.0051					
----	EQU	EQU1262	.	.	.
-2.3793					
----	EQU	EQU1263	.	.	.
-0.0129					
----	EQU	EQU1264	.	.	.
-0.0015					
----	EQU	EQU1265	.	.	.
EPS					
----	EQU	EQU1266	.	.	.
-0.0004					
----	EQU	EQU1267	.	.	.
-0.0003					
----	EQU	EQU1268	.	.	.
EPS					
----	EQU	EQU1269	.	.	.
EPS					
----	EQU	EQU1270	.	.	.
1.3511					
----	EQU	EQU1271	.	.	.
-0.2693					
----	EQU	EQU1272	.	.	.
0.8084					
----	EQU	EQU1273	.	.	.
-0.1876					
----	EQU	EQU1274	.	.	.
0.2959					
----	EQU	EQU1275	.	.	.
-0.1757					
----	EQU	EQU1276	.	.	.
0.1442					

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1277 -1.2676	.	.	.
---- EQU EQU1278 0.4484	.	.	.
---- EQU EQU1279 -2.0993	.	.	.
---- EQU EQU1280 EPS	1.0000	1.0000	1.0000
---- EQU EQU1281 EPS	1.0000	1.0000	1.0000
---- EQU EQU1282
---- EQU EQU1283 EPS	.	.	.
---- EQU EQU1284 -0.2875	.	.	.
---- EQU EQU1285 0.1510	.	.	.
---- EQU EQU1286 -0.5846	.	.	.
---- EQU EQU1287 0.2854	.	.	.
---- EQU EQU1288 -1.4742	.	.	.
---- EQU EQU1289 -0.6680	.	.	.
---- EQU EQU1290 0.5579	.	.	.
---- EQU EQU1291 -2.4043	.	.	.
---- EQU EQU1292 0.9941	.	.	.
---- EQU EQU1293 -5.9615	.	.	.
---- EQU EQU1294 0.0165	.	.	.
---- EQU EQU1295 -0.9929	.	.	.
---- EQU EQU1296 -0.0005	.	.	.
---- EQU EQU1297 -1.2583	.	.	.
---- EQU EQU1298 36.5555	.	.	.
---- EQU EQU1299 41.9813	.	.	.
---- EQU EQU1300 235.4692	.	.	.

---- EQU EQU1301	.	.	.	
36.2546				
---- EQU EQU1302	.	.	.	-
197.3845				
---- EQU EQU1303	.	.	.	
EPS				
---- EQU EQU1304	537.9500	537.9500	537.9500	
-0.0001				
---- EQU EQU1305	.	.	.	-
558.5066				
---- EQU EQU1306	.	.	.	
EPS				
---- EQU EQU1307	.	.	.	-
161.2895				
---- EQU EQU1308	.	.	.	
-0.0004				
---- EQU EQU1309	.	.	.	
0.0021				
---- EQU EQU1310	.	.	.	
2.9384				
---- EQU EQU1311	.	.	.	
199.2414				
---- EQU EQU1312	.	.	.	
0.0563				
---- EQU EQU1313	.	.	.	
-37.9154				
---- EQU EQU1314	.	.	.	
0.0005				
---- EQU EQU1315	1.0000	1.0000	1.0000	
0.2372				
---- EQU EQU1316	.	.	.	
-0.0028				
---- EQU EQU1317	1.0000	1.0000	1.0000	
-7.2623				
---- EQU EQU1318	.	.	.	
0.0012				
---- EQU EQU1319	.	.	.	
4.2362975E-5				
---- EQU EQU1320	.	.	.	
0.0060				

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1321 0.0005	.	.	.
---- EQU EQU1322 0.0034	.	.	.
---- EQU EQU1323 0.0022	.	.	.
---- EQU EQU1324 5.7905730E-5	.	.	.
---- EQU EQU1325 0.0044	.	.	.
---- EQU EQU1326 0.0008	.	.	.
---- EQU EQU1327 -0.0034	.	.	.
---- EQU EQU1328 0.0011	.	.	.
---- EQU EQU1329 0.0066	.	.	.
---- EQU EQU1330 2.7962082E-5	.	.	.
---- EQU EQU1331 0.0051	.	.	.
---- EQU EQU1332 -0.0034	.	.	.
---- EQU EQU1333 0.0005	.	.	.
---- EQU EQU1334 0.0025	.	.	.
---- EQU EQU1335 EPS	.	.	.
---- EQU EQU1336 0.0050	.	.	.
---- EQU EQU1337 0.0015	.	.	.
---- EQU EQU1338 EPS	.	.	.
---- EQU EQU1339 0.0007	.	.	.
---- EQU EQU1340 0.0172	.	.	.
---- EQU EQU1341 -0.0020	.	.	.
---- EQU EQU1342 EPS	.	.	.
---- EQU EQU1343 EPS	.	.	.
---- EQU EQU1344 EPS	.	.	.

----	EQU	EQU1345	.	.	.	
EPS						
----	EQU	EQU1346	.	.	.	
EPS						
----	EQU	EQU1347	.	.	.	
EPS						
----	EQU	EQU1348	.	.	.	
EPS						
----	EQU	EQU1349	.	.	.	
EPS						
----	EQU	EQU1350	.	.	.	
EPS						
----	EQU	EQU1351	.	.	.	
EPS						
----	EQU	EQU1352	.	.	.	
EPS						
----	EQU	EQU1353	.	.	.	
EPS						
----	EQU	EQU1354	.	.	.	
EPS						
----	EQU	EQU1355	.	.	.	
EPS						
----	EQU	EQU1356	.	.	.	
EPS						
----	EQU	EQU1357	.	.	.	
EPS						
----	EQU	EQU1358	.	.	.	
EPS						
----	EQU	EQU1359	.	.	.	
EPS						
----	EQU	EQU1360	.	.	.	
1753.5625						
----	EQU	EQU1361	.	.	.	-
558.9070						
----	EQU	EQU1362	.	.	.	
458.8627						
----	EQU	EQU1363	.	.	.	-
499.6314						
----	EQU	EQU1364	.	.	.	
-0.0033						

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1365	.	.	.
EPS			
---- EQU EQU1366	.	.	-
502.1738			
---- EQU EQU1367	.	.	-
302.8299			
---- EQU EQU1368	.	.	-
302.9130			
---- EQU EQU1369	.	.	.
-0.2124			
---- EQU EQU1370	.	.	.
72.2686			
---- EQU EQU1371	.	.	.
0.0053			
---- EQU EQU1372	.	.	.
EPS			
---- EQU EQU1373	.	.	.
48.7113			
---- EQU EQU1374	.	.	.
721.8557			
---- EQU EQU1375	.	.	.
718.6371			
---- EQU EQU1376	.	.	.
450.8974			
---- EQU EQU1377	.	.	.
-0.0428			
---- EQU EQU1378	.	.	.
EPS			
---- EQU EQU1379	.	.	.
71.9146			
---- EQU EQU1380	.	.	.
43.5843			
---- EQU EQU1381	.	.	.
43.5842			
---- EQU EQU1382	.	.	.
-20.1904			
---- EQU EQU1383	.	.	.
EPS			
---- EQU EQU1384	.	.	.
EPS			
---- EQU EQU1385	.	.	.
EPS			
---- EQU EQU1386	.	.	.
438.1338			
---- EQU EQU1387	.	.	.
-6.9549			
---- EQU EQU1388	.	.	.
72.2686			

---- EQU EQU1389	.	.	.
EPS			
---- EQU EQU1390	.	.	.
43.5843			
---- EQU EQU1391	.	.	.
71.9146			
---- EQU EQU1392	.	.	.
-0.0428			
---- EQU EQU1393	.	.	.
0.0053			
---- EQU EQU1394	.	.	.
43.9408			
---- EQU EQU1395	.	.	.
EPS			
---- EQU EQU1396	.	.	.
EPS			
---- EQU EQU1397	.	.	.
43.5842			
---- EQU EQU1398	.	.	.
EPS			
---- EQU EQU1399	.	.	.
790.9057			
---- EQU EQU1400	.	.	.
EPS			
---- EQU EQU1401	.	.	.
-20.1904			
---- EQU EQU1402	.	.	.
EPS			
---- EQU EQU1403	.	.	.
EPS			
---- EQU EQU1404	-290.0000	-290.0000	-290.0000
EPS			
---- EQU EQU1405	.	.	.
793.7703			
---- EQU EQU1406	.	.	.
481.7180			
---- EQU EQU1407	.	.	.
494.4817			
---- EQU EQU1408	.	.	.
48.6685			

MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1409 0.0053	.	.	.
---- EQU EQU1410 2.2004	.	.	.
---- EQU EQU1411 4.2006	.	.	.
---- EQU EQU1412 EPS	.	.	.
---- EQU EQU1413 1.9250	.	.	.
---- EQU EQU1414 2.3662	.	.	.
---- EQU EQU1415 4.0239	.	.	.
---- EQU EQU1416 -0.0017	.	.	.
---- EQU EQU1417 118.6970	.	.	.
---- EQU EQU1418 -5.9964	.	.	.
---- EQU EQU1419 0.0525	.	.	.
---- EQU EQU1420 -10.3647	.	.	.
---- EQU EQU1421 1.2891	.	.	.
---- EQU EQU1422 -0.1533	414.6000	414.6000	414.6000
---- EQU EQU1423 1.1052	.	.	.
---- EQU EQU1424 -9.0156	.	.	.
---- EQU EQU1425 -0.0263	.	.	.
---- EQU EQU1426 0.0005	.	.	.
---- EQU EQU1427 -16.4464	.	.	.
---- EQU EQU1428 24.7479	.	.	.
---- EQU EQU1429 -0.1655	.	.	.
---- EQU EQU1430 -0.5560	.	.	.
---- EQU EQU1431 -0.4640	.	.	.
---- EQU EQU1432 2.1256	.	.	.

---- EQU EQU1433	.	.	.
1.7610			
---- EQU EQU1434	.	.	.
36.3474			
---- EQU EQU1435	.	.	.
0.4433			
---- EQU EQU1436	.	.	.
204.9417			
---- EQU EQU1437	.	.	.
54.7890			
---- EQU EQU1438	.	.	.
-0.0032			
---- EQU EQU1439	.	.	.
EPS			
---- EQU EQU1440	.	.	.
EPS			
---- EQU EQU1441	.	.	.
EPS			
---- EQU EQU1442	.	.	.
21.4095			
---- EQU EQU1443	.	.	.
-0.0103			
---- EQU EQU1444	.	.	.
38.3817			
---- EQU EQU1445	.	.	.
EPS			
---- EQU EQU1446	.	.	.
330.2436			
---- EQU EQU1447	.	.	.
EPS			
---- EQU EQU1448	.	.	.
339.8641			
---- EQU EQU1449	.	.	.
541.6731			
---- EQU EQU1450	.	.	.
544.0991			
---- EQU EQU1451	.	.	.
561.6332			
---- EQU EQU1452	.	.	.
24.2424			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1453 0.0224	.	.	.
---- EQU EQU1454 0.0013	.	.	.
---- EQU EQU1455 EPS	.	.	.
---- EQU EQU1456 EPS	.	.	.
---- EQU EQU1457 EPS	.	.	.
---- EQU EQU1458 EPS	.	.	.
---- EQU EQU1459 20.0818	.	.	.
---- EQU EQU1460 23.2009	.	.	.
---- EQU EQU1461 7.1635	.	.	.
---- EQU EQU1462 EPS	.	.	.
---- EQU EQU1463 0.0078	.	.	.
---- EQU EQU1464 EPS	.	.	.
---- EQU EQU1465 -0.1746	.	.	.
---- EQU EQU1466 0.0443	.	.	.
---- EQU EQU1467 2.9517	.	.	.
---- EQU EQU1468 -0.2553	1.0000	1.0000	1.0000
---- EQU EQU1469 -0.0033	.	.	.
---- EQU EQU1470 -0.0033	.	.	.
---- EQU EQU1471 -0.0241	1.0000	1.0000	1.0000
---- EQU EQU1472 EPS	.	.	.
---- EQU EQU1473 .	1.0000	1.0000	1.0000
---- EQU EQU1474 EPS	.	.	.
---- EQU EQU1475 EPS	.	.	.
---- EQU EQU1476 .	1.0000	1.0000	1.0000

----	EQU	EQU1477	.	.	.	
-8.0171						
----	EQU	EQU1478	.	.	.	
EPS						
----	EQU	EQU1479	.	.	.	
-0.7515						
----	EQU	EQU1480	.	.	.	
-5.6930						
----	EQU	EQU1481	1.0000	1.0000	1.0000	
9.3606						
----	EQU	EQU1482	.	.	.	
-3.4279						
----	EQU	EQU1483	.	.	.	
EPS						
----	EQU	EQU1484	.	.	.	
-5.7204						
----	EQU	EQU1485	.	.	.	
-0.0014						
----	EQU	EQU1486	.	.	.	
332.8291						
----	EQU	EQU1487	1.0000	1.0000	1.0000	
-0.8828						
----	EQU	EQU1488	.	.	.	
EPS						
----	EQU	EQU1489	.	.	.	
EPS						
----	EQU	EQU1490	.	.	.	-
1.708206E-5						
----	EQU	EQU1491	.	.	.	-
5.979112E-6						
----	EQU	EQU1492	1.0000	1.0000	1.0000	
5.6781						
----	EQU	EQU1493	.	.	.	
-5.4814						
----	EQU	EQU1494	1.0000	1.0000	1.0000	
35.5543						
----	EQU	EQU1495	1.0000	1.0000	1.0000	
-0.9137						
----	EQU	EQU1496	.	.	.	-
6.015542E-5						

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER	
---- EQU EQU1497 5.3433	1.0000	1.0000	1.0000	
---- EQU EQU1498 182.6973	.	.	.	
---- EQU EQU1499 -3.7959	.	.	.	
---- EQU EQU1500 -0.6435	.	.	.	
---- EQU EQU1501 EPS	.	.	.	
---- EQU EQU1502 -0.0007	.	.	.	
---- EQU EQU1503 -17.2225	.	.	.	
---- EQU EQU1504 -5.0672	.	.	.	
---- EQU EQU1505 -3.5676	.	.	.	
---- EQU EQU1506 -0.0007	.	.	.	
---- EQU EQU1507 -0.9425	.	.	.	
---- EQU EQU1508 .	1.0000	1.0000	1.0000	
---- EQU EQU1509 -0.0068	.	.	.	
---- EQU EQU1510 -0.0002	.	.	.	
---- EQU EQU1511 EPS	.	.	.	
---- EQU EQU1512 -0.0258	.	.	.	
---- EQU EQU1513 -35.7349	1.0000	1.0000	1.0000	
---- EQU EQU1514 -0.2124	.	.	.	
---- EQU EQU1515 7.8830	1.0000	1.0000	1.0000	
---- EQU EQU1516 0.0415	.	.	.	
---- EQU EQU1517 181.1745	1.0000	1.0000	1.0000	
---- EQU EQU1518 EPS	.	.	.	
---- EQU EQU1519 0.1709	.	.	.	
---- EQU EQU1520 241.7364	1.0000	1.0000	1.0000	-

---- EQU EQU1521	.	.	.
0.0291			
---- EQU EQU1522	1.0000	1.0000	1.0000
-7.6874			
---- EQU EQU1523	.	.	.
-0.0291			
---- EQU EQU1524	.	.	.
-7.9697			
---- EQU EQU1525	.	.	.
-7.7259			
---- EQU EQU1526	.	.	.
-1.0000			
---- EQU EQU1527	.	.	.
1.0000			
---- EQU EQU1528	6.8883	6.8883	6.8883
-1.0000			
---- EQU EQU1529	.	.	.
1.0000			
---- EQU EQU1530	.	.	.
EPS			
---- EQU EQU1531	.	.	.
0.0074			
---- EQU EQU1532	.	.	.
0.0258			
---- EQU EQU1533	.	.	.
0.0325			
---- EQU EQU1534	.	.	.
2.9778			
---- EQU EQU1535	.	.	.
92.2780			
---- EQU EQU1536	.	.	.
-0.9549			
---- EQU EQU1537	.	.	.
-42.7343			
---- EQU EQU1538	.	.	.
0.0291			
---- EQU EQU1539	.	.	.
-0.2000			
---- EQU EQU1540	.	.	.
-0.0001			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU EQU1541 1.3434	.	.	.
---- EQU EQU1542 3.9985	.	.	.
---- EQU EQU1543 -4.5809	.	.	.
---- EQU EQU1544 -0.1831	.	.	.
---- EQU EQU1545 1.4141	.	.	.
---- EQU EQU1546 -0.0641	.	.	.
---- EQU EQU1547 36.7162	.	.	.
---- EQU EQU1548 EPS	.	.	.
---- EQU EQU1549 EPS	.	.	.
---- EQU EQU1550 544.0439	.	.	.
---- EQU EQU1551 3.4597	.	.	.
---- EQU EQU1552 EPS	.	.	.
---- EQU EQU1553 EPS	.	.	.
---- EQU EQU1554 -1.5748	.	.	.
---- EQU EQU1555 EPS	.	.	.
---- EQU EQU1556 EPS	.	.	.
---- EQU EQU1557 510.2405	.	.	.
---- EQU EQU1558 -2.2002	10.2210	10.2210	10.2210
---- EQU EQU1559 EPS	10.2210	10.2210	10.2210
---- EQU EQU1560 EPS	.	.	.
---- EQU EQU1561 EPS	.	.	.
---- EQU EQU1562 -4.2202	.	.	.
---- EQU EQU1563 544.0292	.	.	.
---- EQU EQU1564 EPS	.	.	.

----	EQU EQU1565	10.2210	10.2210	10.2210
	-0.0129			
----	EQU EQU1566	10.2210	10.2210	10.2210
	-19.2382			
----	EQU EQU1567	10.2210	10.2210	10.2210
	-0.9495			
----	EQU EQU1568	10.2210	10.2210	10.2210
	-0.1865			
----	EQU EQU1569	.	.	.
	95.3695			
----	EQU EQU1570	.	.	.
	47.8879			
----	EQU EQU1571	.	.	.
	.			
----	EQU EQU1572	.	.	.
	213.7931			
----	EQU EQU1573	.	.	.
	EPS			
----	EQU EQU1574	.	.	.
	EPS			
----	EQU EQU1575	.	.	.
	1.2321			
----	EQU EQU1576	.	.	.
	0.8346			
----	EQU EQU1577	.	.	.
	EPS			
----	EQU EQU1578	.	.	.
	EPS			
----	EQU EQU1579	.	.	.
	EPS			
----	EQU INEQU1	-INF	0.0759	1.0000
	.			
----	EQU INEQU2	8.0000	8.4588	+INF
	.			
----	EQU INEQU3	10.0000	12.0087	+INF
	.			
----	EQU INEQU4	10.0000	13.8440	+INF
	.			
----	EQU INEQU5	10.0000	14.1458	+INF
	.			

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MARGINAL	LOWER	LEVEL	UPPER
---- EQU INEQU6 -0.0008	300.0000	300.0000	+INF
---- EQU INEQU7 .	10.0000	24.2003	+INF
---- EQU INEQU8 .	-404.6000	-359.0690	+INF
---- EQU INEQU9 .	-404.6000	-359.0690	+INF
---- EQU INEQU10 .	300.0000	322.5997	+INF
---- EQU INEQU11 -0.0409	10.0000	10.0000	+INF
---- EQU INEQU12 .	10.0000	104.7508	+INF
---- EQU INEQU13 .	10.0000	93.2720	+INF
---- EQU INEQU14 .	300.0000	303.5753	+INF
---- EQU INEQU15 .	10.0000	69.9127	+INF
---- EQU INEQU16 .	300.0000	337.0859	+INF
---- EQU INEQU17 .	10.0000	10.4340	+INF
---- EQU INEQU18 .	300.0000	307.2720	+INF
---- EQU INEQU19 .	10.0000	39.0859	+INF
---- EQU INEQU20 .	300.0000	304.5245	+INF
---- EQU INEQU21 .	10.0000	12.1433	+INF
---- EQU INEQU22 .	10.0000	12.3580	+INF
---- EQU INEQU23 -0.0035	10.0000	10.0000	+INF
---- EQU INEQU24 .	298.0000	363.3260	+INF
---- EQU INEQU25 .	8.0000	68.3260	+INF
---- EQU INEQU26 -0.7971	8.0000	8.0000	+INF
---- EQU INEQU27 .	8.0000	12.1637	+INF
---- EQU INEQU28 .	8.0000	8.4331	+INF
---- EQU INEQU29 .	8.0000	8.2197	+INF

----	EQU	INEQU30	8.0000	16.0857	+INF
.					
----	EQU	INEQU31	298.0000	328.4033	+INF
.					
----	EQU	INEQU32	10.0000	12.0087	+INF
.					
----	EQU	INEQU33	300.0000	328.4033	+INF
.					
----	EQU	INEQU34	10.0000	10.0000	+INF
EPS					
----	EQU	INEQU35	10.0000	10.0000	+INF
-0.0020					
----	EQU	INEQU36	-471.0000	-405.0000	+INF
.					
----	EQU	INEQU37	-471.0000	-460.9878	+INF
.					
----	EQU	INEQU38	-404.6000	-363.3260	+INF
.					
----	EQU	INEQU39	-404.6000	-403.7525	+INF
.					
----	EQU	INEQU40	10.0000	12.1921	+INF
.					
----	EQU	INEQU41	10.0000	13.7160	+INF
.					
----	EQU	INEQU42	-404.6000	-336.6046	+INF
.					
----	EQU	INEQU43	-404.6000	-336.6046	+INF
.					
----	EQU	INEQU44	10.0000	10.0000	+INF
-0.2615					
----	EQU	INEQU45	300.0000	300.0000	+INF
.					
----	EQU	INEQU46	10.0000	13.0955	+INF
.					
----	EQU	INEQU47	300.0000	318.7440	+INF
.					
----	EQU	INEQU48	10.0000	10.5454	+INF
.					
----	EQU	INEQU49	300.0000	300.0000	+INF
-0.0012					

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	LOWER	LEVEL	UPPER
MARGINAL			
---- EQU INEQU50	-INF	.	0.0001
.			
---- EQU OBJNAME	.	.	.
1.0000			

	LOWER	LEVEL	UPPER
MARGINAL			
---- VAR FAC02	0.0900	0.1600	0.1600
374.0119			
---- VAR FAC12	0.0100	0.1600	0.9000
.			
---- VAR FAC23	0.0100	0.1600	0.9000
.			
---- VAR FAC34	0.0100	0.1600	0.9000
.			
---- VAR FAC45	0.0100	0.1600	0.9000
.			
---- VAR FC308	1.0000	3.1197	6.0000
.			
---- VAR FC316	0.1000	1.7518	1.8000
.			
---- VAR FC320	0.0100	0.0459	1.5000
.			
---- VAR FC322	0.1000	1.5684	1.6000
.			
---- VAR FC328	0.0100	0.0545	1.0000
.			
---- VAR FC329	0.1000	0.7635	3.0000
.			
---- VAR FC403	0.1000	2.3677	5.0000
.			
---- VAR FC407	0.7500	0.9348	5.0000
.			
---- VAR FC412	0.0100	0.0420	1.0000
.			
---- VAR FC417	0.1000	0.1439	2.0000
.			
---- VAR FHC01	0.7950	0.8979	1.5000
.			
---- VAR FHC32	0.5000	1.9569	5.0000
.			
---- VAR FSC402	0.1000	0.4587	4.0000
.			
---- VAR FSC405	.	0.3148	3.0000
.			
---- VAR FSC411	0.1000	1.3267	3.2000
.			

----	VAR FSC413	0.1000	0.1439	0.5000
.				
----	VAR FSTME612	0.0500	0.0888	1.0000
.				
----	VAR PC302	101.0000	101.0000	187.0000
-0.0008				
----	VAR PC310	230.0000	260.0000	360.0000
.				
----	VAR PC601	600.0000	625.0000	625.0000
0.0195				
----	VAR PC603	1600.0000	1691.3731	1800.0000
.				
----	VAR QHC07	0.1000	1.9469	5.0000
.				
----	VAR QHC11	0.1000	1.7391	5.0000
.				
----	VAR QHC14	0.1000	1.7391	5.0000
.				
----	VAR QHC16	0.1000	1.7391	5.0000
.				
----	VAR QHC34	0.1000	1.1464	5.0000
.				
----	VAR QHC38	0.1000	0.5352	5.0000
.				
----	VAR QHC41	0.1000	0.8699	5.0000
.				
----	VAR QHC45	0.1000	0.8518	5.0000
.				
----	VAR TAC09	280.0000	280.0000	300.0000
-0.0036				
----	VAR TAC12	280.0000	280.0000	300.0000
.				
----	VAR TAC23	280.0000	280.0000	300.0000
.				
----	VAR TAC31	280.0000	280.0000	300.0000
-0.0010				
----	VAR TAC34	280.0000	280.0000	300.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR TAC42 -0.0030	280.0000	280.0000	300.0000
---- VAR TAC45	280.0000	280.0000	300.0000
.			
---- VAR TC303	260.0000	280.6862	300.0000
.			
---- VAR TC306	320.0000	349.4271	368.0000
.			
---- VAR TC307	300.0000	328.4033	330.0000
.			
---- VAR TC308	270.0000	328.4033	350.0000
.			
---- VAR TC315	300.0000	307.3612	320.0000
.			
---- VAR TC316	335.0000	345.2250	370.0000
.			
---- VAR TC317	300.0000	359.0690	420.0000
.			
---- VAR TC321	250.0000	300.0000	350.0000
.			
---- VAR TC324	359.0000	359.0690	385.0000
.			
---- VAR TC325	300.0000	322.5997	360.0000
.			
---- VAR TC404	305.0000	305.2492	325.0000
.			
---- VAR TC405 -0.0269	410.0000	410.0000	440.0000
---- VAR TC407	298.0000	303.5753	350.0000
.			
---- VAR TC408 -0.8220	405.0000	405.0000	440.0000
---- VAR TC410	345.0000	363.3260	369.0000
.			
---- VAR TC414	300.0000	337.0859	368.0000
.			
---- VAR TC418	301.0000	307.1433	350.0000
.			
---- VAR TC419	298.0000	304.5245	310.0000
.			
---- VAR THC32	250.0000	261.9077	310.0000
.			
---- VAR TSC402	310.0000	322.8886	340.0000
.			
---- VAR TSC403	320.0000	336.6046	350.0000
.			
---- VAR TSC405 -0.4217	300.0000	300.0000	360.0000

----	VAR TSC408	300.0000	318.7440	330.0000
.				
----	VAR TSC413	295.0000	300.0000	350.0000
.				
----	VAR X11AC12	0.8800	0.9687	0.9990
.				
----	VAR X11AC23	0.8800	0.9424	0.9990
.				
----	VAR X11AC34	0.8800	0.9162	0.9990
.				
----	VAR X11AC45	0.8800	0.8900	0.9990
.				
----	VAR X1C316	0.0100	0.1166	0.5000
.				
----	VAR X1C325	0.5000	1.0000	1.0000
.				
----	VAR X1C417	0.0200	0.0200	0.2000
-52.0438				
----	VAR X1HC32	.	0.0228	0.1000
.				
----	VAR X1SC402	.	0.0063	0.1000
.				
----	VAR X1SC403	.	.	0.1000
.				
----	VAR X1SC408	.	0.0200	0.1000
.				
----	VAR X2SC402	.	.	0.1000
.				
----	VAR X2SC403	.	.	0.1000
-13.6611				
----	VAR X2SC408	.	.	0.1000
.				
----	VAR X3C316	0.5000	0.7851	1.0000
.				
----	VAR X3C325	.	1.5978930E-6	0.1000
.				
----	VAR X3C417	0.3500	0.9738	1.0000
.				
----	VAR X3HC32	0.1000	0.7604	1.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3SC402	0.2000	0.3216	0.4200
.			
---- VAR X3SC403	.	0.0234	0.1000
.			
---- VAR X3SC408	0.5000	0.9739	1.0000
.			
---- VAR X4C316	0.0010	0.0894	0.2000
.			
---- VAR X4C417	0.0010	0.0061	0.4000
.			
---- VAR X4HC32	.	0.1401	0.5000
.			
---- VAR X4SC402	0.4800	0.5280	0.7000
.			
---- VAR X4SC403	0.5000	0.7666	1.0000
.			
---- VAR X4SC408	.	0.0061	0.1000
.			
---- VAR X5C316	.	0.0056	0.0100
.			
---- VAR X5C417	.	3.3333334E-5	0.1500
.			
---- VAR X5HC32	.	0.0288	2.5000
.			
---- VAR X5SC402	.	0.0686	0.1000
.			
---- VAR X5SC403	.	0.1000	0.1000
.			
---- VAR X5SC408	.	.	0.1000
.			
---- VAR X6SC402	.	0.0686	0.1000
.			
---- VAR X6SC403	.	0.1000	0.1200
.			
---- VAR X6SC408	.	.	0.1000
.			
---- VAR X7HC32	.	0.0479	2.0000
.			
---- VAR X7SC402	.	0.0069	0.1000
.			
---- VAR X7SC403	.	0.0100	0.1000
.			
---- VAR X7SC408	.	.	0.1000
.			
---- VAR XX1C322	.	0.1133	0.1200
.			
---- VAR XX1C414	.	0.0762	0.0800
.			

----	VAR XX1HC01	.	0.0976	0.5000
.				
----	VAR XX2HC01	0.1000	0.1296	0.6000
.				
----	VAR XX3C317	0.5000	0.7900	1.0000
.				
----	VAR XX3C322	0.5000	0.7900	1.0000
.				
----	VAR XX3C407	.	2.3780783E-5	0.1000
.				
----	VAR XX3C412	.	0.0021	0.1500
.				
----	VAR XX3C414	0.5000	0.8081	1.0000
.				
----	VAR XX3HC01	.	0.0125	0.5500
.				
----	VAR XX4C317	.	0.0899	0.2000
.				
----	VAR XX4C322	.	0.0899	0.2000
.				
----	VAR XX4C407	0.0100	0.0851	0.3000
.				
----	VAR XX4C412	0.5000	0.8771	1.0000
.				
----	VAR XX4C414	.	0.1067	0.2000
.				
----	VAR XX4HC01	.	0.1108	0.3000
.				
----	VAR XX5C407	0.0100	0.1512	0.5000
.				
----	VAR XX5C412	.	0.0568	0.1000
.				
----	VAR XX5C414	.	0.0010	0.1000
.				
----	VAR XX7C414	.	0.0080	0.0080
1021.4560				
----	VAR OBJVAR	-INF	29.1128	+INF
.				
----	VAR C10PC623	.	3.8395828E-5	0.5000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR C10PC625	.	7.7797929E-5	0.5000
.			
---- VAR C10PC627	.	0.0002	0.5000
.			
---- VAR C10PC629	.	0.0002	0.5000
.			
---- VAR C2C623	.	0.0165	0.1000
.			
---- VAR C2C625	.	0.0151	0.1000
.			
---- VAR C2C627	.	0.0148	0.1000
.			
---- VAR C2C629	.	0.0152	0.1000
.			
---- VAR C3C623	.	3.9512	6.0000
.			
---- VAR C3C625	.	2.5135	6.0000
.			
---- VAR C3C627	.	1.4717	6.0000
.			
---- VAR C3C629	.	1.7742	6.0000
.			
---- VAR C3PC623	.	1.2420	10.0000
.			
---- VAR C3PC625	.	1.1980	10.0000
.			
---- VAR C3PC627	.	1.2165	10.0000
.			
---- VAR C3PC629	.	1.1915	10.0000
.			
---- VAR C4PC623	.	0.0276	1.0000
.			
---- VAR C4PC625	.	0.0418	1.0000
.			
---- VAR C4PC627	.	0.0726	1.0000
.			
---- VAR C4PC629	.	0.0589	1.0000
.			
---- VAR C5PC623	.	0.0004	0.1000
.			
---- VAR C5PC625	.	0.0010	0.1000
.			
---- VAR C5PC627	.	0.0028	0.1000
.			
---- VAR C5PC629	.	0.0019	0.1000
.			
---- VAR C7PC623	.	4.1042795E-5	0.1000
.			

----	VAR C7PC625	.	0.0002	0.1000
.				
----	VAR C7PC627	.	0.0016	0.1000
.				
----	VAR C7PC629	.	0.0008	0.1000
.				
----	VAR C8PC623	.	0.0016	0.1000
.				
----	VAR C8PC625	.	0.0035	0.1000
.				
----	VAR C8PC627	.	0.0099	0.1000
.				
----	VAR C8PC629	.	0.0069	0.1000
.				
----	VAR C9PC623	.	0.4585	10.0000
.				
----	VAR C9PC625	.	0.6434	10.0000
.				
----	VAR C9PC627	.	1.0975	10.0000
.				
----	VAR C9PC629	.	0.9108	10.0000
.				
----	VAR CHXC623	2.5000	13.4316	15.0000
.				
----	VAR CHXC625	2.5000	14.2010	15.0000
.				
----	VAR CHXC627	2.5000	14.6961	15.0000
.				
----	VAR CHXC629	2.5000	14.0353	15.0000
.				
----	VAR CIC10PC623	.	.	1.0000
.				
----	VAR CIC10PC625	.	.	1.0000
.				
----	VAR CIC10PC627	.	.	1.0000
.				
----	VAR CIC10PC629	.	.	1.0000
.				
----	VAR CIC11PC623	.	1.4680088E-5	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR CIC11PC625	.	4.5601952E-5	0.1000
.			
---- VAR CIC11PC627	.	0.0002	0.1000
.			
---- VAR CIC11PC629	.	0.0001	0.1000
.			
---- VAR CIC4EC623	.	0.0031	0.1000
.			
---- VAR CIC4EC625	.	0.0031	0.1000
.			
---- VAR CIC4EC627	.	0.0031	0.1000
.			
---- VAR CIC4EC629	.	0.0031	0.1000
.			
---- VAR CIC5EC623	.	0.0007	0.1000
.			
---- VAR CIC5EC625	.	0.0009	0.1000
.			
---- VAR CIC5EC627	.	0.0014	0.1000
.			
---- VAR CIC5EC629	.	0.0013	0.1000
.			
---- VAR CIC8EC623	.	0.0183	0.3000
.			
---- VAR CIC8EC625	.	0.0267	0.3000
.			
---- VAR CIC8EC627	.	0.0448	0.3000
.			
---- VAR CIC8EC629	.	0.0380	0.3000
.			
---- VAR COST	-10000.0000	144.2870	10000.0000
.			
---- VAR DTE601	5.0000	12.9391	50.0000
.			
---- VAR DTE602	5.0000	77.9954	90.0000
.			
---- VAR DTE603	5.0000	10.0000	50.0000
.			
---- VAR DTE605	5.0000	20.9198	50.0000
.			
---- VAR DTE609A	5.0000	10.2703	20.0000
.			
---- VAR DTE610	5.0000	13.9944	50.0000
.			
---- VAR DTE611	5.0000	16.0549	50.0000
.			
---- VAR DTE612	10.0000	55.5310	90.0000
.			

----	VAR DTE613	4.0000	21.2999	30.0000
.				
----	VAR DTE616	10.0000	98.9004	120.0000
.				
----	VAR DTE617	5.0000	34.0905	50.0000
.				
----	VAR DTE621A	5.0000	28.7599	50.0000
.				
----	VAR DTE621B	5.0000	26.6950	40.0000
.				
----	VAR DTE626	5.0000	13.2984	50.0000
.				
----	VAR DTE627A	5.0000	55.0000	55.0000
0.5475				
----	VAR DTE627B	5.0000	31.5672	50.0000
.				
----	VAR DTE628	5.0000	11.1374	60.0000
.				
----	VAR DTE629	5.0000	17.3923	80.0000
.				
----	VAR DTE633	5.0000	12.1527	50.0000
.				
----	VAR DTE634	5.0000	19.6708	20.0000
.				
----	VAR DTE640	5.0000	20.7286	50.0000
.				
----	VAR DTE641	5.0000	16.3756	50.0000
.				
----	VAR DTE695A	5.0000	76.0000	90.0000
.				
----	VAR DTE695B	5.0000	48.0061	60.0000
.				
----	VAR DTE696A	10.0000	51.2740	90.0000
.				
----	VAR DTE696B	10.0000	31.0608	90.0000
.				
----	VAR DTE6XX	1.0000	1.1787	50.0000
.				
----	VAR EARNINGS	-10000.0000	181.6027	10000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR F1C601 -0.2745	.	.	0.1000
---- VAR F1C603	.	0.7330	1.0000
.			
---- VAR F1C606A	.	0.0100	1.0000
.			
---- VAR F2C601	0.5000	0.9941	1.0000
.			
---- VAR F3C601 -13.7780	0.0500	0.0500	1.0000
---- VAR F3C603	.	1.0000	1.0000
.			
---- VAR F3C606A	.	0.0025	1.0000
.			
---- VAR F4C601	0.9500	0.9964	1.0000
.			
---- VAR F4C603	.	1.0000	1.0000
.			
---- VAR F4C606A	.	0.8876	1.0000
.			
---- VAR F5C601	0.5000	1.0000	1.0000
.			
---- VAR F5C603	0.5000	1.0000	1.0000
.			
---- VAR F5C606A	0.5000	0.9886	1.0000
.			
---- VAR F6C601	0.5000	1.0000	1.0000
.			
---- VAR F7C601	0.5000	1.0000	1.0000
.			
---- VAR F7C603	0.5000	1.0000	1.0000
.			
---- VAR F7C606A	0.5000	0.9993	1.0000
.			
---- VAR FAC05	0.1000	6.9259	20.0000
.			
---- VAR FAC07	0.1000	7.0859	20.0000
.			
---- VAR FAC09	0.0100	8.8646	20.0000
.			
---- VAR FAC15	0.1000	8.4886	20.0000
.			
---- VAR FAC18	0.1000	8.6486	20.0000
.			
---- VAR FAC20	0.0100	9.9564	20.0000
.			
---- VAR FAC26	0.1000	18.2520	20.0000
.			

----	VAR FAC29	0.1000	18.4120	20.0000
.				
----	VAR FAC31	0.0100	19.9121	20.0000
.				
----	VAR FAC37	0.1000	14.7376	20.0000
.				
----	VAR FAC40	0.1000	14.8976	20.0000
.				
----	VAR FAC42	0.0100	16.3873	20.0000
.				
----	VAR FC301	1.0000	3.7087	6.0000
.				
----	VAR FC302	0.1000	0.3807	5.0000
.				
----	VAR FC303	2.0000	4.0893	6.0000
.				
----	VAR FC306	0.1000	4.8715	15.0000
.				
----	VAR FC307	0.0001	4.8715	15.0000
.				
----	VAR FC309	0.0001	3.1197	10.0000
.				
----	VAR FC310	0.0001	0.7821	3.0000
.				
----	VAR FC311	.	2.3375	8.0000
.				
----	VAR FC312	0.0001	1.7518	5.0000
.				
----	VAR FC315	0.0001	1.7518	5.0000
.				
----	VAR FC317	0.1000	1.6973	3.0000
.				
----	VAR FC318	0.0001	1.6973	3.0000
.				
----	VAR FC319	0.0001	1.6973	3.0000
.				
----	VAR FC321	.	0.0830	5.0000
.				
----	VAR FC323	0.5000	0.8012	3.0000
.				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FC324	0.5000	0.8012	3.0000
.			
---- VAR FC325	0.5000	0.8181	3.0000
.			
---- VAR FC326	0.0100	0.8181	3.0000
.			
---- VAR FC401	0.1000	2.3677	5.0000
.			
---- VAR FC402	0.1000	2.3677	5.0000
.			
---- VAR FC404	.	2.3677	5.0000
.			
---- VAR FC405	0.1000	0.9348	2.0000
.			
---- VAR FC406	.	0.9348	5.0000
.			
---- VAR FC408	.	3.2323	10.0000
.			
---- VAR FC409	.	3.2323	10.0000
.			
---- VAR FC410	0.1000	0.8605	10.0000
.			
---- VAR FC411	.	0.8605	10.0000
.			
---- VAR FC413	.	0.0420	1.0000
.			
---- VAR FC414	0.1000	2.9946	5.0000
.			
---- VAR FC415	.	2.9946	10.0000
.			
---- VAR FC418	0.1000	3.1385	5.0000
.			
---- VAR FC419	0.0001	3.1385	10.0000
.			
---- VAR FC425	1.0000	3.9120	10.0000
.			
---- VAR FC426	.	3.0516	5.0000
.			
---- VAR FC427	.	2.9772	10.0000
.			
---- VAR FC428	.	2.1168	5.0000
.			
---- VAR FC430	1.0000	3.9120	10.0000
.			
---- VAR FC431	.	2.9772	10.0000
.			
---- VAR FC432	1.0000	2.9352	5.0000
.			

----	VAR FCWE603	0.1000	0.1864	20.0000
.				
----	VAR FCWE605	0.1000	6.7919	15.0000
.				
----	VAR FCWE609A	0.0100	0.0887	1.0000
.				
----	VAR FCWE611	0.1000	3.0202	20.0000
.				
----	VAR FCWE613	0.1000	2.4810	15.0000
.				
----	VAR FCWE617	1.0000	1.5510	25.0000
EPS				
----	VAR FCWE621A	0.1000	5.4552	10.0000
.				
----	VAR FCWE621B	0.1000	6.9388	20.0000
.				
----	VAR FCWE626	0.1000	0.9759	20.0000
.				
----	VAR FCWE627A	0.1000	0.5522	10.0000
.				
----	VAR FCWE627B	0.1000	0.5404	30.0000
.				
----	VAR FCWE634	4.0000	7.2327	60.0000
.				
----	VAR FCWE640	0.4000	0.4000	50.0000
-0.0208				
----	VAR FCWE641A	0.1000	4.2849	30.0000
.				
----	VAR FCWE641B	0.1000	0.9924	10.0000
.				
----	VAR FHC02	0.0100	0.8979	5.0000
.				
----	VAR FHC03	1.0000	3.2215	10.0000
.				
----	VAR FHC04	1.0000	3.2215	10.0000
.				
----	VAR FHC05	1.0000	3.2215	10.0000
.				
----	VAR FHC06	1.0000	4.1195	12.0000
.				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FHC07	1.0000	1.1195	5.0000
.			
---- VAR FHC08	1.0000	3.0000	5.0000
.			
---- VAR FHC11	1.0000	1.0000	5.0000
-0.0308			
---- VAR FHC14	1.0000	1.0000	5.0000
-0.0999			
---- VAR FHC15	1.0000	2.0000	5.0000
.			
---- VAR FHC16	1.0000	1.0000	5.0000
-0.1815			
---- VAR FHC22	1.0000	1.4898	6.0000
.			
---- VAR FHC23	1.0000	1.5002	6.0000
.			
---- VAR FHC24	1.0000	2.9899	6.0000
.			
---- VAR FHC25	1.0000	1.3078	6.0000
.			
---- VAR FHC26	1.0000	4.2977	6.0000
.			
---- VAR FHC27	1.0000	1.7787	10.0000
.			
---- VAR FHC28	1.0000	6.0764	12.0000
.			
---- VAR FHC29	.	1.2304	12.0000
.			
---- VAR FHC30	.	1.2304	12.0000
.			
---- VAR FHC31	.	6.0764	12.0000
.			
---- VAR FHC33	.	0.9669	1.0000
.			
---- VAR FHC34	.	0.6592	1.0000
.			
---- VAR FHC38	.	0.3078	1.0000
.			
---- VAR FHC40	.	0.9899	1.0000
.			
---- VAR FHC41	.	0.5002	1.0000
.			
---- VAR FHC45	.	0.4898	1.0000
.			
---- VAR FLHC28	1.0000	3.1642	10.0000
.			
---- VAR FLHC29	.	0.6407	12.0000
.			

----	VAR FLHC30	.	0.4686	12.0000
.				
----	VAR FLHC31	.	2.3677	12.0000
.				
----	VAR FLR1	.	2.5234	10.0000
.				
----	VAR FLR29	.	1.8991	12.0000
.				
----	VAR FMC302	.	0.0067	0.1000
.				
----	VAR FMC308	0.0001	0.0538	0.5000
.				
----	VAR FMC310	.	0.0138	0.8000
.				
----	VAR FMC311	.	0.0399	0.5000
.				
----	VAR FMC312	.	0.0312	0.1000
.				
----	VAR FMC317	0.0010	0.0300	0.1000
.				
----	VAR FMC322	.	0.0277	1.0000
.				
----	VAR FMC323	.	0.0141	0.4000
.				
----	VAR FMC325	0.0100	0.0185	1.0000
.				
----	VAR FMC405	.	0.0114	0.1000
.				
----	VAR FMC407	.	0.0114	0.1000
.				
----	VAR FMC408	.	0.0396	2.0000
.				
----	VAR FMC409	.	0.0396	0.2000
.				
----	VAR FMC412	.	0.0007	0.1000
.				
----	VAR FMC414	0.0001	0.0523	0.1000
.				
----	VAR FMC425	.	0.0580	2.0000
.				

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- VAR FMC427	.	0.0466	0.2000
.			
---- VAR FMC428	.	0.0338	0.1000
.			
---- VAR FMC430	.	0.0605	0.2000
.			
---- VAR FMC431	.	0.0491	1.0000
.			
---- VAR FMC432	.	0.0484	0.1000
.			
---- VAR FMHC01	.	0.0124	0.1000
.			
---- VAR FMHC32	.	0.0332	0.1000
.			
---- VAR FMLHC28	0.0100	0.0498	0.2000
.			
---- VAR FMLHC29	.	0.0101	0.1000
.			
---- VAR FMLHC30	.	0.0072	0.1000
.			
---- VAR FMLR1	.	0.0397	0.2000
.			
---- VAR FMLR29	.	0.0291	0.1000
.			
---- VAR FMSC403	0.0010	0.0052	0.1000
.			
---- VAR FMSC406	.	0.0242	0.1000
.			
---- VAR FMSC408	.	0.0255	1.0000
.			
---- VAR FMVHC28	.	0.0509	0.2000
.			
---- VAR FMVHC29	.	0.0103	0.1000
.			
---- VAR FMVHC30	.	0.0132	0.1000
.			
---- VAR FMVR1	.	0.0406	0.2000
.			
---- VAR FMVR29	.	0.0512	0.1000
.			
---- VAR FR1	.	4.8460	12.0000
.			
---- VAR FR29	.	4.8460	12.0000
.			
---- VAR FSC401	0.1000	0.4587	5.0000
.			
---- VAR FSC403	0.1000	0.3148	3.0000
.			

----	VAR FSC404	0.1000	0.3148	3.0000	
.					
----	VAR FSC406	.	1.4706	3.0000	
.					
----	VAR FSC407	.	1.4706	3.0000	
.					
----	VAR FSC408	0.0500	1.4706	3.2000	
.					
----	VAR FSC409	0.0500	1.4706	3.2000	
.					
----	VAR FSC412	0.1020	0.1439	1.0000	
.					
----	VAR FSC414	.	4.7975272E-5	0.5000	
.					
----	VAR FSTME602	0.1000	0.2118	1.0000	
.					
----	VAR FSTME695A	.	0.4038	10.0000	
.					
----	VAR FSTME695B	0.1000	0.1000	10.0000	-
340.5316					
----	VAR FSTME696A	0.0100	0.1142	10.0000	
.					
----	VAR FSTME696B	0.0100	0.0190	10.0000	
.					
----	VAR FVHC28	.	2.9122	8.0000	
.					
----	VAR FVHC29	.	0.5897	12.0000	
.					
----	VAR FVHC30	.	0.7618	12.0000	
.					
----	VAR FVHC31	.	3.7087	12.0000	
.					
----	VAR FVR1	.	2.3225	12.0000	
.					
----	VAR FVR29	.	2.9468	12.0000	
.					
----	VAR H1C601	0.8000	1.0638	2.0000	
.					
----	VAR H1C603	-3.0000	-0.3655	1.0000	
.					

GAMS 2.50A Windows NT/95/98

MARGINAL	LOWER	LEVEL	UPPER
---- VAR H1C606A	.	0.9921	10.0000
.			
---- VAR H2C601	0.3950	0.6979	5.0000
.			
---- VAR H3C601	0.5000	2.2985	6.0000
.			
---- VAR H3C603	.	0.2650	1.0000
.			
---- VAR H3C606A	-65.0000	-65.0000	-35.0000
-0.0002			
---- VAR H4C601	0.4500	0.7114	2.0000
.			
---- VAR H4C603	.	0.3365	1.0000
.			
---- VAR H4C606A	-10.0000	-5.99963E-20	1.0000
.			
---- VAR H5C601	0.5000	0.9443	1.5000
.			
---- VAR H5C603	.	0.4400	1.5000
.			
---- VAR H5C606A	-5.0000	0.4867	2.0000
.			
---- VAR H6C601	0.5000	0.9672	3.0000
.			
---- VAR H7C601	0.5000	1.0062	1.5000
.			
---- VAR H7C603	.	0.5113	1.5000
.			
---- VAR H7C606A	.	0.5519	1.0000
.			
---- VAR HAC02	.	9.6649	10000.0000
.			
---- VAR HAC05	10.0000	354.6816	10000.0000
.			
---- VAR HAC07	10.0000	364.3465	10000.0000
.			
---- VAR HAC09	10.0000	1366.4582	10000.0000
.			
---- VAR HAC12	.	8.1937	10000.0000
.			
---- VAR HAC15	10.0000	374.6660	10000.0000
.			
---- VAR HAC18	10.0000	382.8597	10000.0000
.			
---- VAR HAC20	10.0000	1076.1438	10000.0000
.			
---- VAR HAC23	.	7.0620	10000.0000
.			

----	VAR HAC26	10.0000	717.1264	10000.0000
.				
----	VAR HAC29	10.0000	724.1884	10000.0000
.				
----	VAR HAC31	10.0000	1509.4617	10000.0000
.				
----	VAR HAC34	.	6.2820	10000.0000
.				
----	VAR HAC37	10.0000	538.9715	10000.0000
.				
----	VAR HAC40	10.0000	545.2535	10000.0000
.				
----	VAR HAC42	10.0000	1456.4752	10000.0000
.				
----	VAR HACAC09	10.0000	445.9795	10000.0000
.				
----	VAR HACAC20	10.0000	399.8959	10000.0000
.				
----	VAR HACAC31	10.0000	733.2773	10000.0000
.				
----	VAR HACAC42	10.0000	685.6993	10000.0000
.				
----	VAR HC301	10.0000	3259.6087	10000.0000
.				
----	VAR HC302	.	324.8391	5000.0000
.				
----	VAR HC303	0.0001	3584.4478	10000.0000
.				
----	VAR HC306	0.0001	4675.3384	10000.0000
.				
----	VAR HC307	0.0001	3128.1527	10000.0000
.				
----	VAR HC308	0.0001	1998.4013	10000.0000
.				
----	VAR HC309	0.0001	1954.0900	10000.0000
.				
----	VAR HC310	0.0001	693.6764	5000.0000
.				
----	VAR HC311	0.0010	1260.4136	10000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HC312	0.0001	1640.5462	10000.0000
.			
---- VAR HC312LIQ	.	1129.7514	10000.0000
.			
---- VAR HC315	0.0001	1034.0568	10000.0000
.			
---- VAR HC316	0.0001	1210.7225	10000.0000
.			
---- VAR HC317	0.0001	1238.7144	10000.0000
.			
---- VAR HC318	0.0001	1062.0487	10000.0000
.			
---- VAR HC319	0.0001	969.4326	10000.0000
.			
---- VAR HC321	.	47.4076	5000.0000
.			
---- VAR HC322	0.0001	895.8203	5000.0000
.			
---- VAR HC323	.	584.7248	10000.0000
.			
---- VAR HC324	0.0001	775.1915	10000.0000
.			
---- VAR HC325	0.0001	773.4379	10000.0000
.			
---- VAR HC326	0.0001	538.1101	5000.0000
.			
---- VAR HC329	0.0001	502.2361	5000.0000
.			
---- VAR HC401	.	1222.9616	5000.0000
.			
---- VAR HC402	10.0000	1230.0497	10000.0000
.			
---- VAR HC403	0.0001	1294.6622	10000.0000
.			
---- VAR HC404	0.0001	1347.0794	10000.0000
.			
---- VAR HC405	0.0001	751.3369	5000.0000
.			
---- VAR HC406	0.0001	698.9197	5000.0000
.			
---- VAR HC407	0.0001	509.0253	5000.0000
.			
---- VAR HC408	0.0001	2553.6794	10000.0000
.			
---- VAR HC408VAP	10.0000	3329.0390	10000.0000
.			
---- VAR HC409	0.0001	3521.0390	10000.0000
.			

----	VAR HC410	0.0001	608.7064	10000.0000
.				
----	VAR HC410VAP	10.0000	853.7388	10000.0000
.				
----	VAR HC411	10.0000	894.4285	10000.0000
.				
----	VAR HC412	0.0001	41.9762	5000.0000
.				
----	VAR HC412LIQ	1.0000	30.3886	1000.0000
.				
----	VAR HC413	0.0001	23.5844	5000.0000
.				
----	VAR HC414	0.0001	2833.5880	10000.0000
.				
----	VAR HC414LIQ	10.0000	1994.4218	10000.0000
.				
----	VAR HC415	0.0001	1761.4453	5000.0000
.				
----	VAR HC417	0.0001	82.0847	5000.0000
.				
----	VAR HC418	0.0001	1843.5300	10000.0000
.				
----	VAR HC419	0.0001	1823.0505	10000.0000
.				
----	VAR HC425	10.0000	2767.4661	10000.0000
.				
----	VAR HC426	10.0000	2158.7597	5000.0000
.				
----	VAR HC427	.	3010.0998	10000.0000
.				
----	VAR HC428	10.0000	2115.6713	10000.0000
.				
----	VAR HC430	10.0000	2735.3920	10000.0000
.				
----	VAR HC431	10.0000	2975.4635	10000.0000
.				
----	VAR HC432	10.0000	2933.4873	10000.0000
.				
----	VAR HC623	10.0000	86.7552	5000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HC625 -0.0003	10.0000	10.0000	5000.0000
---- VAR HC627 -0.0006	10.0000	10.0000	5000.0000
---- VAR HC629 .	10.0000	140.9275	5000.0000
---- VAR HHC01 .	.	470.9653	5000.0000
---- VAR HHC02 .	.	463.8772	5000.0000
---- VAR HHC03 .	1.0000	1870.4581	10000.0000
---- VAR HHC04 .	10.0000	1805.8456	10000.0000
---- VAR HHC05 .	10.0000	1744.7563	10000.0000
---- VAR HHC06 .	10.0000	2208.6335	10000.0000
---- VAR HHC07 .	10.0000	600.2049	5000.0000
---- VAR HHC11 .	10.0000	536.1429	5000.0000
---- VAR HHC14 .	10.0000	536.1429	5000.0000
---- VAR HHC16 .	10.0000	536.1429	5000.0000
---- VAR HHC29 .	20.0000	845.1483	10000.0000
---- VAR HHC30 .	20.0000	906.2376	10000.0000
---- VAR HHC31 .	100.0000	4482.5703	10000.0000
---- VAR HHC32 .	.	935.5745	5000.0000
---- VAR HHC34 .	.	315.1517	5000.0000
---- VAR HHC38 .	.	147.1412	5000.0000
---- VAR HHC41 .	.	239.1304	5000.0000
---- VAR HHC45 .	.	234.1512	5000.0000
---- VAR HLHC29 .	.	328.5750	10000.0000
---- VAR HLHC30 .	.	239.1871	10000.0000
---- VAR HLHC31 .	20.0000	1222.9616	10000.0000

----	VAR HLR1	.	1294.1055	10000.0000
.				
----	VAR HLR29	10.0000	969.8760	10000.0000
.				
----	VAR HR1	.	3328.6500	10000.0000
.				
----	VAR HR29	20.0000	3576.3327	10000.0000
.				
----	VAR HSC401	10.0000	279.8453	10000.0000
.				
----	VAR HSC402	10.0000	284.0376	10000.0000
.				
----	VAR HSC403	10.0000	204.7536	10000.0000
.				
----	VAR HSC404	10.0000	200.5613	10000.0000
.				
----	VAR HSC405	10.0000	175.9339	10000.0000
.				
----	VAR HSC406	0.1000	956.5194	10000.0000
.				
----	VAR HSC407	10.0000	1410.8739	10000.0000
.				
----	VAR HSC408	10.0000	1354.1002	10000.0000
.				
----	VAR HSC409	10.0000	908.0290	5000.0000
.				
----	VAR HSC411	10.0000	819.1895	5000.0000
.				
----	VAR HSC412	10.0000	88.8395	10000.0000
.				
----	VAR HSC413	10.0000	82.0611	10000.0000
.				
----	VAR HSC414	.	0.0236	500.0000
.				
----	VAR HVHC29	10.0000	516.5734	10000.0000
.				
----	VAR HVHC30	10.0000	667.0506	10000.0000
.				
----	VAR HVHC31	20.0000	3259.6087	10000.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR HVR1	.	2034.5445	10000.0000
.			
---- VAR HVR29	10.0000	2606.4566	10000.0000
.			
---- VAR K1C323	1.0000	2.0354	3.0000
.			
---- VAR K1C325	0.5000	1.0000	2.0000
.			
---- VAR K1C408	1.0000	7.9557	15.0000
.			
---- VAR K1C414	1.0000	2.5362	4.0000
.			
---- VAR K1C428	.	4.2370	10.0000
.			
---- VAR K1C430	1.0000	3.7549	6.0000
.			
---- VAR K1C601	1.5000	2.6034	3.0000
.			
---- VAR K1C603	1.0000	1.2665	3.0000
.			
---- VAR K1C606A	1.0000	1.8218	3.0000
.			
---- VAR K1C606C	1.0000	4.1667	7.0000
.			
---- VAR K1C614B	2.0000	3.2880	3.5000
.			
---- VAR K1C615_A	0.5000	2.3914	4.0000
.			
---- VAR K1C616_A	0.5000	2.8252	5.0000
.			
---- VAR K1E633	1.0000	4.0740	5.5000
.			
---- VAR K1E6XX	1.0000	4.0370	5.5000
.			
---- VAR K1SC406	2.0000	3.6174	5.0000
.			
---- VAR K1SC408	1.5000	2.4874	3.5000
.			
---- VAR K2C601	0.5000	0.7617	1.0000
.			
---- VAR K2E633	0.2000	1.1530	1.5000
.			
---- VAR K2E6XX	0.2000	1.1425	1.5000
.			
---- VAR K2SC406	0.5000	1.1373	1.2000
.			
---- VAR K2SC408	0.5000	0.7204	1.0000
.			

----	VAR K3C323	0.5000	0.8944	1.5000
.				
----	VAR K3C325	0.0100	0.4011	1.5000
.				
----	VAR K3C408	1.0000	3.8360	6.0000
.				
----	VAR K3C414	0.5000	1.0578	3.0000
.				
----	VAR K3C428	.	1.8859	5.0000
.				
----	VAR K3C430	1.0000	1.6462	5.0000
.				
----	VAR K3C601	0.5000	1.0389	2.0000
.				
----	VAR K3C603	0.5000	0.5239	1.0000
.				
----	VAR K3C606A	0.5000	0.7277	3.0000
.				
----	VAR K3C606C	1.0000	1.8481	5.0000
.				
----	VAR K3C614B	0.6000	1.0405	1.5000
.				
----	VAR K3C615_A	0.1000	0.9748	2.0000
.				
----	VAR K3C616_A	0.1000	1.0094	2.0000
.				
----	VAR K3E633	0.3000	1.3727	2.0000
.				
----	VAR K3E6XX	0.3000	1.3602	3.0000
.				
----	VAR K3SC406	1.0000	1.5069	2.0000
.				
----	VAR K3SC408	0.7000	0.9866	1.5000
.				
----	VAR K4C323	0.5000	0.6793	1.0000
.				
----	VAR K4C325	0.0300	0.2894	1.0000
.				
----	VAR K4C408	1.0000	3.0229	5.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR K4C414	0.5000	0.7808	2.0000
.			
---- VAR K4C428	.	1.4416	5.0000
.			
---- VAR K4C430	0.5000	1.2488	3.0000
.			
---- VAR K4C601	0.2000	0.7472	1.0000
.			
---- VAR K4C603	0.1000	0.3849	1.0000
.			
---- VAR K4C606A	0.1000	0.5237	3.0000
.			
---- VAR K4C606C	1.0000	1.4103	4.0000
.			
---- VAR K4C614B	0.5000	0.6541	1.0000
.			
---- VAR K4C615_A	0.0500	0.7037	1.5000
.			
---- VAR K4C616_A	0.0500	0.6776	1.5000
.			
---- VAR K4E633	0.2000	0.9005	1.5000
.			
---- VAR K4E6XX	0.2000	0.8923	1.5000
.			
---- VAR K4SC406	0.8000	1.1115	1.5000
.			
---- VAR K4SC408	0.5000	0.7071	1.0000
.			
---- VAR K5C323	0.1000	0.3108	0.6000
.			
---- VAR K5C325	0.1000	0.1194	0.6000
.			
---- VAR K5C408	0.5000	1.5088	3.0000
.			
---- VAR K5C414	0.1000	0.3372	2.0000
.			
---- VAR K5C428	.	0.6686	2.0000
.			
---- VAR K5C430	0.2000	0.5700	1.5000
.			
---- VAR K5C601	0.1000	0.3065	0.5000
.			
---- VAR K5C603	0.0100	0.1647	0.5000
.			
---- VAR K5C606A	0.1000	0.2151	1.0000
.			
---- VAR K5C606C	0.1000	0.6517	1.2000
.			

----	VAR K5C614B	0.0500	0.1859	0.8000
.				
----	VAR K5C615_A	0.0020	0.2696	1.0000
.				
----	VAR K5C616_A	0.0020	0.2215	1.0000
.				
----	VAR K5E633	0.0500	0.3075	1.0000
.				
----	VAR K5E6XX	0.0500	0.3047	1.0000
.				
----	VAR K5SC406	0.1000	0.4794	0.6000
.				
----	VAR K5SC408	0.2000	0.2880	0.6000
.				
----	VAR K6C601	0.1000	0.2384	1.0000
.				
----	VAR K6SC406	.	0.3815	0.5000
.				
----	VAR K6SC408	0.1000	0.2233	0.5000
.				
----	VAR K7C323	0.1000	0.1213	0.3000
.				
----	VAR K7C325	0.0010	0.0399	0.2000
.				
----	VAR K7C408	0.1000	0.6737	1.0000
.				
----	VAR K7C414	0.0500	0.1205	1.0000
.				
----	VAR K7C428	.	0.2663	2.0000
.				
----	VAR K7C430	.	0.2216	1.0000
.				
----	VAR K7C601	0.0100	0.1015	0.5000
.				
----	VAR K7C603	0.0100	0.0580	0.5000
.				
----	VAR K7C606A	0.0500	0.0713	0.5000
.				
----	VAR K7C614B	0.0010	0.0456	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR K7C615_A	0.0010	0.1025	1.0000
.			
---- VAR K7C616_A	0.0110	0.0668	1.0000
.			
---- VAR K7E633	0.0100	0.0747	0.1000
.			
---- VAR K7E6XX	0.0100	0.0740	0.1000
.			
---- VAR K7SC406	0.1000	0.1710	0.3000
.			
---- VAR K7SC408	0.0500	0.0943	0.2000
.			
---- VAR KP1C601	1.0000	3.1476	5.0000
.			
---- VAR KP1C603	1.0000	1.7975	3.0000
.			
---- VAR KP1C606A	1.0000	2.2725	5.0000
.			
---- VAR KP1C606D	1.0000	6.1168	12.0000
.			
---- VAR KP2C601	0.5000	0.9604	1.5000
.			
---- VAR KP3C601	1.0000	1.2878	2.0000
.			
---- VAR KP3C603	0.5000	0.7776	1.5000
.			
---- VAR KP3C606A	0.5000	0.9345	3.0000
.			
---- VAR KP3C606D	1.0000	2.8514	5.0000
.			
---- VAR KP4C601	0.5000	0.9400	1.5000
.			
---- VAR KP4C603	0.2000	0.5858	1.0000
.			
---- VAR KP4C606A	0.1000	0.6841	3.0000
.			
---- VAR KP4C606D	1.0000	2.2235	5.0000
.			
---- VAR KP5C601	0.1000	0.3971	1.0000
.			
---- VAR KP5C603	0.1000	0.2635	0.5000
.			
---- VAR KP5C606A	0.1000	0.2907	1.0000
.			
---- VAR KP5C606D	1.0000	1.0786	5.0000
.			
---- VAR KP6C601	0.1000	0.3131	1.0000
.			

----	VAR KP7C601	0.0100	0.1373	1.0000
.				
----	VAR KP7C603	0.0100	0.1002	0.3000
.				
----	VAR KP7C606A	0.0500	0.1014	0.5000
.				
----	VAR KP7C606D	0.1000	0.4605	5.0000
.				
----	VAR KWAD1	50.0000	171.1066	300.0000
.				
----	VAR KWAD2	105.0000	288.8934	355.0000
.				
----	VAR LPC601	1.0000	1.7854	5.0000
.				
----	VAR LPC603	1.0000	2.4984	10.0000
.				
----	VAR LPC606A	0.5000	2.7522	5.0000
.				
----	VAR PC303	101.0000	101.0000	140.0000
-0.0032				
----	VAR PC306	650.0000	870.0000	900.0000
.				
----	VAR PC307	600.0000	800.0000	850.0000
.				
----	VAR PC308	600.0000	800.0000	800.0000
0.0006				
----	VAR PC309	580.0000	780.0000	780.0000
.				
----	VAR PC311	260.0000	260.0000	400.0000
-0.0001				
----	VAR PC312	600.0000	800.0000	850.0000
.				
----	VAR PHC30	101.0000	132.0436	140.0000
EPS				
----	VAR PHC32	101.0000	101.0000	200.0000
.				
----	VAR PR29	101.0000	133.2555	140.0000
.				
----	VAR PROFIT	10.0000	29.1128	10000.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR Q2HC07	.	0.0387	1.0000
.			
---- VAR Q2HC11	.	0.0346	1.0000
.			
---- VAR Q2HC14	.	0.0346	1.0000
.			
---- VAR Q2HC16	.	0.0346	1.0000
.			
---- VAR QFP1C606A	.	0.0243	1.0000
.			
---- VAR QFP3C606A	.	0.0024	0.1000
.			
---- VAR QFP4C606A	.	0.8557	1.0000
.			
---- VAR QFP5C606A	.	0.6016	1.0000
.			
---- VAR QFP7C606A	.	0.2539	1.0000
.			
---- VAR QS1C606A	.	0.7801	1.0000
.			
---- VAR QS3C606A	.	0.5164	1.0000
.			
---- VAR QS4C606A	.	0.0502	0.5000
.			
---- VAR QS5C606A	.	0.0276	0.5500
.			
---- VAR QS7C606A	.	0.0052	0.1600
.			
---- VAR R10C623	.	.	0.1000
.			
---- VAR R10C625	.	.	0.1000
.			
---- VAR R10C627	.	1.4078353E-6	0.1000
.			
---- VAR R10C629	.	1.1954751E-6	0.1000
.			
---- VAR R2C623	.	0.0097	0.8320
.			
---- VAR R2C625	.	0.0087	0.8320
.			
---- VAR R2C627	.	0.0087	0.8320
.			
---- VAR R2C629	.	0.0087	0.8320
.			
---- VAR R3C623	.	0.0112	0.1500
.			
---- VAR R3C625	.	0.0102	0.1500
.			

----	VAR R3C627	.	0.0102	0.1500
.				
----	VAR R3C629	.	0.0102	0.1500
.				
----	VAR R4C623	.	0.0015	0.0300
.				
----	VAR R4C625	.	0.0015	0.0300
.				
----	VAR R4C627	.	0.0015	0.0300
.				
----	VAR R4C629	.	0.0014	0.0300
.				
----	VAR R5C623	.	8.5081000E-6	0.3000
.				
----	VAR R5C625	.	1.2019948E-5	0.3000
.				
----	VAR R5C627	.	2.0557128E-5	0.3000
.				
----	VAR R5C629	.	1.7021917E-5	0.3000
.				
----	VAR R7C623	.	.	0.0500
.				
----	VAR R7C625	.	.	0.0500
.				
----	VAR R7C627	.	.	0.0500
.				
----	VAR R7C629	.	.	0.0500
.				
----	VAR R8C623	.	8.9334292E-6	0.1000
.				
----	VAR R8C625	.	1.2406103E-5	0.1000
.				
----	VAR R8C627	.	2.0681053E-5	0.1000
.				
----	VAR R8C629	.	1.7308833E-5	0.1000
.				
----	VAR R9C623	.	0.0097	0.1000
.				
----	VAR R9C625	.	0.0087	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR R9C627 .	.	0.0087	0.1000
---- VAR R9C629 .	.	0.0087	0.1000
---- VAR RHO2HC07 0.0317	610.0000	650.0000	650.0000
---- VAR RHO2HC11 0.0284	610.0000	650.0000	650.0000
---- VAR RHO2HC14 0.0285	610.0000	650.0000	650.0000
---- VAR RHO2HC16 0.0287	610.0000	650.0000	650.0000
---- VAR RHOAC09 0.0002	1500.0000	1700.0000	1700.0000
---- VAR RHOAC20 0.0002	1500.0000	1700.0000	1700.0000
---- VAR RHOAC31 0.0002	1500.0000	1700.0000	1700.0000
---- VAR RHOAC42 0.0002	1500.0000	1700.0000	1700.0000
---- VAR RIC10C623 .	.	.	0.3000
---- VAR RIC10C625 .	.	.	0.3000
---- VAR RIC10C627 .	.	.	0.3000
---- VAR RIC10C629 .	.	.	0.3000
---- VAR RIC11C623 .	.	.	0.1000
---- VAR RIC11C625 .	.	.	0.1000
---- VAR RIC11C627 .	.	1.1922910E-6	0.1000
---- VAR RIC11C629 .	.	.	0.1000
---- VAR SF1S34 .	0.0001	0.0270	1.0000
---- VAR SF2S34 .	.	0.0489	1.0000
---- VAR SFS11 .	0.1000	0.5000	0.8000
---- VAR SFS19 .	0.1000	0.4941	0.8000
---- VAR SFS2 .	0.1000	0.7975	1.0000
---- VAR SFS23 .	0.1000	0.6817	0.8000

----	VAR SFS27	0.1000	0.5053	0.8000
.				
----	VAR SFS41	0.0001	0.9859	1.0000
.				
----	VAR SFS42	0.0001	0.7800	1.0000
.				
----	VAR SFS5	0.1000	0.2718	0.5000
.				
----	VAR SFS7	0.1000	0.3333	0.8000
.				
----	VAR SM1C601	1.0000	2.5926	5.0000
.				
----	VAR SM1C603	0.0500	0.5764	1.0000
.				
----	VAR SM1C606A	0.1000	2.4236	5.0000
.				
----	VAR SM1C606D	1.0000	2.9391	5.0000
.				
----	VAR SM2C601	0.5000	0.7910	1.0000
.				
----	VAR SM3C601	0.5000	1.0607	2.0000
.				
----	VAR SM3C603	0.0010	0.2493	0.5000
.				
----	VAR SM3C606A	0.1000	0.9966	5.0000
.				
----	VAR SM3C606D	1.0000	1.3082	10.0000
.				
----	VAR SM4C601	0.4000	0.7743	1.5000
.				
----	VAR SM4C603	0.0100	0.1878	0.5000
.				
----	VAR SM4C606A	0.1000	0.7296	5.0000
.				
----	VAR SM4C606D	0.5000	1.0000	5.0000
.				
----	VAR SM5C601	0.1000	0.3270	0.6000
.				
----	VAR SM5C603	0.0100	0.0845	0.5000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR SM5C606A	0.0500	0.3100	5.0000
.			
---- VAR SM5C606D	0.1000	0.4638	5.0000
.			
---- VAR SM6C601	0.1000	0.2579	1.0000
.			
---- VAR SM7C601	0.0100	0.1131	0.2000
.			
---- VAR SM7C603	0.0010	0.0321	0.2000
.			
---- VAR SM7C606A	0.0010	0.1081	5.0000
.			
---- VAR SM7C606D	0.1000	0.1847	5.0000
.			
---- VAR SN1C601	1.0000	2.8857	5.0000
.			
---- VAR SN1C603	1.0000	1.3570	3.0000
.			
---- VAR SN1C606A	1.0000	3.4785	20.0000
.			
---- VAR SN2C601	0.5000	0.8443	1.5000
.			
---- VAR SN3C601	0.5000	1.1515	1.5000
.			
---- VAR SN3C603	0.5000	0.5613	1.5000
.			
---- VAR SN3C606A	1.0000	1.3895	15.0000
.			
---- VAR SN4C601	0.5000	0.8282	1.0000
.			
---- VAR SN4C603	0.2000	0.4124	1.0000
.			
---- VAR SN4C606A	0.8000	1.0000	10.0000
.			
---- VAR SN5C601	0.1000	0.3398	0.8000
.			
---- VAR SN5C603	0.1000	0.1764	0.4000
.			
---- VAR SN5C606A	0.3000	0.4107	10.0000
.			
---- VAR SN6C601	0.1000	0.2643	1.0000
.			
---- VAR SN7C601	0.0100	0.1125	0.5000
.			
---- VAR SN7C603	0.0100	0.0622	0.5000
.			
---- VAR SN7C606A	0.1000	0.1362	5.0000
.			

----	VAR TAC02	276.0000	276.0000	290.0000	-
	2.925791E-5				
----	VAR TAC05	273.0000	280.0000	300.0000	
	.				
----	VAR TAC07	273.0000	280.0006	300.0000	
	.				
----	VAR TAC15	273.0000	280.0000	300.0000	
	.				
----	VAR TAC18	273.0000	280.0611	300.0000	
	.				
----	VAR TAC20	280.0000	280.0000	300.0000	
	-0.0019				
----	VAR TAC26	273.0000	280.0000	300.0000	
	.				
----	VAR TAC29	273.0000	280.1146	300.0000	
	.				
----	VAR TAC37	273.0000	280.0000	300.0000	
	.				
----	VAR TAC40	273.0000	280.0363	300.0000	
	.				
----	VAR TC301	200.0000	282.6006	300.0000	
	.				
----	VAR TC302	250.0000	261.9077	290.0000	
	.				
----	VAR TC309	270.0000	322.9752	350.0000	
	.				
----	VAR TC310	200.0000	288.1849	310.0000	
	.				
----	VAR TC311	270.0000	288.1849	310.0000	
	.				
----	VAR TC312	300.0000	328.4033	369.0000	
	.				
----	VAR TC318	250.0000	321.5069	365.0000	
	.				
----	VAR TC319	250.0000	300.0000	400.0000	
	.				
----	VAR TC320	250.0000	300.0000	400.0000	
	.				
----	VAR TC322	250.0000	300.0000	400.0000	
	.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR TC323	300.0000	359.0690	420.0000
.			
---- VAR TC326	300.0000	322.5997	360.0000
.			
---- VAR TC328	300.0000	322.5997	360.0000
.			
---- VAR TC329	300.0000	322.5997	375.0000
.			
---- VAR TC401	260.0000	282.6006	300.0000
.			
---- VAR TC402	270.0000	283.9220	305.0000
.			
---- VAR TC403	280.0000	295.8124	320.0000
.			
---- VAR TC406	298.0000	389.0844	400.0000
.			
---- VAR TC409	400.0000	460.9878	461.0000
.			
---- VAR TC411	300.0000	403.7525	418.0000
.			
---- VAR TC412	330.0000	363.3260	405.0000
.			
---- VAR TC413	250.0000	301.0000	350.0000
.			
---- VAR TC415	250.0000	307.2720	400.0000
.			
---- VAR TC417	275.0000	299.9913	350.0000
.			
---- VAR TC425	300.0000	363.3260	410.0000
.			
---- VAR TC426	300.0000	363.3260	410.0000
.			
---- VAR TC427	360.0000	375.0766	405.0000
.			
---- VAR TC428	300.0000	364.9471	405.0000
.			
---- VAR TC430	300.0000	358.0220	400.0000
.			
---- VAR TC431	300.0000	363.3260	405.0000
.			
---- VAR TC432	350.0000	363.3260	400.0000
.			
---- VAR TCWOTE609A	298.0000	308.1986	320.0000
.			
---- VAR TCWOTE621A	298.0000	326.6519	355.0000
.			
---- VAR TCWOTE621B	298.0000	298.0000	325.0000
-0.0063			

----	VAR	TCWOTE627A	295.0000	295.0000	360.0000
		EPS			
----	VAR	TCWOTE627B	293.0000	293.0000	310.0000
		-0.6540			
----	VAR	TCWOTE641A	295.0000	318.4033	360.0000
		.			
----	VAR	TCWOTE641B	295.0000	312.9752	325.0000
		.			
----	VAR	TCWOUTE603	296.8360	321.4823	350.0000
		.			
----	VAR	TCWOUTE605	298.0000	305.6485	320.0000
		.			
----	VAR	TCWOUTE611	295.0000	297.3066	350.0000
		.			
----	VAR	TCWOUTE613	298.0000	312.5997	320.0000
		.			
----	VAR	TCWOUTE617	295.0000	319.1717	350.0000
		.			
----	VAR	TCWOUTE626	295.0000	295.0000	310.0000
		-0.0030			
----	VAR	TCWOUTE634	295.0000	340.9683	360.0000
		.			
----	VAR	TCWOUTE640	295.0000	316.3947	330.0000
		.			
----	VAR	THC01	295.0000	296.2800	370.0000
		.			
----	VAR	THC02	275.0000	292.6006	302.0000
		.			
----	VAR	THC03	290.0000	304.2455	360.0000
		.			
----	VAR	THC04	280.0000	296.0857	310.0000
		.			
----	VAR	THC05	270.0000	288.2197	300.0000
		.			
----	VAR	THC06	273.0000	289.0923	300.0000
		.			
----	VAR	THC07	273.0000	289.0923	300.0000
		.			
----	VAR	THC11	273.0000	289.0923	300.0000
		.			

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR THC14	273.0000	289.0923	300.0000
.			
---- VAR THC16	273.0000	289.0923	300.0000
.			
---- VAR THC22	273.0000	280.0000	290.0000
.			
---- VAR THC23	273.0000	280.0000	290.0000
.			
---- VAR THC24	273.0000	280.0000	290.0000
.			
---- VAR THC25	273.0000	280.0000	290.0000
.			
---- VAR THC26	273.0000	280.0000	290.0000
.			
---- VAR THC27	273.0000	280.0000	290.0000
.			
---- VAR THC28	270.0000	280.0000	290.0000
.			
---- VAR THC29	270.0000	280.0000	290.0000
.			
---- VAR THC30	250.0000	280.0000	300.0000
.			
---- VAR THC31	260.0000	282.6006	310.0000
.			
---- VAR THC34	250.0000	261.9077	310.0000
.			
---- VAR THC38	250.0000	261.9077	310.0000
.			
---- VAR THC41	250.0000	261.9077	310.0000
.			
---- VAR THC45	250.0000	261.9077	310.0000
.			
---- VAR TMC601	315.0000	329.7466	360.0000
.			
---- VAR TMC603	350.0000	352.1470	375.0000
.			
---- VAR TMC606A	327.0000	331.6356	370.0000
.			
---- VAR TMC606D	370.0000	387.4735	400.0000
.			
---- VAR TMK601	273.0000	307.0119	333.0000
.			
---- VAR TNC601	310.0000	320.8163	340.0000
.			
---- VAR TNC603	320.0000	333.9124	375.0000
.			
---- VAR TNC606A	310.0000	321.1676	370.0000
.			

----	VAR TR1	270.0000	280.0000	290.0000	
.					
----	VAR TR29	260.0000	280.0000	300.0000	
.					
----	VAR TSC401	280.0000	319.2902	350.0000	
.					
----	VAR TSC404	310.0000	331.4823	365.0000	
.					
----	VAR TSC406	320.0000	336.6046	360.0000	
.					
----	VAR TSC407	320.0000	336.6046	400.0000	
.					
----	VAR TSC409	308.0000	318.7440	360.0000	
.					
----	VAR TSC411	308.0000	318.7440	375.0000	
.					
----	VAR TSC412	308.0000	318.7440	360.0000	
.					
----	VAR TSC414	275.0000	275.0000	320.0000	-
	3.485868E-7				
----	VAR UTILITIES	-10000.0000	8.2029	10000.0000	
.					
----	VAR VFC614B	0.1000	0.1628	0.8000	
.					
----	VAR VFC615	0.0010	0.3596	0.6000	
.					
----	VAR VFC616	0.0500	0.2507	1.0000	
.					
----	VAR VFM3	.	0.4793	0.5500	
.					
----	VAR VPC601	1.0000	1.4706	5.0000	
.					
----	VAR VPC603	0.0100	0.8012	3.0000	
.					
----	VAR VPC606A	0.1000	2.9352	10.0000	
.					
----	VAR X10AC09	.	.	0.1000	
.					
----	VAR X10AC20	.	.	0.1000	
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X10AC31	.	.	0.1000
.			
---- VAR X10AC42	.	.	0.1000
.			
---- VAR X11AC02	0.9700	0.9980	0.9980
702.6718			
---- VAR X11AC05	0.8900	0.9687	0.9990
.			
---- VAR X11AC07	0.8900	0.9693	0.9990
.			
---- VAR X11AC09	.	0.7743	1.0000
.			
---- VAR X11AC15	0.8900	0.9424	0.9990
.			
---- VAR X11AC18	0.8900	0.9429	0.9990
.			
---- VAR X11AC20	.	0.8186	1.0000
.			
---- VAR X11AC26	0.8900	0.9162	0.9990
.			
---- VAR X11AC29	0.8900	0.9164	0.9990
.			
---- VAR X11AC31	.	0.8472	1.0000
.			
---- VAR X11AC37	0.8900	0.8900	0.9990
708.3909			
---- VAR X11AC40	0.8900	0.8903	0.9990
.			
---- VAR X11AC42	.	0.8091	1.0000
.			
---- VAR X12AC02	0.0020	0.0020	0.0300
.			
---- VAR X12AC05	0.0010	0.0313	0.1100
.			
---- VAR X12AC07	0.0010	0.0307	0.1100
.			
---- VAR X12AC09	.	0.0251	0.1000
.			
---- VAR X12AC12	0.0010	0.0313	0.1200
.			
---- VAR X12AC15	0.0010	0.0576	0.1100
.			
---- VAR X12AC18	0.0010	0.0571	0.1100
.			
---- VAR X12AC20	.	0.0500	0.1000
.			
---- VAR X12AC23	0.0010	0.0576	0.1200
.			

----	VAR X12AC26	0.0010	0.0838	0.1100
.				
----	VAR X12AC29	0.0010	0.0836	0.1100
.				
----	VAR X12AC31	.	0.0775	0.1000
.				
----	VAR X12AC34	0.0010	0.0838	0.1200
.				
----	VAR X12AC37	0.0010	0.1100	0.1100
.				
----	VAR X12AC40	0.0010	0.1097	0.1100
.				
----	VAR X12AC42	.	0.1000	0.1000
4.6738				
----	VAR X12AC45	0.0010	0.1100	0.1200
.				
----	VAR X1AC09	.	0.0090	0.1000
.				
----	VAR X1AC20	.	0.0065	0.1000
.				
----	VAR X1AC31	.	0.0035	0.1000
.				
----	VAR X1AC42	.	0.0042	0.1000
.				
----	VAR X1C301	.	0.0671	0.2000
.				
----	VAR X1C302	.	0.0780	0.2000
.				
----	VAR X1C303	0.0500	0.0681	0.2200
.				
----	VAR X1C306	.	0.0721	0.5000
.				
----	VAR X1C307	.	0.0721	0.5000
.				
----	VAR X1C308	.	0.0472	0.4000
.				
----	VAR X1C309	.	0.0472	0.5000
.				
----	VAR X1C310	.	0.0931	0.5000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1C311	.	0.0318	0.2000
.			
---- VAR X1C312	.	0.1166	1.0000
.			
---- VAR X1C315	0.0001	0.1166	1.0000
.			
---- VAR X1C317	.	0.0882	0.3000
.			
---- VAR X1C318	0.0001	0.0882	0.3000
.			
---- VAR X1C319	0.0001	0.0882	0.1000
.			
---- VAR X1C320	.	0.0882	0.1000
.			
---- VAR X1C321	0.0001	0.0882	0.1000
.			
---- VAR X1C322	.	0.0882	0.1500
.			
---- VAR X1C323	.	0.0882	0.2000
.			
---- VAR X1C324	.	0.0882	0.3000
.			
---- VAR X1C326	0.4000	1.0000	1.0000
.			
---- VAR X1C328	0.4000	1.0000	1.0000
.			
---- VAR X1C329	0.4000	1.0000	1.0000
.			
---- VAR X1C401	.	0.0147	0.2000
.			
---- VAR X1C402	.	0.0147	0.2000
.			
---- VAR X1C403	.	0.0147	0.2000
.			
---- VAR X1C404	.	0.0147	0.2000
.			
---- VAR X1C405	.	.	0.0100
.			
---- VAR X1C406	.	.	0.0100
.			
---- VAR X1C407	.	.	0.0100
.			
---- VAR X1C408	.	.	1.0000
.			
---- VAR X1C409	.	.	0.0100
.			
---- VAR X1C410	0.0001	0.0003	1.0000
.			

----	VAR X1C411	.	0.0003	0.1000
.				
----	VAR X1C412	.	0.0015	0.0500
.				
----	VAR X1C413	.	0.0015	0.1000
.				
----	VAR X1C414	.	0.0586	0.2500
.				
----	VAR X1C415	.	0.0586	0.2000
.				
----	VAR X1C418	.	0.0569	0.3000
.				
----	VAR X1C419	0.0001	0.0569	0.2000
.				
----	VAR X1C425	.	0.0003	0.1000
.				
----	VAR X1C426	.	0.0003	0.1000
.				
----	VAR X1C427	.	0.0004	1.0000
.				
----	VAR X1C428	.	0.0005	0.1000
.				
----	VAR X1C430	.	0.0005	0.1000
.				
----	VAR X1C431	.	0.0015	0.1000
.				
----	VAR X1C432	.	0.0015	0.1000
.				
----	VAR X1HC01	0.0010	0.0592	0.3000
.				
----	VAR X1HC02	.	0.0592	0.3000
.				
----	VAR X1HC03	0.0001	0.0577	0.2000
.				
----	VAR X1HC04	.	0.0577	0.2000
.				
----	VAR X1HC05	.	0.0577	0.2000
.				
----	VAR X1HC06	.	0.0580	0.2000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X1HC07	.	0.0580	0.2000
.			
---- VAR X1HC08	.	0.0580	0.2000
.			
---- VAR X1HC11	.	0.0580	0.2000
.			
---- VAR X1HC14	.	0.0580	0.2000
.			
---- VAR X1HC15	.	0.0580	0.2000
.			
---- VAR X1HC16	.	0.0580	0.2000
.			
---- VAR X1HC22	.	0.0464	0.5000
.			
---- VAR X1HC23	.	0.0463	0.5000
.			
---- VAR X1HC24	.	0.0464	0.5000
.			
---- VAR X1HC25	.	0.0497	0.5000
.			
---- VAR X1HC26	.	0.0474	0.5000
.			
---- VAR X1HC27	.	0.0450	0.5000
.			
---- VAR X1HC28	.	0.0187	0.2000
.			
---- VAR X1HC29	.	0.0187	0.2000
.			
---- VAR X1HC30	.	0.0144	0.2000
.			
---- VAR X1HC31	.	0.0147	0.1000
.			
---- VAR X1HC33	.	0.0228	0.1000
.			
---- VAR X1HC34	.	0.0228	0.1000
.			
---- VAR X1HC38	.	0.0228	0.1000
.			
---- VAR X1HC40	.	0.0228	0.1000
.			
---- VAR X1HC41	.	0.0228	0.1000
.			
---- VAR X1HC45	.	0.0228	0.1000
.			
---- VAR X1R1	.	0.0187	0.1000
.			
---- VAR X1R29	.	0.0147	0.2000
.			

----	VAR	X1SC401	.	0.0063	0.1000	
.						
----	VAR	X1SC404	.	.	0.1000	
.						
----	VAR	X1SC405	.	.	0.1000	
.						
----	VAR	X1SC406	.	.	0.1000	
.						
----	VAR	X1SC407	.	.	0.1000	
.						
----	VAR	X1SC409	.	0.0200	0.1000	
.						
----	VAR	X1SC411	.	0.0200	0.1000	
.						
----	VAR	X1SC412	.	0.0200	0.1000	
.						
----	VAR	X1SC413	.	0.0200	0.1000	
.						
----	VAR	X1SC414	.	.	0.1000	
.						
----	VAR	X2AC09	.	.	1.0000	
.						
----	VAR	X2AC20	.	.	1.0000	
.						
----	VAR	X2AC31	.	.	1.0000	
.						
----	VAR	X2AC42	.	.	1.0000	
.						
----	VAR	X2C301	.	.	0.0100	
.						
----	VAR	X2C417	.	3.3333333E-5	0.1000	
.						
----	VAR	X2C418	.	0.0009	0.1000	
.						
----	VAR	X2C419	.	0.0009	0.1000	
.						
----	VAR	X2HC01	0.1000	0.1000	0.7000	
.						
----	VAR	X2HC02	0.1000	0.1000	1.0000	-
467.4856						

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X2HC03	.	0.0009	0.1000
.			
---- VAR X2HC04	.	0.0009	0.1000
.			
---- VAR X2HC05	.	0.0009	0.1000
.			
---- VAR X2HC06	.	0.0225	0.1500
.			
---- VAR X2HC07	.	0.0225	0.1500
.			
---- VAR X2HC08	.	0.0225	0.1500
.			
---- VAR X2HC11	.	0.0225	0.1500
.			
---- VAR X2HC14	.	0.0225	0.1500
.			
---- VAR X2HC15	.	0.0225	0.1500
.			
---- VAR X2HC16	.	0.0225	0.1500
.			
---- VAR X2HC22	.	.	0.1000
.			
---- VAR X2HC23	.	.	0.1000
.			
---- VAR X2HC24	.	.	0.1000
.			
---- VAR X2HC25	.	.	0.1000
.			
---- VAR X2HC26	.	.	0.1000
.			
---- VAR X2HC27	.	.	0.1000
.			
---- VAR X2HC28	.	.	0.1000
.			
---- VAR X2HC29	.	.	0.1000
.			
---- VAR X2HC30	.	.	0.1000
.			
---- VAR X2HC31	.	.	0.1000
EPS			
---- VAR X2R1	.	.	0.1000
.			
---- VAR X2R29	.	.	0.1000
.			
---- VAR X2SC401	.	.	0.1000
.			
---- VAR X2SC404	.	.	0.1000
.			

----	VAR X2SC405	.	.	0.1000
.				
----	VAR X2SC406	.	.	0.1000
.				
----	VAR X2SC407	.	.	0.1000
.				
----	VAR X2SC409	.	.	0.1000
.				
----	VAR X2SC411	.	.	0.1000
.				
----	VAR X2SC412	.	.	0.1000
.				
----	VAR X2SC413	.	.	0.1000
.				
----	VAR X2SC414	.	0.1000	0.1000
0.0240				
----	VAR X3AC09	.	0.1350	0.7000
.				
----	VAR X3AC20	.	0.0859	0.7000
.				
----	VAR X3AC31	.	0.0503	0.7000
.				
----	VAR X3AC42	.	0.0606	0.7000
.				
----	VAR X3C301	0.5000	0.7721	1.0000
.				
----	VAR X3C302	0.4500	0.8214	1.0000
.				
----	VAR X3C303	0.5000	0.7767	0.8000
.				
----	VAR X3C306	.	0.7813	1.0000
.				
----	VAR X3C307	.	0.7813	1.0000
.				
----	VAR X3C308	.	0.7791	1.0000
.				
----	VAR X3C309	0.2000	0.7791	0.8000
.				
----	VAR X3C310	.	0.8052	1.0000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3C311	.	0.7703	1.0000
.			
---- VAR X3C312	.	0.7851	1.0000
.			
---- VAR X3C315	0.0001	0.7851	1.0000
.			
---- VAR X3C317	0.5000	0.8104	1.0000
.			
---- VAR X3C318	0.0001	0.8104	1.0000
.			
---- VAR X3C319	0.0001	0.8104	1.0000
.			
---- VAR X3C320	0.0001	0.8104	1.0000
.			
---- VAR X3C321	0.0001	0.8104	1.0000
.			
---- VAR X3C322	.	0.8104	1.0000
.			
---- VAR X3C323	0.5000	0.8104	0.9500
.			
---- VAR X3C324	0.5000	0.8104	0.9500
.			
---- VAR X3C326	.	1.5978930E-6	0.5000
.			
---- VAR X3C328	.	1.5969259E-6	0.5000
.			
---- VAR X3C329	.	1.5978930E-6	0.5000
.			
---- VAR X3C401	.	0.5001	1.0000
.			
---- VAR X3C402	.	0.5001	0.8000
.			
---- VAR X3C403	0.0001	0.5001	1.0000
.			
---- VAR X3C404	0.0001	0.5001	1.0000
.			
---- VAR X3C405	.	1.6916491E-5	0.1000
.			
---- VAR X3C406	.	1.6916491E-5	0.0100
.			
---- VAR X3C407	.	1.6916491E-5	0.0100
.			
---- VAR X3C408	.	1.6916491E-5	1.0000
.			
---- VAR X3C409	.	1.6916491E-5	0.0100
.			
---- VAR X3C410	0.0001	0.0010	0.1000
.			

----	VAR X3C411	0.0001	0.0010	0.2000	
.					
----	VAR X3C412	.	0.0020	0.1000	
.					
----	VAR X3C413	.	0.0020	0.1000	
.					
----	VAR X3C414	0.5000	0.8198	1.0000	
.					
----	VAR X3C415	.	0.8198	1.0000	
.					
----	VAR X3C418	0.0001	0.8269	1.0000	
.					
----	VAR X3C419	0.0001	0.8269	1.0000	
.					
----	VAR X3C425	.	0.0010	0.1000	
.					
----	VAR X3C426	0.0001	0.0010	0.1000	
.					
----	VAR X3C427	.	0.0013	1.0000	
.					
----	VAR X3C428	.	0.0014	0.3000	
.					
----	VAR X3C430	.	0.0015	0.1000	
.					
----	VAR X3C431	.	0.0020	0.1000	
.					
----	VAR X3C432	.	0.0020	0.1000	
.					
----	VAR X3HC01	0.0100	0.0100	0.6000	-
179.0197					
----	VAR X3HC02	.	0.0100	0.5000	
.					
----	VAR X3HC03	0.1000	0.8264	1.0000	
.					
----	VAR X3HC04	0.1000	0.8264	1.0000	
.					
----	VAR X3HC05	0.1000	0.8264	1.0000	
.					
----	VAR X3HC06	0.3000	0.6485	1.0000	
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X3HC07	0.3000	0.6485	1.0000
.			
---- VAR X3HC08	0.3000	0.6485	1.0000
.			
---- VAR X3HC11	0.3000	0.6485	1.0000
.			
---- VAR X3HC14	0.3000	0.6485	1.0000
.			
---- VAR X3HC15	0.3000	0.6485	1.0000
.			
---- VAR X3HC16	0.3000	0.6485	1.0000
.			
---- VAR X3HC22	0.1000	0.6670	0.9000
.			
---- VAR X3HC23	0.1000	0.6676	0.9000
.			
---- VAR X3HC24	0.1000	0.6673	0.9000
.			
---- VAR X3HC25	0.1000	0.6540	0.9000
.			
---- VAR X3HC26	0.1000	0.6633	0.9000
.			
---- VAR X3HC27	0.1000	0.6730	0.9000
.			
---- VAR X3HC28	0.1000	0.5617	0.6000
.			
---- VAR X3HC29	0.1000	0.5617	0.6000
.			
---- VAR X3HC30	0.1000	0.4951	0.6000
.			
---- VAR X3HC31	0.1000	0.5001	0.6000
.			
---- VAR X3HC33	0.1000	0.7604	1.0000
.			
---- VAR X3HC34	0.1000	0.7604	1.0000
.			
---- VAR X3HC38	0.1000	0.7604	1.0000
.			
---- VAR X3HC40	0.1000	0.7604	1.0000
.			
---- VAR X3HC41	0.1000	0.7604	1.0000
.			
---- VAR X3HC45	0.1000	0.7604	1.0000
.			
---- VAR X3R1	.	0.5617	0.6000
.			
---- VAR X3R29	0.1000	0.5014	0.6000
.			

----	VAR X3SC401	0.2000	0.3216	0.4000
.				
----	VAR X3SC404	.	0.0234	0.1000
.				
----	VAR X3SC405	.	0.0234	0.1000
.				
----	VAR X3SC406	.	0.0234	0.1000
.				
----	VAR X3SC407	.	0.0234	0.1000
.				
----	VAR X3SC409	0.5000	0.9739	1.0000
.				
----	VAR X3SC411	0.5000	0.9739	1.0000
.				
----	VAR X3SC412	0.5000	0.9739	1.0000
.				
----	VAR X3SC413	0.5000	0.9739	1.0000
.				
----	VAR X3SC414	0.5000	0.5000	1.0000
-0.0001				
----	VAR X4AC09	.	0.0235	0.2000
.				
----	VAR X4AC20	.	0.0148	0.2000
.				
----	VAR X4AC31	.	0.0087	0.2000
.				
----	VAR X4AC42	.	0.0105	0.2000
.				
----	VAR X4C301	.	0.1161	0.5000
.				
----	VAR X4C302	.	0.0951	0.5000
.				
----	VAR X4C303	0.0500	0.1142	0.2000
.				
----	VAR X4C306	.	0.1108	0.8000
.				
----	VAR X4C307	.	0.1108	0.8000
.				
----	VAR X4C308	.	0.1228	0.5000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4C309	.	0.1228	0.4000
.			
---- VAR X4C310	.	0.0932	0.3000
.			
---- VAR X4C311	.	0.1328	0.5000
.			
---- VAR X4C312	.	0.0894	1.0000
.			
---- VAR X4C315	0.0001	0.0894	0.3000
.			
---- VAR X4C317	.	0.0922	0.2000
.			
---- VAR X4C318	0.0001	0.0922	0.3000
.			
---- VAR X4C319	0.0001	0.0922	0.3000
.			
---- VAR X4C320	0.0001	0.0922	0.3000
.			
---- VAR X4C321	0.0001	0.0922	0.3000
.			
---- VAR X4C322	.	0.0922	0.4000
.			
---- VAR X4C323	0.0100	0.0922	0.2500
.			
---- VAR X4C324	0.0100	0.0922	0.2500
.			
---- VAR X4C325	.	.	0.1000
.			
---- VAR X4C326	.	.	0.1000
.			
---- VAR X4C328	.	.	0.1000
.			
---- VAR X4C329	.	.	0.1000
.			
---- VAR X4C401	0.0010	0.1147	0.5000
.			
---- VAR X4C402	0.0010	0.1147	0.5000
.			
---- VAR X4C403	0.0001	0.1147	0.3000
.			
---- VAR X4C404	0.0001	0.1147	0.3000
.			
---- VAR X4C405	0.0001	0.0605	0.2000
.			
---- VAR X4C406	.	0.0605	0.2000
.			
---- VAR X4C407	0.0100	0.0605	0.3000
.			

----	VAR	X4C408	.	0.0605	0.2000
.					
----	VAR	X4C409	.	0.0605	0.3000
.					
----	VAR	X4C410	0.0001	0.5357	1.0000
.					
----	VAR	X4C411	.	0.5357	1.0000
.					
----	VAR	X4C412	0.5000	0.8408	1.0000
.					
----	VAR	X4C413	0.0001	0.8408	1.0000
.					
----	VAR	X4C414	0.0100	0.1083	0.2500
.					
----	VAR	X4C415	0.0001	0.1083	0.3000
.					
----	VAR	X4C418	0.0001	0.1036	0.3000
.					
----	VAR	X4C419	0.0001	0.1036	0.3000
.					
----	VAR	X4C425	.	0.5357	1.0000
.					
----	VAR	X4C426	0.0001	0.5357	1.0000
.					
----	VAR	X4C427	.	0.6849	1.0000
.					
----	VAR	X4C428	.	0.7456	1.0000
.					
----	VAR	X4C430	0.5000	0.6543	1.0000
.					
----	VAR	X4C431	0.0001	0.8408	1.0000
.					
----	VAR	X4C432	0.5000	0.8408	1.0000
.					
----	VAR	X4HC01	.	0.0886	0.2500
.					
----	VAR	X4HC02	.	0.0886	0.2500
.					
----	VAR	X4HC03	.	0.1033	0.3000
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X4HC04	.	0.1033	0.5000
.			
---- VAR X4HC05	.	0.1033	0.5000
.			
---- VAR X4HC06	.	0.1001	0.4000
.			
---- VAR X4HC07	.	0.1001	0.4000
.			
---- VAR X4HC08	.	0.1001	0.4000
.			
---- VAR X4HC11	.	0.1001	0.4000
.			
---- VAR X4HC14	.	0.1001	0.4000
.			
---- VAR X4HC15	.	0.1001	0.4000
.			
---- VAR X4HC16	.	0.1001	0.4000
.			
---- VAR X4HC22	.	0.1158	0.5000
.			
---- VAR X4HC23	.	0.1161	0.5000
.			
---- VAR X4HC24	.	0.1159	0.5000
.			
---- VAR X4HC25	.	0.1125	0.5000
.			
---- VAR X4HC26	.	0.1149	0.5000
.			
---- VAR X4HC27	.	0.1172	0.5000
.			
---- VAR X4HC28	.	0.1207	0.5000
.			
---- VAR X4HC29	.	0.1207	0.3000
.			
---- VAR X4HC30	.	0.1140	0.3000
.			
---- VAR X4HC31	.	0.1147	0.3000
.			
---- VAR X4HC33	.	0.1401	0.5000
.			
---- VAR X4HC34	.	0.1401	0.5000
.			
---- VAR X4HC38	.	0.1401	0.5000
.			
---- VAR X4HC40	.	0.1401	0.5000
.			
---- VAR X4HC41	.	0.1401	0.5000
.			

----	VAR X4HC45	.	0.1401	0.5000
.				
----	VAR X4R1	.	0.1207	0.3000
.				
----	VAR X4R29	0.0100	0.1148	0.3000
.				
----	VAR X4SC401	0.5000	0.5280	0.7000
.				
----	VAR X4SC404	0.4800	0.7666	1.0000
.				
----	VAR X4SC405	0.4800	0.7666	1.0000
.				
----	VAR X4SC406	0.7000	0.7666	1.0000
.				
----	VAR X4SC407	0.7000	0.7666	1.0000
.				
----	VAR X4SC409	.	0.0061	0.1000
.				
----	VAR X4SC411	.	0.0061	0.1000
.				
----	VAR X4SC412	.	0.0061	0.1000
.				
----	VAR X4SC413	.	0.0061	0.1000
.				
----	VAR X4SC414	.	0.1000	0.1000
0.0094				
----	VAR X5AC09	.	0.0062	0.1000
.				
----	VAR X5AC20	.	0.0041	0.1000
.				
----	VAR X5AC31	.	0.0023	0.1000
.				
----	VAR X5AC42	.	0.0028	0.1000
.				
----	VAR X5C301	.	0.0179	0.2000
.				
----	VAR X5C302	.	0.0056	0.1000
.				
----	VAR X5C303	.	0.0167	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5C306	.	0.0150	0.6000
.			
---- VAR X5C307	.	0.0150	0.6000
.			
---- VAR X5C308	.	0.0202	0.2000
.			
---- VAR X5C309	.	0.0202	0.2000
.			
---- VAR X5C310	.	0.0057	0.1000
.			
---- VAR X5C311	.	0.0250	0.2000
.			
---- VAR X5C312	.	0.0056	0.4000
.			
---- VAR X5C315	0.0001	0.0056	0.1000
.			
---- VAR X5C317	.	0.0058	0.1000
.			
---- VAR X5C318	0.0001	0.0058	0.1000
.			
---- VAR X5C319	0.0001	0.0058	0.1000
.			
---- VAR X5C320	.	0.0058	0.1000
.			
---- VAR X5C321	0.0001	0.0058	0.1000
.			
---- VAR X5C322	.	0.0058	0.1000
.			
---- VAR X5C323	0.0020	0.0058	0.1000
.			
---- VAR X5C324	0.0020	0.0058	0.1000
.			
---- VAR X5C325	.	.	0.0100
.			
---- VAR X5C326	.	.	0.0100
.			
---- VAR X5C328	.	.	0.0100
.			
---- VAR X5C329	.	.	0.0100
.			
---- VAR X5C401	.	0.0516	0.5000
.			
---- VAR X5C402	.	0.0516	0.5000
.			
---- VAR X5C403	0.0001	0.0516	0.2000
.			
---- VAR X5C404	.	0.0516	0.2000
.			

----	VAR	X5C405	.	0.1335	0.2000
.					
----	VAR	X5C406	.	0.1335	0.2000
.					
----	VAR	X5C407	.	0.1335	0.2000
.					
----	VAR	X5C408	.	0.1335	0.2000
.					
----	VAR	X5C409	.	0.1335	0.3000
.					
----	VAR	X5C410	0.0001	0.0932	1.0000
.					
----	VAR	X5C411	.	0.0932	1.0000
.					
----	VAR	X5C412	.	0.0676	0.1000
.					
----	VAR	X5C413	.	0.0676	0.3000
.					
----	VAR	X5C414	.	0.0013	0.1000
.					
----	VAR	X5C415	.	0.0013	0.1000
.					
----	VAR	X5C418	.	0.0012	0.1000
.					
----	VAR	X5C419	0.0001	0.0012	0.1000
.					
----	VAR	X5C425	.	0.0932	1.0000
.					
----	VAR	X5C426	0.0001	0.0932	1.0000
.					
----	VAR	X5C427	.	0.0805	1.0000
.					
----	VAR	X5C428	.	0.0754	0.4000
.					
----	VAR	X5C430	.	0.0833	0.1000
.					
----	VAR	X5C431	.	0.0676	0.2000
.					
----	VAR	X5C432	.	0.0676	0.1000
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR X5HC01	.	0.1422	0.1500
.			
---- VAR X5HC02	.	0.1422	0.1500
.			
---- VAR X5HC03	.	0.0013	0.1000
.			
---- VAR X5HC04	.	0.0013	0.3000
.			
---- VAR X5HC05	.	0.0013	0.3000
.			
---- VAR X5HC06	.	0.0320	0.3000
.			
---- VAR X5HC07	.	0.0320	0.3000
.			
---- VAR X5HC08	.	0.0320	0.3000
.			
---- VAR X5HC11	.	0.0320	0.3000
.			
---- VAR X5HC14	.	0.0320	0.3000
.			
---- VAR X5HC15	.	0.0320	0.3000
.			
---- VAR X5HC16	.	0.0320	0.3000
.			
---- VAR X5HC22	.	0.0310	0.5000
.			
---- VAR X5HC23	.	0.0310	0.5000
.			
---- VAR X5HC24	.	0.0310	0.5000
.			
---- VAR X5HC25	.	0.0313	0.5000
.			
---- VAR X5HC26	.	0.0311	0.5000
.			
---- VAR X5HC27	.	0.0309	0.5000
.			
---- VAR X5HC28	.	0.0463	0.5000
.			
---- VAR X5HC29	0.0100	0.0463	0.3000
.			
---- VAR X5HC30	.	0.0520	0.3000
.			
---- VAR X5HC31	.	0.0516	0.3000
.			
---- VAR X5HC33	.	0.0288	2.5000
.			
---- VAR X5HC34	.	0.0288	2.5000
.			

----	VAR X5HC38	.	0.0288	2.5000
.				
----	VAR X5HC40	.	0.0288	2.5000
.				
----	VAR X5HC41	.	0.0288	2.5000
.				
----	VAR X5HC45	.	0.0288	2.5000
.				
----	VAR X5R1	.	0.0463	0.3000
.				
----	VAR X5R29	0.0100	0.0516	0.4000
.				
----	VAR X5SC401	0.0080	0.0686	0.1000
.				
----	VAR X5SC404	.	0.1000	0.1000
.				
----	VAR X5SC405	.	0.1000	0.1000
1.9580				
----	VAR X5SC406	0.0100	0.1000	0.1000
.				
----	VAR X5SC407	0.0100	0.1000	0.1000
.				
----	VAR X5SC409	.	.	0.1000
.				
----	VAR X5SC411	.	.	0.1000
.				
----	VAR X5SC412	.	.	0.1000
.				
----	VAR X5SC413	.	.	0.1000
.				
----	VAR X5SC414	.	0.1000	0.1000
0.0094				
----	VAR X6SC401	.	0.0686	0.1000
.				
----	VAR X6SC404	.	0.1000	0.1200
.				
----	VAR X6SC405	.	0.1000	0.1000
3.4527				
----	VAR X6SC406	.	0.1000	0.1000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X6SC407	.	0.1000	0.1000
.			
---- VAR X6SC409	.	.	0.1000
.			
---- VAR X6SC411	.	.	0.1000
.			
---- VAR X6SC412	.	.	0.1000
.			
---- VAR X6SC413	.	.	0.1000
.			
---- VAR X6SC414	.	0.1000	0.1000
0.0240			
---- VAR X7AC09	.	0.0211	0.1000
.			
---- VAR X7AC20	.	0.0154	0.1000
.			
---- VAR X7AC31	.	0.0082	0.1000
.			
---- VAR X7AC42	.	0.0099	0.1000
.			
---- VAR X7C301	.	0.0268	0.1000
.			
---- VAR X7C302	.	.	0.3000
.			
---- VAR X7C303	.	0.0243	0.1000
.			
---- VAR X7C306	.	0.0208	0.8000
.			
---- VAR X7C307	.	0.0208	0.8000
.			
---- VAR X7C308	.	0.0307	0.3000
.			
---- VAR X7C309	.	0.0307	0.3000
.			
---- VAR X7C310	.	0.0028	0.2000
.			
---- VAR X7C311	.	0.0401	1.0000
.			
---- VAR X7C312	.	0.0033	0.5000
.			
---- VAR X7C315	.	0.0033	0.0100
.			
---- VAR X7C316	.	0.0033	0.0100
.			
---- VAR X7C317	.	0.0034	0.1000
.			
---- VAR X7C318	.	0.0034	0.1500
.			

----	VAR X7C319	.	0.0034	0.1500
.				
----	VAR X7C320	.	0.0034	0.1000
.				
----	VAR X7C321	.	0.0034	0.1000
.				
----	VAR X7C322	.	0.0034	0.1000
.				
----	VAR X7C323	.	0.0034	0.0200
.				
----	VAR X7C324	.	0.0034	0.1000
.				
----	VAR X7C325	.	.	0.2000
.				
----	VAR X7C326	.	.	0.2000
.				
----	VAR X7C328	.	.	0.2000
.				
----	VAR X7C329	.	.	0.1000
.				
----	VAR X7C401	.	0.3189	1.0000
.				
----	VAR X7C402	.	0.3189	0.6000
.				
----	VAR X7C403	0.0001	0.3189	1.0000
.				
----	VAR X7C404	0.0001	0.3189	1.0000
.				
----	VAR X7C405	0.0001	0.8059	1.0000
.				
----	VAR X7C406	0.0010	0.8059	1.0000
.				
----	VAR X7C407	0.0100	0.8059	1.0000
.				
----	VAR X7C408	.	0.8059	1.0000
.				
----	VAR X7C409	.	0.8059	1.0000
.				
----	VAR X7C410	0.0001	0.3698	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7C411	.	0.3698	1.0000
.			
---- VAR X7C412	.	0.0882	0.2000
.			
---- VAR X7C413	.	0.0882	0.3000
.			
---- VAR X7C414	.	0.0120	0.1000
.			
---- VAR X7C415	.	0.0120	0.1000
.			
---- VAR X7C417	0.0001	0.0001	0.0800
-38.1402			
---- VAR X7C418	0.0001	0.0106	0.1000
.			
---- VAR X7C419	.	0.0106	0.1000
.			
---- VAR X7C425	0.2000	0.3698	1.0000
.			
---- VAR X7C426	0.0001	0.3698	1.0000
.			
---- VAR X7C427	.	0.2328	1.0000
.			
---- VAR X7C428	.	0.1771	0.5000
.			
---- VAR X7C430	.	0.2603	0.3500
.			
---- VAR X7C431	.	0.0882	0.3000
.			
---- VAR X7C432	.	0.0882	0.3000
.			
---- VAR X7HC01	.	0.6000	0.6000
.			
---- VAR X7HC02	.	0.6000	0.6000
34.0552			
---- VAR X7HC03	.	0.0104	0.1000
.			
---- VAR X7HC04	.	0.0104	0.2500
.			
---- VAR X7HC05	.	0.0104	0.2500
.			
---- VAR X7HC06	.	0.1389	0.3000
.			
---- VAR X7HC07	.	0.1389	0.3000
.			
---- VAR X7HC08	.	0.1389	0.3000
.			
---- VAR X7HC11	.	0.1389	0.3000
.			

----	VAR X7HC14	.	0.1389	0.3000
.				
----	VAR X7HC15	.	0.1389	0.3000
.				
----	VAR X7HC16	.	0.1389	0.3000
.				
----	VAR X7HC22	.	0.1397	0.5000
.				
----	VAR X7HC23	.	0.1391	0.5000
.				
----	VAR X7HC24	.	0.1394	0.5000
.				
----	VAR X7HC25	.	0.1525	0.5000
.				
----	VAR X7HC26	.	0.1434	0.5000
.				
----	VAR X7HC27	.	0.1340	0.5000
.				
----	VAR X7HC28	.	0.2525	0.5000
.				
----	VAR X7HC29	0.1000	0.2525	0.5000
.				
----	VAR X7HC30	0.1000	0.3246	0.5000
.				
----	VAR X7HC31	0.1000	0.3189	0.6000
.				
----	VAR X7HC33	.	0.0479	2.0000
.				
----	VAR X7HC34	.	0.0479	2.0000
.				
----	VAR X7HC38	.	0.0479	2.0000
.				
----	VAR X7HC40	.	0.0479	2.0000
.				
----	VAR X7HC41	.	0.0479	2.0000
.				
----	VAR X7HC45	.	0.0479	2.0000
.				
----	VAR X7R1	.	0.2525	0.5000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR X7R29	0.1000	0.3175	0.6000
.			
---- VAR X7SC401	.	0.0069	0.1000
.			
---- VAR X7SC404	.	0.0100	0.1200
.			
---- VAR X7SC405	.	0.0100	0.1200
.			
---- VAR X7SC406	.	0.0100	0.0100
2.9674			
---- VAR X7SC407	.	0.0100	0.1000
.			
---- VAR X7SC409	.	.	0.1000
.			
---- VAR X7SC411	.	.	0.1000
.			
---- VAR X7SC412	.	.	0.1000
.			
---- VAR X7SC413	.	.	0.1000
.			
---- VAR X7SC414	.	0.1000	0.1000
0.0240			
---- VAR X8AC09	.	4.6550938E-6	0.1000
.			
---- VAR X8AC20	.	5.7557385E-6	0.1000
.			
---- VAR X8AC31	.	4.7975916E-6	0.1000
.			
---- VAR X8AC42	.	4.8789678E-6	0.1000
.			
---- VAR X9AC09	.	0.0058	0.3000
.			
---- VAR X9AC20	.	0.0046	0.3000
.			
---- VAR X9AC31	.	0.0023	0.3000
.			
---- VAR X9AC42	.	0.0028	0.3000
.			
---- VAR XAC02	0.4000	0.4999	1.0000
.			
---- VAR XAC05	0.4000	0.4978	1.0000
.			
---- VAR XAC07	0.4000	0.4979	1.0000
.			
---- VAR XAC09	0.4000	0.4809	1.0000
.			
---- VAR XAC12	0.4000	0.4978	1.0000
.			

----	VAR XAC15	0.4000	0.4959	1.0000
.				
----	VAR XAC18	0.4000	0.4959	1.0000
.				
----	VAR XAC20	0.4000	0.4854	1.0000
.				
----	VAR XAC23	0.4000	0.4959	1.0000
.				
----	VAR XAC26	0.4000	0.4938	1.0000
.				
----	VAR XAC29	0.4000	0.4939	1.0000
.				
----	VAR XAC31	0.4000	0.4880	1.0000
.				
----	VAR XAC34	0.4000	0.4938	1.0000
.				
----	VAR XAC37	0.4000	0.4917	1.0000
.				
----	VAR XAC40	0.4000	0.4917	1.0000
.				
----	VAR XAC42	0.4000	0.4844	1.0000
.				
----	VAR XIC10AC09	.	.	1.0000
.				
----	VAR XIC10AC20	.	.	1.0000
.				
----	VAR XIC10AC31	.	.	1.0000
.				
----	VAR XIC10AC42	.	.	1.0000
.				
----	VAR XIC11AC09	.	.	1.0000
.				
----	VAR XIC11AC20	.	.	1.0000
.				
----	VAR XIC11AC31	.	.	1.0000
.				
----	VAR XIC11AC42	.	.	1.0000
.				
----	VAR XM1C606D	.	0.0002	0.5000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR XM3C606D	.	0.0008	0.5000
.			
---- VAR XM4C606D	.	0.5575	0.6500
.			
---- VAR XM5C606D	.	0.0980	0.5000
.			
---- VAR XM7C606D	.	0.3436	1.0000
.			
---- VAR XX1C302	.	0.1003	0.2500
.			
---- VAR XX1C308	.	0.0621	0.5000
.			
---- VAR XX1C310	.	0.1193	0.5000
.			
---- VAR XX1C311	.	0.0422	0.3000
.			
---- VAR XX1C312	.	0.1485	1.0000
.			
---- VAR XX1C323	.	0.1133	0.2000
.			
---- VAR XX1C325	0.4000	1.0000	1.0000
.			
---- VAR XX1C405	.	.	0.0100
.			
---- VAR XX1C408	.	.	1.0000
.			
---- VAR XX1C425	.	0.0005	1.0000
.			
---- VAR XX1C428	.	0.0006	1.0000
.			
---- VAR XX1C430	.	0.0007	0.5000
.			
---- VAR XX1C431	.	0.0020	0.1000
.			
---- VAR XX1HC28	0.0100	0.0270	0.2000
.			
---- VAR XX1HC29	.	0.0270	0.2000
.			
---- VAR XX1HC30	0.0100	0.0213	0.2000
.			
---- VAR XX1HC32	.	0.0305	0.1000
.			
---- VAR XX1R1	.	0.0270	0.2000
.			
---- VAR XX1R29	.	0.0218	0.1000
.			
---- VAR XX1SC406	.	.	0.2000
.			

----	VAR	XX1SC408	.	0.0262	0.1000
.					
----	VAR	XX2HC28	.	.	0.1000
.					
----	VAR	XX2HC29	.	.	0.1000
.					
----	VAR	XX2HC30	.	.	0.1000
-0.0576					
----	VAR	XX2R1	.	.	0.1000
.					
----	VAR	XX2R29	.	.	0.1000
EPS					
----	VAR	XX2SC406	.	.	0.1000
.					
----	VAR	XX2SC408	.	.	1.0000
.					
----	VAR	XX3C302	0.5000	0.8024	1.0000
.					
----	VAR	XX3C308	.	0.7783	1.0000
.					
----	VAR	XX3C310	.	0.7837	1.0000
.					
----	VAR	XX3C311	.	0.7764	1.0000
.					
----	VAR	XX3C312	.	0.7587	1.0000
.					
----	VAR	XX3C323	0.5000	0.7900	0.9200
.					
----	VAR	XX3C325	.	1.2128590E-6	0.5000
.					
----	VAR	XX3C405	.	2.3780783E-5	0.1000
.					
----	VAR	XX3C408	.	2.3780783E-5	1.0000
.					
----	VAR	XX3C425	.	0.0011	1.0000
.					
----	VAR	XX3C428	.	0.0015	1.0000
.					
----	VAR	XX3C430	.	0.0017	0.1000
.					

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX3C431	.	0.0021	0.5000
.			
---- VAR XX3C432	.	0.0021	0.1500
.			
---- VAR XX3HC28	0.2000	0.6141	0.8000
.			
---- VAR XX3HC29	0.1000	0.6141	0.8000
.			
---- VAR XX3HC30	0.1000	0.5571	0.6000
.			
---- VAR XX3HC32	0.3000	0.7712	1.0000
.			
---- VAR XX3R1	0.1000	0.6141	0.8000
.			
---- VAR XX3R29	0.1000	0.5626	0.6000
.			
---- VAR XX3SC406	.	0.0245	0.1000
.			
---- VAR XX3SC408	0.5000	0.9678	1.0000
.			
---- VAR XX4C302	.	0.0929	0.5000
.			
---- VAR XX4C308	.	0.1227	0.5000
.			
---- VAR XX4C310	.	0.0907	0.3000
.			
---- VAR XX4C311	.	0.1338	0.5000
.			
---- VAR XX4C312	.	0.0863	0.1500
.			
---- VAR XX4C323	0.0800	0.0899	0.2800
.			
---- VAR XX4C325	.	.	0.0500
.			
---- VAR XX4C405	0.0001	0.0851	0.2000
.			
---- VAR XX4C408	.	0.0851	0.3000
.			
---- VAR XX4C409	0.0001	0.0851	0.3000
.			
---- VAR XX4C425	.	0.6219	1.0000
.			
---- VAR XX4C427	.	0.7538	1.0000
.			
---- VAR XX4C428	.	0.8037	1.0000
.			
---- VAR XX4C430	0.5000	0.7278	1.0000
.			

----	VAR XX4C431	0.0001	0.8771	1.0000
.				
----	VAR XX4C432	0.5000	0.8771	1.0000
.				
----	VAR XX4HC28	0.0100	0.1320	0.3000
.				
----	VAR XX4HC29	0.0100	0.1320	0.3000
.				
----	VAR XX4HC30	0.0100	0.1283	0.3000
.				
----	VAR XX4HC32	.	0.1421	0.5000
.				
----	VAR XX4R1	.	0.1320	0.3000
.				
----	VAR XX4R29	0.0100	0.1288	0.3000
.				
----	VAR XX4SC406	0.6000	0.8003	1.0000
.				
----	VAR XX4SC408	.	0.0060	0.0500
.				
----	VAR XX5C302	.	0.0044	0.1000
.				
----	VAR XX5C308	.	0.0163	0.8000
.				
----	VAR XX5C310	.	0.0045	0.1000
.				
----	VAR XX5C311	.	0.0203	0.1000
.				
----	VAR XX5C312	.	0.0044	0.3000
.				
----	VAR XX5C323	0.0010	0.0046	0.1500
.				
----	VAR XX5C325	.	.	0.0010
.				
----	VAR XX5C405	0.0001	0.1512	0.2000
.				
----	VAR XX5C408	.	0.1512	0.3000
.				
----	VAR XX5C425	.	0.0872	1.0000
.				

MARGINAL	LOWER	LEVEL	UPPER
---- VAR XX5C428	.	0.0655	1.0000
.			
---- VAR XX5C430	.	0.0747	1.0000
.			
---- VAR XX5C431	.	0.0568	1.0000
.			
---- VAR XX5HC28	0.0100	0.0408	0.3000
.			
---- VAR XX5HC29	.	0.0408	0.3000
.			
---- VAR XX5HC30	.	0.0471	0.3000
.			
---- VAR XX5HC32	.	0.0235	0.2000
.			
---- VAR XX5R1	.	0.0408	0.3000
.			
---- VAR XX5R29	.	0.0466	0.3000
.			
---- VAR XX5SC406	.	0.0841	0.1500
.			
---- VAR XX5SC408	.	.	0.1000
.			
---- VAR XX6SC406	.	0.0841	0.1000
.			
---- VAR XX6SC408	.	.	1.0000
-4.0268			
---- VAR XX7C302	.	.	0.2000
-0.7740			
---- VAR XX7C308	.	0.0207	0.1000
.			
---- VAR XX7C310	.	0.0018	0.1000
.			
---- VAR XX7C311	.	0.0272	0.3000
.			
---- VAR XX7C312	.	0.0021	0.1000
.			
---- VAR XX7C323	0.0020	0.0022	0.1000
.			
---- VAR XX7C325	.	.	0.1000
-31.8651			
---- VAR XX7C405	0.0001	0.7636	1.0000
.			
---- VAR XX7C408	.	0.7636	1.0000
.			
---- VAR XX7C425	.	0.2893	1.0000
.			
---- VAR XX7C428	.	0.1287	1.0000
.			

----	VAR XX7C430	.	0.1952	1.0000
.				
----	VAR XX7C431	.	0.0620	1.0000
.				
----	VAR XX7HC28	0.1000	0.1861	0.4000
.				
----	VAR XX7HC29	.	0.1861	0.5000
.				
----	VAR XX7HC30	0.1000	0.2462	0.5000
.				
----	VAR XX7HC32	.	0.0327	0.2000
.				
----	VAR XX7R1	0.1000	0.1861	0.5000
.				
----	VAR XX7R29	0.1000	0.2402	0.5000
.				
----	VAR XX7SC406	.	0.0070	0.1000
.				
----	VAR XX7SC408	.	.	0.1000
.				
----	VAR Y1HC28	0.0500	0.0771	0.5000
.				
----	VAR Y1HC29	0.0500	0.0771	0.5000
.				
----	VAR Y1HC30	0.0500	0.0665	0.5000
.				
----	VAR Y1HC31	0.0500	0.0671	0.4000
.				
----	VAR Y1R1	.	0.0771	0.5000
.				
----	VAR Y1R29	0.0500	0.0673	0.5000
.				
----	VAR Y2HC28	.	.	0.1000
.				
----	VAR Y2HC29	.	.	0.1000
.				
----	VAR Y2HC30	.	.	0.1000
.				
----	VAR Y2HC31	.	.	0.1000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR Y2R1	.	.	0.1000
.			
---- VAR Y2R29	.	.	0.1000
.			
---- VAR Y3HC28	0.2000	0.7795	0.9000
.			
---- VAR Y3HC29	0.1000	0.7795	0.9000
.			
---- VAR Y3HC30	0.1000	0.7713	0.8500
.			
---- VAR Y3HC31	0.1000	0.7721	0.8500
.			
---- VAR Y3R1	0.1000	0.7795	0.9000
.			
---- VAR Y3R29	0.1000	0.7723	0.8500
.			
---- VAR Y4HC28	.	0.1099	0.5000
.			
---- VAR Y4HC29	.	0.1099	0.3000
.			
---- VAR Y4HC30	0.0100	0.1165	0.4000
.			
---- VAR Y4HC31	.	0.1161	0.3000
.			
---- VAR Y4R1	.	0.1099	0.3000
.			
---- VAR Y4R29	.	0.1160	0.5000
.			
---- VAR Y5HC28	.	0.0144	0.2000
.			
---- VAR Y5HC29	.	0.0144	0.2000
.			
---- VAR Y5HC30	.	0.0181	0.2000
.			
---- VAR Y5HC31	.	0.0179	0.2000
.			
---- VAR Y5R1	.	0.0144	0.2000
.			
---- VAR Y5R29	.	0.0178	0.2000
.			
---- VAR Y7HC28	0.0100	0.0191	0.5000
.			
---- VAR Y7HC29	.	0.0191	0.1000
.			
---- VAR Y7HC30	.	0.0275	0.1000
.			
---- VAR Y7HC31	.	0.0268	0.2000
.			

----	VAR Y7R1	.	0.0191	0.1000
.				
----	VAR Y7R29	.	0.0266	0.2000
.				
----	VAR YY1HC28	0.1000	0.1000	0.5000
.				
----	VAR YY1HC29	0.1000	0.1000	0.6000
.				
----	VAR YY1HC30	0.0500	0.0869	0.6000
.				
----	VAR YY1R1	0.1000	0.1000	0.6000
-23.5298				
----	VAR YY1R29	0.0500	0.0878	0.6000
.				
----	VAR YY2HC28	.	.	0.1000
.				
----	VAR YY2HC29	.	.	0.1000
.				
----	VAR YY2HC30	.	.	0.1000
.				
----	VAR YY2R1	.	.	0.1000
.				
----	VAR YY2R29	.	.	0.1000
.				
----	VAR YY3HC28	0.1000	0.7677	0.9000
.				
----	VAR YY3HC29	0.1000	0.7677	0.8000
.				
----	VAR YY3HC30	0.1000	0.7647	0.8000
.				
----	VAR YY3R1	0.1000	0.7677	0.8000
.				
----	VAR YY3R29	0.1000	0.7652	0.8000
.				
----	VAR YY4HC28	0.0100	0.1082	0.3000
.				
----	VAR YY4HC29	0.0100	0.1082	0.3000
.				
----	VAR YY4HC30	0.0100	0.1155	0.3000
.				

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MARGINAL	LOWER	LEVEL	UPPER
---- VAR YY4R1	.	0.1082	0.3000
.			
---- VAR YY4R29	0.0100	0.1150	0.3000
.			
---- VAR YY5HC28	0.0010	0.0114	0.2000
.			
---- VAR YY5HC29	.	0.0114	0.2000
.			
---- VAR YY5HC30	.	0.0145	0.1000
.			
---- VAR YY5R1	.	0.0114	0.2000
.			
---- VAR YY5R29	.	0.0142	0.2000
.			
---- VAR YY7HC28	.	0.0127	0.2000
.			
---- VAR YY7HC29	.	0.0127	0.2000
.			
---- VAR YY7HC30	.	0.0184	0.1000
.			
---- VAR YY7R1	.	0.0127	0.1000
.			
---- VAR YY7R29	.	0.0178	0.2000
.			
FAC02			
FAC12			
FAC23			
FAC34			
FAC45			
FC308			
FC316			
FC320			
FC322			
FC328			
FC329			
FC403			
FC407			
FC412			
FC417			
FHC01			
FHC32			
FSC402			
FSC405			
FSC411			
FSC413			
FSTME612			
PC302			

PC310
PC601
PC603
QHC07
QHC11
QHC14
QHC16
QHC34

GAMS 2.50A Windows NT/95/98

QHC38
QHC41
QHC45
TAC09
TAC12
TAC23
TAC31
TAC34
TAC42
TAC45
TC303
TC306
TC307
TC308
TC315
TC316
TC317
TC321
TC324
TC325
TC404
TC405
TC407
TC408
TC410
TC414
TC418
TC419
THC32
TSC402
TSC403
TSC405
TSC408
TSC413
X11AC12
X11AC23
X11AC34
X11AC45
X1C316
X1C325
X1C417
X1HC32
X1SC402
X1SC403
X1SC408
X2SC402

GAMS 2.50A Windows NT/95/98

X2SC403
X2SC408
X3C316
X3C325
X3C417
X3HC32
X3SC402
X3SC403
X3SC408
X4C316
X4C417
X4HC32
X4SC402
X4SC403
X4SC408
X5C316
X5C417
X5HC32
X5SC402
X5SC403
X5SC408
X6SC402
X6SC403
X6SC408
X7HC32
X7SC402
X7SC403
X7SC408
XX1C322
XX1C414
XX1HC01
XX2HC01
XX3C317
XX3C322
XX3C407
XX3C412
XX3C414
XX3HC01
XX4C317
XX4C322
XX4C407
XX4C412
XX4C414
XX4HC01
XX5C407
XX5C412

GAMS 2.50A Windows NT/95/98

XX5C414
XX7C414
OBJVAR objective or profit function
C10PC623
C10PC625
C10PC627
C10PC629
C2C623
C2C625
C2C627
C2C629
C3C623
C3C625
C3C627
C3C629
C3PC623
C3PC625
C3PC627
C3PC629
C4PC623
C4PC625
C4PC627
C4PC629
C5PC623
C5PC625
C5PC627
C5PC629
C7PC623
C7PC625
C7PC627
C7PC629
C8PC623
C8PC625
C8PC627
C8PC629
C9PC623
C9PC625
C9PC627
C9PC629
CHXC623
CHXC625
CHXC627
CHXC629
CIC10PC623
CIC10PC625
CIC10PC627

GAMS 2.50A Windows NT/95/98

CIC10PC629
CIC11PC623
CIC11PC625
CIC11PC627
CIC11PC629
CIC4EC623
CIC4EC625
CIC4EC627
CIC4EC629
CIC5EC623
CIC5EC625
CIC5EC627
CIC5EC629
CIC8EC623
CIC8EC625
CIC8EC627
CIC8EC629
COST
DTE601
DTE602
DTE603
DTE605
DTE609A
DTE610
DTE611
DTE612
DTE613
DTE616
DTE617
DTE621A
DTE621B
DTE626
DTE627A
DTE627B
DTE628
DTE629
DTE633
DTE634
DTE640
DTE641
DTE695A
DTE695B
DTE696A
DTE696B
DTE6XX
EARNINGS

GAMS 2.50A Windows NT/95/98

F1C601
F1C603
F1C606A
F2C601
F3C601
F3C603
F3C606A
F4C601
F4C603
F4C606A
F5C601
F5C603
F5C606A
F6C601
F7C601
F7C603
F7C606A
FAC05
FAC07
FAC09
FAC15
FAC18
FAC20
FAC26
FAC29
FAC31
FAC37
FAC40
FAC42
FC301
FC302
FC303
FC306
FC307
FC309
FC310
FC311
FC312
FC315
FC317
FC318
FC319
FC321
FC323
FC324
FC325

GAMS 2.50A Windows NT/95/98

FC326
FC401
FC402
FC404
FC405
FC406
FC408
FC409
FC410
FC411
FC413
FC414
FC415
FC418
FC419
FC425
FC426
FC427
FC428
FC430
FC431
FC432
FCWE603
FCWE605
FCWE609A
FCWE611
FCWE613
FCWE617
FCWE621A
FCWE621B
FCWE626
FCWE627A
FCWE627B
FCWE634
FCWE640
FCWE641A
FCWE641B
FHC02
FHC03
FHC04
FHC05
FHC06
FHC07
FHC08
FHC11
FHC14

GAMS 2.50A Windows NT/95/98

FHC15
FHC16
FHC22
FHC23
FHC24
FHC25
FHC26
FHC27
FHC28
FHC29
FHC30
FHC31
FHC33
FHC34
FHC38
FHC40
FHC41
FHC45
FLHC28
FLHC29
FLHC30
FLHC31
FLR1
FLR29
FMC302
FMC308
FMC310
FMC311
FMC312
FMC317
FMC322
FMC323
FMC325
FMC405
FMC407
FMC408
FMC409
FMC412
FMC414
FMC425
FMC427
FMC428
FMC430
FMC431
FMC432
FMHC01

GAMS 2.50A Windows NT/95/98

FMHC32
FMLHC28
FMLHC29
FMLHC30
FMLR1
FMLR29
FMSC403
FMSC406
FMSC408
FMVHC28
FMVHC29
FMVHC30
FMVR1
FMVR29
FR1
FR29
FSC401
FSC403
FSC404
FSC406
FSC407
FSC408
FSC409
FSC412
FSC414
FSTME602
FSTME695A
FSTME695B
FSTME696A
FSTME696B
FVHC28
FVHC29
FVHC30
FVHC31
FVR1
FVR29
H1C601
H1C603
H1C606A
H2C601
H3C601
H3C603
H3C606A
H4C601
H4C603
H4C606A

GAMS 2.50A Windows NT/95/98

H5C601
H5C603
H5C606A
H6C601
H7C601
H7C603
H7C606A
HAC02
HAC05
HAC07
HAC09
HAC12
HAC15
HAC18
HAC20
HAC23
HAC26
HAC29
HAC31
HAC34
HAC37
HAC40
HAC42
HACAC09
HACAC20
HACAC31
HACAC42
HC301
HC302
HC303
HC306
HC307
HC308
HC309
HC310
HC311
HC312
HC312LIQ
HC315
HC316
HC317
HC318
HC319
HC321
HC322
HC323

GAMS 2.50A Windows NT/95/98

HC324
HC325
HC326
HC329
HC401
HC402
HC403
HC404
HC405
HC406
HC407
HC408
HC408VAP
HC409
HC410
HC410VAP
HC411
HC412
HC412LIQ
HC413
HC414
HC414LIQ
HC415
HC417
HC418
HC419
HC425
HC426
HC427
HC428
HC430
HC431
HC432
HC623
HC625
HC627
HC629
HHC01
HHC02
HHC03
HHC04
HHC05
HHC06
HHC07
HHC11
HHC14

GAMS 2.50A Windows NT/95/98

HHC16
HHC29
HHC30
HHC31
HHC32
HHC34
HHC38
HHC41
HHC45
HLHC29
HLHC30
HLHC31
HLR1
HLR29
HR1
HR29
HSC401
HSC402
HSC403
HSC404
HSC405
HSC406
HSC407
HSC408
HSC409
HSC411
HSC412
HSC413
HSC414
HVHC29
HVHC30
HVHC31
HVR1
HVR29
K1C323
K1C325
K1C408
K1C414
K1C428
K1C430
K1C601
K1C603
K1C606A
K1C606C
K1C614B
K1C615_A

GAMS 2.50A Windows NT/95/98

K1C616_A
K1E633
K1E6XX
K1SC406
K1SC408
K2C601
K2E633
K2E6XX
K2SC406
K2SC408
K3C323
K3C325
K3C408
K3C414
K3C428
K3C430
K3C601
K3C603
K3C606A
K3C606C
K3C614B
K3C615_A
K3C616_A
K3E633
K3E6XX
K3SC406
K3SC408
K4C323
K4C325
K4C408
K4C414
K4C428
K4C430
K4C601
K4C603
K4C606A
K4C606C
K4C614B
K4C615_A
K4C616_A
K4E633
K4E6XX
K4SC406
K4SC408
K5C323
K5C325

GAMS 2.50A Windows NT/95/98

K5C408
K5C414
K5C428
K5C430
K5C601
K5C603
K5C606A
K5C606C
K5C614B
K5C615_A
K5C616_A
K5E633
K5E6XX
K5SC406
K5SC408
K6C601
K6SC406
K6SC408
K7C323
K7C325
K7C408
K7C414
K7C428
K7C430
K7C601
K7C603
K7C606A
K7C614B
K7C615_A
K7C616_A
K7E633
K7E6XX
K7SC406
K7SC408
KP1C601
KP1C603
KP1C606A
KP1C606D
KP2C601
KP3C601
KP3C603
KP3C606A
KP3C606D
KP4C601
KP4C603
KP4C606A

GAMS 2.50A Windows NT/95/98

KP4C606D
KP5C601
KP5C603
KP5C606A
KP5C606D
KP6C601
KP7C601
KP7C603
KP7C606A
KP7C606D
KWAD1
KWAD2
LPC601
LPC603
LPC606A
PC303
PC306
PC307
PC308
PC309
PC311
PC312
PHC30
PHC32
PR29
PROFIT
Q2HC07
Q2HC11
Q2HC14
Q2HC16
QFP1C606A
QFP3C606A
QFP4C606A
QFP5C606A
QFP7C606A
QS1C606A
QS3C606A
QS4C606A
QS5C606A
QS7C606A
R10C623
R10C625
R10C627
R10C629
R2C623
R2C625

GAMS 2.50A Windows NT/95/98

R2C627
R2C629
R3C623
R3C625
R3C627
R3C629
R4C623
R4C625
R4C627
R4C629
R5C623
R5C625
R5C627
R5C629
R7C623
R7C625
R7C627
R7C629
R8C623
R8C625
R8C627
R8C629
R9C623
R9C625
R9C627
R9C629
RHO2HC07
RHO2HC11
RHO2HC14
RHO2HC16
RHOAC09
RHOAC20
RHOAC31
RHOAC42
RIC10C623
RIC10C625
RIC10C627
RIC10C629
RIC11C623
RIC11C625
RIC11C627
RIC11C629
SF1S34
SF2S34
SFS11
SFS19

GAMS 2.50A Windows NT/95/98

SFS2
SFS23
SFS27
SFS41
SFS42
SFS5
SFS7
SM1C601
SM1C603
SM1C606A
SM1C606D
SM2C601
SM3C601
SM3C603
SM3C606A
SM3C606D
SM4C601
SM4C603
SM4C606A
SM4C606D
SM5C601
SM5C603
SM5C606A
SM5C606D
SM6C601
SM7C601
SM7C603
SM7C606A
SM7C606D
SN1C601
SN1C603
SN1C606A
SN2C601
SN3C601
SN3C603
SN3C606A
SN4C601
SN4C603
SN4C606A
SN5C601
SN5C603
SN5C606A
SN6C601
SN7C601
SN7C603
SN7C606A

GAMS 2.50A Windows NT/95/98

TAC02
TAC05
TAC07
TAC15
TAC18
TAC20
TAC26
TAC29
TAC37
TAC40
TC301
TC302
TC309
TC310
TC311
TC312
TC318
TC319
TC320
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TC323
TC326
TC328
TC329
TC401
TC402
TC403
TC406
TC409
TC411
TC412
TC413
TC415
TC417
TC425
TC426
TC427
TC428
TC430
TC431
TC432
TCWOTE609A
TCWOTE621A
TCWOTE621B
TCWOTE627A
TCWOTE627B

GAMS 2.50A Windows NT/95/98

TCWOTE641A
TCWOTE641B
TCWOUTE603
TCWOUTE605
TCWOUTE611
TCWOUTE613
TCWOUTE617
TCWOUTE626
TCWOUTE634
TCWOUTE640
THC01
THC02
THC03
THC04
THC05
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GAMS 2.50A Windows NT/95/98

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**** REPORT SUMMARY : 0 NONOPT
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 0 UNBOUNDED
 0 ERRORS

Economic Optimization Program
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EXECUTION TIME = 0.170 SECONDS 1.3 Mb WIN-18-097

USER: Ralph W. Pike G990726:1450AP-WIN
Louisiana State University, Department of Chemical EngineeriDC267

**** FILE SUMMARY

INPUT C:\PROGRAM FILES\GAMSIDE\DO_ECON
OUTPUT C:\PROGRAM FILES\GAMSIDE\DO_ECON.LST
SAVE C:\PROGRAM FILES\GAMSIDE\PUT_DATA.G0?