



TEAM LND
Calgary, Alberta
CANADA

Case Name: C:\Documents and Settings\Edward A. Moscoso\Mis documentos\Hysys\De

Unit Set: EmUnits

Date/Time: Sun Nov 13 14:32:18 2005

Workbook: Case (Main)

Streams

Name	484	703	703A	702	702A
Vapour Fraction	0.0000	1.0000	1.0000	0.0000	0.0111
Temperature (C)	141.7 *	140.6	140.6	140.6	139.2
Pressure (kg/cm2_g)	11.80 *	4.600	0.4200	4.600	3.950
Mass Flow (kg/h)	9.409e+004 *	735.7	735.7	9.336e+004	9.336e+004
Mass Density (kg/m3)	665.5	11.38	2.936	664.8	408.6
Mass Enthalpy (kcal/kg)	-434.2	-339.9	-339.9	-434.9	-434.9
Molecular Weight	80.85	70.88	70.88	80.94	80.94
Comp Mass Frac (Cyclohexane)	0.9499 *	0.9016	0.9016	0.9503	0.9503
Comp Mass Frac (cycHexanol)	0.0175 *	0.0116	0.0116	0.0175	0.0175
Comp Mass Frac (CC6one)	0.0189 *	0.0051	0.0051	0.0191	0.0191
Comp Mass Frac (H2O)	0.0121 *	0.0171	0.0171	0.0120	0.0120
Comp Mass Frac (Oxygen)	0.0000 *	0.0023	0.0023	0.0000	0.0000
Comp Mass Frac (Nitrogen)	0.0010 *	0.0610	0.0610	0.0006	0.0006
Comp Mass Frac (CO)	0.0000 *	0.0007	0.0007	0.0000	0.0000
Comp Mass Frac (1-Pentanol)	0.0005 *	0.0008	0.0008	0.0005	0.0005
Comp Mass Frac (CC6Peroxide)	0.0000 *	0.0000	0.0000	0.0000	0.0000
Name	484A	704	705	733	1000A
Vapour Fraction	0.0089	0.0000	1.0000	0.0000	1.0000
Temperature (C)	140.6	136.7	131.3	46.89	214.6
Pressure (kg/cm2_g)	4.600	3.210 *	2.850 *	7.249	9.210
Mass Flow (kg/h)	9.409e+004	5.512e+004	5.835e+004	2.011e+004	1.090e+004
Mass Density (kg/m3)	458.8	670.5	9.041	755.6	4.462
Mass Enthalpy (kcal/kg)	-434.2	-423.9	-354.0	-443.8	-3119
Molecular Weight	80.85	82.98	79.83	83.20	18.02
Comp Mass Frac (Cyclohexane)	0.9499	0.9369	0.9776	0.9927	0.0000 *
Comp Mass Frac (cycHexanol)	0.0175	0.0244	0.0062	0.0036	0.0000 *
Comp Mass Frac (CC6one)	0.0189	0.0323	0.0000	0.0000	0.0000 *
Comp Mass Frac (H2O)	0.0121	0.0062	0.0145	0.0031	1.0000 *
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000	0.0000	0.0000 *
Comp Mass Frac (Nitrogen)	0.0010	0.0000	0.0010	0.0004	0.0000 *
Comp Mass Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000 *
Comp Mass Frac (1-Pentanol)	0.0005	0.0002	0.0007	0.0003	0.0000 *
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000	0.0000	0.0000 *
Name	1001	1000	704A	734	735
Vapour Fraction	0.0000 *	1.0000	0.2809	0.0000	0.0000
Temperature (C)	178.6	220.0 *	92.25	46.89	46.89 *
Pressure (kg/cm2_g)	8.858	12.00 *	0.3515 *	7.249	7.249 *
Mass Flow (kg/h)	1.090e+004	1.090e+004 *	5.512e+004	2.030e+004	4.041e+004 *
Mass Density (kg/m3)	876.1	5.616	13.03	755.6	755.6
Mass Enthalpy (kcal/kg)	-3624	-3119	-423.9	-443.8	-443.8
Molecular Weight	18.02	18.02	82.98	83.20	83.20
Comp Mass Frac (Cyclohexane)	0.0000	0.0000 *	0.9369	0.9927	0.9927 *
Comp Mass Frac (cycHexanol)	0.0000	0.0000 *	0.0244	0.0036	0.0036 *
Comp Mass Frac (CC6one)	0.0000	0.0000 *	0.0323	0.0000	0.0000 *
Comp Mass Frac (H2O)	1.0000	1.0000 *	0.0062	0.0031	0.0031 *
Comp Mass Frac (Oxygen)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
Comp Mass Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0004	0.0004 *
Comp Mass Frac (CO)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *
Comp Mass Frac (1-Pentanol)	0.0000	0.0000 *	0.0002	0.0003	0.0003 *
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000 *	0.0000	0.0000	0.0000 *



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Workbook: Case (Main) (continued)

Streams (continued)

Name	705A	707	706	709	708
Vapour Fraction	1.0000	1.0000	0.0000	1.0000	0.0000
Temperature (C)	131.3	118.0	118.0	92.18	103.3
Pressure (kg/cm ₂ _g)	2.850	2.830	2.830	0.4043 *	0.5709
Mass Flow (kg/h)	6418	215.5	5.171e+004	7.296e+004	8908
Mass Density (kg/m ³)	9.041	7.645	687.0	3.822	758.2
Mass Enthalpy (kcal/kg)	-354.0	-324.7	-446.9	-343.5	-571.3
Molecular Weight	79.83	65.63	79.90	82.35	83.72
Comp Mass Frac (Cyclohexane)	0.9776	0.8669	0.9780	0.9897	0.6098
Comp Mass Frac (cycHexanol)	0.0062	0.0034	0.0062	0.0034	0.1497
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0000	0.0000	0.2236
Comp Mass Frac (H ₂ O)	0.0145	0.0155	0.0145	0.0055	0.0166
Comp Mass Frac (Oxygen)	0.0000	0.0031	0.0000	0.0000	0.0000
Comp Mass Frac (Nitrogen)	0.0010	0.1091	0.0006	0.0011	0.0000
Comp Mass Frac (CO)	0.0000	0.0012	0.0000	0.0000	0.0000
Comp Mass Frac (1-Pentanol)	0.0007	0.0009	0.0007	0.0002	0.0003
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000	0.0000	0.0000
Name	711A	710	711	1002	1002A
Vapour Fraction	1.0000	0.0000	1.0000	1.0000	1.0000
Temperature (C)	103.4	133.4	103.4 *	220.0 *	210.9
Pressure (kg/cm ₂ _g)	0.5709	0.6039 *	0.5709 *	12.00 *	7.340 *
Mass Flow (kg/h)	5517	3391	5504 *	1132 *	1132
Mass Density (kg/m ³)	3.922	809.6	3.920	5.616	3.675
Mass Enthalpy (kcal/kg)	-408.6	-664.2	-408.9	-3119	-3119
Molecular Weight	78.05	94.95	78.03	18.02	18.02
Comp Mass Frac (Cyclohexane)	0.9098	0.1216	0.9096 *	0.0000 *	0.0000
Comp Mass Frac (cycHexanol)	0.0279	0.3477	0.0279 *	0.0000 *	0.0000
Comp Mass Frac (CC6one)	0.0381	0.5254	0.0382 *	0.0000 *	0.0000
Comp Mass Frac (H ₂ O)	0.0240	0.0046	0.0241 *	1.0000 *	1.0000
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
Comp Mass Frac (Nitrogen)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
Comp Mass Frac (CO)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
Comp Mass Frac (1-Pentanol)	0.0001	0.0006	0.0001 *	0.0000 *	0.0000
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000 *	0.0000 *	0.0000
Name	1003	CW_in	CW_out	713	715
Vapour Fraction	0.0000 *	0.0000	0.0000	0.0039	1.0000
Temperature (C)	169.7	31.90 *	44.97	46.78	46.78
Pressure (kg/cm ₂ _g)	6.988	4.500 *	3.500 *	0.4037	0.4037
Mass Flow (kg/h)	1132	6.687e+005	6.687e+005	8.177e+004	158.2
Mass Density (kg/m ³)	884.9	1002	992.3	449.9	2.145
Mass Enthalpy (kcal/kg)	-3633	-3773	-3760	-454.8	-170.7
Molecular Weight	18.02	18.02	18.02	82.01	40.49
Comp Mass Frac (Cyclohexane)	0.0000	0.0000 *	0.0000	0.9880	0.4588
Comp Mass Frac (cycHexanol)	0.0000	0.0000 *	0.0000	0.0037	0.0003
Comp Mass Frac (CC6one)	0.0000	0.0000 *	0.0000	0.0000	0.0000
Comp Mass Frac (H ₂ O)	1.0000	1.0000 *	1.0000	0.0065	0.0014
Comp Mass Frac (Oxygen)	0.0000	0.0000 *	0.0000	0.0000	0.0197
Comp Mass Frac (Nitrogen)	0.0000	0.0000 *	0.0000	0.0014	0.5075
Comp Mass Frac (CO)	0.0000	0.0000 *	0.0000	0.0000	0.0122
Comp Mass Frac (1-Pentanol)	0.0000	0.0000 *	0.0000	0.0003	0.0001
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000 *	0.0000	0.0000	0.0000



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Workbook: Case (Main) (continued)

Streams (continued)

Name	714	716	(OI/Ona)_in	(OI/Ona)_out	717
Vapour Fraction	0.0000	0.8528	0.0000	0.0000	1.0000
Temperature (C)	46.78	24.70	12.00 *	22.31	24.70
Pressure (kg/cm2_g)	0.4037	0.3992	12.00 *	12.00	0.3992
Mass Flow (kg/h)	8.162e+004	158.2	1200 *	1200	110.6
Mass Density (kg/m3)	756.0	2.690	918.6	908.9	1.881
Mass Enthalpy (kcal/kg)	-455.4	-205.2	-688.2	-683.6	-97.24
Molecular Weight	82.17	40.49	95.58	95.58	33.17
Comp Mass Frac (Cyclohexane)	0.9890	0.4588	0.2000 *	0.2000	0.2279
Comp Mass Frac (cycHexanol)	0.0037	0.0003	0.3200 *	0.3200	0.0000
Comp Mass Frac (CC6one)	0.0000	0.0000	0.4800 *	0.4800	0.0000
Comp Mass Frac (H2O)	0.0065	0.0014	0.0000 *	0.0000	0.0003
Comp Mass Frac (Oxygen)	0.0000	0.0197	0.0000 *	0.0000	0.0282
Comp Mass Frac (Nitrogen)	0.0005	0.5075	0.0000 *	0.0000	0.7261
Comp Mass Frac (CO)	0.0000	0.0122	0.0000 *	0.0000	0.0175
Comp Mass Frac (1-Pentanol)	0.0003	0.0001	0.0000 *	0.0000	0.0000
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000 *	0.0000	0.0000
Name	718	719-	705C	705B	709A
Vapour Fraction	0.0000	0.0000	0.0050	1.0000	0.9894
Temperature (C)	24.70	46.76	118.0	131.3	92.16
Pressure (kg/cm2_g)	0.3992	0.3992	2.830	2.850	0.4043
Mass Flow (kg/h)	47.68	8.166e+004	5.193e+004	5.193e+004	8.177e+004
Mass Density (kg/m3)	775.2	755.1	501.9	9.041	3.847
Mass Enthalpy (kcal/kg)	-455.5	-455.4	-446.4	-354.0	-347.1
Molecular Weight	82.89	82.17	79.83	79.83	82.01
Comp Mass Frac (Cyclohexane)	0.9943	0.9890	0.9776	0.9776	0.9880
Comp Mass Frac (cycHexanol)	0.0011	0.0037	0.0062	0.0062	0.0037
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (H2O)	0.0039	0.0065	0.0145	0.0145	0.0065
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (Nitrogen)	0.0005	0.0005	0.0010	0.0010	0.0014
Comp Mass Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (1-Pentanol)	0.0002	0.0003	0.0007	0.0007	0.0003
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000	0.0000	0.0000
Name	706A	706B	471	471A	471B
Vapour Fraction	0.0000	0.0000	0.0011	1.0000	0.0000
Temperature (C)	118.0	118.0 *	61.50 *	61.48	61.48
Pressure (kg/cm2_g)	2.830	2.830	1.500 *	1.300	1.300
Mass Flow (kg/h)	2327	4.939e+004	9.409e+004 *	66.46	9.403e+004
Mass Density (kg/m3)	687.0	687.0	673.1	3.382	746.7
Mass Enthalpy (kcal/kg)	-446.9	-446.9	-435.6	-178.2	-435.8
Molecular Weight	79.90	79.90	84.80	41.12	84.86
Comp Mass Frac (Cyclohexane)	0.9780	0.9780	0.9537 *	0.4732	0.9540
Comp Mass Frac (cycHexanol)	0.0062	0.0062	0.0079 *	0.0008	0.0079
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0034 *	0.0002	0.0034
Comp Mass Frac (H2O)	0.0145	0.0145	0.0003 *	0.0001	0.0003
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000 *	0.0190	0.0000
Comp Mass Frac (Nitrogen)	0.0006	0.0006	0.0010 *	0.4833	0.0007
Comp Mass Frac (CO)	0.0000	0.0000	0.0000 *	0.0233	0.0000
Comp Mass Frac (1-Pentanol)	0.0007	0.0007	0.0000 *	0.0000	0.0000
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0336 *	0.0000	0.0336



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Workbook: Case (Main) (continued)

Streams (continued)

Name	705A1	720-	721-	722	723
Vapour Fraction	1.0000	0.0000	1.0000	0.0000	0.0000
Temperature (C)	131.3	46.28	46.28	46.28	46.28
Pressure (kg/cm2_g)	0.4043 *	0.3992	0.3992	0.3992	0.3992
Mass Flow (kg/h)	6418	8.771e+004	0.0000	271.1	4.471e+004
Mass Density (kg/m3)	3.347	755.2	3.584	991.1	755.2
Mass Enthalpy (kcal/kg)	-354.0	-444.1	-530.8	-3756	-444.1
Molecular Weight	79.83	83.20	67.76	18.03	83.20
Comp Mass Frac (Cyclohexane)	0.9776	0.9927	0.9336	0.0000	0.9927
Comp Mass Frac (cycHexanol)	0.0062	0.0036	0.0005	0.0009	0.0036
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (H2O)	0.0145	0.0031	0.0659	0.9991	0.0031
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (Nitrogen)	0.0010	0.0004	0.0000	0.0000	0.0004
Comp Mass Frac (CO)	0.0000	0.0000	0.0000	0.0000	0.0000
Comp Mass Frac (1-Pentanol)	0.0007	0.0003	0.0000	0.0000	0.0003
Comp Mass Frac (CC6Peroxide)	0.0000	*** *	*** *	*** *	0.0000
Name	724	725	726	727-	706C
Vapour Fraction	0.0000	0.0000	1.0000	0.0000	0.1560
Temperature (C)	46.28	46.90	24.70	35.00 *	92.03
Pressure (kg/cm2_g)	0.3992	7.249	0.3992	2.000 *	0.4043 *
Mass Flow (kg/h)	4.300e+004	4.300e+004	110.6	3735 *	2327
Mass Density (kg/m3)	755.2	755.6	1.881	764.5	23.14
Mass Enthalpy (kcal/kg)	-444.1	-443.8	-97.24	-437.6	-446.9
Molecular Weight	83.20	83.20	33.17	84.16	79.90
Comp Mass Frac (Cyclohexane)	0.9927	0.9927	0.2279	1.0000 *	0.9780
Comp Mass Frac (cycHexanol)	0.0036	0.0036	0.0000	0.0000 *	0.0062
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0000	0.0000 *	0.0000
Comp Mass Frac (H2O)	0.0031	0.0031	0.0003	0.0000 *	0.0145
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0282	0.0000 *	0.0000
Comp Mass Frac (Nitrogen)	0.0004	0.0004	0.7261	0.0000 *	0.0006
Comp Mass Frac (CO)	0.0000	0.0000	0.0175	0.0000 *	0.0000
Comp Mass Frac (1-Pentanol)	0.0003	0.0003	0.0000	0.0000 *	0.0007
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	0.0000	0.0000 *	0.0000
Name	720+	721+	719+	725R1-	725R1+
Vapour Fraction	0.0000	0.0000	0.0000	0.0000	0.0000
Temperature (C)	46.28	46.28	46.76	46.89 *	46.89
Pressure (kg/cm2_g)	0.3992	0.3992	0.3992	7.249 *	7.249
Mass Flow (kg/h)	8.771e+004	0.0000	8.166e+004	2579	2579
Mass Density (kg/m3)	755.2	777.5	755.4	755.6	755.6
Mass Enthalpy (kcal/kg)	-444.1	-652.1	-455.4	-443.8	-443.8
Molecular Weight	83.20	67.76	82.17	83.20	83.20
Comp Mass Frac (Cyclohexane)	0.9927	0.9336	0.9890	0.9927 *	0.9927
Comp Mass Frac (cycHexanol)	0.0036	0.0005	0.0037	0.0036 *	0.0036
Comp Mass Frac (CC6one)	0.0000	0.0000	0.0000	0.0000 *	0.0000
Comp Mass Frac (H2O)	0.0031	0.0659	0.0065	0.0031 *	0.0031
Comp Mass Frac (Oxygen)	0.0000	0.0000	0.0000	0.0000 *	0.0000
Comp Mass Frac (Nitrogen)	0.0004	0.0000	0.0005	0.0004 *	0.0004
Comp Mass Frac (CO)	0.0000	0.0000	0.0000	0.0000 *	0.0000
Comp Mass Frac (1-Pentanol)	0.0003	0.0000	0.0003	0.0003 *	0.0003
Comp Mass Frac (CC6Peroxide)	0.0000	0.0000	*** *	0.0000 *	*** *