







1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
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6	Workbook: Case (Main)					
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8						
9	Material Streams					
10	Fluid Pkg:					All
11	Name	21002	21003*	21003	2101124	21005
12	Vapour Fraction	0.0011	1.0000	0.0000	0.0000	1.0000
13	Temperature (C)	32.20 *	32.20	32.20	34.11	87.84
14	Pressure (bar)	2.500 *	2.500	2.500	35.70	2.300
15	Molar Flow (kgmole/h)	318.3 *	0.3390	318.0	746.0	592.3
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0020 *	0.9315	0.0010	0.0000	0.0128
19	Master Comp Mole Frac (CO)	0.0000 *	0.0000	0.0000	0.0000	0.6030
20	Master Comp Mole Frac (CO2)	0.0000 *	0.0000	0.0000	0.0001	0.0002
21	Master Comp Mole Frac (Methanol)	0.9970 *	0.0685	0.9980	0.0020	0.1065
22	Master Comp Mole Frac (CH3I)	0.0000 *	0.0000	0.0000	0.0742	0.0497
23	Master Comp Mole Frac (M-Acetate)	0.0000 *	0.0000	0.0000	0.0155	0.0076
24	Master Comp Mole Frac (AceticAcid)	0.0000 *	0.0000	0.0000	0.2052	0.0713
25	Master Comp Mole Frac (H2O)	0.0009 *	0.0000	0.0009	0.7028	0.1485
26	Master Comp Mole Frac (HI)	0.0000 *	0.0000	0.0000	0.0002	0.0002
27	Master Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0001 *	0.0000	0.0001	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000 *	0.0000	0.0000	0.0001	0.0277
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.6470 *	0.3158	0.3312	0.0020	7.6102
34	Master Comp Molar Flow (CO)	0.0000 *	0.0000	0.0000	0.0138	357.1496
35	Master Comp Molar Flow (CO2)	0.0000 *	0.0000	0.0000	0.0997	0.1236
36	Master Comp Molar Flow (Methanol)	317.3481 *	0.0232	317.3248	1.4847	63.1003
37	Master Comp Molar Flow (CH3I)	0.0000 *	0.0000	0.0000	55.3273	29.4377
38	Master Comp Molar Flow (M-Acetate)	0.0000 *	0.0000	0.0000	11.5907	4.4807
39	Master Comp Molar Flow (AceticAcid)	0.0000 *	0.0000	0.0000	153.0623	42.2432
40	Master Comp Molar Flow (H2O)	0.2827 *	0.0000	0.2827	524.3157	87.9757
41	Master Comp Molar Flow (HI)	0.0000 *	0.0000	0.0000	0.1308	0.1077
42	Master Comp Molar Flow (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0142	0.0216
43	Master Comp Molar Flow (Ethanol)	0.0222 *	0.0000	0.0222	0.0000	0.0044
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC							
2										
3							Unit Set: Project			
4							Date/Time: Mon Dec 16 09:45:15 2019			
5										
6	<div>Workbook: Case (Main) (continued)</div>									
7										
8										
9	Material Streams (continued)					Fluid Pkg:	All			
10										
11	Name	21008	22013	22015	21012	21014*				
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000				
13	Temperature (C)	87.84	70.35 *	20.00 *	72.01	60.74				
14	Pressure (bar)	2.300	39.90 *	35.70 *	31.00	31.00				
15	Molar Flow (kgmole/h)	4242	184.7 *	561.3 *	316.2	1062				
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
17	Master Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000 *	0.0010	0.0003				
19	Master Comp Mole Frac (CO)	0.0001	0.0000 *	0.0000 *	0.0000	0.0000				
20	Master Comp Mole Frac (CO2)	0.0000	0.0003 *	0.0001 *	0.0000	0.0001				
21	Master Comp Mole Frac (Methanol)	0.1412	0.0026 *	0.0018 *	0.9980	0.2985				
22	Master Comp Mole Frac (CH3I)	0.0105	0.2508 *	0.0160 *	0.0000	0.0521				
23	Master Comp Mole Frac (M-Acetate)	0.0035	0.0330 *	0.0098 *	0.0000	0.0109				
24	Master Comp Mole Frac (AceticAcid)	0.3782	0.1724 *	0.2159 *	0.0000	0.1441				
25	Master Comp Mole Frac (H2O)	0.4662	0.5401 *	0.7563 *	0.0009	0.4939				
26	Master Comp Mole Frac (HI)	0.0000	0.0007 *	0.0000 *	0.0000	0.0001				
27	Master Comp Mole Frac (C3oicAcid)	0.0002	0.0001 *	0.0000 *	0.0000	0.0000				
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000 *	0.0001	0.0000				
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
31	Master Comp Molar Flow (Hydrogen)(kgmole/h)	0.0000	0.0001 *	0.0000 *	0.0000	0.0001				
32	Master Comp Molar Flow (Methane)(kgmole/h)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
33	Master Comp Molar Flow (Nitrogen)(kgmole/h)	0.0226	0.0020 *	0.0000 *	0.3293	0.3313				
34	Master Comp Molar Flow (CO)(kgmole/h)	0.6011	0.0038 *	0.0100 *	0.0000	0.0138				
35	Master Comp Molar Flow (CO2)(kgmole/h)	0.0050	0.0497 *	0.0500 *	0.0000	0.0997				
36	Master Comp Molar Flow (Methanol)(kgmole/h)	599.2214	0.4846 *	1.0001 *	315.5796	317.0642				
37	Master Comp Molar Flow (CH3I)(kgmole/h)	44.7268	46.3266 *	9.0006 *	0.0000	55.3273				
38	Master Comp Molar Flow (M-Acetate)(kgmole/h)	14.7075	6.0903 *	5.5004 *	0.0000	11.5907				
39	Master Comp Molar Flow (AceticAcid)(kgmole/h)	1604.3526	31.8537 *	121.2086 *	0.0000	153.0623				
40	Master Comp Molar Flow (H2O)(kgmole/h)	1977.7937	99.7855 *	424.5303 *	0.2812	524.5969				
41	Master Comp Molar Flow (HI)(kgmole/h)	0.0333	0.1308 *	0.0000 *	0.0000	0.1308				
42	Master Comp Molar Flow (C3oicAcid)(kgmole/h)	0.7635	0.0142 *	0.0000 *	0.0000	0.0142				
43	Master Comp Molar Flow (Ethanol)(kgmole/h)	0.0521	0.0000 *	0.0000 *	0.0221	0.0221				
44	Master Comp Molar Flow (KOH)(kgmole/h)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
45	Master Comp Molar Flow (Rh*)(kgmole/h)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000				
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2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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8						
9	Material Streams (continued)					
10	Fluid Pkg: All					
11	Name	21007	21010	22004	2103	21009
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	1.0000
13	Temperature (C)	24.00 *	122.6 *	188.0 *	91.43	122.6
14	Pressure (bar)	15.00 *	2.300 *	8.000 *	2.300	2.300
15	Molar Flow (kgmole/h)	26.37 *	3381 *	147.2 *	4390	1009
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0010 *	0.0000 *	0.0000 *	0.0001	0.0006
20	Master Comp Mole Frac (CO2)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
21	Master Comp Mole Frac (Methanol)	0.2846 *	0.1001 *	0.0001 *	0.1365	0.2475
22	Master Comp Mole Frac (CH3I)	0.1061 *	0.0047 *	0.0072 *	0.0104	0.0317
23	Master Comp Mole Frac (M-Acetate)	0.0182 *	0.0021 *	0.0033 *	0.0035	0.0083
24	Master Comp Mole Frac (AceticAcid)	0.1916 *	0.4401 *	0.7604 *	0.3910	0.2466
25	Master Comp Mole Frac (H2O)	0.3982 *	0.4527 *	0.2283 *	0.4582	0.4651
26	Master Comp Mole Frac (HI)	0.0002 *	0.0000 *	0.0000 *	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0001 *	0.0002 *	0.0007 *	0.0002	0.0001
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0012 *	0.0002 *	0.0000 *	0.0226	0.0225
34	Master Comp Molar Flow (CO)	0.0275 *	0.0033 *	0.0000 *	0.6011	0.6005
35	Master Comp Molar Flow (CO2)	0.0006 *	0.0008 *	0.0000 *	0.0050	0.0050
36	Master Comp Molar Flow (Methanol)	7.5055 *	338.3181 *	0.0221 *	599.2434	249.8143
37	Master Comp Molar Flow (CH3I)	2.7978 *	16.0394 *	1.0594 *	45.7862	32.0036
38	Master Comp Molar Flow (M-Acetate)	0.4800 *	7.1175 *	0.4811 *	15.1887	8.3460
39	Master Comp Molar Flow (AceticAcid)	5.0536 *	1487.9139 *	111.9541 *	1716.3067	248.9391
40	Master Comp Molar Flow (H2O)	10.5017 *	1530.6984 *	33.6206 *	2011.4143	469.5093
41	Master Comp Molar Flow (HI)	0.0041 *	0.0062 *	0.0002 *	0.0335	0.0303
42	Master Comp Molar Flow (C3oicAcid)	0.0026 *	0.7682 *	0.1001 *	0.8636	0.1322
43	Master Comp Molar Flow (Ethanol)	0.0005 *	0.0340 *	0.0000 *	0.0521	0.0181
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
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2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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8						
9	Material Streams (continued)					Fluid Pkg: All
10						
11	Name	21010.	23010	23012	23013	23008
12	Vapour Fraction	0.0000	0.0000	1.0000	0.0000	0.0000
13	Temperature (C)	122.6	43.35 *	43.49	50.41	43.35 *
14	Pressure (bar)	2.300	33.90 *	28.50	28.60	33.90 *
15	Molar Flow (kgmole/h)	3380	35.90 *	43.63	36.97	145.5 *
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0001	0.0000	0.0000 *
17	Master Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0207	0.0002	0.0000 *
19	Master Comp Mole Frac (CO)	0.0000	0.0000 *	0.9757	0.0070	0.0000 *
20	Master Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0003	0.0001	0.0000 *
21	Master Comp Mole Frac (Methanol)	0.1034	0.0005 *	0.0000	0.0023	0.0005 *
22	Master Comp Mole Frac (CH3I)	0.0041	0.0047 *	0.0003	0.0241	0.0047 *
23	Master Comp Mole Frac (M-Acetate)	0.0020	0.0041 *	0.0001	0.0055	0.0041 *
24	Master Comp Mole Frac (AceticAcid)	0.4341	0.9473 *	0.0026	0.9173	0.9473 *
25	Master Comp Mole Frac (H2O)	0.4562	0.0433 *	0.0003	0.0432	0.0433 *
26	Master Comp Mole Frac (HI)	0.0000	0.0000 *	0.0000	0.0002	0.0000 *
27	Master Comp Mole Frac (C3oicAcid)	0.0002	0.0000 *	0.0000	0.0000	0.0000 *
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000 *	0.0033	0.0000	0.0000 *
32	Master Comp Molar Flow (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000 *	0.9039	0.0081	0.0000 *
34	Master Comp Molar Flow (CO)	0.0007	0.0000 *	42.5716	0.2588	0.0000 *
35	Master Comp Molar Flow (CO2)	0.0001	0.0000 *	0.0112	0.0031	0.0000 *
36	Master Comp Molar Flow (Methanol)	349.4291	0.0193 *	0.0003	0.0856	0.0784 *
37	Master Comp Molar Flow (CH3I)	13.7825	0.1689 *	0.0111	0.8927	0.6844 *
38	Master Comp Molar Flow (M-Acetate)	6.8426	0.1489 *	0.0028	0.2039	0.6035 *
39	Master Comp Molar Flow (AceticAcid)	1467.3676	34.0069 *	0.1131	33.9095	137.8274 *
40	Master Comp Molar Flow (H2O)	1541.9050	1.5560 *	0.0134	1.5980	6.3063 *
41	Master Comp Molar Flow (HI)	0.0032	0.0000 *	0.0000	0.0088	0.0000 *
42	Master Comp Molar Flow (C3oicAcid)	0.7315	0.0000 *	0.0000	0.0000	0.0001 *
43	Master Comp Molar Flow (Ethanol)	0.0340	0.0000 *	0.0000	0.0000	0.0000 *
44	Master Comp Molar Flow (KOH)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
45	Master Comp Molar Flow (Rh)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
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2			Unit Set: Project			
3						
4			Date/Time: Mon Dec 16 09:45:15 2019			
5						
6	Workbook: Case (Main) (continued)					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	23010.	23009.	23370	23372	23009
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	43.35	43.35	17.00 *	24.76	25.00 *
14	Pressure (bar)	33.90	33.90	12.00 *	35.00 *	4.400 *
15	Molar Flow (kgmole/h)	35.94	109.6	388.6	388.6	109.6
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
21	Master Comp Mole Frac (Methanol)	0.0005	0.0005	0.0000 *	0.0000	0.0005
22	Master Comp Mole Frac (CH3I)	0.0047	0.0047	0.0000 *	0.0000	0.0047
23	Master Comp Mole Frac (M-Acetate)	0.0041	0.0041	0.0000 *	0.0000	0.0041
24	Master Comp Mole Frac (AceticAcid)	0.9473	0.9473	0.0000 *	0.0000	0.9473
25	Master Comp Mole Frac (H2O)	0.0433	0.0433	1.0000 *	1.0000	0.0433
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
36	Master Comp Molar Flow (Methanol)	0.0194	0.0590	0.0000 *	0.0000	0.0590
37	Master Comp Molar Flow (CH3I)	0.1690	0.5153	0.0000 *	0.0000	0.5153
38	Master Comp Molar Flow (M-Acetate)	0.1491	0.4544	0.0000 *	0.0000	0.4544
39	Master Comp Molar Flow (AceticAcid)	34.0434	103.7840	0.0000 *	0.0000	103.7840
40	Master Comp Molar Flow (H2O)	1.5577	4.7487	388.5629 *	388.5629	4.7487
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000 *	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000 *	0.0000	0.0000
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2				Unit Set: Project		
3						
4				Date/Time: Mon Dec 16 09:45:15 2019		
5						
6	Workbook: Case (Main) (continued)					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	22011	23014	23001	23002	23011*
12	Vapour Fraction	1.0000	1.0000	0.0000	1.0000	0.0000
13	Temperature (C)	16.56 *	25.82	35.17	33.96	35.24
14	Pressure (bar)	2.100 *	2.000	2.100	2.000	6.000 *
15	Molar Flow (kgmole/h)	23.70 *	18.48	114.8	62.11	114.8
16	Master Comp Mole Frac (Hydrogen)	0.0578 *	0.0741	0.0000	0.0221	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.1450 *	0.1851	0.0001	0.0696	0.0001
19	Master Comp Mole Frac (CO)	0.4200 *	0.5371	0.0003	0.8452	0.0003
20	Master Comp Mole Frac (CO2)	0.1739 *	0.1895	0.0054	0.0566	0.0054
21	Master Comp Mole Frac (Methanol)	0.0000 *	0.0000	0.0005	0.0000	0.0005
22	Master Comp Mole Frac (CH3I)	0.1669 *	0.0016	0.0387	0.0006	0.0387
23	Master Comp Mole Frac (M-Acetate)	0.0051 *	0.0003	0.0050	0.0001	0.0050
24	Master Comp Mole Frac (AceticAcid)	0.0001 *	0.0105	0.9025	0.0049	0.9025
25	Master Comp Mole Frac (H2O)	0.0094 *	0.0014	0.0431	0.0006	0.0431
26	Master Comp Mole Frac (HI)	0.0218 *	0.0003	0.0045	0.0001	0.0045
27	Master Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	1.3697 *	1.3686	0.0011	1.3719	0.0011
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	3.4360 *	3.4208	0.0152	4.3248	0.0152
34	Master Comp Molar Flow (CO)	9.9548 *	9.9247	0.0301	52.4963	0.0301
35	Master Comp Molar Flow (CO2)	4.1204 *	3.5021	0.6183	3.5133	0.6183
36	Master Comp Molar Flow (Methanol)	0.0005 *	0.0006	0.0589	0.0009	0.0589
37	Master Comp Molar Flow (CH3I)	3.9551 *	0.0287	4.4418	0.0397	4.4418
38	Master Comp Molar Flow (M-Acetate)	0.1211 *	0.0057	0.5698	0.0085	0.5698
39	Master Comp Molar Flow (AceticAcid)	0.0024 *	0.1943	103.5921	0.3074	103.5921
40	Master Comp Molar Flow (H2O)	0.2236 *	0.0262	4.9460	0.0396	4.9460
41	Master Comp Molar Flow (HI)	0.5164 *	0.0053	0.5111	0.0054	0.5111
42	Master Comp Molar Flow (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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8						
9	Material Streams (continued)					Fluid Pkg: All
10						
11	Name	23011	23003	23004	23301	23006*
12	Vapour Fraction	0.0007	1.0000	0.0000	0.0000	0.0000
13	Temperature (C)	39.26	112.0	140.9	1.000 *	43.00 *
14	Pressure (bar)	6.000	2.100	2.200	15.00 *	15.00 *
15	Molar Flow (kgmole/h)	151.8	10.30	141.5	450.0 *	149.1
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0001	0.0000	0.0000 *	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0002	0.0023	0.0000	0.0000 *	0.0000
19	Master Comp Mole Frac (CO)	0.0019	0.0281	0.0000	0.0000 *	0.0000
20	Master Comp Mole Frac (CO2)	0.0041	0.0603	0.0000	0.0000 *	0.0000
21	Master Comp Mole Frac (Methanol)	0.0010	0.0056	0.0006	0.0000 *	0.0006
22	Master Comp Mole Frac (CH3I)	0.0352	0.4492	0.0050	0.5000 *	0.0047
23	Master Comp Mole Frac (M-Acetate)	0.0051	0.0125	0.0046	0.0000 *	0.0043
24	Master Comp Mole Frac (AceticAcid)	0.9061	0.3386	0.9474	0.0000 *	0.9448
25	Master Comp Mole Frac (H2O)	0.0431	0.0528	0.0424	0.5000 *	0.0456
26	Master Comp Mole Frac (HI)	0.0034	0.0505	0.0000	0.0000 *	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000 *	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000 *	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0011	0.0011	0.0000	0.0000 *	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0233	0.0233	0.0000	0.0000 *	0.0000
34	Master Comp Molar Flow (CO)	0.2889	0.2889	0.0000	0.0000 *	0.0000
35	Master Comp Molar Flow (CO2)	0.6214	0.6214	0.0000	0.0000 *	0.0000
36	Master Comp Molar Flow (Methanol)	0.1445	0.0578	0.0867	0.0000 *	0.0867
37	Master Comp Molar Flow (CH3I)	5.3344	4.6270	0.7075	225.0000 *	0.7075
38	Master Comp Molar Flow (M-Acetate)	0.7737	0.1289	0.6448	0.0000 *	0.6448
39	Master Comp Molar Flow (AceticAcid)	137.5015	3.4880	134.0135	0.0000 *	140.9138
40	Master Comp Molar Flow (H2O)	6.5441	0.5438	6.0002	225.0000 *	6.7953
41	Master Comp Molar Flow (HI)	0.5199	0.5199	0.0000	0.0000 *	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0001	0.0000	0.0001	0.0000 *	0.0001
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000 *	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000 *	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000 *	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC			
2			Unit Set: Project			
3			Date/Time: Mon Dec 16 09:45:15 2019			
4						
5						
6	Workbook: Case (Main) (continued)					
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8						
9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	23302	23006	23007*	23008*	22020
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	43.90	43.35	43.35	43.35	159.6 *
14	Pressure (bar)	15.00	33.90 *	33.90	33.90	3.300 *
15	Molar Flow (kgmole/h)	450.0	149.1	2.237	146.9	332.8 *
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
21	Master Comp Mole Frac (Methanol)	0.0000	0.0006	0.0006	0.0006	0.0000 *
22	Master Comp Mole Frac (CH3I)	0.5000	0.0047	0.0047	0.0047	0.0000 *
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0043	0.0043	0.0043	0.0000 *
24	Master Comp Mole Frac (AceticAcid)	0.0000	0.9448	0.9448	0.9448	0.9904 *
25	Master Comp Mole Frac (H2O)	0.5000	0.0456	0.0456	0.0456	0.0087 *
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0009 *
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
36	Master Comp Molar Flow (Methanol)	0.0000	0.0867	0.0013	0.0854	0.0002 *
37	Master Comp Molar Flow (CH3I)	225.0000	0.7075	0.0106	0.6969	0.0000 *
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.6448	0.0097	0.6351	0.0000 *
39	Master Comp Molar Flow (AceticAcid)	0.0000	140.9138	2.1137	138.8001	329.6079 *
40	Master Comp Molar Flow (H2O)	225.0000	6.7953	0.1019	6.6933	2.8975 *
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0001	0.0000	0.0001	0.2945 *
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000	0.0000 *
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000	0.0000 *
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC				
2			Unit Set: Project				
3			Date/Time: Mon Dec 16 09:45:15 2019				
4							
5							
6	Workbook: Case (Main) (continued)						
7							
8							
9	Material Streams (continued)					Fluid Pkg:	All
10							
11	Name	koh	22068*	22068	22067	22069	
12	Vapour Fraction	0.0000 *	0.0000	0.0000 *	0.0000	1.0000	
13	Temperature (C)	161.5 *	159.5	159.7	96.31 *	144.8 *	
14	Pressure (bar)	6.426	3.300	6.780 *	9.400 *	2.200 *	
15	Molar Flow (kgmole/h)	0.2200 *	333.0	333.0	998.7 *	10.30 *	
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
18	Master Comp Mole Frac (Nitrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
19	Master Comp Mole Frac (CO)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
20	Master Comp Mole Frac (CO2)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
21	Master Comp Mole Frac (Methanol)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
22	Master Comp Mole Frac (CH3I)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
23	Master Comp Mole Frac (M-Acetate)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
24	Master Comp Mole Frac (AceticAcid)	0.0000 *	0.9898	0.9898	0.8977 *	0.9461 *	
25	Master Comp Mole Frac (H2O)	0.9091 *	0.0093	0.0093	0.1023 *	0.0219 *	
26	Master Comp Mole Frac (HI)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
27	Master Comp Mole Frac (C3oicAcid)	0.0000 *	0.0009	0.0009	0.0000 *	0.0320 *	
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
29	Master Comp Mole Frac (KOH*)	0.0909 *	0.0001	0.0001	0.0000 *	0.0000 *	
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
31	Master Comp Molar Flow (Hydrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
33	Master Comp Molar Flow (Nitrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
34	Master Comp Molar Flow (CO)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
35	Master Comp Molar Flow (CO2)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
36	Master Comp Molar Flow (Methanol)	0.0000 *	0.0002	0.0002	0.0082 *	0.0000 *	
37	Master Comp Molar Flow (CH3I)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
38	Master Comp Molar Flow (M-Acetate)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
39	Master Comp Molar Flow (AceticAcid)	0.0000 *	329.6079	329.6079	896.5157 *	9.7445 *	
40	Master Comp Molar Flow (H2O)	0.2000 *	3.0975	3.0975	102.1839 *	0.2251 *	
41	Master Comp Molar Flow (HI)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
42	Master Comp Molar Flow (C3oicAcid)	0.0000 *	0.2945	0.2945	0.0000 *	0.3299 *	
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
44	Master Comp Molar Flow (KOH)	0.0200 *	0.0200	0.0200	0.0000 *	0.0000 *	
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *	
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
7						
8						
9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	22051	22064	22052	22065	22306
12	Vapour Fraction	1.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	132.6	137.7	145.6	70.09	4.000 *
14	Pressure (bar)	1.700	1.851	2.220	4.351	1.000
15	Molar Flow (kgmole/h)	1015	315.9	10.82	315.9	500.0 *
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000 *
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000 *
24	Master Comp Mole Frac (AceticAcid)	0.8967	0.9980	0.9409	0.9980	0.0000 *
25	Master Comp Mole Frac (H2O)	0.1033	0.0019	0.0001	0.0019	1.0000 *
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0571	0.0000	0.0000 *
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0018	0.0000	0.0000 *
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
36	Master Comp Molar Flow (Methanol)	0.0084	0.0000	0.0000	0.0000	0.0000 *
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000 *
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000 *
39	Master Comp Molar Flow (AceticAcid)	910.3982	315.2858	10.1841	315.2858	0.0000 *
40	Master Comp Molar Flow (H2O)	104.8946	0.6103	0.0016	0.6103	500.0000 *
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0059	0.6185	0.0059	0.0000 *
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0200	0.0000	0.0000 *
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000	0.0000 *
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					Fluid Pkg: All
10						
11	Name	22307	22051*	22304	22305	VAP22051*
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	1.0000
13	Temperature (C)	76.00 *	96.10 *	10.00 *	100.0 *	96.10
14	Pressure (bar)	1.000 *	1.700	1.600 *	1.600	1.700
15	Molar Flow (kgmole/h)	500.0	1015	6419	6419	0.0000
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000 *	0.0000	0.0000
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000 *	0.0000	0.0000
24	Master Comp Mole Frac (AceticAcid)	0.0000	0.8967	0.0000 *	0.0000	0.8967
25	Master Comp Mole Frac (H2O)	1.0000	0.1033	1.0000 *	1.0000	0.1033
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
36	Master Comp Molar Flow (Methanol)	0.0000	0.0084	0.0000 *	0.0000	0.0000
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000	0.0000 *	0.0000	0.0000
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000	0.0000 *	0.0000	0.0000
39	Master Comp Molar Flow (AceticAcid)	0.0000	910.3982	0.0000 *	0.0000	0.0000
40	Master Comp Molar Flow (H2O)	500.0000	104.8946	6418.6397 *	6418.6397	0.0000
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000 *	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000 *	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	22066	22066*	22067*	22054	22060
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	96.10	96.31	96.31	96.31	96.31
14	Pressure (bar)	1.700	9.400 *	9.400	9.400	9.400
15	Molar Flow (kgmole/h)	1015	1015	998.7	16.59	8.895
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
24	Master Comp Mole Frac (AceticAcid)	0.8967	0.8967	0.8967	0.8967	0.8967
25	Master Comp Mole Frac (H2O)	0.1033	0.1033	0.1033	0.1033	0.1033
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
36	Master Comp Molar Flow (Methanol)	0.0084	0.0084	0.0082	0.0001	0.0001
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
39	Master Comp Molar Flow (AceticAcid)	910.3982	910.3982	895.5223	14.8759	7.9756
40	Master Comp Molar Flow (H2O)	104.8946	104.8946	103.1806	1.7140	0.9189
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0000
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC			
2			Unit Set: Project			
3						
4			Date/Time: Mon Dec 16 09:45:15 2019			
5						
6	<div>Workbook: Case (Main) (continued)</div>					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	22055	22053	22070	25009	25009*
12	Vapour Fraction	0.0000	0.0000	0.0000	1.0000	0.0000
13	Temperature (C)	96.31	145.7	162.9	70.09	70.09
14	Pressure (bar)	9.400	5.100 *	3.000	4.351	4.351
15	Molar Flow (kgmole/h)	7.695	10.82	0.7542	0.0000	315.9
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
24	Master Comp Mole Frac (AceticAcid)	0.8967	0.9409	0.5929	0.9980	0.9980
25	Master Comp Mole Frac (H2O)	0.1033	0.0001	0.0085	0.0019	0.0019
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0571	0.3721	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0018	0.0265	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
36	Master Comp Molar Flow (Methanol)	0.0001	0.0000	0.0000	0.0000	0.0000
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
39	Master Comp Molar Flow (AceticAcid)	6.9003	10.1841	0.4472	0.0000	315.2858
40	Master Comp Molar Flow (H2O)	0.7950	0.0016	0.0064	0.0000	0.6103
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.6185	0.2806	0.0000	0.0059
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0200	0.0200	0.0000	0.0000
45	Master Comp Molar Flow (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	22002	22003	22024	22004*	22009*
12	Vapour Fraction	0.0000	0.0000	1.0000	0.0000	0.0000
13	Temperature (C)	69.63 *	176.7 *	161.1	188.0	176.5
14	Pressure (bar)	7.700 *	9.630 *	7.700	8.000	7.885
15	Molar Flow (kgmole/h)	485.0 *	70.00 *	969.6	147.2	559.1
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000 *	0.0014	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000 *	0.0000 *	0.0036	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000 *	0.0000 *	0.0102	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0003 *	0.0001 *	0.0040	0.0000	0.0001
21	Master Comp Mole Frac (Methanol)	0.0026 *	0.0006 *	0.0025	0.0001	0.0006
22	Master Comp Mole Frac (CH3I)	0.2490 *	0.0380 *	0.2482	0.0072	0.0381
23	Master Comp Mole Frac (M-Acetate)	0.0328 *	0.0087 *	0.0326	0.0033	0.0087
24	Master Comp Mole Frac (AceticAcid)	0.1761 *	0.6157 *	0.1625	0.7604	0.6143
25	Master Comp Mole Frac (H2O)	0.5385 *	0.3365 *	0.5339	0.2283	0.3378
26	Master Comp Mole Frac (HI)	0.0007 *	0.0000 *	0.0009	0.0000	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0001 *	0.0004 *	0.0001	0.0007	0.0004
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0004 *	0.0002 *	1.3993	0.0000	0.0012
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0054 *	0.0009 *	3.4993	0.0000	0.0070
34	Master Comp Molar Flow (CO)	0.0102 *	0.0017 *	9.8988	0.0000	0.0132
35	Master Comp Molar Flow (CO2)	0.1339 *	0.0054 *	3.8964	0.0000	0.0429
36	Master Comp Molar Flow (Methanol)	1.2630 *	0.0403 *	2.4574	0.0221	0.3239
37	Master Comp Molar Flow (CH3I)	120.7531 *	2.6567 *	240.6611	1.0594	21.2906
38	Master Comp Molar Flow (M-Acetate)	15.8897 *	0.6085 *	31.6412	0.4811	4.8760
39	Master Comp Molar Flow (AceticAcid)	85.3996 *	43.0961 *	157.5191	111.9541	343.4269
40	Master Comp Molar Flow (H2O)	261.1612 *	23.5562 *	517.6620	33.6206	188.8388
41	Master Comp Molar Flow (HI)	0.3454 *	0.0031 *	0.8632	0.0002	0.0251
42	Master Comp Molar Flow (C3oicAcid)	0.0381 *	0.0310 *	0.0739	0.1001	0.2451
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
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2				Unit Set: Project		
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5						
6	Workbook: Case (Main) (continued)					
7						
8						
9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	21009*	22009	22003*	22008	22300
12	Vapour Fraction	0.8461	0.0000	0.0000	1.0000	0.0000
13	Temperature (C)	127.5 *	176.6	176.6	150.4	5.000 *
14	Pressure (bar)	2.300 *	9.630 *	9.630	2.100	2.000 *
15	Molar Flow (kgmole/h)	1121 *	559.1	60.38	979.9	1000 *
16	Master Comp Mole Frac (Hydrogen)	0.0012 *	0.0000	0.0000	0.0014	0.0000 *
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
18	Master Comp Mole Frac (Nitrogen)	0.0031 *	0.0000	0.0000	0.0036	0.0000 *
19	Master Comp Mole Frac (CO)	0.0088 *	0.0000	0.0000	0.0104	0.0000 *
20	Master Comp Mole Frac (CO2)	0.0034 *	0.0001	0.0001	0.0046	0.0000 *
21	Master Comp Mole Frac (Methanol)	0.0013 *	0.0006	0.0006	0.0026	0.0000 *
22	Master Comp Mole Frac (CH3I)	0.1245 *	0.0381	0.0381	0.2503	0.0000 *
23	Master Comp Mole Frac (M-Acetate)	0.0183 *	0.0087	0.0087	0.0324	0.0000 *
24	Master Comp Mole Frac (AceticAcid)	0.4322 *	0.6143	0.6143	0.1643	0.0000 *
25	Master Comp Mole Frac (H2O)	0.4063 *	0.3378	0.3378	0.5289	1.0000 *
26	Master Comp Mole Frac (HI)	0.0005 *	0.0000	0.0000	0.0014	0.0000 *
27	Master Comp Mole Frac (C3oicAcid)	0.0003 *	0.0004	0.0004	0.0001	0.0000 *
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
31	Master Comp Molar Flow (Hydrogen)	1.4000 *	0.0012	0.0001	1.4004	0.0000 *
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
33	Master Comp Molar Flow (Nitrogen)	3.5000 *	0.0070	0.0008	3.5225	0.0000 *
34	Master Comp Molar Flow (CO)	9.9001 *	0.0132	0.0014	10.1877	0.0000 *
35	Master Comp Molar Flow (CO2)	3.8000 *	0.0429	0.0046	4.5178	0.0000 *
36	Master Comp Molar Flow (Methanol)	1.5000 *	0.3239	0.0350	2.5152	0.0000 *
37	Master Comp Molar Flow (CH3I)	139.6012 *	21.2906	2.2994	245.2880	0.0000 *
38	Master Comp Molar Flow (M-Acetate)	20.5002 *	4.8760	0.5266	31.7701	0.0000 *
39	Master Comp Molar Flow (AceticAcid)	484.4043 *	343.4269	37.0901	161.0071	0.0000 *
40	Master Comp Molar Flow (H2O)	455.4041 *	188.8388	20.3946	518.2058	1000.0000 *
41	Master Comp Molar Flow (HI)	0.5400 *	0.0251	0.0027	1.3831	0.0000 *
42	Master Comp Molar Flow (C3oicAcid)	0.3500 *	0.2451	0.0265	0.0739	0.0000 *
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC					
2									
3							Unit Set: Project		
4							Date/Time: Mon Dec 16 09:45:15 2019		
5									
6	<div>Workbook: Case (Main) (continued)</div>								
7									
8									
9	Material Streams (continued)					Fluid Pkg:	All		
10									
11	Name	22008*	22301	22010	22011*	22012			
12	Vapour Fraction	1.0000	0.0000	1.0000	1.0000	0.0000			
13	Temperature (C)	114.0 *	29.31	69.50 *	16.56	16.56			
14	Pressure (bar)	2.100	2.000	2.100 *	2.100	2.100			
15	Molar Flow (kgmole/h)	979.9	1000	146.0 *	24.44	121.5			
16	Master Comp Mole Frac (Hydrogen)	0.0014	0.0000	0.0096 *	0.0573	0.0000			
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
18	Master Comp Mole Frac (Nitrogen)	0.0036	0.0000	0.0242 *	0.1437	0.0002			
19	Master Comp Mole Frac (CO)	0.0104	0.0000	0.0699 *	0.4160	0.0003			
20	Master Comp Mole Frac (CO2)	0.0046	0.0000	0.0347 *	0.1737	0.0068			
21	Master Comp Mole Frac (Methanol)	0.0026	0.0000	0.0007 *	0.0000	0.0009			
22	Master Comp Mole Frac (CH3I)	0.2503	0.0000	0.6584 *	0.1672	0.7571			
23	Master Comp Mole Frac (M-Acetate)	0.0324	0.0000	0.0394 *	0.0051	0.0464			
24	Master Comp Mole Frac (AceticAcid)	0.1643	0.0000	0.0126 *	0.0001	0.0151			
25	Master Comp Mole Frac (H2O)	0.5289	1.0000	0.1383 *	0.0094	0.1643			
26	Master Comp Mole Frac (HI)	0.0014	0.0000	0.0121 *	0.0276	0.0090			
27	Master Comp Mole Frac (C3oicAcid)	0.0001	0.0000	0.0000 *	0.0000	0.0000			
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
31	Master Comp Molar Flow (Hydrogen)	1.4004	0.0000	1.4007 *	1.3996	0.0011			
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
33	Master Comp Molar Flow (Nitrogen)	3.5225	0.0000	3.5302 *	3.5116	0.0187			
34	Master Comp Molar Flow (CO)	10.1877	0.0000	10.2055 *	10.1666	0.0389			
35	Master Comp Molar Flow (CO2)	4.5178	0.0000	5.0687 *	4.2445	0.8241			
36	Master Comp Molar Flow (Methanol)	2.5152	0.0000	0.1063 *	0.0005	0.1058			
37	Master Comp Molar Flow (CH3I)	245.2880	0.0000	96.1046 *	4.0852	92.0194			
38	Master Comp Molar Flow (M-Acetate)	31.7701	0.0000	5.7586 *	0.1241	5.6345			
39	Master Comp Molar Flow (AceticAcid)	161.0071	0.0000	1.8407 *	0.0021	1.8385			
40	Master Comp Molar Flow (H2O)	518.2058	1000.0000	20.1936 *	0.2307	19.9629			
41	Master Comp Molar Flow (HI)	1.3831	0.0000	1.7680 *	0.6751	1.0929			
42	Master Comp Molar Flow (C3oicAcid)	0.0739	0.0000	0.0008 *	0.0000	0.0008			
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000 *	0.0000	0.0000			
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					Fluid Pkg: All
10						
11	Name	22026	22026*	22038*	22010**	22006*
12	Vapour Fraction	0.0000	0.0000	0.8999	1.0000	0.0000
13	Temperature (C)	40.00 *	16.36	108.8	69.50	69.50
14	Pressure (bar)	5.200 *	2.100	2.100	2.100	2.100
15	Molar Flow (kgmole/h)	4.300 *	125.8	1106	147.0	958.7
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0013	0.0095	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000 *	0.0001	0.0032	0.0240	0.0000
19	Master Comp Mole Frac (CO)	0.0000 *	0.0003	0.0092	0.0694	0.0000
20	Master Comp Mole Frac (CO2)	0.0000 *	0.0065	0.0048	0.0346	0.0003
21	Master Comp Mole Frac (Methanol)	0.0000 *	0.0008	0.0024	0.0007	0.0026
22	Master Comp Mole Frac (CH3I)	0.0000 *	0.7313	0.3051	0.6591	0.2508
23	Master Comp Mole Frac (M-Acetate)	0.0000 *	0.0448	0.0338	0.0395	0.0330
24	Master Comp Mole Frac (AceticAcid)	1.0000 *	0.0488	0.1512	0.0126	0.1724
25	Master Comp Mole Frac (H2O)	0.0000 *	0.1586	0.4867	0.1384	0.5401
26	Master Comp Mole Frac (HI)	0.0000 *	0.0087	0.0022	0.0122	0.0007
27	Master Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0001	0.0000	0.0001
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000 *	0.0011	1.4015	1.4010	0.0005
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000 *	0.0187	3.5412	3.5308	0.0104
34	Master Comp Molar Flow (CO)	0.0000 *	0.0389	10.2267	10.2069	0.0198
35	Master Comp Molar Flow (CO2)	0.0000 *	0.8241	5.3419	5.0843	0.2577
36	Master Comp Molar Flow (Methanol)	0.0000 *	0.1058	2.6210	0.1069	2.5141
37	Master Comp Molar Flow (CH3I)	0.0000 *	92.0194	337.3075	96.8997	240.4078
38	Master Comp Molar Flow (M-Acetate)	0.0000 *	5.6345	37.4045	5.8000	31.6045
39	Master Comp Molar Flow (AceticAcid)	4.3000 *	6.1385	167.1457	1.8493	165.2964
40	Master Comp Molar Flow (H2O)	0.0000 *	19.9629	538.1687	20.3431	517.8257
41	Master Comp Molar Flow (HI)	0.0000 *	1.0929	2.4760	1.7973	0.6787
42	Master Comp Molar Flow (C3oicAcid)	0.0000 *	0.0008	0.0747	0.0008	0.0739
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000 *	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
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6	<div>Workbook: Case (Main) (continued)</div>					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	22006	22007	22002*	22001	22002/
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	69.50	69.50	69.50	69.50	69.63
14	Pressure (bar)	2.100	2.100	2.100	2.100	7.700 *
15	Molar Flow (kgmole/h)	184.7	773.9	478.5	295.4	478.5
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0003	0.0003	0.0003	0.0003	0.0003
21	Master Comp Mole Frac (Methanol)	0.0026	0.0026	0.0026	0.0026	0.0026
22	Master Comp Mole Frac (CH3I)	0.2508	0.2508	0.2508	0.2508	0.2508
23	Master Comp Mole Frac (M-Acetate)	0.0330	0.0330	0.0330	0.0330	0.0330
24	Master Comp Mole Frac (AceticAcid)	0.1724	0.1724	0.1724	0.1724	0.1724
25	Master Comp Mole Frac (H2O)	0.5401	0.5401	0.5401	0.5401	0.5401
26	Master Comp Mole Frac (HI)	0.0007	0.0007	0.0007	0.0007	0.0007
27	Master Comp Mole Frac (C3oicAcid)	0.0001	0.0001	0.0001	0.0001	0.0001
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0001	0.0004	0.0003	0.0002	0.0003
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0020	0.0084	0.0052	0.0032	0.0052
34	Master Comp Molar Flow (CO)	0.0038	0.0160	0.0099	0.0061	0.0099
35	Master Comp Molar Flow (CO2)	0.0497	0.2080	0.1286	0.0794	0.1286
36	Master Comp Molar Flow (Methanol)	0.4845	2.0297	1.2549	0.7747	1.2549
37	Master Comp Molar Flow (CH3I)	46.3266	194.0812	120.0004	74.0808	120.0004
38	Master Comp Molar Flow (M-Acetate)	6.0902	25.5143	15.7755	9.7388	15.7755
39	Master Comp Molar Flow (AceticAcid)	31.8526	133.4438	82.5083	50.9355	82.5083
40	Master Comp Molar Flow (H2O)	99.7850	418.0407	258.4745	159.5661	258.4745
41	Master Comp Molar Flow (HI)	0.1308	0.5479	0.3388	0.2091	0.3388
42	Master Comp Molar Flow (C3oicAcid)	0.0142	0.0596	0.0369	0.0228	0.0369
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC			
2			Unit Set: Project			
3						
4			Date/Time: Mon Dec 16 09:45:15 2019			
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					
10	Fluid Pkg:					All
11	Name	22023	22018	22022	22025	22019
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	1.0000
13	Temperature (C)	176.6	174.6	62.16 *	32.20 *	133.4
14	Pressure (bar)	9.630	9.400	10.50 *	3.300 *	2.700
15	Molar Flow (kgmole/h)	498.7	509.8	343.3 *	1.800 *	629.5
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
20	Master Comp Mole Frac (CO2)	0.0001	0.0001	0.0001 *	0.0000 *	0.0001
21	Master Comp Mole Frac (Methanol)	0.0006	0.0006	0.0073 *	1.0000 *	0.0073
22	Master Comp Mole Frac (CH3I)	0.0381	0.0373	0.0664 *	0.0000 *	0.0664
23	Master Comp Mole Frac (M-Acetate)	0.0087	0.0085	0.0152 *	0.0000 *	0.0152
24	Master Comp Mole Frac (AceticAcid)	0.6143	0.6206	0.3187 *	0.0000 *	0.3187
25	Master Comp Mole Frac (H2O)	0.3378	0.3324	0.5920 *	0.0000 *	0.5920
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0001 *	0.0000 *	0.0001
27	Master Comp Mole Frac (C3oicAcid)	0.0004	0.0004	0.0000 *	0.0000 *	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0011	0.0011	0.0013 *	0.0000 *	0.0024
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0063	0.0063	0.0075 *	0.0000 *	0.0138
34	Master Comp Molar Flow (CO)	0.0118	0.0118	0.0141 *	0.0000 *	0.0259
35	Master Comp Molar Flow (CO2)	0.0383	0.0383	0.0459 *	0.0000 *	0.0842
36	Master Comp Molar Flow (Methanol)	0.2889	0.2903	2.5067 *	1.8000 *	4.5970
37	Master Comp Molar Flow (CH3I)	18.9912	19.0018	22.7876 *	0.0000 *	41.7894
38	Master Comp Molar Flow (M-Acetate)	4.3494	4.3591	5.2276 *	0.0000 *	9.5867
39	Master Comp Molar Flow (AceticAcid)	306.3368	316.4261	109.4123 *	0.0000 *	200.6448
40	Master Comp Molar Flow (H2O)	168.4442	169.4651	203.2294 *	0.0000 *	372.6945
41	Master Comp Molar Flow (HI)	0.0224	0.0224	0.0269 *	0.0000 *	0.0493
42	Master Comp Molar Flow (C3oicAcid)	0.2186	0.2186	0.0067 *	0.0000 *	0.0123
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
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1	 <div> Company Name Not Available Bedford, MA USA </div>	Case Name: ACETIC ACID FIN.HSC
2		Unit Set: Project
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Workbook: Case (Main) (continued)


Material Streams (continued)						Fluid Pkg:	All
Name	22020*	22019*	22302	22303	VAP		
Vapour Fraction	0.0000	0.0000	0.0000	0.7868	1.0000		
Temperature (C)	160.0	62.00 *	0.0000 *	64.68	62.00		
Pressure (bar)	3.300	2.700	0.2500 *	0.2500	2.700		
Molar Flow (kgmole/h)	225.4	629.5	700.0 *	700.0	0.0000		
Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (CO2)	0.0000	0.0001	0.0000 *	0.0000	0.0001		
Master Comp Mole Frac (Methanol)	0.0000	0.0073	0.0000 *	0.0000	0.0074		
Master Comp Mole Frac (CH3I)	0.0000	0.0664	0.0000 *	0.0000	0.0661		
Master Comp Mole Frac (M-Acetate)	0.0000	0.0152	0.0000 *	0.0000	0.0152		
Master Comp Mole Frac (AceticAcid)	0.9991	0.3187	0.0000 *	0.0000	0.3212		
Master Comp Mole Frac (H2O)	0.0000	0.5920	1.0000 *	1.0000	0.5898		
Master Comp Mole Frac (HI)	0.0000	0.0001	0.0000 *	0.0000	0.0001		
Master Comp Mole Frac (C3oicAcid)	0.0009	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Hydrogen)	0.0000	0.0024	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Nitrogen)	0.0000	0.0138	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (CO)	0.0000	0.0259	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (CO2)	0.0000	0.0842	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Methanol)	0.0000	4.5970	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (CH3I)	0.0000	41.7894	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (M-Acetate)	0.0000	9.5867	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (AceticAcid)	225.1937	200.6448	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (H2O)	0.0000	372.6945	700.0000 *	700.0000	0.0000		
Master Comp Molar Flow (HI)	0.0000	0.0493	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (C3oicAcid)	0.2130	0.0123	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000 *	0.0000	0.0000		
Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000 *	0.0000	0.0000		


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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
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3				Unit Set: Project		
4						
5				Date/Time: Mon Dec 16 09:45:15 2019		
6	<div>Workbook: Case (Main) (continued)</div>					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	22021	22021*	22022*	22014	22080
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	62.00	62.16	62.16	62.16	62.76
14	Pressure (bar)	2.700	10.50 *	10.50	10.50	2.100
15	Molar Flow (kgmole/h)	629.5	629.5	343.3	286.2	581.7
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
20	Master Comp Mole Frac (CO2)	0.0001	0.0001	0.0001	0.0001	0.0002
21	Master Comp Mole Frac (Methanol)	0.0073	0.0073	0.0073	0.0073	0.0049
22	Master Comp Mole Frac (CH3I)	0.0664	0.0664	0.0664	0.0664	0.1600
23	Master Comp Mole Frac (M-Acetate)	0.0152	0.0152	0.0152	0.0152	0.0242
24	Master Comp Mole Frac (AceticAcid)	0.3187	0.3187	0.3187	0.3187	0.2444
25	Master Comp Mole Frac (H2O)	0.5920	0.5920	0.5920	0.5920	0.5657
26	Master Comp Mole Frac (HI)	0.0001	0.0001	0.0001	0.0001	0.0004
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0024	0.0024	0.0013	0.0011	0.0013
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0138	0.0138	0.0075	0.0063	0.0095
34	Master Comp Molar Flow (CO)	0.0259	0.0259	0.0141	0.0118	0.0179
35	Master Comp Molar Flow (CO2)	0.0842	0.0842	0.0459	0.0383	0.1177
36	Master Comp Molar Flow (Methanol)	4.5970	4.5970	2.5067	2.0902	2.8650
37	Master Comp Molar Flow (CH3I)	41.7894	41.7894	22.7878	19.0016	93.0824
38	Master Comp Molar Flow (M-Acetate)	9.5867	9.5867	5.2276	4.3591	14.0979
39	Master Comp Molar Flow (AceticAcid)	200.6448	200.6448	109.4116	91.2332	142.1687
40	Master Comp Molar Flow (H2O)	372.6945	372.6945	203.2303	169.4642	329.0303
41	Master Comp Molar Flow (HI)	0.0493	0.0493	0.0269	0.0224	0.2316
42	Master Comp Molar Flow (C3oicAcid)	0.0123	0.0123	0.0067	0.0056	0.0283
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC					
2									
3							Unit Set: Project		
4							Date/Time: Mon Dec 16 09:45:15 2019		
5									
6	Workbook: Case (Main) (continued)								
7									
8									
9	Material Streams (continued)								
10	Fluid Pkg:					All			
11	Name	22157	21006*	21007*	21083	21017*			
12	Vapour Fraction	0.0000	1.0000	0.0000	0.0000	0.0000			
13	Temperature (C)	62.91	24.00	24.00	32.60	32.60			
14	Pressure (bar)	10.00 *	15.00	15.00	33.00	33.00			
15	Molar Flow (kgmole/h)	581.7	44.70	26.37	1.749	316.2			
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0001	0.0000	0.0000	0.0000			
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000			
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0204	0.0000	0.0010	0.0010			
19	Master Comp Mole Frac (CO)	0.0000	0.9582	0.0010	0.0000	0.0000			
20	Master Comp Mole Frac (CO2)	0.0002	0.0003	0.0000	0.0000	0.0000			
21	Master Comp Mole Frac (Methanol)	0.0049	0.0015	0.2846	0.9980	0.9980			
22	Master Comp Mole Frac (CH3I)	0.1600	0.0164	0.1061	0.0000	0.0000			
23	Master Comp Mole Frac (M-Acetate)	0.0242	0.0013	0.0182	0.0000	0.0000			
24	Master Comp Mole Frac (AceticAcid)	0.2444	0.0003	0.1916	0.0000	0.0000			
25	Master Comp Mole Frac (H2O)	0.5657	0.0012	0.3982	0.0009	0.0009			
26	Master Comp Mole Frac (HI)	0.0004	0.0002	0.0002	0.0000	0.0000			
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0001	0.0000	0.0000			
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0001	0.0001			
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000			
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000			
31	Master Comp Molar Flow (Hydrogen)(kgmole/h)	0.0013	0.0033	0.0000	0.0000	0.0000			
32	Master Comp Molar Flow (Methane)(kgmole/h)	0.0000	0.0000	0.0000	0.0000	0.0000			
33	Master Comp Molar Flow (Nitrogen)(kgmole/h)	0.0095	0.9120	0.0012	0.0018	0.3293			
34	Master Comp Molar Flow (CO)(kgmole/h)	0.0179	42.8305	0.0275	0.0000	0.0000			
35	Master Comp Molar Flow (CO2)(kgmole/h)	0.1177	0.0143	0.0006	0.0000	0.0000			
36	Master Comp Molar Flow (Methanol)(kgmole/h)	2.8650	0.0666	7.5054	1.7453	315.5796			
37	Master Comp Molar Flow (CH3I)(kgmole/h)	93.0824	0.7349	2.7976	0.0000	0.0000			
38	Master Comp Molar Flow (M-Acetate)(kgmole/h)	14.0979	0.0577	0.4799	0.0000	0.0000			
39	Master Comp Molar Flow (AceticAcid)(kgmole/h)	142.1687	0.0156	5.0535	0.0000	0.0000			
40	Master Comp Molar Flow (H2O)(kgmole/h)	329.0303	0.0554	10.5017	0.0016	0.2812			
41	Master Comp Molar Flow (HI)(kgmole/h)	0.2316	0.0088	0.0041	0.0000	0.0000			
42	Master Comp Molar Flow (C3oicAcid)(kgmole/h)	0.0283	0.0000	0.0026	0.0000	0.0000			
43	Master Comp Molar Flow (Ethanol)(kgmole/h)	0.0000	0.0000	0.0005	0.0001	0.0221			
44	Master Comp Molar Flow (KOH)(kgmole/h)	0.0000	0.0000	0.0000	0.0000	0.0000			
45	Master Comp Molar Flow (Rh*)(kgmole/h)	0.0000	0.0000	0.0000	0.0000	0.0000			
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
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6	<div>Workbook: Case (Main) (continued)</div>					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	21027	21013*	21017**	22375	22038***
12	Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.1330
13	Temperature (C)	32.60	32.60	32.60	0.0000 *	69.50 *
14	Pressure (bar)	33.00 *	33.00	33.00	1.000e-002 *	2.100
15	Molar Flow (kgmole/h)	318.0	210.8	105.4	1000 *	1106
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000 *	0.0013
17	Master Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0010	0.0010	0.0010	0.0000 *	0.0032
19	Master Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000 *	0.0092
20	Master Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000 *	0.0048
21	Master Comp Mole Frac (Methanol)	0.9980	0.9980	0.9980	0.0000 *	0.0024
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000 *	0.3051
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000 *	0.0338
24	Master Comp Mole Frac (AceticAcid)	0.0000	0.0000	0.0000	0.0000 *	0.1512
25	Master Comp Mole Frac (H2O)	0.0009	0.0009	0.0009	1.0000 *	0.4867
26	Master Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000 *	0.0022
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000 *	0.0001
28	Master Comp Mole Frac (Ethanol)	0.0001	0.0001	0.0001	0.0000 *	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000	0.0000	0.0000 *	1.4015
32	Master Comp Molar Flow (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.3312	0.2195	0.1098	0.0000 *	3.5412
34	Master Comp Molar Flow (CO)	0.0000	0.0000	0.0000	0.0000 *	10.2267
35	Master Comp Molar Flow (CO2)	0.0000	0.0000	0.0000	0.0000 *	5.3419
36	Master Comp Molar Flow (Methanol)	317.3248	210.3653	105.2142	0.0000 *	2.6210
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000	0.0000	0.0000 *	337.3075
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000	0.0000	0.0000 *	37.4045
39	Master Comp Molar Flow (AceticAcid)	0.0000	0.0000	0.0000	0.0000 *	167.1457
40	Master Comp Molar Flow (H2O)	0.2827	0.1874	0.0937	1000.0000 *	538.1687
41	Master Comp Molar Flow (HI)	0.0000	0.0000	0.0000	0.0000 *	2.4760
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0000	0.0000	0.0000 *	0.0747
43	Master Comp Molar Flow (Ethanol)	0.0222	0.0147	0.0074	0.0000 *	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000	0.0000	0.0000 *	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000	0.0000	0.0000 *	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
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9	Material Streams (continued)					Fluid Pkg: All
10						
11	Name	22376	22370	22371	2201000	2103*
12	Vapour Fraction	0.7015	0.0000	0.1777	0.1674	0.2300
13	Temperature (C)	6.526	5.000 *	6.523	16.56 *	122.6 *
14	Pressure (bar)	1.000e-002	1.000e-002 *	1.000e-002	2.100	2.300 *
15	Molar Flow (kgmole/h)	1000	500.0 *	500.0	146.0	4390
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000	0.0096	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0242	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000 *	0.0000	0.0699	0.0001
20	Master Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0000	0.0347	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000 *	0.0000	0.0007	0.1365
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000 *	0.0000	0.6584	0.0104
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000 *	0.0000	0.0394	0.0035
24	Master Comp Mole Frac (AceticAcid)	0.0000	0.0000 *	0.0000	0.0126	0.3910
25	Master Comp Mole Frac (H2O)	1.0000	1.0000 *	1.0000	0.1383	0.4582
26	Master Comp Mole Frac (HI)	0.0000	0.0000 *	0.0000	0.0121	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000 *	0.0000	0.0000	0.0002
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000 *	0.0000	1.4007	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000 *	0.0000	3.5302	0.0226
34	Master Comp Molar Flow (CO)	0.0000	0.0000 *	0.0000	10.2055	0.6011
35	Master Comp Molar Flow (CO2)	0.0000	0.0000 *	0.0000	5.0687	0.0050
36	Master Comp Molar Flow (Methanol)	0.0000	0.0000 *	0.0000	0.1063	599.2434
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000 *	0.0000	96.1046	45.7862
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000 *	0.0000	5.7586	15.1887
39	Master Comp Molar Flow (AceticAcid)	0.0000	0.0000 *	0.0000	1.8407	1716.3067
40	Master Comp Molar Flow (H2O)	1000.0000	500.0000 *	500.0000	20.1936	2011.4143
41	Master Comp Molar Flow (HI)	0.0000	0.0000 *	0.0000	1.7680	0.0335
42	Master Comp Molar Flow (C3oicAcid)	0.0000	0.0000 *	0.0000	0.0008	0.8636
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000 *	0.0000	0.0000	0.0521
44	Master Comp Molar Flow (KOH)	0.0000	0.0000 *	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000 *	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
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7	Workbook: Case (Main) (continued)					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	21001	21005.	TO FLARE	21006	23004.
12	Vapour Fraction	1.0000	1.0000	1.0000	1.0000	0.0000
13	Temperature (C)	32.20 *	87.84	87.84	48.70 *	138.8
14	Pressure (bar)	32.00 *	2.300	2.300	28.60 *	2.200
15	Molar Flow (kgmole/h)	365.6 *	71.07	521.2	44.70	149.1
16	Master Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0001	0.0000
17	Master Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0200 *	0.0128	0.0128	0.0204	0.0000
19	Master Comp Mole Frac (CO)	0.9800 *	0.6030	0.6030	0.9582	0.0000
20	Master Comp Mole Frac (CO2)	0.0000 *	0.0002	0.0002	0.0003	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000 *	0.1065	0.1065	0.0015	0.0006
22	Master Comp Mole Frac (CH3I)	0.0000 *	0.0497	0.0497	0.0164	0.0047
23	Master Comp Mole Frac (M-Acetate)	0.0000 *	0.0076	0.0076	0.0013	0.0043
24	Master Comp Mole Frac (AceticAcid)	0.0000 *	0.0713	0.0713	0.0003	0.9448
25	Master Comp Mole Frac (H2O)	0.0000 *	0.1485	0.1485	0.0012	0.0456
26	Master Comp Mole Frac (HI)	0.0000 *	0.0002	0.0002	0.0002	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000 *	0.0033	0.0244	0.0033	0.0000
32	Master Comp Molar Flow (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
33	Master Comp Molar Flow (Nitrogen)	7.3000 *	0.9132	6.6970	0.9120	0.0000
34	Master Comp Molar Flow (CO)	358.3000 *	42.8580	314.2917	42.8305	0.0000
35	Master Comp Molar Flow (CO2)	0.0000 *	0.0148	0.1088	0.0143	0.0000
36	Master Comp Molar Flow (Methanol)	0.0000 *	7.5720	55.5283	0.0666	0.0867
37	Master Comp Molar Flow (CH3I)	0.0000 *	3.5325	25.9052	0.7349	0.7075
38	Master Comp Molar Flow (M-Acetate)	0.0000 *	0.5377	3.9430	0.0577	0.6448
39	Master Comp Molar Flow (AceticAcid)	0.0000 *	5.0692	37.1740	0.0156	140.9138
40	Master Comp Molar Flow (H2O)	0.0000 *	10.5571	77.4186	0.0554	6.7953
41	Master Comp Molar Flow (HI)	0.0000 *	0.0129	0.0948	0.0088	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.0000 *	0.0026	0.0190	0.0000	0.0001
43	Master Comp Molar Flow (Ethanol)	0.0000 *	0.0005	0.0038	0.0000	0.0000
44	Master Comp Molar Flow (KOH)	0.0000 *	0.0000	0.0000	0.0000	0.0000
45	Master Comp Molar Flow (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC			
2			Unit Set: Project			
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4			Date/Time: Mon Dec 16 09:45:15 2019			
5						
6	Workbook: Case (Main) (continued)					
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10	Material Streams (continued)				Fluid Pkg:	All
11	Name	22069.	22071	22013.	21300	21301
12	Vapour Fraction	1.0000	0.0000	0.0000	0.0000	0.0000
13	Temperature (C)	144.8	95.00 *	70.35	5.000 *	22.64
14	Pressure (bar)	2.200	5.200 *	39.90 *	15.00 *	1.000 *
15	Molar Flow (kgmole/h)	10.30	0.2300 *	184.7	1000 *	1000
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
17	Master Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
18	Master Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
19	Master Comp Mole Frac (CO)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
20	Master Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0003	0.0000 *	0.0000
21	Master Comp Mole Frac (Methanol)	0.0000	0.0000 *	0.0026	0.0000 *	0.0000
22	Master Comp Mole Frac (CH3I)	0.0000	0.0000 *	0.2508	0.0000 *	0.0000
23	Master Comp Mole Frac (M-Acetate)	0.0000	0.0000 *	0.0330	0.0000 *	0.0000
24	Master Comp Mole Frac (AceticAcid)	0.9453	0.0000 *	0.1724	0.0000 *	0.0000
25	Master Comp Mole Frac (H2O)	0.0219	1.0000 *	0.5401	1.0000 *	1.0000
26	Master Comp Mole Frac (HI)	0.0000	0.0000 *	0.0007	0.0000 *	0.0000
27	Master Comp Mole Frac (C3oicAcid)	0.0328	0.0000 *	0.0001	0.0000 *	0.0000
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
31	Master Comp Molar Flow (Hydrogen)	0.0000	0.0000 *	0.0001	0.0000 *	0.0000
32	Master Comp Molar Flow (Methane)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
33	Master Comp Molar Flow (Nitrogen)	0.0000	0.0000 *	0.0020	0.0000 *	0.0000
34	Master Comp Molar Flow (CO)	0.0000	0.0000 *	0.0038	0.0000 *	0.0000
35	Master Comp Molar Flow (CO2)	0.0000	0.0000 *	0.0497	0.0000 *	0.0000
36	Master Comp Molar Flow (Methanol)	0.0000	0.0000 *	0.4845	0.0000 *	0.0000
37	Master Comp Molar Flow (CH3I)	0.0000	0.0000 *	46.3266	0.0000 *	0.0000
38	Master Comp Molar Flow (M-Acetate)	0.0000	0.0000 *	6.0902	0.0000 *	0.0000
39	Master Comp Molar Flow (AceticAcid)	9.7369	0.0000 *	31.8526	0.0000 *	0.0000
40	Master Comp Molar Flow (H2O)	0.2252	0.2300 *	99.7850	1000.0000 *	1000.0000
41	Master Comp Molar Flow (HI)	0.0000	0.0000 *	0.1308	0.0000 *	0.0000
42	Master Comp Molar Flow (C3oicAcid)	0.3379	0.0000 *	0.0142	0.0000 *	0.0000
43	Master Comp Molar Flow (Ethanol)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
44	Master Comp Molar Flow (KOH)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
45	Master Comp Molar Flow (Rh)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3				Date/Time: Mon Dec 16 09:45:15 2019		
4						
5						
6	Workbook: Case (Main) (continued)					
7						
8						
9	Material Streams (continued)				Fluid Pkg:	All
10						
11	Name	21005*	1	21018		
12	Vapour Fraction	0.6289	0.0000	0.0000		
13	Temperature (C)	24.00 *	20.00 *	147.4 *		
14	Pressure (bar)	15.00 *	31.00 *	31.00 *		
15	Molar Flow (kgmole/h)	71.07	105.4 *	105.4		
16	Master Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000		
17	Master Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000		
18	Master Comp Mole Frac (Nitrogen)	0.0128	0.0010 *	0.0010		
19	Master Comp Mole Frac (CO)	0.6030	0.0000 *	0.0000		
20	Master Comp Mole Frac (CO2)	0.0002	0.0000 *	0.0000		
21	Master Comp Mole Frac (Methanol)	0.1065	0.9980 *	0.9980		
22	Master Comp Mole Frac (CH3I)	0.0497	0.0000 *	0.0000		
23	Master Comp Mole Frac (M-Acetate)	0.0076	0.0000 *	0.0000		
24	Master Comp Mole Frac (AceticAcid)	0.0713	0.0000 *	0.0000		
25	Master Comp Mole Frac (H2O)	0.1485	0.0009 *	0.0009		
26	Master Comp Mole Frac (HI)	0.0002	0.0000 *	0.0000		
27	Master Comp Mole Frac (C3oicAcid)	0.0000	0.0000 *	0.0000		
28	Master Comp Mole Frac (Ethanol)	0.0000	0.0001 *	0.0001		
29	Master Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000		
30	Master Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000		
31	Master Comp Molar Flow (Hydrogen)	0.0033	0.0000 *	0.0000		
32	Master Comp Molar Flow (Methane)	0.0000	0.0000 *	0.0000		
33	Master Comp Molar Flow (Nitrogen)	0.9132	0.1098 *	0.1098		
34	Master Comp Molar Flow (CO)	42.8580	0.0000 *	0.0000		
35	Master Comp Molar Flow (CO2)	0.0148	0.0000 *	0.0000		
36	Master Comp Molar Flow (Methanol)	7.5720	105.2142 *	105.2142		
37	Master Comp Molar Flow (CH3I)	3.5325	0.0000 *	0.0000		
38	Master Comp Molar Flow (M-Acetate)	0.5377	0.0000 *	0.0000		
39	Master Comp Molar Flow (AceticAcid)	5.0692	0.0000 *	0.0000		
40	Master Comp Molar Flow (H2O)	10.5571	0.0937 *	0.0937		
41	Master Comp Molar Flow (HI)	0.0129	0.0000 *	0.0000		
42	Master Comp Molar Flow (C3oicAcid)	0.0026	0.0000 *	0.0000		
43	Master Comp Molar Flow (Ethanol)	0.0005	0.0074 *	0.0074		
44	Master Comp Molar Flow (KOH)	0.0000	0.0000 *	0.0000		
45	Master Comp Molar Flow (Rh)	0.0000	0.0000 *	0.0000		
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63	Aspen Technology Inc.		Aspen HYSYS Version 10		Page 27 of 40	


1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
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4				Date/Time: Mon Dec 16 09:45:15 2019		
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6	Workbook: Case (Main) (continued)					
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10	Compositions				Fluid Pkg:	All
11	Name	21002	21003*	21003	2101124	21005
12	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0000	0.0000
13	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
14	Comp Mole Frac (Nitrogen)	0.0020 *	0.9315	0.0010	0.0000	0.0128
15	Comp Mole Frac (CO)	0.0000 *	0.0000	0.0000	0.0000	0.6030
16	Comp Mole Frac (CO2)	0.0000 *	0.0000	0.0000	0.0001	0.0002
17	Comp Mole Frac (Methanol)	0.9970 *	0.0685	0.9980	0.0020	0.1065
18	Comp Mole Frac (CH3I)	0.0000 *	0.0000	0.0000	0.0742	0.0497
19	Comp Mole Frac (M-Acetate)	0.0000 *	0.0000	0.0000	0.0155	0.0076
20	Comp Mole Frac (AceticAcid)	0.0000 *	0.0000	0.0000	0.2052	0.0713
21	Comp Mole Frac (H2O)	0.0009 *	0.0000	0.0009	0.7028	0.1485
22	Comp Mole Frac (HI)	0.0000 *	0.0000	0.0000	0.0002	0.0002
23	Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
24	Comp Mole Frac (Ethanol)	0.0001 *	0.0000	0.0001	0.0000	0.0000
25	Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
26	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
27	Name	21008	22013	22015	21012	21014*
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000
29	Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000 *	0.0010	0.0003
31	Comp Mole Frac (CO)	0.0001	0.0000 *	0.0000 *	0.0000	0.0000
32	Comp Mole Frac (CO2)	0.0000	0.0003 *	0.0001 *	0.0000	0.0001
33	Comp Mole Frac (Methanol)	0.1412	0.0026 *	0.0018 *	0.9980	0.2985
34	Comp Mole Frac (CH3I)	0.0105	0.2508 *	0.0160 *	0.0000	0.0521
35	Comp Mole Frac (M-Acetate)	0.0035	0.0330 *	0.0098 *	0.0000	0.0109
36	Comp Mole Frac (AceticAcid)	0.3782	0.1724 *	0.2159 *	0.0000	0.1441
37	Comp Mole Frac (H2O)	0.4662	0.5401 *	0.7563 *	0.0009	0.4939
38	Comp Mole Frac (HI)	0.0000	0.0007 *	0.0000 *	0.0000	0.0001
39	Comp Mole Frac (C3oicAcid)	0.0002	0.0001 *	0.0000 *	0.0000	0.0000
40	Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000 *	0.0001	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000 *	0.0000	0.0000
43	Name	21007	21010	22004	2103	21009
44	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
45	Comp Mole Frac (Methane)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
47	Comp Mole Frac (CO)	0.0010 *	0.0000 *	0.0000 *	0.0001	0.0006
48	Comp Mole Frac (CO2)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
49	Comp Mole Frac (Methanol)	0.2846 *	0.1001 *	0.0001 *	0.1365	0.2475
50	Comp Mole Frac (CH3I)	0.1061 *	0.0047 *	0.0072 *	0.0104	0.0317
51	Comp Mole Frac (M-Acetate)	0.0182 *	0.0021 *	0.0033 *	0.0035	0.0083
52	Comp Mole Frac (AceticAcid)	0.1916 *	0.4401 *	0.7604 *	0.3910	0.2466
53	Comp Mole Frac (H2O)	0.3982 *	0.4527 *	0.2283 *	0.4582	0.4651
54	Comp Mole Frac (HI)	0.0002 *	0.0000 *	0.0000 *	0.0000	0.0000
55	Comp Mole Frac (C3oicAcid)	0.0001 *	0.0002 *	0.0007 *	0.0002	0.0001
56	Comp Mole Frac (Ethanol)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000 *	0.0000 *	0.0000 *	0.0000	0.0000
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2			Unit Set: Project			
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6	Workbook: Case (Main) (continued)					
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9						
10	Compositions (continued)				Fluid Pkg:	All
11	Name	21010.	23010	23012	23013	23008
12	Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0001	0.0000	0.0000 *
13	Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
14	Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0207	0.0002	0.0000 *
15	Comp Mole Frac (CO)	0.0000	0.0000 *	0.9757	0.0070	0.0000 *
16	Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0003	0.0001	0.0000 *
17	Comp Mole Frac (Methanol)	0.1034	0.0005 *	0.0000	0.0023	0.0005 *
18	Comp Mole Frac (CH3I)	0.0041	0.0047 *	0.0003	0.0241	0.0047 *
19	Comp Mole Frac (M-Acetate)	0.0020	0.0041 *	0.0001	0.0055	0.0041 *
20	Comp Mole Frac (AceticAcid)	0.4341	0.9473 *	0.0026	0.9173	0.9473 *
21	Comp Mole Frac (H2O)	0.4562	0.0433 *	0.0003	0.0432	0.0433 *
22	Comp Mole Frac (HI)	0.0000	0.0000 *	0.0000	0.0002	0.0000 *
23	Comp Mole Frac (C3oicAcid)	0.0002	0.0000 *	0.0000	0.0000	0.0000 *
24	Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
25	Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
26	Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
27	Name	23010.	23009.	23370	23372	23009
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
29	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
31	Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
32	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
33	Comp Mole Frac (Methanol)	0.0005	0.0005	0.0000 *	0.0000	0.0005
34	Comp Mole Frac (CH3I)	0.0047	0.0047	0.0000 *	0.0000	0.0047
35	Comp Mole Frac (M-Acetate)	0.0041	0.0041	0.0000 *	0.0000	0.0041
36	Comp Mole Frac (AceticAcid)	0.9473	0.9473	0.0000 *	0.0000	0.9473
37	Comp Mole Frac (H2O)	0.0433	0.0433	1.0000 *	1.0000	0.0433
38	Comp Mole Frac (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
39	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
40	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
43	Name	22011	23014	23001	23002	23011*
44	Comp Mole Frac (Hydrogen)	0.0578 *	0.0741	0.0000	0.0221	0.0000
45	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.1450 *	0.1851	0.0001	0.0696	0.0001
47	Comp Mole Frac (CO)	0.4200 *	0.5371	0.0003	0.8452	0.0003
48	Comp Mole Frac (CO2)	0.1739 *	0.1895	0.0054	0.0566	0.0054
49	Comp Mole Frac (Methanol)	0.0000 *	0.0000	0.0005	0.0000	0.0005
50	Comp Mole Frac (CH3I)	0.1669 *	0.0016	0.0387	0.0006	0.0387
51	Comp Mole Frac (M-Acetate)	0.0051 *	0.0003	0.0050	0.0001	0.0050
52	Comp Mole Frac (AceticAcid)	0.0001 *	0.0105	0.9025	0.0049	0.9025
53	Comp Mole Frac (H2O)	0.0094 *	0.0014	0.0431	0.0006	0.0431
54	Comp Mole Frac (HI)	0.0218 *	0.0003	0.0045	0.0001	0.0045
55	Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
56	Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
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6	Workbook: Case (Main) (continued)					
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10	Compositions (continued)				Fluid Pkg:	All
11	Name	23011	23003	23004	23301	23006*
12	Comp Mole Frac (Hydrogen)	0.0000	0.0001	0.0000	0.0000 *	0.0000
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
14	Comp Mole Frac (Nitrogen)	0.0002	0.0023	0.0000	0.0000 *	0.0000
15	Comp Mole Frac (CO)	0.0019	0.0281	0.0000	0.0000 *	0.0000
16	Comp Mole Frac (CO2)	0.0041	0.0603	0.0000	0.0000 *	0.0000
17	Comp Mole Frac (Methanol)	0.0010	0.0056	0.0006	0.0000 *	0.0006
18	Comp Mole Frac (CH3I)	0.0352	0.4492	0.0050	0.5000 *	0.0047
19	Comp Mole Frac (M-Acetate)	0.0051	0.0125	0.0046	0.0000 *	0.0043
20	Comp Mole Frac (AceticAcid)	0.9061	0.3386	0.9474	0.0000 *	0.9448
21	Comp Mole Frac (H2O)	0.0431	0.0528	0.0424	0.5000 *	0.0456
22	Comp Mole Frac (HI)	0.0034	0.0505	0.0000	0.0000 *	0.0000
23	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000 *	0.0000
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000 *	0.0000
25	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
27	Name	23302	23006	23007*	23008*	22020
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
29	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
31	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
32	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
33	Comp Mole Frac (Methanol)	0.0000	0.0006	0.0006	0.0006	0.0000 *
34	Comp Mole Frac (CH3I)	0.5000	0.0047	0.0047	0.0047	0.0000 *
35	Comp Mole Frac (M-Acetate)	0.0000	0.0043	0.0043	0.0043	0.0000 *
36	Comp Mole Frac (AceticAcid)	0.0000	0.9448	0.9448	0.9448	0.9904 *
37	Comp Mole Frac (H2O)	0.5000	0.0456	0.0456	0.0456	0.0087 *
38	Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
39	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0009 *
40	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
41	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
42	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
43	Name	koh	22068*	22068	22067	22069
44	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
45	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
46	Comp Mole Frac (Nitrogen)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
47	Comp Mole Frac (CO)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
48	Comp Mole Frac (CO2)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
49	Comp Mole Frac (Methanol)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
50	Comp Mole Frac (CH3I)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
51	Comp Mole Frac (M-Acetate)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
52	Comp Mole Frac (AceticAcid)	0.0000 *	0.9898	0.9898	0.8977 *	0.9461 *
53	Comp Mole Frac (H2O)	0.9091 *	0.0093	0.0093	0.1023 *	0.0219 *
54	Comp Mole Frac (HI)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
55	Comp Mole Frac (C3oicAcid)	0.0000 *	0.0009	0.0009	0.0000 *	0.0320 *
56	Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
57	Comp Mole Frac (KOH*)	0.0909 *	0.0001	0.0001	0.0000 *	0.0000 *
58	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000 *	0.0000 *
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6	Workbook: Case (Main) (continued)					
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10	Compositions (continued)				Fluid Pkg:	All
11	Name	22051	22064	22052	22065	22306
12	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000 *
14	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
15	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
16	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000 *
17	Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
18	Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000 *
19	Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000 *
20	Comp Mole Frac (AceticAcid)	0.8967	0.9980	0.9409	0.9980	0.0000 *
21	Comp Mole Frac (H2O)	0.1033	0.0019	0.0001	0.0019	1.0000 *
22	Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000 *
23	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0571	0.0000	0.0000 *
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000 *
25	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0018	0.0000	0.0000 *
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000 *
27	Name	22307	22051*	22304	22305	VAP22051*
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
29	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
31	Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
32	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000 *	0.0000	0.0000
33	Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
34	Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000 *	0.0000	0.0000
35	Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000 *	0.0000	0.0000
36	Comp Mole Frac (AceticAcid)	0.0000	0.8967	0.0000 *	0.0000	0.8967
37	Comp Mole Frac (H2O)	1.0000	0.1033	1.0000 *	1.0000	0.1033
38	Comp Mole Frac (HI)	0.0000	0.0000	0.0000 *	0.0000	0.0000
39	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000 *	0.0000	0.0000
40	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
43	Name	22066	22066*	22067*	22054	22060
44	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
47	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
48	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
49	Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000
50	Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
51	Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
52	Comp Mole Frac (AceticAcid)	0.8967	0.8967	0.8967	0.8967	0.8967
53	Comp Mole Frac (H2O)	0.1033	0.1033	0.1033	0.1033	0.1033
54	Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
55	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0000
56	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
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6	Workbook: Case (Main) (continued)					
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9						
10	Compositions (continued)				Fluid Pkg:	All
11	Name	22055	22053	22070	25009	25009*
12	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
14	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
15	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
16	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000	0.0000
17	Comp Mole Frac (Methanol)	0.0000	0.0000	0.0000	0.0000	0.0000
18	Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000	0.0000
19	Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000	0.0000
20	Comp Mole Frac (AceticAcid)	0.8967	0.9409	0.5929	0.9980	0.9980
21	Comp Mole Frac (H2O)	0.1033	0.0001	0.0085	0.0019	0.0019
22	Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000	0.0000
23	Comp Mole Frac (C3oicAcid)	0.0000	0.0571	0.3721	0.0000	0.0000
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
25	Comp Mole Frac (KOH*)	0.0000	0.0018	0.0265	0.0000	0.0000
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
27	Name	22002	22003	22024	22004*	22009*
28	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000 *	0.0014	0.0000	0.0000
29	Comp Mole Frac (Methane)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000 *	0.0000 *	0.0036	0.0000	0.0000
31	Comp Mole Frac (CO)	0.0000 *	0.0000 *	0.0102	0.0000	0.0000
32	Comp Mole Frac (CO2)	0.0003 *	0.0001 *	0.0040	0.0000	0.0001
33	Comp Mole Frac (Methanol)	0.0026 *	0.0006 *	0.0025	0.0001	0.0006
34	Comp Mole Frac (CH3I)	0.2490 *	0.0380 *	0.2482	0.0072	0.0381
35	Comp Mole Frac (M-Acetate)	0.0328 *	0.0087 *	0.0326	0.0033	0.0087
36	Comp Mole Frac (AceticAcid)	0.1761 *	0.6157 *	0.1625	0.7604	0.6143
37	Comp Mole Frac (H2O)	0.5385 *	0.3365 *	0.5339	0.2283	0.3378
38	Comp Mole Frac (HI)	0.0007 *	0.0000 *	0.0009	0.0000	0.0000
39	Comp Mole Frac (C3oicAcid)	0.0001 *	0.0004 *	0.0001	0.0007	0.0004
40	Comp Mole Frac (Ethanol)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
41	Comp Mole Frac (KOH*)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000 *	0.0000 *	0.0000	0.0000	0.0000
43	Name	21009*	22009	22003*	22008	22300
44	Comp Mole Frac (Hydrogen)	0.0012 *	0.0000	0.0000	0.0014	0.0000 *
45	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
46	Comp Mole Frac (Nitrogen)	0.0031 *	0.0000	0.0000	0.0036	0.0000 *
47	Comp Mole Frac (CO)	0.0088 *	0.0000	0.0000	0.0104	0.0000 *
48	Comp Mole Frac (CO2)	0.0034 *	0.0001	0.0001	0.0046	0.0000 *
49	Comp Mole Frac (Methanol)	0.0013 *	0.0006	0.0006	0.0026	0.0000 *
50	Comp Mole Frac (CH3I)	0.1245 *	0.0381	0.0381	0.2503	0.0000 *
51	Comp Mole Frac (M-Acetate)	0.0183 *	0.0087	0.0087	0.0324	0.0000 *
52	Comp Mole Frac (AceticAcid)	0.4322 *	0.6143	0.6143	0.1643	0.0000 *
53	Comp Mole Frac (H2O)	0.4063 *	0.3378	0.3378	0.5289	1.0000 *
54	Comp Mole Frac (HI)	0.0005 *	0.0000	0.0000	0.0014	0.0000 *
55	Comp Mole Frac (C3oicAcid)	0.0003 *	0.0004	0.0004	0.0001	0.0000 *
56	Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
57	Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
58	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000 *
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60						
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62						
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3						
4				Date/Time: Mon Dec 16 09:45:15 2019		
5						
6	Workbook: Case (Main) (continued)					
7						
8						
9	Compositions (continued) Fluid Pkg: All					
10						
11	Name	22008*	22301	22010	22011*	22012
12	Comp Mole Frac (Hydrogen)	0.0014	0.0000	0.0096 *	0.0573	0.0000
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
14	Comp Mole Frac (Nitrogen)	0.0036	0.0000	0.0242 *	0.1437	0.0002
15	Comp Mole Frac (CO)	0.0104	0.0000	0.0699 *	0.4160	0.0003
16	Comp Mole Frac (CO2)	0.0046	0.0000	0.0347 *	0.1737	0.0068
17	Comp Mole Frac (Methanol)	0.0026	0.0000	0.0007 *	0.0000	0.0009
18	Comp Mole Frac (CH3I)	0.2503	0.0000	0.6584 *	0.1672	0.7571
19	Comp Mole Frac (M-Acetate)	0.0324	0.0000	0.0394 *	0.0051	0.0464
20	Comp Mole Frac (AceticAcid)	0.1643	0.0000	0.0126 *	0.0001	0.0151
21	Comp Mole Frac (H2O)	0.5289	1.0000	0.1383 *	0.0094	0.1643
22	Comp Mole Frac (HI)	0.0014	0.0000	0.0121 *	0.0276	0.0090
23	Comp Mole Frac (C3oicAcid)	0.0001	0.0000	0.0000 *	0.0000	0.0000
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
25	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
27	Name	22026	22026*	22038*	22010**	22006*
28	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0013	0.0095	0.0000
29	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000 *	0.0001	0.0032	0.0240	0.0000
31	Comp Mole Frac (CO)	0.0000 *	0.0003	0.0092	0.0694	0.0000
32	Comp Mole Frac (CO2)	0.0000 *	0.0065	0.0048	0.0346	0.0003
33	Comp Mole Frac (Methanol)	0.0000 *	0.0008	0.0024	0.0007	0.0026
34	Comp Mole Frac (CH3I)	0.0000 *	0.7313	0.3051	0.6591	0.2508
35	Comp Mole Frac (M-Acetate)	0.0000 *	0.0448	0.0338	0.0395	0.0330
36	Comp Mole Frac (AceticAcid)	1.0000 *	0.0488	0.1512	0.0126	0.1724
37	Comp Mole Frac (H2O)	0.0000 *	0.1586	0.4867	0.1384	0.5401
38	Comp Mole Frac (HI)	0.0000 *	0.0087	0.0022	0.0122	0.0007
39	Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0001	0.0000	0.0001
40	Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
41	Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
43	Name	22006	22007	22002*	22001	22002/
44	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
47	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
48	Comp Mole Frac (CO2)	0.0003	0.0003	0.0003	0.0003	0.0003
49	Comp Mole Frac (Methanol)	0.0026	0.0026	0.0026	0.0026	0.0026
50	Comp Mole Frac (CH3I)	0.2508	0.2508	0.2508	0.2508	0.2508
51	Comp Mole Frac (M-Acetate)	0.0330	0.0330	0.0330	0.0330	0.0330
52	Comp Mole Frac (AceticAcid)	0.1724	0.1724	0.1724	0.1724	0.1724
53	Comp Mole Frac (H2O)	0.5401	0.5401	0.5401	0.5401	0.5401
54	Comp Mole Frac (HI)	0.0007	0.0007	0.0007	0.0007	0.0007
55	Comp Mole Frac (C3oicAcid)	0.0001	0.0001	0.0001	0.0001	0.0001
56	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
59						
60						
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62						
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2			Unit Set: Project			
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4			Date/Time: Mon Dec 16 09:45:15 2019			
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6	Workbook: Case (Main) (continued)					
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9						
10	Compositions (continued)				Fluid Pkg:	All
11	Name	22023	22018	22022	22025	22019
12	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
14	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
15	Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
16	Comp Mole Frac (CO2)	0.0001	0.0001	0.0001 *	0.0000 *	0.0001
17	Comp Mole Frac (Methanol)	0.0006	0.0006	0.0073 *	1.0000 *	0.0073
18	Comp Mole Frac (CH3I)	0.0381	0.0373	0.0664 *	0.0000 *	0.0664
19	Comp Mole Frac (M-Acetate)	0.0087	0.0085	0.0152 *	0.0000 *	0.0152
20	Comp Mole Frac (AceticAcid)	0.6143	0.6206	0.3187 *	0.0000 *	0.3187
21	Comp Mole Frac (H2O)	0.3378	0.3324	0.5920 *	0.0000 *	0.5920
22	Comp Mole Frac (HI)	0.0000	0.0000	0.0001 *	0.0000 *	0.0001
23	Comp Mole Frac (C3oicAcid)	0.0004	0.0004	0.0000 *	0.0000 *	0.0000
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
25	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
27	Name	22020*	22019*	22302	22303	VAP
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
29	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000 *	0.0000	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000	0.0000
31	Comp Mole Frac (CO)	0.0000	0.0000	0.0000 *	0.0000	0.0000
32	Comp Mole Frac (CO2)	0.0000	0.0001	0.0000 *	0.0000	0.0001
33	Comp Mole Frac (Methanol)	0.0000	0.0073	0.0000 *	0.0000	0.0074
34	Comp Mole Frac (CH3I)	0.0000	0.0664	0.0000 *	0.0000	0.0661
35	Comp Mole Frac (M-Acetate)	0.0000	0.0152	0.0000 *	0.0000	0.0152
36	Comp Mole Frac (AceticAcid)	0.9991	0.3187	0.0000 *	0.0000	0.3212
37	Comp Mole Frac (H2O)	0.0000	0.5920	1.0000 *	1.0000	0.5898
38	Comp Mole Frac (HI)	0.0000	0.0001	0.0000 *	0.0000	0.0001
39	Comp Mole Frac (C3oicAcid)	0.0009	0.0000	0.0000 *	0.0000	0.0000
40	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000 *	0.0000	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000 *	0.0000	0.0000
43	Name	22021	22021*	22022*	22014	22080
44	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
45	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.0000	0.0000	0.0000	0.0000	0.0000
47	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
48	Comp Mole Frac (CO2)	0.0001	0.0001	0.0001	0.0001	0.0002
49	Comp Mole Frac (Methanol)	0.0073	0.0073	0.0073	0.0073	0.0049
50	Comp Mole Frac (CH3I)	0.0664	0.0664	0.0664	0.0664	0.1600
51	Comp Mole Frac (M-Acetate)	0.0152	0.0152	0.0152	0.0152	0.0242
52	Comp Mole Frac (AceticAcid)	0.3187	0.3187	0.3187	0.3187	0.2444
53	Comp Mole Frac (H2O)	0.5920	0.5920	0.5920	0.5920	0.5657
54	Comp Mole Frac (HI)	0.0001	0.0001	0.0001	0.0001	0.0004
55	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000	0.0000
56	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
59						
60						
61						
62						
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6	Workbook: Case (Main) (continued)					
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9						
10	Compositions (continued)				Fluid Pkg:	All
11	Name	22157	21006*	21007*	21083	21017*
12	Comp Mole Frac (Hydrogen)	0.0000	0.0001	0.0000	0.0000	0.0000
13	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000	0.0000
14	Comp Mole Frac (Nitrogen)	0.0000	0.0204	0.0000	0.0010	0.0010
15	Comp Mole Frac (CO)	0.0000	0.9582	0.0010	0.0000	0.0000
16	Comp Mole Frac (CO2)	0.0002	0.0003	0.0000	0.0000	0.0000
17	Comp Mole Frac (Methanol)	0.0049	0.0015	0.2846	0.9980	0.9980
18	Comp Mole Frac (CH3I)	0.1600	0.0164	0.1061	0.0000	0.0000
19	Comp Mole Frac (M-Acetate)	0.0242	0.0013	0.0182	0.0000	0.0000
20	Comp Mole Frac (AceticAcid)	0.2444	0.0003	0.1916	0.0000	0.0000
21	Comp Mole Frac (H2O)	0.5657	0.0012	0.3982	0.0009	0.0009
22	Comp Mole Frac (HI)	0.0004	0.0002	0.0002	0.0000	0.0000
23	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0001	0.0000	0.0000
24	Comp Mole Frac (Ethanol)	0.0000	0.0000	0.0000	0.0001	0.0001
25	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000	0.0000
26	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000	0.0000
27	Name	21027	21013*	21017**	22375	22038***
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000	0.0000	0.0000 *	0.0013
29	Comp Mole Frac (Methane)	0.0000	0.0000	0.0000	0.0000 *	0.0000
30	Comp Mole Frac (Nitrogen)	0.0010	0.0010	0.0010	0.0000 *	0.0032
31	Comp Mole Frac (CO)	0.0000	0.0000	0.0000	0.0000 *	0.0092
32	Comp Mole Frac (CO2)	0.0000	0.0000	0.0000	0.0000 *	0.0048
33	Comp Mole Frac (Methanol)	0.9980	0.9980	0.9980	0.0000 *	0.0024
34	Comp Mole Frac (CH3I)	0.0000	0.0000	0.0000	0.0000 *	0.3051
35	Comp Mole Frac (M-Acetate)	0.0000	0.0000	0.0000	0.0000 *	0.0338
36	Comp Mole Frac (AceticAcid)	0.0000	0.0000	0.0000	0.0000 *	0.1512
37	Comp Mole Frac (H2O)	0.0009	0.0009	0.0009	1.0000 *	0.4867
38	Comp Mole Frac (HI)	0.0000	0.0000	0.0000	0.0000 *	0.0022
39	Comp Mole Frac (C3oicAcid)	0.0000	0.0000	0.0000	0.0000 *	0.0001
40	Comp Mole Frac (Ethanol)	0.0001	0.0001	0.0001	0.0000 *	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000	0.0000	0.0000 *	0.0000
43	Name	22376	22370	22371	2201000	2103*
44	Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000	0.0096	0.0000
45	Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000	0.0000
46	Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0242	0.0000
47	Comp Mole Frac (CO)	0.0000	0.0000 *	0.0000	0.0699	0.0001
48	Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0000	0.0347	0.0000
49	Comp Mole Frac (Methanol)	0.0000	0.0000 *	0.0000	0.0007	0.1365
50	Comp Mole Frac (CH3I)	0.0000	0.0000 *	0.0000	0.6584	0.0104
51	Comp Mole Frac (M-Acetate)	0.0000	0.0000 *	0.0000	0.0394	0.0035
52	Comp Mole Frac (AceticAcid)	0.0000	0.0000 *	0.0000	0.0126	0.3910
53	Comp Mole Frac (H2O)	1.0000	1.0000 *	1.0000	0.1383	0.4582
54	Comp Mole Frac (HI)	0.0000	0.0000 *	0.0000	0.0121	0.0000
55	Comp Mole Frac (C3oicAcid)	0.0000	0.0000 *	0.0000	0.0000	0.0002
56	Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000	0.0000
57	Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000	0.0000
58	Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000	0.0000
59						
60						
61						
62						
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6	Workbook: Case (Main) (continued)					
7						
8						
9						
10	Compositions (continued)				Fluid Pkg:	All
11	Name	21001	21005.	TO FLARE	21006	23004.
12	Comp Mole Frac (Hydrogen)	0.0000 *	0.0000	0.0000	0.0001	0.0000
13	Comp Mole Frac (Methane)	0.0000 *	0.0000	0.0000	0.0000	0.0000
14	Comp Mole Frac (Nitrogen)	0.0200 *	0.0128	0.0128	0.0204	0.0000
15	Comp Mole Frac (CO)	0.9800 *	0.6030	0.6030	0.9582	0.0000
16	Comp Mole Frac (CO2)	0.0000 *	0.0002	0.0002	0.0003	0.0000
17	Comp Mole Frac (Methanol)	0.0000 *	0.1065	0.1065	0.0015	0.0006
18	Comp Mole Frac (CH3I)	0.0000 *	0.0497	0.0497	0.0164	0.0047
19	Comp Mole Frac (M-Acetate)	0.0000 *	0.0076	0.0076	0.0013	0.0043
20	Comp Mole Frac (AceticAcid)	0.0000 *	0.0713	0.0713	0.0003	0.9448
21	Comp Mole Frac (H2O)	0.0000 *	0.1485	0.1485	0.0012	0.0456
22	Comp Mole Frac (HI)	0.0000 *	0.0002	0.0002	0.0002	0.0000
23	Comp Mole Frac (C3oicAcid)	0.0000 *	0.0000	0.0000	0.0000	0.0000
24	Comp Mole Frac (Ethanol)	0.0000 *	0.0000	0.0000	0.0000	0.0000
25	Comp Mole Frac (KOH*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
26	Comp Mole Frac (Rh*)	0.0000 *	0.0000	0.0000	0.0000	0.0000
27	Name	22069.	22071	22013.	21300	21301
28	Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
29	Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
30	Comp Mole Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
31	Comp Mole Frac (CO)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
32	Comp Mole Frac (CO2)	0.0000	0.0000 *	0.0003	0.0000 *	0.0000
33	Comp Mole Frac (Methanol)	0.0000	0.0000 *	0.0026	0.0000 *	0.0000
34	Comp Mole Frac (CH3I)	0.0000	0.0000 *	0.2508	0.0000 *	0.0000
35	Comp Mole Frac (M-Acetate)	0.0000	0.0000 *	0.0330	0.0000 *	0.0000
36	Comp Mole Frac (AceticAcid)	0.9453	0.0000 *	0.1724	0.0000 *	0.0000
37	Comp Mole Frac (H2O)	0.0219	1.0000 *	0.5401	1.0000 *	1.0000
38	Comp Mole Frac (HI)	0.0000	0.0000 *	0.0007	0.0000 *	0.0000
39	Comp Mole Frac (C3oicAcid)	0.0328	0.0000 *	0.0001	0.0000 *	0.0000
40	Comp Mole Frac (Ethanol)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
41	Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
42	Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000	0.0000 *	0.0000
43	Name	21005*	1	21018		
44	Comp Mole Frac (Hydrogen)	0.0000	0.0000 *	0.0000		
45	Comp Mole Frac (Methane)	0.0000	0.0000 *	0.0000		
46	Comp Mole Frac (Nitrogen)	0.0128	0.0010 *	0.0010		
47	Comp Mole Frac (CO)	0.6030	0.0000 *	0.0000		
48	Comp Mole Frac (CO2)	0.0002	0.0000 *	0.0000		
49	Comp Mole Frac (Methanol)	0.1065	0.9980 *	0.9980		
50	Comp Mole Frac (CH3I)	0.0497	0.0000 *	0.0000		
51	Comp Mole Frac (M-Acetate)	0.0076	0.0000 *	0.0000		
52	Comp Mole Frac (AceticAcid)	0.0713	0.0000 *	0.0000		
53	Comp Mole Frac (H2O)	0.1485	0.0009 *	0.0009		
54	Comp Mole Frac (HI)	0.0002	0.0000 *	0.0000		
55	Comp Mole Frac (C3oicAcid)	0.0000	0.0000 *	0.0000		
56	Comp Mole Frac (Ethanol)	0.0000	0.0001 *	0.0001		
57	Comp Mole Frac (KOH*)	0.0000	0.0000 *	0.0000		
58	Comp Mole Frac (Rh*)	0.0000	0.0000 *	0.0000		
59	Energy Streams					
60						
61	Name	e2301	e23006	e2205	E 2207	E P-2207
62	Heat Flow (kcal/h)	798.3	5052	2488	9.729e+006	1.435e+004
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6	Workbook: Case (Main) (continued)					
7						
8						
9	Energy Streams (continued)				Fluid Pkg:	All
10						
11	Name	E2211	03-E 2215	E 2201	E1	E P2202
12	Heat Flow (kcal/h)	66.83	9.117e+004	1.563e+006	1690	3397
13	Name	E 2204	E P2204	E P2206	E 1	E 2
14	Heat Flow (kcal/h)	5.484e+006	5618	5515	1.272e+004	1.242e+007
15	Name	E 4	E 11	e 1		
16	Heat Flow (kcal/h)	7027	8852	4.897e+005		
17						
18	Unit Ops					
19	Operation Name	Operation Type	Feeds	Products	Ignored	Calc Level
20	03-d 2101	Tank	21002	21003	No	500.0 *
21				21003*		
22	V-100	Tank	22051*	22066	No	500.0 *
23				VAP22051*		
24	03-TK 2502 A-B	Tank	22065	25009*	No	500.0 *
25				25009		
26	D 2207	Tank	22038***	22006*	No	500.0 *
27				22010**		
28	V-101	Tank	22019*	22021	No	500.0 *
29				VAP		
30	d-2103	Tank	2103*	21010.	No	500.0 *
31				21009		
32	03-p-2301	Pump	23001	23011*	No	500.0 *
33			e2301			
34	P-100	Pump	23006*	23006	No	500.0 *
35			e23006			
36	P-101	Pump	22068*	22068	No	500.0 *
37			e2205			
38	03-P 2207 A- B	Pump	22066	22066*	No	500.0 *
39			E P-2207			
40	03-P 2211 A-B	Pump	22052	22053	No	500.0 *
41			E2211			
42	P 2203	Pump	22009*	22009	No	500.0 *
43			E1			
44	P 2202	Pump	22002*	22002/	No	500.0 *
45			E P2202			
46	P 2204	Pump	22021	22021*	No	500.0 *
47			E P2204			
48	P 2206	Pump	22080	22157	No	500.0 *
49			E P2206			
50	P-102	Pump	21003	21027	No	500.0 *
51			E 1			
52	P-2201	Pump	22006	22013.	No	500.0 *
53			E 11			
54	CSTR-100	Cont. Stirred Tank Reactor	21014*	21008	No	500.0 *
55			21007	21005		
56			21010			
57			21001			
58	MIX-101	Mixer	22013	2101124	No	500.0 *
59			22015			
60	MIX-100	Mixer	21013*	21012	No	500.0 *
61			21018			
62	MIX-102	Mixer	21012	21014*	No	500.0 *
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3						
4				Date/Time: Mon Dec 16 09:45:15 2019		
5						
6	Workbook: Case (Main) (continued)					
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8						
9	Unit Ops (continued)					
10						
11	Operation Name	Operation Type	Feeds	Products	Ignored	Calc Level
12	MIX-102	Mixer	2101124		No	500.0 *
13	MIX-103	Mixer	22004	2103	No	500.0 *
14			21008			
15	MIX-104	Mixer	23012	23002	No	500.0 *
16			23014			
17	MIX-105	Mixer	23013	23011	No	500.0 *
18			23011*			
19	MIX-106	Mixer	koh	22068*	No	500.0 *
20			22020			
21	MIX-108	Mixer	23003	22008	No	500.0 *
22			22024			
23	MIX-109	Mixer	22012	22026*	No	500.0 *
24			22026			
25	MIX-110	Mixer	22026*	22038*	No	500.0 *
26			22008*			
27	MIX-111	Mixer	22023	22018	No	500.0 *
28			23007*			
29			22060			
30	MIX-112	Mixer	22001	22080	No	500.0 *
31			22014			
32	MIX-107	Mixer	22055	23004.	No	500.0 *
33			23004			
34	TEE-101	Tee	23008	23010.	No	500.0 *
35				23009.		
36	TEE-102	Tee	23006	23007*	No	500.0 *
37				23008*		
38	TEE-103	Tee	22066*	22067*	No	500.0 *
39				22054		
40	TEE-104	Tee	22054	22060	No	500.0 *
41				22055		
42	TEE-106	Tee	22009	22003*	No	500.0 *
43				22023		
44	TEE-109	Tee	22006*	22006	No	500.0 *
45				22007		
46	TEE-108	Tee	22007	22002*	No	500.0 *
47				22001		
48	TEE-110	Tee	22021*	22022*	No	500.0 *
49				22014		
50	TEE-100	Tee	21027	21083	No	500.0 *
51				21017*		
52	TEE-105	Tee	21017*	21013*	No	500.0 *
53				21017**		
54	TEE-111	Tee	21005	21005.	No	500.0 *
55				TO FLARE		
56	T 2301	Absorber	23010	23013	No	2500 *
57			21006	23012		
58	T 2302	Absorber	23009	23001	No	2500 *
59			22011	23014		
60	03-E-2302	Heat Exchanger	23009.	23009	No	500.0 *
61			23370	23372		
62	E-101	Heat Exchanger	23004.	23006*	No	500.0 *
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1	<div></div> <div>Company Name Not Available Bedford, MA USA</div>			Case Name: ACETIC ACID FIN.HSC		
2				Unit Set: Project		
3						
4				Date/Time: Mon Dec 16 09:45:15 2019		
5						
6	Workbook: Case (Main) (continued)					
7						
8						
9	Unit Ops (continued)					
10						
11	Operation Name	Operation Type	Feeds	Products	Ignored	Calc Level
12	E-101	Heat Exchanger	23301	23302	No	500.0 *
13	03-E 2209	Heat Exchanger	22064	22065	No	500.0 *
14			22306	22307		
15	03-E 2208	Heat Exchanger	22051	22051*	No	500.0 *
16			22304	22305		
17	E 2202	Heat Exchanger	22008	22008*	No	500.0 *
18			22300	22301		
19	E-103	Heat Exchanger	22019	22019*	No	500.0 *
20			22302	22303		
21	E 2206	Heat Exchanger	22038*	22038***	No	500.0 *
22			22375	22376		
23	E 2203	Heat Exchanger	22010	2201000	No	500.0 *
24			22370	22371		
25	E-104	Heat Exchanger	21005.	21005*	No	500.0 *
26			21300	21301		
27	03-T-2303	Reboiled Absorber	23011	23004	No	2500 *
28				23003		
29	03-T 2203	Reboiled Absorber	22067	22052	No	2500 *
30			22068	22051		
31			22069	22064		
32			E 2207			
33	03-T 2206	Reboiled Absorber	22053	22070	No	2500 *
34			22071	22069.		
35			03-E 2215			
36	T 2201	Reboiled Absorber	22002	22004*	No	2500 *
37			22003	22024		
38			21009*	22009*		
39			E 2201			
40	T 2202	Reboiled Absorber	22022	22020*	No	2500 *
41			22018	22019		
42			22025			
43			E 2204			
44	D 2208	Separator	2201000	22012	No	500.0 *
45				22011*		
46	V-102	Separator	21005*	21007*	No	500.0 *
47				21006*		
48	E-102	Heater	2103	2103*	No	500.0 *
49			E 2			
50	E-105	Heater	21006*	21006	No	500.0 *
51			E 4			
52	E-100	Heater	21017**	21018	No	500.0 *
53			e 1			
54	RCY-1	Recycle	21010.	21010	No	3500 *
55	RCY-2	Recycle	21007*	21007	No	3500 *
56	RCY-3	Recycle	23010.	23010	No	3500 *
57	RCY-4	Recycle	23008*	23008	No	3500 *
58	RCY-5	Recycle	22011*	22011	No	3500 *
59	RCY-6	Recycle	22069.	22069	No	3500 *
60	RCY-7	Recycle	22020*	22020	No	3500 *
61	RCY-8	Recycle	22067*	22067	No	3500 *
62	RCY-9	Recycle	22004*	22004	No	3500 *
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1	 <div>Company Name Not Available Bedford, MA USA</div>		Case Name: ACETIC ACID FIN.HSC				
2			Unit Set: Project				
3			Date/Time: Mon Dec 16 09:45:15 2019				
4							
5							
6	Workbook: Case (Main) (continued)						
7							
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9							
10	Unit Ops (continued)						
11	Operation Name	Operation Type	Feeds	Products	Ignored	Calc Level	
12	RCY-10	Recycle	22002/	22002	No	3500 *	
13	RCY-11	Recycle	22013.	22013	No	3500 *	
14	RCY-12	Recycle	22003*	22003	No	3500 *	
15	RCY-13	Recycle	22010**	22010	No	3500 *	
16	RCY-14	Recycle	22022*	22022	No	3500 *	
17	RCY-15	Recycle	21009	21009*	No	3500 *	
18							
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