CASE 1A MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		0.0001	0.2171	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0168	1.0000	0.0188	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0297	0.0000	0.0000	0.0000	1.0000	0.9420	0.9420	0.8768	1.0000	0.0000	0.0000
Temperature	C	72.00	68.46	68.00	68.00	72.00	69.18	71.81	71.81	71.80	71.14	71.81	69.03	69.04	69.04	69.04	69.11	69.11	69.11	69.19	69.00	69.61	69.00	55.00	69.00	35.00	35.00	35.57	35.57	35.57	35.72
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	409.068	512.074	110.245	409.068	409.068	24.612	247.336	186.301	186.301	186.301	42.9	193.502	1.439	178.303	24.612	178.303	167.449	10.854	10.854	167.449	167.449	166.365	166.365	1.084	1.084	1.084	1.125	1.015	110.6	110.6
Molar Flow	kgmole/h	14.397	18.420	4.435	14.397	14.397	1.366	13.729	2.032	2.032	2.032	1.68	2.220	41.7	1.415	1.366	1.415	812.4	602.5	602.5	812.4	812.4	788.3	788.3	24.2	24.2	24.2	26.0	22.8	3.20	3.20
Mass Enthalpy	kJ/kg	-10.237	-8.888	-3.524	-10.251	-10.237	-15.696	-15.685	-3.728	-3.728	-3.728	-3.493	-3.835	-3.063	-2.926	-15.697	-2.925	-2.097	-15.697	-15.697	-2.096	-2.096	-2.093	-2.123	-2.567	-2.679	-2.679	-3.036	-2.527	-7.705	-7.704
Heat Flow	kW	-1,163,267	-1,264,271	-107,927	-1,164,850	-1,163,267	-107,304	-1,077,606	-192,924	-192,924	-192,924	-42	-206,139	-1,224	-144,921	-107,315	-144,887	-97,562	-47,325	-47,325	-97,515	-97,515	-96,743	-98,121	-773	-806	-806	-949	-712	-237	-237
Mass Density	kg/m3	880.06	43.16	8.72	892.70	880.06	973.71	971.36	808.72	787.23	399.67	8.76	369.02	5.01	799.51	973.36	799.81	790.67	973.46	973.27	312.85	790.27	792.39	802.32	3.33	3.70	3.70	3.83	3.45	777.90	778.36
Molecular Weight		28.41	27.80	24.86	28.41	28.41	18.02	18.02	91.70	91.70	91.70	25.52	87.15	34.54	126.02	18.02	126.02	206.11	18.02	18.02	206.11	206.11	211.05	211.05	44.86	44.86	44.86	43.29	44.52	34.52	34.52
VAPOR																															
Mass Flow	kg/h	44.6	101.891	110.245	---	44.6	---	---	---	53.9	1.139.3	42.9	1.439	1.439	---	---	---	---	---	---	1.084	---	---	---	1.084	1.014	1.014	1.015	1.015	---	---
Molar Flow	kgmole/h	1.75	3.999	4.435	---	1.75	---	---	---	2.08	34.2	1.68	41.7	41.7	---	---	---	---	---	---	24.2	---	---	---	24.2	22.8	22.8	22.8	22.8	---	---
Actual Volume Flow	m3/h	5.09	11.404	12.648	---	5.09	---	---	---	6.40	238.0	4.90	287.2	287.3	---	---	---	---	---	---	325.3	---	---	---	325.3	292.8	292.8	293.9	293.9	---	---
Std Gas Flow	MMSCFD	0.04	80.30	89.04	---	0.04	---	---	---	0.04	0.69	0.03	0.84	0.84	---	---	---	---	---	---	0.49	---	---	---	0.49	0.46	0.46	0.46	0.46	---	---
Mass Density	kg/m3	8.76	8.94	8.72	---	8.76	---	---	---	8.43	4.79	8.76	5.01	5.01	---	---	---	---	---	---	3.33	---	---	---	3.33	3.46	3.46	3.45	3.45	---	---
Molecular Weight		25.55	25.48	24.86	---	25.55	---	---	---	25.92	33.29	25.52	34.53	34.54	---	---	---	---	---	---	44.86	---	---	---	44.86	44.53	44.53	44.52	44.52	---	---
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.034	0.033	0.034	---	0.034	---	---	---	0.033	0.028	0.034	0.027	0.027	---	---	---	---	---	---	0.023	---	---	---	0.023	0.020	0.020	0.020	0.020	---	---
Mass Heat Capacity	kJ/kg-C	2.140	2.131	2.139	---	2.140	---	---	---	2.130	2.005	2.140	1.990	1.990	---	---	---	---	---	---	1.919	---	---	---	1.919	1.782	1.782	1.785	1.785	---	---
Cp/Cv		1.214	1.217	1.221	---	1.214	---	---	---	1.210	1.160	1.214	1.156	1.156	---	---	---	---	---	---	1.118	---	---	---	1.118	1.131	1.131	1.131	1.131	---	---
Z Factor		0.966	0.965	0.967	---	0.966	---	---	---	0.967	0.975	0.966	0.973	0.973	---	---	---	---	---	---	0.977	---	---	---	0.977	0.971	0.971	0.971	0.971	---	---
LIQUID																															
Mass Flow	kg/h	163.923	164.882	---	163.960	163.923	---	---	163.924	163.871	162.833	---	167.451	---	167.449	---	167.449	167.449	---	---	166.365	167.449	166.365	166.365	---	56.5	56.5	66.0	---	66.0	66.0
Molar Flow	kgmole/h	789.5	804.4	---	790.9	789.5	---	---	789.6	787.6	758.0	---	812.5	---	812.4	---	812.4	812.4	---	---	788.3	812.4	788.3	788.3	---	0.63	0.63	0.73	---	0.73	0.73
Actual Volume Flow	m3/h	207.4	208.3	---	206.7	207.4	---	---	207.3	207.2	205.1	---	211.9	---	211.9	---	211.8	211.8	---	---	210.0	211.9	210.0	207.4	---	0.08	0.08	0.10	---	0.10	0.10
Liq Vol Flow @Std Cond	barrel/day	29.801	30.020	---	29.811	29.801	---	---	29.801	29.787	29.529	---	30.525	---	30.525	---	30.525	30.525	---	---	30.266	30.525	30.266	30.266	---	12.3	12.3	14.3	---	14.3	14.3
Mass Density	kg/m3	790.52	791.62	---	793.26	790.52	---	---	790.65	790.82	793.78	---	790.36	---	790.36	---	790.67	790.67	---	---	792.39	790.27	792.39	802.32	---	674.92	674.92	676.80	---	676.80	677.37
Viscosity (Note 4)	cP	1.883	1.936	---	2.002	1.883	---	---	1.888	1.896	2.027	---	1.897	---	1.897	---	1.896	1.896	---	---	1.982	1.881	1.982	2.516	---	0.328	0.328	0.333	---	0.333	0.333
Thermal Conductivity	W/m-K	0.110	0.110	---	0.110	0.110	---	---	0.110	0.110	0.112	---	0.111	---	0.111	---	0.111	0.111	---	---	0.112	0.111	0.112	0.114	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	kJ/kg-C	2.173	2.159	---	2.156	2.173	---	---	2.172	2.172	2.166	---	2.161	---	2.161	---	2.161	2.161	---	---	2.158	2.163	2.158	2.100	---	2.154	2.154	2.152	---	2.152	2.150
Surface Tension	dyne/cm	16.50	16.55	---	16.71	16.50	---	---	16.51	16.55	17.14	---	16.95	---	16.95	---	16.94	16.94	---	---	17.24	16.91	17.24	18.21	---	16.33	16.33	16.36	---	16.36	16.35
AQUEOUS (Note 3)																															
Mass Flow	kg/h	245,100	245,301	---	245,108	245,100	24,612	247,336	22,377	22,375	22,329	---	24,612	---	10,854	24,612	10,854	---	10,854	10,854	---	---	---	---	---	13.8	13.8	44.5	---	44.5	44.5
Molar Flow	kgmole/h	13,605	13,616	---	13,606	13,605	1,366	13,729	1,242	1,242	1,239	---	1,366	---	602.5	1,366	602.5	---	602.5	602.5	---	---	---	---	---	0.77	0.77	2.47	---	2.47	2.47
Actual Volume Flow	m3/h	252.4	251.8	---	251.5	252.4	25.3	254.6	23.0	23.0	23.0	---	25.3	---	11.2	25.3	11.1	---	11.1	11.2	---	---	---	---	---	0.01	0.01	0.04	---	0.04	0.04
Liq Vol Flow @Std Cond	barrel/day	36,474	36,504	---	36,475	36,474	3,663	36,807	3,330	3,330	3,323	---	3,663	---	1,615	3,663	1,615	---	1,615	1,615	---	---	---	---	---	2.06	2.06	6.62	---	6.62	6.62
Mass Density	kg/m3	971.21	974.04	---	974.40	971.21	973.71	971.36	971.36	971.35	971.69	---	973.38	---	973.36	973.36	973.46	---	973.46	973.27	---	---	---	---	---	999.80	999.80	999.37	---	999.37	999.45
Viscosity	cP	0.390	0.409	---	0.412	0.390	0.405	0.391	0.391	0.391	0.394	---	0.406	---	0.406	0.406	0.405	---	0.405	0.405	---	---	---	---	---	0.718	0.718	0.710	---	0.710	0.708
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	4.343	4.338	---	4.338	4.343	4.338	4.343	4.343	4.343	4.343	---	4.340	---	4.340	4.340	4.339	---	4.339	4.340	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	63.80	64.44	---	64.52	63.80	64.31	63.83	63.83	63.83	63.95	---	64.34	---	64.33	64.33	64.32	---	64.32	64.31	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.24
COMPOSITION MOLE FRACTION																															
Nitrogen		0.000002	0.000642	0.002657	0.000002	0.000002	0.000000	0.000000	0.000014	0.000014	0.000014	0.002374	0.000014	0.000672	0.000003	0.000000	0.000003	0.000004	0.000000	0.000000	0.000004	0.000004	0.000000	0.000000	0.000133	0.000133	0.000133	0.000123	0.000141	0.000000	0.000000
CO2		0.000004	0.000135	0.000548	0.000004	0.000004	0.000001	0.000001	0.000018	0.000018	0.000018	0.000556	0.000019	0.000571	0.000012	0.000001	0.000012	0.000020	0.000001	0.000001	0.000020	0.000020	0.000008	0.000008	0.000428	0.000428	0.000428	0.000398	0.000453	0.000003	0.000003
Methane		0.001261	0.139579	0.657987	0.001261	0.001261	0.000000	0.000000	0.008407	0.008407	0.008407	0.634613	0.008581	0.354642	0.003023	0.000000	0.003023	0.005264	0.000000	0.000000	0.005264	0.005264	0.001085	0.001085	0.141618	0.141618	0.141618	0.131631	0.150080	0.000336	0.000336
Ethane		0.000931	0.029751	0.130929	0.000931	0.000931	0.000000	0.000000	0.006483	0.006483	0.006483	0.135029	0.006865	0.174841	0.005622	0.000000	0.005622	0.009792	0.000000	0.000000	0.009792	0.009792	0.004923	0.004923	0.168654	0.168654	0.168654	0.156797	0.178541	0.002058	0.002058
Propane		0.001824	0.024126	0.094292	0.001824	0.001824	0.000000	0.000000	0.012842	0.012842	0.012842	0.100051	0.014098	0.187128	0.016609	0.000000	0.016609	0.028925	0.000000	0.000000	0.028925	0.028925	0.021644	0.021644	0.266474	0.266474	0.266474	0.247884	0.281165	0.011047	0.011047
i-Butane		0.000770	0.005103	0.018696	0.000770	0.000770	0.000000	0.000000	0.005437	0.005437	0.005437	0.020168	0.006134	0.043633	0.008339	0.000000	0.008339	0.014523	0.000000	0.000000	0.014523	0.014523	0.012749	0.012749	0.072395	0.072395	0.072395	0.067418	0.075864	0.007308	0.007308
n-Butane		0.001788	0.009488	0.033607	0.001788	0.001788	0.000000	0.000000	0.012636	0.012636	0.012636	0.036454	0.014485	0.082076	0.020310	0.000000	0.020310	0.035372	0.000000	0.000000	0.035372	0.035372	0.032142	0.032142	0.140756	0.140756	0.140756	0.131164	0.146838	0.019624	0.019624
22-Moropane		0.000001	0.000006	0.000020	0.000001	0.000001	0.000000	0.000000	0.000010	0.000010	0.000010	0.000022	0.000012	0.000051	0.000017	0.000000	0.000017	0.000029	0.000000	0.000000	0.000029	0.000029	0.000027	0.000027	0.000090	0.000090	0.000090	0.000084	0.000093	0.000017	0.000017
i-Pentane		0.001009	0.002927	0.008884	0.001009	0.001009	0.000000	0.000000	0.007140	0.007140	0.007140	0.009771	0.008418	0.023413	0.012519	0.000000	0.012519	0.021802	0.000000	0.000000	0.021802	0.021802	0.021165	0.021165	0.042597	0.042597	0.042597	0.039821	0.043430	0.014141	0.014141
n-Pentane		0.001246	0.003113	0.008865	0.001246	0.001246	0.000000	0.000000	0.008821	0.008821	0.008821	0.009825	0.010541	0.023946	0.015835	0.000000	0.015835	0.027578	0.000000	0.000000	0.027578	0.027578	0.027075	0.027075	0.044001	0.044001	0.044001	0.041196	0.044326	0.018926	0.018926
n-Hexane		0.001705	0.002466	0.004710	0.001705	0.001705	0.000000	0.000000	0.012074	0.012074	0.012074	0.005302	0.014599	0.013026	0.022525	0.000000	0.022525	0.039229	0.000000	0.000000	0.039229	0.039229	0.039682	0.039682	0.024457	0.024457	0.024457	0.023173	0.022310	0.029315	0.029315
Mycylopentan		0.000120	0.000171	0.000323	0.000120	0.000120	0.000000	0.000000	0.000847	0.000847	0.000847	0.000362	0.001028	0.000900	0.001587	0.000000	0.001587	0.002764	0.000000	0.000000	0.002764	0.002764	0.002796	0.002796	0.001695	0.001695	0.001695	0.001607	0.001539	0.002093	0.002093
Benzene		0.000010	0.000014	0.000027	0.000010	0.000010	0.000000	0.000000	0.000069	0.000069	0.000069	0.000030	0.000085	0.000076	0.000130	0.000000	0.000130	0.000227	0.000000	0.000000	0.000227	0.000227	0.000230	0.000230	0.000143	0.000143	0.000143	0.000136	0.000130	0.000176	0.000176
Cyclohexane		0.000108	0.000143	0.000242	0.000108	0.000108	0.000000	0.000000	0.000763	0.000763	0.000763	0.000272	0.000919	0.000673	0.001423	0.000000	0.001423	0.002478	0.000000	0.000000	0.002478	0.002478	0.002515	0.002515	0.001271	0.001271	0.001271	0.001210	0.001117	0.001872	0.001872
n-Heptane		0.000762	0.000797	0.000839	0.000762	0.000762	0.000000	0.000000	0.005397	0.005397	0.005397	0.000961	0.006146	0.002180	0.009579	0.000000	0.009579	0.016683	0.000000	0.000000	0.016683	0.016683	0.017069	0.017069	0.004106	0.004106	0.004106	0.003992	0.002949	0.011420	0.011420
Mycylohexane		0.000378	0.000402	0.000443	0.000378	0.000378	0.000000	0.000000	0.002676	0.002676	0.002676	0.000503	0.003064	0.001161	0.004774	0.000000	0.004774	0.008314	0.000000	0.000000	0.008314	0.008314	0.008501	0.008501	0.002193	0.002193	0.002193	0.002127	0.001624	0.005707	0.005707
Toluene		0.000038	0.000039	0.000038	0.000038	0.000038	0.000000	0.000000	0.000266	0.000266	0.000266	0.000043	0.000302	0.000100	0.000471	0.000000	0.000471	0.000820	0.000000	0.000000	0.000820	0.000820	0.000839	0.000839	0.000189	0.000189	0.000189	0.000185	0.000130	0.000571	0.000571
n-Octane		0.001356	0.001203	0.000597	0.001356	0.001356	0.000000	0.000000	0.009606	0.009606	0.009606	0.000696	0.009918	0.001393	0.015522	0.000000	0.015522	0.027033	0.000000	0.000000	0.027033	0.027033	0.027782	0.027782	0.002614	0.002614	0.002614	0.002670	0.001175	0.013308	0.013308
E-Benzene		0.000013	0.000011	0.000005	0.000013	0.000013	0.000000	0.000000	0.000089	0.000089	0.000089	0.000006	0.000092	0.000012	0.000143	0.000000	0.000143	0.000250	0.000000	0.000000	0.000250	0.000250	0.000257	0.000257	0.000023	0.000023	0.000023	0.000024	0.000010	0.000124	0.000124
m-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000225	0.000225	0.000225	0.000013	0.000228	0.000027	0.000357	0.000000	0.000357	0.000622	0.000000	0.000000	0.000622	0.000622	0.000640	0.000640	0.000051	0.000051	0.000051	0.000053	0.000019	0.000289	0.000289
p-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000225	0.000225	0.000225	0.000013	0.000228	0.000027	0.000357	0.000000	0.000357	0.000622	0.000000	0.000000	0.000622	0.000622	0.000640	0.000640	0.000051	0.000051	0.000051	0.000053	0.000019	0.000288	0.000288
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000179	0.000179	0.000179	0.000010	0.000181	0.000020	0.000283	0.000000	0.000283	0.000494	0.000000	0.000000	0.000494	0.000494	0.000508	0.000508	0.000038	0.000038	0.000038	0.000039	0.000014	0.000221	0.000221
n-Nonane		0.001142	0.000942	0.000207	0.001142	0.001142	0.000000	0.000000	0.008092	0.008092	0.008092	0.000245	0.007825	0.000448	0.012267	0.000000	0.012267	0.021363	0.000000	0.000000	0.021363	0.021363	0.021993	0.021993	0.000834	0.000834	0.000834	0.000926	0.000194	0.006137	0.006137
124-MBenzene		0.000060	0.000048	0.000007	0.000060	0.000060	0.000000	0.000000	0.000423	0.000423	0.000423	0.000009	0.000402	0.000016	0.000631	0.000000	0.000631	0.001099	0.000000	0.000000	0.001099	0.001099	0.001132	0.001132	0.000030	0.000030	0.000030	0.000035	0.000005	0.000251	0.000251
n-Decane		0.001050	0.000840	0.000080	0.001050	0.001050	0.000000	0.000000	0.007442	0.007442	0.007442	0.000096	0.006975	0.000165	0.010940	0.000000	0.010940	0.019053	0.000000	0.000000	0.019053	0.019053	0.019628	0.019628	0.000305	0.000305	0.000305	0.000383	0.000033	0.002869	0.002869
C7*		0.001269	0.001403	0.001266	0.001269	0.001269	0.000000	0.000000	0.008994	0.008994	0.008994	0.001947	0.010454	0.004534	0.016269	0.000000	0.016269	0.028333	0.000000	0.000000	0.028333	0.028333	0.028944	0.028944	0.000544	0.000544	0.000544	0.000584	0.000557	0.020289	0.020289
C8*		0.001994	0.001710	0.000632	0.001994	0.001994	0.000000	0.000000	0.014127	0.014127	0.014127	0.000738	0.014153	0.001416	0.022168	0.000000	0.022168	0.038608	0.000000	0.000000	0.038608	0.038608	0.039710	0.039710	0.002641	0.002641	0.002641	0.002754	0.001020	0.015094	0.015094
C9*		0.001365	0.001101	0.000142	0.001365	0.001365	0.000000	0.000000	0.009671	0.009671	0.009671	0.000169	0.009142	0.000296	0.014337	0.000000	0.014337	0.024969	0.000000	0.000000	0.024969	0.024969	0.025717	0.025717	0.000546	0.000546	0.000546	0.000646	0.000088	0.004615	0.004615
C10-C13*		0.000202	0.000158	0.000002	0.000202	0.000202	0.000000	0.000000	0.001429	0.001429	0.001429	0.000003	0.001313	0.000005	0.002060	0.000000	0.002060	0.003587	0.000000	0.000000	0.003587	0.003587	0.003697	0.003697	0.000008	0.000008	0.000008	0.000013	0.000000	0.000108	0.000108
C14-C18*		0.000141	0.000110	0.000000	0.000141	0.000141	0.000000	0.000000	0.001001	0.001001	0.001001	0.000000	0.000916	0.000000	0.001437	0.000000	0.001437	0.002503	0.000000	0.000000	0.002503	0.002503	0.002579	0.002579	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001
C19-C21*		0.000100	0.000076	0.000000	0.000100	0.000100	0.000000	0.000000	0.000701	0.000701	0.000701	0.000000	0.000645	0.000000	0.001013	0.000000	0.001013	0.001764	0.000000	0.000000	0.001764	0.001764	0.001818	0.001818	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000098	0.000076	0.000000	0.000098	0.000098	0.000000	0.000000	0.000693	0.000693	0.000693	0.000000	0.000634	0.000000	0.000995	0.000000	0.000995	0.001734	0.000000	0.000000	0.001734	0.001734	0.001787	0.001787	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000073	0.000057	0.000000	0.000073	0.000073	0.000000	0.000000	0.000520	0.000520	0.000520	0.000000	0.000476	0.000000	0.000746	0.000000	0.000746	0.001300	0.000000	0.000000	0.001300	0.001300	0.001339	0.001339	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000070	0.000055	0.000000	0.000070	0.000070	0.000000	0.000000	0.000496	0.000496	0.000496	0.000000	0.000454	0.000000	0.000713	0.000000	0.000713	0.001241	0.000000	0.000000	0.001241	0.001241	0.001279	0.001279	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000065	0.000051	0.000000	0.000065	0.000065	0.000000	0.000000	0.000464	0.000464	0.000464	0.000000	0.000425	0.000000	0.000666	0.000000	0.000666	0.001161	0.000000	0.000000	0.001161	0.001161	0.001196	0.001196	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000045	0.000035	0.000000	0.000045	0.000045	0.000000	0.000000	0.000319	0.000319	0.000319	0.000000	0.000292	0.000000	0.000458	0.000000	0.000458	0.000798	0.000000	0.000000	0.000798	0.000798	0.000823	0.000823	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000038	0.000029	0.000000	0.000038	0.000038	0.000000	0.000000	0.000266	0.000266	0.000266	0.000000	0.000244	0.000000	0.000383	0.000000	0.000383	0.000666	0.000000	0.000000	0.000666	0.000666	0.000687	0.000687	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.001060	0.000829	0.000001	0.001060	0.001060	0.000000	0.000000	0.007511	0.007511	0.007511	0.000002	0.006875	0.000002	0.010789	0.000000	0.010789	0.018789	0.000000	0.000000	0.018789	0.018789	0.019365	0.019365	0.000004	0.000004	0.000004	0.000007	0.000000	0.000058	0.000058
C14-C16*		0.000501	0.000391	0.000000	0.000501	0.000501	0.000000	0.000000	0.003549	0.003549	0.003549	0.000000	0.003248	0.000000	0.005097	0.000000	0.005097	0.008876	0.000000	0.000000	0.008876	0.008876	0.009148	0.009148	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000585	0.000457	0.000000	0.000585	0.000585	0.000000	0.000000	0.004147	0.004147	0.

CASE 1A MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8486	0.9710	1.0000	0.0000	0.0031	1.0000	0.7973	0.9597	0.0000	0.0160	1.0000	1.0000	1.0000	0.0107	0.2137	0.9690	1.0000	1.0000	0.0000	0.0449	1.0000	1.0000	0.9758	0.9758	0.9998	0.0000	0.3160	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	51.36	51.02	51.02	50.41	99.56	35.00	30.29	30.29	28.88	40.03	40.03	67.94	39.64	26.32	33.00	30.29	30.29	30.05	27.59	30.05	158.14	50.00	50.00	49.85	50.00	28.55	50.33	50.33	50.33
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	47.89	47.39	47.39	47.09	47.39	8.70	45.39	45.39	45.39
Mass Flow	kg/h	1,015	1,015	2,454	2,412	41.6	41.6	2,412	2,412	118,070	7,091	7,091	10,935	10,935	110,288	0.00	0.00	110,288	110,980	55,490	0.00	0.00	55,490	55,490	55,490	110,980	105,604	5,375	5,375	104,494	91,740	45,870
Molar Flow	kgmole/h	22.8	22.8	64.5	62.6	1.84	1.84	62.6	62.6	4,606	185.4	185.4	449.0	449.0	4,436	0.00	0.00	4,436	4,420	2,210	0.00	0.00	2,210	2,210	2,210	4,420	4,313	106.9	106.9	4,291	3,767	1,884
Mass Enthalpy	kJ/kg	-2,455	-2,630	-2,884	-2,721	-12,338	-12,338	-2,634	-2,889	-3,599	-6,590	-6,590	-3,456	-3,456	-3,524	-2,557	-2,557	-3,648	-3,408	-3,408	-2,295	-2,295	-3,408	-3,156	-3,441	-3,441	-3,468	-2,908	-2,908	-3,456	-3,456	-3,456
Heat Flow	kW	-692	-741	-1,966	-1,823	-143	-143	-1,765	-1,936	-118,031	-12,979	-12,979	-10,497	-10,497	-107,969	0	0	-111,755	-105,052	-52,526	0	0	-52,526	-48,640	-53,036	-106,072	-101,730	-4,343	-4,343	-100,314	-88,070	-44,035
Mass Density	kg/m3	8.25	10.16	6.07	5.82	882.68	378.26	13.61	19.92	10.34	735.64	280.12	33.55	33.55	8.62	506.29	94.52	9.82	9.73	9.73	637.01	222.86	9.41	36.70	56.89	56.89	54.06	516.28	61.30	51.19	51.19	51.19
Molecular Weight		44.52	44.52	38.07	38.52	22.64	22.64	38.52	38.52	25.64	38.24	38.24	24.35	24.35	24.86	55.63	55.63	24.86	25.11	25.11	79.80	79.80	25.11	25.11	25.11	25.11	24.48	50.29	50.29	24.35	24.35	24.35
VAPOR																																
Mass Flow	kg/h	1,015	802.7	2,411	2,412	---	0.27	2,412	1,695	110,980	---	94.1	10,935	10,935	110,288	0.00	0.00	106,062	110,980	55,490	---	0.00	55,490	55,490	52,802	105,604	105,563	---	1,032	104,494	91,740	45,870
Molar Flow	kgmole/h	22.8	19.3	62.6	62.6	---	0.006	62.6	49.9	4,420	---	2.97	449.0	449.0	4,436	0.00	0.00	4,299	4,420	2,210	---	0.00	2,210	2,210	2,157	4,313	4,313	---	33.8	4,291	3,767	1,884
Actual Volume Flow	m3/h	123.1	99.6	404.1	414.6	---	0.06	177.2	119.9	11,405	---	15.90	325.9	325.9	12,788	0.00	0.00	11,224	11,405	5,702	---	0.00	5,897	1,512	970	1,940	1,953	---	80.5	2,041	1,792	896.1
Std Gas Flow	MMSCFD	0.46	0.39	1.26	1.26	---	0.0001	1.26	1.00	88.75	---	0.06	9.02	9.02	89.07	0.00	0.00	86.31	88.75	44.38	---	0.00	44.38	44.38	43.30	86.61	86.59	---	0.68	86.15	75.64	37.82
Mass Density	kg/m3	8.25	8.06	5.97	5.82	---	4.24	13.61	14.13	9.73	---	5.92	33.55	33.55	8.62	34.26	12.84	9.45	9.73	9.73	---	5.84	9.41	36.70	54.42	54.42	54.04	---	12.82	51.19	51.19	51.19
Molecular Weight		44.52	41.49	38.52	38.52	---	47.55	38.52	33.94	25.11	---	31.69	24.35	24.35	24.86	24.69	30.86	24.67	25.11	25.11	---	31.18	25.11	25.11	24.48	24.48	24.48	---	30.57	24.35	24.35	24.35
Viscosity	cP	0.010	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.010	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.010	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.025	0.021	0.024	0.024	---	0.020	0.030	0.025	0.029	---	0.025	0.033	0.033	0.034	0.033	0.025	0.029	0.029	0.029	---	0.025	0.029	0.049	0.036	0.036	0.036	---	0.025	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.991	1.820	1.904	1.902	---	1.837	2.141	1.944	2.026	---	1.881	2.292	2.292	2.138	2.292	1.947	2.040	2.026	2.026	---	1.883	2.022	2.606	2.521	2.521	2.517	---	1.950	2.489	2.489	2.489
Cp/Cv		1.130	1.161	1.151	1.151	---	1.121	1.153	1.215	1.246	---	1.191	1.361	1.361	1.220	1.364	1.233	1.247	1.246	1.246	---	1.194	1.245	1.233	1.455	1.455	1.453	---	1.230	1.436	1.436	1.436
Z Factor		0.946	0.936	0.960	0.961	---	0.965	0.933	0.911	0.952	---	0.963	0.864	0.864	0.967	0.860	0.923	0.955	0.952	0.952	---	0.963	0.954	0.933	0.810	0.810	0.811	---	0.923	0.821	0.821	0.821
LIQUID																																
Mass Flow	kg/h	---	203.7	11.6	---	10.5	10.3	---	685.7	4,847	4,847	4,753	---	---	---	0.00	0.00	2,215	---	---	0.00	0.00	---	---	2,617	5,233	40.5	5,233	4,201	---	---	---
Molar Flow	kgmole/h	---	2.98	0.12	---	0.11	0.11	---	10.9	60.9	60.9	57.9	---	---	---	0.00	0.00	26.1	---	---	0.00	0.00	---	---	49.5	99.0	0.77	99.0	65.2	---	---	---
Actual Volume Flow	m3/h	---	0.33	0.02	---	0.02	0.02	---	1.17	7.40	7.40	7.18	---	---	---	0.00	0.00	3.32	---	---	0.00	0.00	---	---	5.13	10.3	0.08	10.3	7.01	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	49.0	2.48	---	2.25	2.18	---	170.8	1,093.1	1,093.1	1,062.8	---	---	---	0.00	0.00	488.5	---	---	0.00	0.00	---	---	705	1,410	10.9	1,410	1,033.1	---	---	---
Mass Density	kg/m3	---	609.70	670.07	---	671.89	677.13	---	583.65	654.71	654.71	662.21	---	---	---	542.04	590.38	667.70	---	---	637.01	663.59	---	---	509.64	509.64	510.37	509.64	599.24	---	---	---
Viscosity (Note 4)	cP	---	0.204	0.309	---	0.314	0.329	---	0.171	0.281	0.281	0.300	---	---	---	0.132	0.181	0.310	---	---	0.278	0.304	---	---	0.112	0.112	0.112	0.112	0.191	---	---	---
Thermal Conductivity	W/m-K	---	0.098	0.103	---	0.103	0.105	---	0.093	0.103	0.103	0.105	---	---	---	0.088	0.096	0.104	---	---	0.103	0.105	---	---	0.084	0.084	0.084	0.084	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.302	2.219	---	2.214	2.201	---	2.393	2.182	2.182	2.161	---	---	---	2.545	2.348	2.165	---	---	2.180	2.153	---	---	2.676	2.676	2.673	2.676	2.322	---	---	---
Surface Tension	dyne/cm	---	12.80	14.93	---	15.04	15.55	---	10.93	14.86	14.86	15.59	---	---	---	8.67	11.62	15.24	---	---	14.92	15.71	---	---	7.28	7.28	7.31	7.28	11.99	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	8.57	31.4	---	31.1	31.1	---	31.9	2,244	2,244	2,243	---	---	---	---	---	2,011	---	---	---	---	---	---	71.2	142.4	0.54	142.4	141.9	---	---	---
Molar Flow	kgmole/h	---	0.48	1.74	---	1.73	1.73	---	1.77	124.5	124.5	124.5	---	---	---	---	---	111.6	---	---	---	---	---	---	3.95	7.90	0.03	7.90	7.88	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.03	---	0.03	0.03	---	0.03	2.24	2.24	2.23	---	---	---	---	---	2.01	---	---	---	---	---	---	0.07	0.14	0.001	0.14	0.14	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.28	4.67	---	4.63	4.63	---	4.75	333.9	333.9	333.9	---	---	---	---	---	299.2	---	---	---	---	---	---	10.6	21.2	0.08	21.2	21.1	---	---	---
Mass Density	kg/m3	---	1,002.17	987.29	---	987.56	987.97	---	1,000.05	1,003.61	1003.6113	1,004.53	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.84	989.84	989.9503	989.8431	1,004.93	---	---	---
Viscosity	cP	---	0.764	0.532	---	0.535	0.540	---	0.718	0.792	0.792	0.817	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.823	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.645	---	0.644	0.644	---	0.625	0.619	0.619	0.617	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.616	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.322	---	4.322	4.321	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.315	4.315	4.312	---	---	---
Surface Tension	dyne/cm	---	70.89	67.50	---	67.56	67.66	---	70.36	71.18	71.18	71.43	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	71.48	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000141	0.000141	0.000484	0.000498	0.000000	0.000000	0.000498	0.000498	0.002573	0.000014	0.000014	0.002754	0.002754	0.002657	0.000191	0.000191	0.002657	0.002680	0.002680	0.000041	0.000041	0.002680	0.002680	0.002680	0.002680	0.002739	0.000289	0.000289	0.002754	0.002754	0.002754
CO2		0.000453	0.000453	0.000529	0.000545	0.000002	0.000002	0.000545	0.000545	0.000541	0.000023	0.000023	0.000574	0.000574	0.000548	0.000195	0.000195	0.000548	0.000563	0.000563	0.000066	0.000066	0.000563	0.000563	0.000563	0.000563	0.000571	0.000235	0.000235	0.000574	0.000574	0.000574
Methane		0.150080	0.150080	0.282301	0.290576	0.000325	0.000325	0.290576	0.290576	0.641475	0.010628	0.010628	0.684080	0.684080	0.657978	0.121112	0.121112	0.657978	0.667938	0.667938	0.031847	0.031847	0.667938	0.667938	0.667938	0.667938	0.680506	0.160745	0.160745	0.684080	0.684080	0.684080
Ethane		0.178541	0.178541	0.176149	0.181292	0.000905	0.000905	0.181292	0.181292	0.130922	0.011132	0.011132	0.137519	0.137519	0.130931	0.093767	0.093767	0.130931	0.135947	0.135947	0.033503	0.033503	0.135947	0.135947	0.135947	0.135947	0.136800	0.101513	0.101513	0.137519	0.137519	0.137519
Propane		0.281165	0.281165	0.220383	0.226749	0.003469	0.003469	0.226749	0.226749	0.097866	0.027921	0.027921	0.099578	0.099578	0.094294	0.184486	0.184486	0.094294	0.100800	0.100800	0.084317	0.084317	0.100800	0.100800	0.100800	0.100800	0.099058	0.171116	0.171116	0.099578	0.099578	0.099578
i-Butane		0.075864	0.075864	0.055031	0.056588	0.001972	0.001972	0.056588	0.056588	0.020205	0.013745	0.013745	0.019559	0.019559	0.018696	0.074302	0.074302	0.018696	0.020476	0.020476	0.041617	0.041617	0.020476	0.020476	0.020476	0.020476	0.019457	0.061598	0.061598	0.019559	0.019559	0.019559
n-Butane		0.146838	0.146838	0.104978	0.107911	0.005055	0.005055	0.107911	0.107911	0.037040	0.034660	0.034660	0.034819	0.034819	0.033608	0.173313	0.173313	0.033608	0.037140	0.037140	0.105030	0.105030	0.037140	0.037140	0.037140	0.037140	0.034637	0.138146	0.138146	0.034819	0.034819	0.034819
22-Mpropane		0.000093	0.000093	0.000066	0.000068	0.000004	0.000004	0.000068	0.000068	0.000023	0.000028	0.000028	0.000000	0.000000	0.000020	0.000000	0.000000	0.000020	0.000023	0.000023	0.000086	0.000086	0.000023	0.000023	0.000023	0.000023	0.000021	0.000101	0.000101	0.000000	0.000000	0.000000
i-Pentane		0.043430	0.043430	0.030492	0.031289	0.003331	0.003331	0.031289	0.031289	0.010443	0.022318	0.022318	0.008677	0.008677	0.008885	0.088385	0.088385	0.008885	0.009945	0.009945	0.067805	0.067805	0.009945	0.009945	0.009945	0.009945	0.008631	0.062958	0.062958	0.008677	0.008677	0.008677
n-Pentane		0.044326	0.044326	0.031153	0.031940	0.003425	0.003425	0.031940	0.031940	0.010691	0.029241	0.029241	0.008388	0.008388	0.008886	0.106436	0.106436	0.008886	0.009913	0.009913	0.088910	0.088910	0.009913	0.009913	0.009913	0.009913	0.008344	0.073194	0.073194	0.008388	0.008388	0.008388
n-Hexane		0.022310	0.022310	0.016309	0.016603	0.006287	0.006287	0.016603	0.016603	0.006188	0.042015	0.042015	0.003296	0.003296	0.004710	0.102930	0.102930	0.004710	0.004685	0.004685	0.128174	0.128174	0.004685	0.004685	0.004685	0.004685	0.003279	0.061423	0.061423	0.003296	0.003296	0.003296
Mcyclopentan		0.001539	0.001539	0.001126	0.001146	0.000451	0.000451	0.001146	0.001146	0.000428	0.002996	0.002996	0.000000	0.000000	0.000323	0.000000	0.000000	0.000323	0.000320	0.000320	0.009132	0.009132	0.000320	0.000320	0.000320	0.000320	0.000220	0.004367	0.004367	0.000000	0.000000	0.000000
Benzene		0.000130	0.000130	0.000095	0.000097	0.000038	0.000038	0.000097	0.000097	0.000036	0.000249	0.000249	0.000000	0.000000	0.000027	0.000000	0.000000	0.000027	0.000027	0.000027	0.000759	0.000759	0.000027	0.000027	0.000027	0.000027	0.000018	0.000363	0.000363	0.000000	0.000000	0.000000
Cyclohexane		0.001117	0.001117	0.000830	0.000843	0.000403	0.000403	0.000843	0.000843	0.000324	0.002615	0.002615	0.000000	0.000000	0.000242	0.000000	0.000000	0.000242	0.000228	0.000228	0.007975	0.007975	0.000228	0.000228	0.000228	0.000228	0.000149	0.003400	0.003400	0.000000	0.000000	0.000000
n-Heptane		0.002949	0.002949	0.002452	0.002451	0.002495	0.002495	0.002451	0.002451	0.001959	0.014256	0.014256	0.000839	0.000839	0.000547	0.000000	0.000000	0.000839	0.000547	0.000547	0.013633	0.043633	0.000547	0.000547	0.000547	0.000547	0.001059	0.011059	0.011059	0.000000	0.000000	0.000000
Mcyclohexane		0.001624	0.001624	0.001325	0.001327	0.001263	0.001263	0.001327	0.001327	0.000586	0.007265	0.007265	0.000000	0.000000	0.000443	0.000000	0.000000	0.000443	0.000306	0.000306	0.022206	0.022206	0.000306	0.000306	0.000306	0.000306	0.000163	0.006109	0.006109	0.000000	0.000000	0.000000
Toluene		0.000130	0.000130	0.000111	0.000110	0.000126	0.000126	0.000110	0.000110	0.000050	0.000686	0.000686	0.000000	0.000000	0.000038	0.000000	0.000000	0.000038	0.000023	0.000023	0.002096	0.002096	0.000023	0.000023	0.000023	0.000023	0.000011	0.000492	0.000492	0.000000	0.000000	0.000000
n-Octane		0.001175	0.001175	0.001316	0.001255	0.003405	0.003405	0.001255	0.001255	0.000704	0.013278	0.013278	0.000000	0.000000	0.000597	0.000000	0.000000	0.000597	0.000176	0.000176	0.040775	0.040775	0.000176	0.000176	0.000176	0.000176	0.000061	0.004830	0.004830	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000011	0.000011	0.000033	0.000033	0.000011	0.000011	0.000006	0.000119	0.000119	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000001	0.000001	0.000364	0.000364	0.000001	0.000001	0.000001	0.000001	0.000000	0.000040	0.000040	0.000000	0.000000	0.000000
m-Xylene		0.000019	0.000019	0.000024	0.000023	0.000079	0.000079	0.000023	0.000023	0.000013	0.000266	0.000266	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.000816	0.000816	0.000003	0.000003	0.000003	0.000003	0.000001	0.000078	0.000078	0.000000	0.000000	0.000000
p-Xylene		0.000019	0.000019	0.000024	0.000023	0.000079	0.000079	0.000023	0.000023	0.000013	0.000265	0.000265	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.000814	0.000814	0.000003	0.000003	0.000003	0.000003	0.000001	0.000078	0.000078	0.000000	0.000000	0.000000
o-Xylene		0.000014	0.000014	0.000018	0.000017	0.000062	0.000062	0.000017	0.000017	0.000010	0.000200	0.000200	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000615	0.000615	0.000002	0.000002	0.000002	0.000002	0.000001	0.000056	0.000056	0.000000	0.000000	0.000000
n-Nonane		0.000194	0.000194	0.000358	0.000306	0.002129	0.002129	0.000306	0.000306	0.000222	0.004938	0.004938	0.000000	0.000000	0.000207	0.000000	0.000000	0.000207	0.000024	0.000024	0.015213	0.015213	0.000024	0.000024	0.000024	0.000024	0.000005	0.000783	0.000783	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000012	0.000009	0.000104	0.000104	0.000009	0.000009	0.000008	0.000179	0.000179	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000000	0.000000	0.000550	0.000550	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018	0.000018	0.000000	0.000000	0.000000
n-Decane		0.000033	0.000033	0.000118	0.000081	0.001404	0.001404	0.000081	0.000081	0.000081	0.001924	0.001924	0.000000	0.000000	0.000080	0.000000	0.000000	0.000080	0.000003	0.000003	0.005947	0.005947	0.000003	0.000003	0.000003	0.000003	0.000000	0.000127	0.000127	0.000000	0.000000	0.000000
C7*		0.006557	0.006557	0.005249	0.005275	0.004368	0.004368	0.005275	0.005275	0.002261	0.026267	0.026267	0.000706	0.000706	0.001707	0.043883	0.043883	0.001707	0.001254	0.001254	0.080331	0.080331	0.001254	0.001254	0.001254	0.001254	0.000703	0.023493	0.023493	0.000706	0.000706	0.000706
C8*		0.001020	0.001020	0.001276	0.001189	0.004243	0.004243	0.001189	0.001189	0.000726	0.014424	0.014424	0.000048	0.000048	0.000632	0.010022	0.010022	0.000632	0.000152	0.000152	0.044347	0.044347	0.000152	0.000152	0.000152	0.000152	0.000047	0.004356	0.004356	0.000048	0.000048	0.000048
C9*		0.000868	0.000868	0.000222	0.000171	0.001957	0.001957	0.000171	0.000171	0.000148	0.003417	0.003417	0.000002	0.000002	0.000142	0.000977	0.000977	0.000142	0.010548	0.010548	0.000010	0.000010	0.010548	0.010548	0.010548	0.010548	0.000010	0.000361	0.000361	0.000002	0.000002	0.000002
C10-C13*		0.000000	0.000000	0.000003	0.000001	0.000081	0.000081	0.000001	0.000001	0.000002	0.000056	0.000056	0.000000	0.000000	0.000002	0.000002	0.000002	0.000002	0.000000	0.000000	0.000175	0.000175	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 1A MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1633	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9299	1.0000	1.0000	1.0000	0.7973	1.0000
Temperature	C	50.33	43.99	50.33	141.63	45.00	45.00	45.00	44.87	59.00	12.47	70.03	50.33	40.03	35.00	50.33
Pressure	bar_g	45.39	30.00	45.39	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.39	30.00	8.70	45.39
Mass Flow	kg/h	0.00	0.00	45,870	45,870	45,870	72,775	18,964	72,775	18,964	18,964	10,935	10,935	10,935	2,412	1,819
Molar Flow	kgmole/h	0.00	0.00	1,884	1,884	1,884	2,988	778.7	2,988	778.7	778.7	449.0	449.0	449.0	62.6	74.7
Mass Enthalpy	kJ/kg	-2,627	-2,627	-3,456	-3,297	-3,605	-3,605	-3,605	-3,605	-3,554	-3,554	-3,386	-3,456	-3,456	-2,889	-3,456
Heat Flow	kW	0	0	-44,035	-42,015	-45,930	-72,871	-18,989	-72,871	-18,722	-18,722	-10,286	-10,497	-10,497	-1,936	-1,747
Mass Density	kg/m3	499.17	244.11	51.19	111.64	203.54	203.54	203.54	203.05	179.25	34.89	28.84	51.19	33.55	19.92	51.19
Molecular Weight		49.67	49.67	24.35	24.35	24.35	24.35	24.35	24.35	24.35	24.35	24.35	24.35	24.35	38.52	24.35
VAPOR																
Mass Flow	kg/h	---	0.00	45,870	45,870	45,870	72,775	18,964	72,775	18,964	16,265	10,935	10,935	10,935	1,695	1,819
Molar Flow	kgmole/h	---	0.00	1,884	1,884	1,884	2,988	778.7	2,988	778.7	724.1	449.0	449.0	449.0	49.9	74.7
Actual Volume Flow	m3/h	---	0.00	896.1	410.9	225.4	357.6	93.2	358.4	105.8	538.5	379.1	213.6	325.9	119.9	35.54
Std Gas Flow	MMSCFD	---	0.00	37.82	37.82	37.82	60.00	15.64	60.00	15.64	14.54	9.02	9.02	9.02	1.00	1.50
Mass Density	kg/m3	---	36.71	51.19	111.64	203.54	203.54	203.54	203.05	179.25	30.20	28.84	51.19	33.55	14.13	51.19
Molecular Weight		---	26.34	24.35	24.35	24.35	24.35	24.35	24.35	24.35	22.46	24.35	24.35	24.35	33.94	24.35
Viscosity	cP	---	0.012	0.013	0.019	0.023	0.023	0.023	0.023	0.021	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	W/m-K	---	0.032	0.036	0.056	0.058	0.058	0.058	0.058	0.055	0.030	0.036	0.036	0.033	0.025	0.036
Mass Heat Capacity	kJ/kg-C	---	2.296	2.489	2.937	3.711	3.711	3.711	3.714	3.481	2.255	2.315	2.489	2.292	1.944	2.489
Cp/Cv		---	1.362	1.436	1.397	2.044	2.044	2.044	2.046	1.884	1.407	1.297	1.436	1.361	1.215	1.436
Z Factor		---	0.844	0.821	0.860	0.614	0.614	0.614	0.614	0.666	0.862	0.903	0.821	0.864	0.911	0.821
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	2,699	---	---	---	685.7	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	54.6	---	---	---	10.92	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	4.99	---	---	---	1.17	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	760.0	---	---	---	170.8	---
Mass Density	kg/m3	499.17	525.65	---	---	---	---	---	---	---	540.36	---	---	---	583.65	---
Viscosity (Note 4)	cP	0.099	0.120	---	---	---	---	---	---	---	0.138	---	---	---	0.171	---
Thermal Conductivity	W/m-K	0.081	0.085	---	---	---	---	---	---	---	0.094	---	---	---	0.093	---
Mass Heat Capacity	kJ/kg-C	2.824	2.629	---	---	---	---	---	---	---	2.478	---	---	---	2.393	---
Surface Tension	dyne/cm	6.34	7.84	---	---	---	---	---	---	---	9.53	---	---	---	10.93	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	31.9	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.77	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.75	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000340	0.000340	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.002754	0.000498	0.002754
CO2		0.000268	0.000268	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000574	0.000545	0.000574
Methane		0.187554	0.187554	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.684080	0.290576	0.684080
Ethane		0.117921	0.117921	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.137519	0.181292	0.137519
Propane		0.198869	0.198869	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.099578	0.226749	0.099578
I-Butane		0.071728	0.071728	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.019559	0.056588	0.019559
n-Butane		0.160350	0.160350	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.034819	0.107911	0.034819
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000068	0.000000
I-Pentane		0.073357	0.073357	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.008677	0.031289	0.008677
n-Pentane		0.085096	0.085096	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.008388	0.031940	0.008388
n-Hexane		0.071511	0.071511	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.003296	0.016603	0.003296
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001146	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000097	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000843	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002451	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001327	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000110	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001255	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000023	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000023	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000017	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000306	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000009	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000081	0.000000
C7*		0.027366	0.027366	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.000706	0.005275	0.000706
C8*		0.005204	0.005204	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.000048	0.001389	0.000048
C9*		0.000434	0.000434	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000171	0.000002
C10-C13*		0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.033059	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTc:10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000064	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc:14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc:15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c:11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000049	0.000000
10X-DST1_2c:12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000015	0.000000
10X-DST1_2c:13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
10X-DST1_2c:14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c:15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c:16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c:17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c:18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c:19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc:16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc:17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc:18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc:19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004550	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002171	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000312	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460

CASE 1B MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
Vapour Fraction		0.0001	0.2414	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0168	1.0000	0.0188
Temperature	C	72.00	68.42	68.00	68.00	72.00	68.96	71.80	71.80	71.78	71.12	71.80	68.81
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00
Mass Flow	kg/h	408,399	525,784	124,436	408,399	408,399	24,833	247,334	185,855	185,855	185,855	42.5	193,759
Molar Flow	kgmole/h	14,376	18,980	5,005	14,376	14,376	1,378	13,729	2,024	2,024	2,024	1.67	2,233
Mass Enthalpy	kJ/kg	-10,241	-8,743	-9,524	-10,255	-10,241	-15,696	-15,685	-3,727	-3,727	-3,727	-3,493	-3,849
Heat Flow	kW	-1,161,801	-1,276,892	-121,808	-1,163,380	-1,161,801	-108,274	-1,077,604	-192,430	-192,430	-192,430	-41	-207,164
Mass Density	kg/m3	880.33	38.88	8.72	892.94	880.33	973.88	971.37	809.07	787.63	400.29	8.76	367.53
Molecular Weight		28.41	27.70	24.86	28.41	28.41	18.02	18.02	91.83	91.83	91.83	25.52	86.75
VAPOR													
Mass Flow	kg/h	44.4	116,384	124,436	---	44.4	---	---	---	53.6	1,133.1	42.5	1,456
Molar Flow	kgmole/h	1.74	4,582	5,005	---	1.74	---	---	---	2.07	34.1	1.67	42.1
Actual Volume Flow	m3/h	5.07	13,066	14,275	---	5.07	---	---	---	6.36	236.8	4.85	289.8
Std Gas Flow	MMSCFD	0.03	92.00	100.49	---	0.03	---	---	---	0.04	0.68	0.03	0.84
Mass Density	kg/m3	8.77	8.91	8.72	---	8.77	---	---	---	8.42	4.78	8.76	5.02
Molecular Weight		25.55	25.40	24.86	---	25.55	---	---	---	25.92	33.27	25.52	34.60
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011
Thermal Conductivity	W/m-K	0.034	0.033	0.034	---	0.034	---	---	---	0.033	0.028	0.034	0.027
Mass Heat Capacity	kJ/kg-C	2.140	2.132	2.139	---	2.140	---	---	---	2.130	2.005	2.140	1.988
Cp/Cv		1.214	1.217	1.221	---	1.214	---	---	---	1.210	1.160	1.214	1.156
Z Factor		0.966	0.965	0.967	---	0.966	---	---	---	0.967	0.975	0.966	0.972
LIQUID													
Mass Flow	kg/h	163,540	164,393	---	163,577	163,540	---	---	163,542	163,489	162,456	---	167,470
Molar Flow	kgmole/h	785.3	798.4	---	786.6	785.3	---	---	785.3	783.3	753.9	---	812.9
Actual Volume Flow	m3/h	206.8	207.5	---	206.1	206.8	---	---	206.7	206.6	204.6	---	211.9
Liq Vol Flow @Std Cond	barrel/day	29,719	29,914	---	29,730	29,719	---	---	29,720	29,706	29,449	---	30,531
Mass Density	kg/m3	790.90	792.18	---	793.63	790.90	---	---	791.04	791.20	794.15	---	790.47
Viscosity (Note 4)	cP	1.897	1.959	---	2.018	1.897	---	---	1.903	1.911	2.044	---	1.903
Thermal Conductivity	W/m-K	0.110	0.110	---	0.110	0.110	---	---	0.110	0.110	0.112	---	0.111
Mass Heat Capacity	kJ/kg-C	2.172	2.159	---	2.156	2.172	---	---	2.172	2.171	2.165	---	2.160
Surface Tension	dyne/cm	16.51	16.58	---	16.72	16.51	---	---	16.52	16.56	17.15	---	16.95
AQUEOUS (Note 3)													
Mass Flow	kg/h	244,815	245,007	---	244,822	244,815	24,833	247,334	22,314	22,313	22,266	---	24,833
Molar Flow	kgmole/h	13,589	13,600	---	13,590	13,589	1,378	13,729	1,239	1,239	1,236	---	1,378
Actual Volume Flow	m3/h	252.1	251.5	---	251.3	252.1	25.5	254.6	23.0	23.0	22.9	---	25.5
Liq Vol Flow @Std Cond	barrel/day	36,433	36,460	---	36,433	36,431	3,695	36,806	3,321	3,320	3,313	---	3,696
Mass Density	kg/m3	971.21	974.07	---	974.40	971.21	973.88	971.37	971.37	971.37	971.70	---	973.55
Viscosity	cP	0.390	0.409	---	0.412	0.390	0.406	0.391	0.391	0.391	0.394	---	0.407
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.661	0.664	0.664	0.664	0.663	---	0.661
Mass Heat Capacity	kJ/kg-C	4.343	4.338	---	4.338	4.343	4.338	4.343	4.343	4.343	4.343	---	4.340
Surface Tension	dyne/cm	63.80	64.45	---	64.52	63.80	64.35	63.84	63.84	63.84	63.96	---	64.38
COMPOSITION MOLE FRACTION													
Nitrogen		0.000002	0.000710	0.002685	0.000002	0.000002	0.000000	0.000000	0.000014	0.000014	0.000014	0.002399	0.000014
CO2		0.000004	0.000149	0.000554	0.000004	0.000004	0.000001	0.000001	0.000018	0.000018	0.000018	0.000561	0.000019
Methane		0.001254	0.155519	0.657499	0.001254	0.001254	0.000000	0.000000	0.008384	0.008384	0.008384	0.634217	0.008554
Ethane		0.000925	0.032867	0.130775	0.000925	0.000925	0.000000	0.000000	0.006461	0.006461	0.006461	0.134853	0.006856
Propane		0.001831	0.026470	0.095122	0.001831	0.001831	0.000000	0.000000	0.012924	0.012924	0.012924	0.100908	0.014254
i-Butane		0.000769	0.005535	0.018780	0.000769	0.000769	0.000000	0.000000	0.005449	0.005449	0.005449	0.020253	0.006186
n-Butane		0.001783	0.010232	0.033683	0.001783	0.001783	0.000000	0.000000	0.012633	0.012633	0.012633	0.036524	0.014591
22-Mpropane		0.000001	0.000006	0.000019	0.000001	0.000001	0.000000	0.000000	0.000009	0.000009	0.000009	0.000020	0.000011
i-Pentane		0.000999	0.003088	0.008840	0.000999	0.000999	0.000000	0.000000	0.007087	0.007087	0.007087	0.009719	0.008436
n-Pentane		0.001231	0.003258	0.008820	0.001231	0.001231	0.000000	0.000000	0.008735	0.008735	0.008735	0.009749	0.010550
n-Hexane		0.001671	0.002489	0.004639	0.001671	0.001671	0.000000	0.000000	0.011862	0.011862	0.011862	0.005220	0.014540
Mcyclopentan		0.000113	0.000166	0.000306	0.000113	0.000113	0.000000	0.000000	0.000802	0.000802	0.000802	0.000343	0.000987
Benzene		0.000009	0.000014	0.000026	0.000009	0.000009	0.000000	0.000000	0.000066	0.000066	0.000066	0.000029	0.000081
Cyclohexane		0.000102	0.000138	0.000231	0.000102	0.000102	0.000000	0.000000	0.000727	0.000727	0.000727	0.000265	0.000828
n-Heptane		0.000738	0.000774	0.000817	0.000738	0.000738	0.000000	0.000000	0.005241	0.005241	0.005241	0.000935	0.006041
Mcyclohexane		0.000365	0.000390	0.000431	0.000365	0.000365	0.000000	0.000000	0.002595	0.002595	0.002595	0.000489	0.003008
Toluene		0.000036	0.000037	0.000037	0.000036	0.000036	0.000000	0.000000	0.000259	0.000259	0.000259	0.000042	0.000297
n-Octane		0.001336	0.001168	0.000591	0.001336	0.001336	0.000000	0.000000	0.009493	0.009493	0.009493	0.000689	0.009844
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000088	0.000088	0.000088	0.000008	0.000091
m-Xylene		0.000031	0.000027	0.000011	0.000031	0.000031	0.000000	0.000000	0.000223	0.000223	0.000223	0.000013	0.000227
p-Xylene		0.000031	0.000027	0.000011	0.000031	0.000031	0.000000	0.000000	0.000223	0.000223	0.000223	0.000013	0.000227
o-Xylene		0.000025	0.000021	0.000009	0.000025	0.000025	0.000000	0.000000	0.000178	0.000178	0.000178	0.000010	0.000180
n-Nonane		0.001136	0.000915	0.000207	0.001136	0.001136	0.000000	0.000000	0.008068	0.008068	0.008068	0.000245	0.007781
124-MBenzene		0.000060	0.000047	0.000007	0.000060	0.000060	0.000000	0.000000	0.000423	0.000423	0.000423	0.000009	0.000400
n-Decane		0.001049	0.000815	0.000080	0.001049	0.001049	0.000000	0.000000	0.007450	0.007450	0.007450	0.000096	0.006936
C7*		0.001243	0.001384	0.001679	0.001243	0.001243	0.000000	0.000000	0.008826	0.008826	0.008826	0.001914	0.010395
C8*		0.001975	0.001662	0.000629	0.001975	0.001975	0.000000	0.000000	0.014031	0.014031	0.014031	0.000735	0.014073
C9*		0.001361	0.001069	0.000142	0.001361	0.001361	0.000000	0.000000	0.009670	0.009670	0.009670	0.000170	0.009090
C10-C13*		0.000202	0.000154	0.000002	0.000202	0.000202	0.000000	0.000000	0.001434	0.001434	0.001434	0.000023	0.001305
C14-C18*		0.000141	0.000107	0.000000	0.000141	0.000141	0.000000	0.000000	0.001005	0.001005	0.001005	0.000000	0.000910
C19-C21*		0.000100	0.000076	0.000000	0.000100	0.000100	0.000000	0.000000	0.000708	0.000708	0.000708	0.000000	0.000642
C22-C24*		0.000098	0.000074	0.000000	0.000098	0.000098	0.000000	0.000000	0.000696	0.000696	0.000696	0.000000	0.000631
C25-C27*		0.000073	0.000056	0.000000	0.000073	0.000073	0.000000	0.000000	0.000522	0.000522	0.000522	0.000000	0.000473
C28-C31*		0.000070	0.000053	0.000000	0.000070	0.000070	0.000000	0.000000	0.000498	0.000498	0.000498	0.000000	0.000452
C32-C37*		0.000066	0.000050	0.000000	0.000066	0.000066	0.000000	0.000000	0.000466	0.000466	0.000466	0.000000	0.000422
C38-C45*		0.000045	0.000034	0.000000	0.000045	0.000045	0.000000	0.000000	0.000321	0.000321	0.000321	0.000000	0.000290
C46-C80*		0.000038	0.000029	0.000000	0.000038	0.000038	0.000000	0.000000	0.000268	0.000268	0.000268	0.000000	0.000242
C10-C13_1*		0.001061	0.000804	0.000001	0.001061	0.001061	0.000000	0.000000	0.007540	0.007540	0.007540	0.000002	0.006835
C14-C16*		0.000502	0.000380	0.000000	0.000502	0.000502	0.000000	0.000000	0.003563	0.003563	0.003563	0.000000	0.003229
C17-C20*		0.000586	0.000444	0.000000	0.000586	0.000586	0.000000	0.000000	0.004163	0.004163	0.004163	0.000000	0.003773
C21-C22*		0.000532	0.000403	0.000000	0.000532	0.000532	0.000000	0.000000	0.003779	0.003779	0.003779	0.000000	0.003424
C23*		0.000209	0.000158	0.000000	0.000209	0.000209	0.000000	0.000000	0.001482	0.001482	0.001482	0.000000	0.001343
C24-C26*		0.000459	0.000347	0.000000	0.000459	0.000459	0.000000	0.000000	0.003259	0.003259	0.003259	0.000000	0.002953
C27-C29*		0.000284	0.000215	0.000000	0.000284	0.000284	0.000000	0.000000	0.002018	0.002018	0.002018	0.000000	0.001829
C30-C34*		0.000254	0.000193	0.000000	0.000254	0.000254	0.000000	0.000000	0.001806	0.001806	0.001806	0.000000	0.001637
C35-C80*		0.000208	0.000158	0.000000	0.000208	0.000208	0.000000	0.000000	0.001477	0.001477	0.001477	0.000000	0.001339
C10-C13_2*		0.000031	0.000024	0.000000	0.000031	0.000031	0.000000	0.000000	0.000223	0.000223	0.000223	0.000000	0.000203
C14-C18_1*		0.000019	0.000014	0.000000	0.000019	0.000019	0.000000	0.000000	0.000134	0.000134	0.000134	0.000000	0.000121
C19-C21_1*		0.000019	0.000014	0.000000	0.000019	0.000019	0.000000	0.000000	0.000134	0.000134	0.000134	0.000000	0.000121
C22-C23*		0.000013	0.000010	0.000000	0.000013	0.000013	0.000000	0.000000	0.000092	0.000092	0.000092	0.000000	0.000083
C24-C26_1*		0.000014	0.000011	0.000000	0.000014	0.000014	0.000000	0.000000	0.000102	0.000102	0.000102	0.000000	0.000093
C27-C29_1*		0.000010	0.000008	0.000000	0.000010	0.000010	0.000000	0.000000	0.000071	0.000071	0.000071	0.000000	0.000065
C30-C33*		0.000009	0.000007	0.000000	0.000009	0.000009	0.000000	0.000000	0.000063	0.000063	0.000063	0.000000	0.000057
C34-C40*		0.000008	0.000006	0.000000	0.000008	0.000008	0.000000	0.000000	0.000058	0.000058	0.000058	0.000000	0.000052
C41-C80*		0.000006	0.000005	0.000000	0.000006	0.000006	0.000000	0.000000	0.000043	0.000043	0.000043	0.000000	0.000039
C10-C13_3*		0.001989	0.001507	0.000002	0.001989	0.001989	0.000000	0.000000	0.014125	0.014125	0.014125	0.000003	0.012806
C14-C17*		0.000879	0.000666	0.000000	0.000879	0.000879	0.000000	0.000000	0.006243	0.006243	0.006243	0.000000	0.005657
C18-C21*		0.001240	0.000939	0.000000	0.001240	0.001240	0.000000	0.000000	0.008806	0.008806	0.008806	0.000000	0.007980
C22-C23_1*		0.000739	0.000560	0.000000	0.000739	0.000739	0.000000	0.000000	0.005247	0.005247	0.005247	0.000000	0.004755
C24-C25*		0.000574	0.000435	0.000000	0.000574	0.000574	0.000000	0.000000	0.004077	0.004077	0.004077	0.000000	0.003694
C26-C28*		0.000630	0.000477	0.000000	0.000630	0.000630	0.000000	0.000000	0.004475	0.004475	0.004475	0.000000	0.004055
C29-C32*		0.000543	0.000411	0.000000	0.000543	0.000543	0.000000	0.000000	0.003854	0.003854	0.003854	0.000000	0.003492
C33-C39*		0.000485	0.000367	0.000000	0.000485	0.000485	0.000000	0.000000	0.003443	0.003443	0.003443	0.000000	0.003120
C40-C80*		0.000340	0.000257	0.000000	0.000340	0.000340	0.000000	0.000000	0.002412	0.002412	0.002412	0.000000	0.002185
H2O		0.945436	0.724150	0.030505	0.945436	0.945436	0.999999	0.999999	0.613221	0.613221	0.613221	0.038316	0.619646
HSTc20+*		0.002923	0.002214	0.000000	0.002923	0.002923	0.000000	0.000000	0.020760	0.020760	0.020760	0.000000	0.018813
HSTDc10*		0.000658	0.000517	0.000070	0.000658	0.000658	0.000000	0.000000	0.004673	0.004673	0.004673	0.000084	0.004397
HSTDc11*		0.000521	0.000401	0.000024	0.000521	0.000521	0.000000	0.000000	0.003700	0.003700	0.003700	0.000029	0.003410
HSTDc12*		0.000421	0.000321	0.000008	0.000421	0.000421	0.000000	0.000000	0.002993	0.002993	0.002993	0.000010	0.002730
HSTDc13*		0.000398	0.000303	0.000003	0.000398	0.000398	0.000000	0.000000	0.002830	0.002830	0.002830	0.000004	0.002572
HSTDc14*		0.000324	0.000246	0.000001	0.000324	0.000324	0.000000	0.000000	0.002302	0.002302	0.002302	0.000001	0.002088
HSTDc15*		0.000356	0.000270	0.000000	0.000356	0.000356	0.000000	0.000000	0.002529	0.002529	0.002529	0.000001	0.002292
H5-22P_C20+*		0.001333	0.001010	0.000000	0.001333	0.001333	0.000000	0.000000	0.009470	0.009470	0.009470	0.000000	0.008582
10X-DST1_2c11*		0.001026	0.000792	0.000057	0.001026	0.001026	0.000000	0.000000	0.007290	0.007290	0.007290	0.000069	0.006739
10X-DST1_2c12*		0.000862	0.000660	0.000026	0.000862	0.000862	0.000000	0.000000	0.006123	0.006123	0.006123	0.000031	0.005609
10X-DST1_2c13*		0.000869	0.000662	0.000015	0.000869	0.000869	0.000000	0.000000	0.006174	0.006174	0.006174	0.000018	0.005629
10X-DST1_2c14*		0.000757	0.000575	0.000007	0.000757	0.000757	0.000000	0.000000	0.005378	0.005378	0.005378	0.000008	0.004889
10X-DST1_2c15*		0.000883	0.000670	0.000003	0.000883	0.000883	0.000000	0.000000	0.006272	0.006272	0.006272	0.000004	0.005691
10X-DST1_2c16*		0.000563	0.000426	0.000001	0.000563	0.000563	0.000000	0.000000	0.003997	0.003997	0.003997	0.000001	0.003624
10X-DST1_2c17*		0.000487	0.000369	0.000000	0.000487	0.000487	0.000000	0.000000	0.003459	0.003459	0.003459	0.000000	0.003135
10X-DST1_2c18*		0.000574	0.000435	0.000000	0.000574	0.000574	0.000000	0.000000	0.004076	0.004076	0.004076	0.000000	0.003694
10X-DST1_2c19*		0.000486	0.000368	0.000000	0.000486	0.000486	0.000000	0.000000	0.003451	0.003451	0.003451	0.000000	0.003127
10X-DST1_C20+*		0.002303	0.001744	0.000000	0.002303	0.002303	0.000000	0.000000	0.016359	0.016359	0.016359	0.000000	0.014824
10X-DST2_C20+*		0.001425	0.001079	0.000000	0.001425	0.001425	0.000000	0.000000	0.010122	0.010122	0.010122	0.000000	0.009172
HSTDc16*		0.000227	0.000172	0.000000	0.000227	0.000227	0.000000	0.000000	0.001611	0.001611	0.001611	0.000000	0.001460
HSTDc17*		0.000189	0.000143	0.000000	0.000189	0.000189	0.000000	0.000000	0.001341	0.001341	0.001341	0.000000	0.001215
HSTDc18*		0.000182	0.000138	0.000000	0.000182	0.000182	0.000000	0.000000	0.001290	0.001290	0.001290	0.000000	0.001169
HSTDc19*		0.000162	0.000123	0.000000	0.000162	0.000162	0.000000	0.000000	0.001152	0.001152	0.001152	0.000000	0.001044
HSDc20+*		0.001485	0.001125	0.000000	0.001485	0.001485	0.000000	0.000000	0.010546	0.010546	0.010546	0.000000	0.009556
HSTDc6*		0.000410	0.000631	0.001215	0.000410	0.000410	0.000000	0.000000	0.002910	0.002910	0.002910	0.001363	0.003559
HSTDc7*		0.000536	0.000587	0.000688	0.000536	0.000536	0.000000	0.000000	0.003804	0.003804	0.003804	0.000783	0.004446
HSTDc8*		0.000892	0.000820	0.000549	0.000892	0.000892	0.000000	0.000000	0.006333	0.006333	0.006333	0.000633	0.006815
HSTDc9*		0.000745	0.000613	0.000185	0.000745	0.000745	0.000000	0.000000	0.005291	0.005291	0.005291	0.000216	0.005208
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Stream Name	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0303	0.0000	0.0000	0.0000	1.0000	0.9433	0.9433	0.8778	1.0000	0.0000	0.0000
Temperature	68.83	68.83	68.83	68.89	68.89	68.89	68.97	69.00	69.63	69.00	55.00	69.00	35.00	35.00	35.56	35.56	35.56	35.71
Pressure	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	1,456	178,323	24,833	178,323	167,468	10,856	10,856	167,468	167,468	166,360	166,360	1,108	1,108	1,108	1,151	1,038	112.5	112.5
Molar Flow	42.1	1,415	1,378	1,415	812.8	602.6	602.6	812.8	812.8	788.2	788.2	24.6	24.6	24.6	26.5	23.2	3.24	3.24
Mass Enthalpy	-3,056	-2,927	-15,698	-2,926	-2,098	-15,697	-15,697	-2,097	-2,097	-2,094	-2,123	-2,558	-2,669	-2,669	-3,024	-2,523	-7,637	-7,636
Heat Flow	-1,236	-144,972	-108,286	-144,938	-97,603	-47,334	-47,334	-97,532	-97,532	-96,745	-98,123	-787	-821	-821	-966	-728	-239	-239
Mass Density	5.02	799.62	973.54	799.93	790.78	973.64	973.44	309.41	790.21	792.39	802.32	3.34	3.71	3.71	3.84	3.46	776.31	776.78
Molecular Weight	34.60	125.99	18.02	125.99	206.03	18.02	18.02	206.03	206.03	211.06	211.06	45.01	45.01	45.01	43.45	44.65	34.78	34.78
VAPOR																		
Mass Flow	1,456	---	---	---	---	---	---	1,108	---	---	---	1,108	1,037	1,037	1,038	1,038	---	---
Molar Flow	42.1	---	---	---	---	---	---	24.6	---	---	---	24.6	23.2	23.2	23.2	23.2	---	---
Actual Volume Flow	289.9	---	---	---	---	---	---	331.3	---	---	---	331.3	298.6	298.6	299.7	299.7	---	---
Std Gas Flow	0.84	---	---	---	---	---	---	0.49	---	---	---	0.49	0.47	0.47	0.47	0.47	---	---
Mass Density	5.02	---	---	---	---	---	---	3.34	---	---	---	3.34	3.47	3.47	3.46	3.46	---	---
Molecular Weight	34.60	---	---	---	---	---	---	45.01	---	---	---	45.01	44.66	44.66	44.65	44.65	---	---
Viscosity	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	0.027	---	---	---	---	---	---	0.023	---	---	---	0.023	0.020	0.020	0.020	0.020	---	---
Mass Heat Capacity	1.988	---	---	---	---	---	---	1.919	---	---	---	1.919	1.782	1.782	1.784	1.784	---	---
Cp/Cv	1.156	---	---	---	---	---	---	1.118	---	---	---	1.118	1.131	1.131	1.131	1.131	---	---
Z Factor	0.972	---	---	---	---	---	---	0.976	---	---	---	0.976	0.971	0.971	0.971	0.971	---	---
LIQUID																		
Mass Flow	---	167,468	---	167,468	167,468	---	---	166,360	167,468	166,360	166,360	---	57.2	57.2	67.8	---	67.8	67.8
Molar Flow	---	812.8	---	812.8	812.8	---	---	788.2	812.8	788.2	788.2	---	0.64	0.64	0.75	---	0.75	0.75
Actual Volume Flow	---	211.9	---	211.8	211.8	---	---	209.9	211.9	209.9	207.3	---	0.08	0.08	0.10	---	0.10	0.10
Liq Vol Flow @Std Cond	---	30,530	---	30,530	30,530	---	---	30,265	30,530	30,265	30,265	---	12.5	12.5	14.7	---	14.7	14.7
Mass Density	---	790.47	---	790.78	790.78	---	---	792.39	790.21	792.39	802.32	---	674.75	674.75	676.62	---	676.62	677.19
Viscosity (Note 4)	---	1.902	---	1.901	1.901	---	---	1.982	1.879	1.982	2.517	---	0.327	0.327	0.333	---	0.333	0.333
Thermal Conductivity	---	0.111	---	0.111	0.111	---	---	0.112	0.111	0.112	0.114	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	---	2.160	---	2.160	2.160	---	---	2.158	2.163	2.158	2.100	---	2.154	2.154	2.153	---	2.153	2.151
Surface Tension	---	16.95	---	16.94	16.94	---	---	17.23	16.89	17.23	18.20	---	16.31	16.31	16.35	---	16.35	16.33
AQUEOUS (Note 3)																		
Mass Flow	---	10,855	24,833	10,856	---	10,856	10,856	---	---	---	---	---	13.6	13.6	44.7	---	44.7	44.7
Molar Flow	---	602.6	1,378	602.6	---	602.6	602.6	---	---	--

CASE 1B MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8473	0.9708	1.0000	0.0000	0.0034	1.0000	0.7962	0.9602	0.0000	0.0156	1.0000	1.0000	1.0000	0.0104	0.2134	0.9692	1.0000	1.0000	0.0000	0.0450	1.0000	1.0000	0.9762	0.9762	0.9998	0.0000	0.3159	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	50.97	50.63	50.63	49.97	99.06	35.00	30.31	30.31	28.93	40.02	40.02	67.94	39.64	26.31	33.00	30.31	30.31	30.08	27.62	30.08	157.88	50.00	50.00	49.85	50.00	28.53	50.33	50.33	50.33
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	47.89	47.39	47.39	47.09	47.39	8.70	45.39	45.39	45.39
Mass Flow	kg/h	1,038	1,038	2,494	2,451	43.1	43.1	2,451	2,451	132,887	7,792	7,792	11,166	11,166	124,478	0.00	0.00	124,478	125,095	62,547	0.00	0.00	62,547	62,547	62,547	125,095	119,133	5,962	5,962	117,900	104,913	52,457
Molar Flow	kgmole/h	23.2	23.2	65.3	63.4	1.88	1.88	63.4	63.4	5,189	206.3	206.3	458.3	458.3	5,007	0.00	0.00	5,007	4,982	2,491	0.00	0.00	2,491	2,491	2,491	4,982	4,864	118.7	118.7	4,839	4,306	2,153
Mass Enthalpy	kJ/kg	-2,451	-2,627	-2,877	-2,714	-12,136	-12,136	-2,628	-2,882	-3,600	-6,697	-6,697	-3,455	-3,455	-3,524	-2,556	-2,556	-3,647	-3,408	-3,408	-2,295	-2,295	-3,408	-3,156	-3,441	-3,441	-3,467	-2,916	-2,916	-3,455	-3,455	-3,455
Heat Flow	kW	-707	-758	-1,993	-1,848	-145	-145	-1,789	-1,962	-132,904	-14,495	-14,495	-10,715	-10,715	-121,849	0	0	-126,115	-118,410	-59,205	0	0	-59,205	-54,838	-59,778	-119,556	-114,727	-4,829	-4,829	-113,140	-100,678	-50,339
Mass Density	kg/m3	8.27	10.21	6.10	5.84	876.87	360.65	13.68	20.01	10.33	738.35	282.70	33.58	33.58	8.63	507.30	94.63	9.82	9.73	9.73	636.73	223.20	9.41	36.73	56.89	56.89	54.10	516.32	61.27	51.23	51.23	51.23
Molecular Weight		44.65	44.65	38.18	38.63	22.98	22.98	38.63	38.63	25.61	37.78	37.78	24.37	24.37	24.86	55.65	55.65	24.86	25.11	25.11	79.99	79.99	25.11	25.11	25.11	25.11	24.49	50.23	50.23	24.37	24.37	24.37
VAPOR																																
Mass Flow	kg/h	1,038	820.1	2,450	2,451	---	0.30	2,451	1,720	125,095	---	102.1	11,166	11,166	124,478	0.00	0.00	119,789	125,095	62,547	---	0.00	62,547	62,547	59,566	119,133	119,087	---	1,147	117,900	104,913	52,457
Molar Flow	kgmole/h	23.2	19.7	63.4	63.4	---	0.006	63.4	50.5	4,982	---	3.22	458.3	458.3	5,007	0.00	0.00	4,852	4,982	2,491	---	0.00	2,491	2,491	2,432	4,864	4,863	---	37.5	4,839	4,306	2,153
Actual Volume Flow	m3/h	125.5	101.4	408.8	419.4	---	0.07	179.2	121.2	12,857	---	17.26	332.5	332.5	14,432	0.00	0.00	12,669	12,857	6,428	---	0.00	6,647	1,703	1,094	2,188	2,202	---	89.4	2,301	2,048	1,024.0
Std Gas Flow	MMSCFD	0.47	0.40	1.27	1.27	---	0.0001	1.27	1.01	100.04	---	0.06	9.20	9.20	100.53	0.00	0.00	97.43	100.04	50.02	---	0.00	50.02	50.02	48.83	97.66	97.64	---	0.75	97.15	86.45	43.23
Mass Density	kg/m3	8.27	8.09	5.99	5.84	---	4.25	13.68	14.18	9.73	---	5.92	33.58	33.58	8.63	34.27	12.84	9.46	9.73	9.73	---	5.84	9.41	36.73	54.46	54.46	54.08	---	12.83	51.23	51.23	51.23
Molecular Weight		44.65	41.63	38.63	38.63	---	47.64	38.63	34.04	25.11	---	31.70	24.37	24.37	24.86	24.70	30.37	24.69	25.11	25.11	---	31.18	25.11	25.11	24.49	24.49	24.49	---	30.58	24.37	24.37	24.37
Viscosity	cP	0.010	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.010	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.010	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.025	0.021	0.024	0.024	---	0.020	0.030	0.025	0.029	---	0.025	0.033	0.033	0.034	0.033	0.025	0.029	0.029	0.029	---	0.025	0.029	0.049	0.036	0.036	0.036	---	0.025	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.991	1.820	1.902	1.900	---	1.835	2.139	1.943	2.026	---	1.882	2.292	2.292	2.138	2.292	1.946	2.040	2.026	2.026	---	1.883	2.022	2.605	2.521	2.521	2.517	---	1.950	2.489	2.489	2.489
Cp/Cv		1.130	1.161	1.151	1.151	---	1.121	1.153	1.215	1.246	---	1.191	1.361	1.361	1.220	1.364	1.233	1.246	1.246	1.246	---	1.194	1.245	1.233	1.455	1.455	1.453	---	1.230	1.436	1.436	1.436
Z Factor		0.946	0.936	0.960	0.961	---	0.965	0.932	0.910	0.952	---	0.963	0.864	0.864	0.967	0.859	0.923	0.955	0.952	0.952	---	0.963	0.954	0.933	0.810	0.810	0.811	---	0.923	0.821	0.821	0.821
LIQUID																																
Mass Flow	kg/h	---	209.4	12.7	---	11.5	11.3	---	699.6	5,264	5,264	5,163	---	---	---	0.00	0.00	2,420	---	---	0.00	0.00	---	---	2,900	5,801	45.6	5,801	4,655	---	---	---
Molar Flow	kgmole/h	---	3.07	0.14	---	0.12	0.12	---	11.2	66.0	66.0	62.8	---	---	---	0.00	0.00	28.4	---	---	0.00	0.00	---	---	54.9	109.7	0.86	109.7	72.3	---	---	---
Actual Volume Flow	m3/h	---	0.34	0.02	---	0.02	0.02	---	1.20	8.03	8.03	7.79	---	---	---	0.00	0.00	3.62	---	---	0.00	0.00	---	---	5.69	11.4	0.09	11.4	7.77	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	50.4	2.72	---	2.48	2.40	---	174.5	1,186.3	1,186.3	1,153.5	---	---	---	0.00	0.00	533.3	---	---	0.00	0.00	---	---	781.5	1,563	12.3	1,563	1,144.7	---	---	---
Mass Density	kg/m3	---	609.05	669.10	---	670.89	676.26	---	582.75	655.21	655.21	662.69	---	---	---	542.10	590.46	668.13	---	---	636.73	664.08	---	---	509.55	509.55	510.28	509.55	599.23	---	---	---
Viscosity (Note 4)	cP	---	0.203	0.307	---	0.312	0.326	---	0.170	0.283	0.283	0.301	---	---	---	0.132	0.181	0.311	---	---	0.279	0.305	---	---	0.112	0.112	0.112	0.112	0.191	---	---	---
Thermal Conductivity	W/m-K	---	0.098	0.103	---	0.103	0.105	---	0.093	0.103	0.103	0.105	---	---	---	0.088	0.096	0.104	---	---	0.103	0.105	---	---	0.084	0.084	0.084	0.084	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.304	2.220	---	2.215	2.201	---	2.396	2.182	2.182	2.160	---	---	---	2.545	2.348	2.164	---	---	2.179	2.153	---	---	2.676	2.676	2.673	2.676	2.322	---	---	---
Surface Tension	dyne/cm	---	12.76	14.90	---	15.01	15.53	---	10.88	14.86	14.86	15.59	---	---	---	8.66	11.62	15.24	---	---	14.92	15.71	---	---	7.27	7.27	7.30	7.27	11.98	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	8.74	31.9	---	31.6	31.5	---	31.6	2,527	2,527	2,527	---	---	---	---	---	2,269	---	---	---	---	---	---	80.6	161.1	0.61	161.1	160.6	---	---	---
Molar Flow	kgmole/h	---	0.49	1.77	---	1.75	1.75	---	1.75	140.3	140.3	140.3	---	---	---	---	---	126.0	---	---	---	---	---	---	4.47	8.94	0.03	8.94	8.91	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.03	---	0.03	0.03	---	0.03	2.52	2.52	2.52	---	---	---	---	---	2.27	---	---	---	---	---	---	0.08	0.16	0.001	0.16	0.16	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.30	4.74	---	4.70	4.69	---	4.70	376.1	376.1	376.0	---	---	---	---	---	337.7	---	---	---	---	---	---	12.0	24.0	0.09	24.0	23.9	---	---	---
Mass Density	kg/m3	---	1,002.17	987.59	---	987.85	988.31	---	1,000.05	1,003.59	1003.5906	1,004.49	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.84	989.84	989.95	989.84	1004.9518	---	---	---
Viscosity	cP	---	0.764	0.535	---	0.538	0.544	---	0.718	0.792	0.792	0.816	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.823	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.644	---	0.644	0.643	---	0.625	0.619	0.619	0.617	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.616	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.321	---	4.321	4.321	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.312	---	---	---
Surface Tension	dyne/cm	---	70.89	67.56	---	67.62	67.74	---	70.36	71.18	71.18	71.42	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	71.49	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000139	0.000139	0.000484	0.000498	0.000000	0.000000	0.000498	0.000498	0.002603	0.000014	0.000014	0.002784	0.002784	0.002685	0.000193	0.000193	0.002685	0.002711	0.002711	0.000042	0.000042	0.002711	0.002711	0.002711	0.002711	0.002770	0.000292	0.000292	0.002784	0.002784	0.002784
CO2		0.000452	0.000452	0.000531	0.000547	0.000002	0.000002	0.000547	0.000547	0.000547	0.000023	0.000023	0.000580	0.000580	0.000554	0.000196	0.000196	0.000554	0.000568	0.000568	0.000066	0.000066	0.000568	0.000568	0.000568	0.000568	0.000577	0.000237	0.000237	0.000580	0.000580	0.000580
Methane		0.147141	0.147141	0.279621	0.287875	0.000350	0.000350	0.287875	0.287875	0.641629	0.010349	0.010349	0.683680	0.683680	0.657491	0.120937	0.120937	0.657491	0.667763	0.667763	0.031832	0.031832	0.667763	0.667763	0.667763	0.667763	0.680142	0.160483	0.160483	0.683680	0.683680	0.683680
Ethane		0.176825	0.176825	0.175366	0.180520	0.000980	0.000980	0.180520	0.180520	0.130695	0.010814	0.010814	0.137211	0.137211	0.130776	0.093468	0.093468	0.130776	0.135658	0.135658	0.033406	0.033406	0.135658	0.135658	0.135658	0.135658	0.136500	0.101141	0.101141	0.137211	0.137211	0.137211
Propane		0.283674	0.283674	0.222884	0.229358	0.003824	0.003824	0.229358	0.229358	0.998513	0.027352	0.027352	0.100257	0.100257	0.095124	0.185557	0.185557	0.095124	0.101459	0.101459	0.084786	0.084786	0.101459	0.101459	0.101459	0.101459	0.099738	0.171997	0.171997	0.100257	0.100257	0.100257
i-Butane		0.076600	0.076600	0.055624	0.057204	0.002175	0.002175	0.057204	0.057204	0.020229	0.013401	0.013401	0.019610	0.019610	0.018781	0.074418	0.074418	0.018781	0.020512	0.020512	0.041651	0.041651	0.020512	0.020512	0.020512	0.020512	0.019508	0.061647	0.061647	0.019610	0.019610	0.019610
n-Butane		0.148196	0.148196	0.106024	0.108993	0.005574	0.005574	0.108993	0.108993	0.036987	0.033712	0.033712	0.034842	0.034842	0.033684	0.173246	0.173246	0.033684	0.037123	0.037123	0.104862	0.104862	0.037123	0.037123	0.037123	0.037123	0.034662	0.137975	0.137975	0.034842	0.034842	0.034842
22-Mpropane		0.000085	0.000085	0.000060	0.000062	0.000004	0.000004	0.000062	0.000062	0.000021	0.000025	0.000025	0.000000	0.000000	0.000019	0.000000	0.000000	0.000019	0.000021	0.000021	0.000078	0.000078	0.000021	0.000021	0.000021	0.000021	0.000019	0.000091	0.000091	0.000000	0.000000	0.000000
i-Pentane		0.043682	0.043682	0.030664	0.031462	0.003660	0.003660	0.031462	0.031462	0.010346	0.021578	0.021578	0.008640	0.008640	0.008841	0.087914	0.087914	0.008841	0.009881	0.009881	0.067295	0.067295	0.009881	0.009881	0.009881	0.009881	0.008595	0.062562	0.062562	0.008640	0.008640	0.008640
n-Pentane		0.044539	0.044539	0.031289	0.032073	0.004749	0.004749	0.032073	0.032073	0.010564	0.028226	0.028226	0.008344	0.008344	0.008820	0.105753	0.105753	0.008820	0.009833	0.009833	0.088097	0.088097	0.009833	0.009833	0.009833	0.009833	0.008300	0.072651	0.072651	0.008344	0.008344	0.008344
n-Hexane		0.022333	0.022333	0.016298	0.016577	0.006875	0.006875	0.016577	0.016577	0.006078	0.040573	0.040573	0.003288	0.003288	0.004640	0.102563	0.102563	0.004640	0.004650	0.004650	0.127052	0.127052	0.004650	0.004650	0.004650	0.004650	0.003271	0.061132	0.061132	0.003288	0.003288	0.003288
Mcyclopentan		0.001485	0.001485	0.001085	0.001103	0.000475	0.000475	0.001103	0.001103	0.000405	0.002788	0.002788	0.000000	0.000000	0.000306	0.000000	0.000000	0.000306	0.000306	0.000306	0.008724	0.008724	0.000306	0.000306	0.000306	0.000306	0.000211	0.004192	0.004192	0.000000	0.000000	0.000000
Benzene		0.000126	0.000126	0.000092	0.000093	0.000040	0.000040	0.000093	0.000093	0.000034	0.000232	0.000232	0.000000	0.000000	0.000026	0.000000	0.000000	0.000026	0.000026	0.000026	0.000725	0.000725	0.000026	0.000026	0.000026	0.000026	0.000018	0.000348	0.000348	0.000000	0.000000	0.000000
Cyclohexane		0.001084	0.001084	0.000804	0.000815	0.000427	0.000427	0.000815	0.000815	0.000308	0.002454	0.002454	0.000000	0.000000	0.000231	0.000000	0.000000	0.000231	0.000220	0.000220	0.007680	0.007680	0.000220	0.000220	0.000220	0.000220	0.000145	0.003292	0.003292	0.000000	0.000000	0.000000
n-Heptane		0.002917	0.002917	0.002416	0.002408	0.002689	0.002689	0.002408	0.002408	0.001071	0.013807	0.013807	0.000000	0.000000	0.000817	0.000000	0.000000	0.000817	0.000544	0.000544	0.043377	0.043377	0.000544	0.000544	0.000544	0.000544	0.00287	0.011070	0.011070	0.000000	0.000000	0.000000
Mcyclohexane		0.001605	0.001605	0.001304	0.001303	0.001359	0.001359	0.001303	0.001303	0.000571	0.007015	0.007015	0.000000	0.000000	0.000431	0.000000	0.000000	0.000431	0.000304	0.000304	0.022011	0.022011	0.000304	0.000304	0.000304	0.000304	0.000163	0.006099	0.006099	0.000000	0.000000	0.000000
Toluene		0.000129	0.000129	0.000109	0.000108	0.000136	0.000136	0.000108	0.000108	0.000048	0.000667	0.000667	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000023	0.000023	0.002092	0.002092	0.000023	0.000023	0.000023	0.000023	0.000011	0.000495	0.000495	0.000000	0.000000	0.000000
n-Octane		0.001176	0.001176	0.001307	0.001237	0.003686	0.003686	0.001237	0.001237	0.000700	0.013236	0.013236	0.000000	0.000000	0.000591	0.000000	0.000000	0.000591	0.000181	0.000181	0.041723	0.041723	0.000181	0.000181	0.000181	0.000181	0.000063	0.004991	0.004991	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000011	0.000011	0.000035	0.000035	0.000011	0.000011	0.000006	0.000119	0.000119	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000001	0.000001	0.000373	0.000373	0.000001	0.000001	0.000001	0.000001	0.000001	0.000041	0.000041	0.000000	0.000000	0.000000
m-Xylene		0.000019	0.000019	0.000024	0.000022	0.000085	0.000085	0.000022	0.000022	0.000013	0.000266	0.000266	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.000838	0.000838	0.000003	0.000003	0.000003	0.000003	0.000001	0.000081	0.000081	0.000000	0.000000	0.000000
p-Xylene		0.000020	0.000020	0.000024	0.000022	0.000085	0.000085	0.000022	0.000022	0.000013	0.000266	0.000266	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.000837	0.000837	0.000003	0.000003	0.000003	0.000003	0.000001	0.000081	0.000081	0.000000	0.000000	0.000000
o-Xylene		0.000014	0.000014	0.000018	0.000016	0.000067	0.000067	0.000016	0.000016	0.000010	0.000201	0.000201	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000632	0.000632	0.000002	0.000002	0.000002	0.000002	0.000001	0.000058	0.000058	0.000000	0.000000	0.000000
n-Nonane		0.000195	0.000195	0.000355	0.000298	0.002282	0.002282	0.000298	0.000298	0.000222	0.004988	0.004988	0.000000	0.000000	0.000207	0.000000	0.000000	0.000207	0.000025	0.000025	0.015774	0.015774	0.000025	0.000025	0.000025	0.000025	0.000005	0.000821	0.000821	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000012	0.000009	0.000110	0.000110	0.000009	0.000009	0.000008	0.000181	0.000181	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000001	0.000001	0.000572	0.000572	0.000001	0.000001	0.000001	0.000001	0.000000	0.000019	0.000019	0.000000	0.000000	0.000000
n-Decane		0.000034	0.000034	0.000117	0.000077	0.001476	0.001476	0.000077	0.000077	0.000084	0.001954	0.001954	0.000000	0.000000	0.000080	0.000000	0.000000	0.000080	0.000004	0.000004	0.006199	0.006199	0.000004	0.000004	0.000004	0.000004	0.000000	0.001134	0.001134	0.000000	0.000000	0.000000
C7*		0.006560	0.006560	0.005235	0.005249	0.004765	0.004765	0.005249	0.005249	0.002226	0.025628	0.025628	0.000714	0.000714	0.001679	0.044287	0.044287	0.001679	0.001257	0.001257	0.080453	0.080453	0.001257	0.001257	0.001257	0.001257	0.000710	0.023679	0.023679	0.000714	0.000714	0.000714
C8*		0.001023	0.001023	0.001268	0.001170	0.004587	0.004587	0.001170	0.001170	0.000725	0.014471	0.014471	0.000050	0.000050	0.000629	0.010434	0.010434	0.000629	0.000156	0.000156	0.045671	0.045671	0.000156	0.000156	0.000156	0.000156	0.000049	0.004529	0.004529	0.000050	0.000050	0.000050
C9*		0.000089	0.000089	0.000220	0.000165	0.002076	0.002076	0.000165	0.000165	0.000148	0.003464	0.003464	0.000002	0.000002	0.000142	0.001030	0.001030	0.000142	0.000011	0.000011	0.010977	0.010977	0.000011	0.000011	0.000011	0.000011	0.000002	0.000380	0.000380	0.000002	0.000002	0.000002
C10-C13*		0.000000	0.000000	0.000003	0.000001	0.000081	0.000081	0.000001	0.000001	0.000002	0.000057	0.000057	0.000000	0.000000	0.000002	0.000002	0.000002	0.000002	0.000000	0.000000	0.000183	0.000183	0.000000	0.000000	0.000000	0.000000	0.000001	0.000041	0.000041	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000408	0.000408	0.000000	0.000000	0.000001	0.000029	0.000029	0.000000	0.000000	0.000001	0.000000	0.000000	0.000001	0.000000	0.000000	0.000092	0.000092	0.000000	0.000000	0.000000	0.000000	0.000000	0.000020	0.000020	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 1B MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1630	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9296	1.0000	1.0000	1.0000	0.7962	1.0000
Temperature	C	50.33	44.00	50.33	141.17	45.00	45.00	45.00	44.87	59.00	12.47	70.02	50.33	40.02	35.00	50.33
Pressure	bar_g	45.39	30.00	45.39	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.39	30.00	8.70	45.39
Mass Flow	kg/h	0.00	0.00	52,457	52,457	52,457	86,167	18,746	86,167	18,746	18,746	11,166	11,166	11,166	2,451	1,820
Molar Flow	kgmole/h	0.00	0.00	2,153	2,153	2,153	3,536	769.4	3,536	769.4	769.4	458.3	458.3	458.3	63.4	74.7
Mass Enthalpy	kJ/kg	-2,626	-2,626	-3,455	-3,298	-3,604	-3,604	-3,604	-3,604	-3,553	-3,553	-3,385	-3,455	-3,455	-2,882	-3,455
Heat Flow	kW	0	0	-50,339	-48,050	-52,508	-86,251	-18,765	-86,251	-18,500	-18,500	-10,499	-10,715	-10,715	-1,962	-1,747
Mass Density	kg/m3	499.12	244.35	51.23	111.94	203.79	203.79	203.79	203.30	179.45	34.93	28.86	51.23	33.58	20.01	51.23
Molecular Weight		49.67	49.67	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37	38.63	24.37
VAPOR																
Mass Flow	kg/h	---	0.00	52,457	52,457	52,457	86,167	18,746	86,167	18,746	16,071	11,166	11,166	11,166	1,720	1,820
Molar Flow	kgmole/h	---	0.00	2,153	2,153	2,153	3,536	769.4	3,536	769.4	715.2	458.3	458.3	458.3	50.5	74.7
Actual Volume Flow	m3/h	---	0.00	1,024.0	468.6	257.4	422.8	92.0	423.8	104.5	531.8	386.9	218.0	332.5	121.2	35.53
Std Gas Flow	MMSCFD	---	0.00	43.23	43.23	43.23	71.00	15.45	71.00	15.45	14.36	9.20	9.20	9.20	1.01	1.50
Mass Density	kg/m3	---	36.73	51.23	111.94	203.79	203.79	203.79	203.30	179.45	30.22	28.86	51.23	33.58	14.18	51.23
Molecular Weight		---	26.35	24.37	24.37	24.37	24.37	24.37	24.37	24.37	22.47	24.37	24.37	24.37	34.04	24.37
Viscosity	cP	---	0.012	0.013	0.019	0.023	0.023	0.023	0.023	0.021	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	W/m-K	---	0.032	0.036	0.056	0.058	0.058	0.058	0.058	0.055	0.030	0.036	0.036	0.033	0.025	0.036
Mass Heat Capacity	kJ/kg-C	---	2.296	2.489	2.937	3.712	3.712	3.712	3.715	3.482	2.255	2.315	2.489	2.292	1.943	2.489
Cp/Cv		---	1.362	1.436	1.398	2.044	2.044	2.044	2.047	1.884	1.407	1.297	1.436	1.361	1.215	1.436
Z Factor		---	0.844	0.821	0.859	0.614	0.614	0.614	0.613	0.665	0.862	0.903	0.821	0.864	0.910	0.821
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	2,675	---	---	---	699.6	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	54.2	---	---	---	11.18	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	4.95	---	---	---	1.20	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	753.6	---	---	---	174.5	---
Mass Density	kg/m3	499.12	525.62	---	---	---	---	---	---	---	540.16	---	---	---	582.75	---
Viscosity (Note 4)	cP	0.099	0.120	---	---	---	---	---	---	---	0.138	---	---	---	0.170	---
Thermal Conductivity	W/m-K	0.081	0.085	---	---	---	---	---	---	---	0.094	---	---	---	0.093	---
Mass Heat Capacity	kJ/kg-C	2.824	2.629	---	---	---	---	---	---	---	2.479	---	---	---	2.396	---
Surface Tension	dyne/cm	6.34	7.83	---	---	---	---	---	---	---	9.52	---	---	---	10.88	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	31.6	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.75	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.70	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000344	0.000344	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.002784	0.000498	0.002784
CO2		0.000271	0.000271	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000580	0.000547	0.000580
Methane		0.187364	0.187364	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.683680	0.287875	0.683680
Ethane		0.117580	0.117580	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.137211	0.180520	0.137211
Propane		0.200060	0.200060	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.100257	0.229358	0.100257
i-Butane		0.071847	0.071847	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.019610	0.057204	0.019610
n-Butane		0.160298	0.160298	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.034842	0.108993	0.034842
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000062	0.000000
i-Pentane		0.072963	0.072963	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.008640	0.031462	0.008640
n-Pentane		0.084545	0.084545	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.008344	0.032073	0.008344
n-Hexane		0.071243	0.071243	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.003288	0.016577	0.003288
Mycylopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001103	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000093	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000815	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002408	0.000000
Mycylohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001303	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000108	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001237	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000022	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000022	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000016	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000298	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000009	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000077	0.000000
C7*		0.027610	0.027610	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.000714	0.005249	0.000714
C8*		0.005416	0.005416	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.000050	0.001170	0.000050
C9*		0.000458	0.000458	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000165	0.000002
C10-C13*		0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.032433	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000081	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000047	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000014	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004365	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002128	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001322	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000306	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58	883.21

CASE 1C MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		0.0001	0.2580	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0168	1.0000	0.0189	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0306	0.0000	0.0000	0.0000	1.0000	0.9442	0.9442	0.8787	1.0000	0.0000	0.0000
Temperature	C	72.00	68.40	68.00	68.00	72.00	68.79	71.78	71.78	71.74	71.08	71.78	68.63	68.65	68.65	68.65	68.72	68.72	68.72	68.79	69.00	69.64	69.00	55.00	69.00	35.00	35.00	35.55	35.55	35.55	35.71
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	407,933	535,670	134,723	407,933	407,933	24,995	247,336	185,550	185,550	185,550	42.2	193,941	1,465	178,334	24,995	178,334	167,477	10,856	10,856	167,477	167,477	166,354	166,354	1,123	1,123	1,123	1,167	1,054	113.7	113.7
Molar Flow	kgmole/h	14,362	19,383	5,418	14,362	14,362	1,387	13,729	2,019	2,019	2,019	1.66	2,243	42.3	1,416	1,387	1,416	813.0	602.6	602.6	813.0	813.0	788.1	788.1	24.9	24.9	24.9	26.8	23.6	3.25	3.25
Mass Enthalpy	kJ/kg	-10,244	-8,643	-3,524	-10,258	-10,244	-15,697	-15,685	-3,727	-3,727	-3,727	-3,493	-3,859	-3,052	-2,927	-15,699	-2,927	-2,099	-15,698	-15,698	-2,097	-2,097	-2,094	-2,123	-2,553	-2,663	-2,663	-3,015	-2,521	-7,589	-7,588
Heat Flow	kW	-1,160,758	-1,285,987	-131,865	-1,162,337	-1,160,758	-108,988	-1,077,614	-192,096	-192,096	-192,096	-41	-207,913	-1,242	-145,006	-109,000	-144,972	-97,632	-47,340	-47,340	-97,542	-97,542	-96,745	-98,123	-797	-831	-831	-978	-738	-240	-240
Mass Density	kg/m3	880.52	36.39	8.72	893.11	880.52	974.02	971.38	809.30	788.04	400.86	8.76	366.76	5.03	799.73	973.68	800.04	790.89	973.78	973.58	307.13	790.18	792.40	802.33	3.35	3.71	3.71	3.84	3.47	775.22	775.69
Molecular Weight		28.40	27.64	24.86	28.40	28.40	18.02	18.02	91.92	91.92	91.92	25.51	86.47	34.63	125.98	18.02	125.98	206.01	18.02	18.02	206.01	206.01	211.09	211.09	45.09	45.09	45.09	43.54	44.73	34.97	34.97
VAPOR																															
Mass Flow	kg/h	44.2	126,799	134,723	---	44.2	---	---	---	53.1	1,127.8	42.2	1,465	1,465	---	---	---	---	---	---	1,123	---	---	---	1,123	1,052	1,052	1,054	1,054	---	---
Molar Flow	kgmole/h	1.73	5,000	5,418	---	1.73	---	---	---	2.05	33.9	1.66	42.3	42.3	---	---	---	---	---	---	24.9	---	---	---	24.9	23.5	23.5	23.6	23.6	---	---
Actual Volume Flow	m3/h	5.05	14,260	15,454	---	5.05	---	---	---	6.31	235.8	4.82	291.3	291.3	---	---	---	---	---	---	335.4	---	---	---	335.4	302.6	302.6	303.6	303.6	---	---
Std Gas Flow	MMSCFD	0.03	100.40	108.79	---	0.03	---	---	---	0.04	0.68	0.03	0.85	0.85	---	---	---	---	---	---	0.50	---	---	---	0.50	0.47	0.47	0.47	0.47	---	---
Mass Density	kg/m3	8.77	8.89	8.72	---	8.77	---	---	---	8.42	4.78	8.76	5.03	5.03	---	---	---	---	---	---	3.35	---	---	---	3.35	3.48	3.48	3.47	3.47	---	---
Molecular Weight		25.55	25.36	24.86	---	25.55	---	---	---	25.91	33.25	25.51	34.63	34.63	---	---	---	---	---	---	45.09	---	---	---	45.09	44.74	44.74	44.73	44.73	---	---
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.034	0.033	0.034	---	0.034	---	---	---	0.033	0.028	0.034	0.027	0.027	---	---	---	---	---	---	0.023	---	---	---	0.023	0.020	0.020	0.020	0.020	---	---
Mass Heat Capacity	kJ/kg-C	2.140	2.132	2.139	---	2.140	---	---	---	2.130	2.005	2.139	1.988	1.988	---	---	---	---	---	---	1.918	---	---	---	1.918	1.781	1.781	1.784	1.784	---	---
Cp/Cv		1.214	1.217	1.221	---	1.214	---	---	---	1.210	1.160	1.214	1.156	1.156	---	---	---	---	---	---	1.117	---	---	---	1.117	1.131	1.131	1.131	1.131	---	---
Z Factor		0.966	0.965	0.967	---	0.966	---	---	---	0.967	0.975	0.966	0.972	0.972	---	---	---	---	---	---	0.976	---	---	---	0.976	0.971	0.971	0.971	0.971	---	---
LIQUID																															
Mass Flow	kg/h	163,278	164,072	---	163,316	163,278	---	---	163,285	163,228	162,200	---	167,480	---	167,478	---	167,477	167,477	---	---	166,354	167,477	166,354	166,354	---	57.6	57.6	68.9	---	68.9	68.9
Molar Flow	kgmole/h	782.3	794.5	---	783.6	782.3	---	---	782.3	780.3	751.0	---	813.0	---	813.0	---	813.0	813.0	---	---	788.1	813.0	788.1	788.1	---	0.65	0.65	0.76	---	0.76	0.76
Actual Volume Flow	m3/h	206.4	207.0	---	205.7	206.4	---	---	206.3	206.2	204.2	---	211.8	---	211.8	---	211.8	211.8	---	---	209.9	211.9	209.9	207.3	---	0.09	0.09	0.10	---	0.10	0.10
Liq Vol Flow @Std Cond	barrel/day	29,663	29,845	---	29,674	29,663	---	---	29,665	29,650	29,395	---	30,533	---	30,532	---	30,532	30,532	---	---	30,264	30,532	30,264	30,264	---	12.6	12.6	15.0	---	15.0	15.0
Mass Density	kg/m3	791.17	792.55	---	793.90	791.17	---	---	791.32	791.50	794.45	---	790.59	---	790.58	---	790.89	790.89	---	---	792.40	790.18	792.40	802.33	---	674.69	674.69	676.54	---	676.54	677.11
Viscosity (Note 4)	cP	1.908	1.974	---	2.029	1.908	---	---	1.915	1.923	2.057	---	1.908	---	1.907	---	1.906	1.906	---	---	1.983	1.878	1.983	2.518	---	0.327	0.327	0.333	---	0.333	0.333
Thermal Conductivity	W/m-K	0.110	0.110	---	0.110	0.110	---	---	0.110	0.110	0.112	---	0.111	---	0.111	---	0.111	0.111	---	---	0.112	0.111	0.112	0.114	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	kJ/kg-C	2.172	2.159	---	2.156	2.172	---	---	2.171	2.171	2.165	---	2.159	---	2.159	---	2.159	2.159	---	---	2.158	2.163	2.158	2.100	---	2.155	2.155	2.153	---	2.153	2.151
Surface Tension	dyne/cm	16.52	16.60	---	16.73	16.52	---	---	16.53	16.57	17.17	---	16.95	---	16.95	---	16.94	16.94	---	---	17.22	16.88	17.22	18.19	---	16.30	16.30	16.34	---	16.34	16.32
AQUEOUS (Note 3)																															
Mass Flow	kg/h	244,610	244,798	---	244,617	244,610	24,995	247,336	22,271	22,269	22,223	---	24,996	---	10,856	24,995	10,856	---	10,856	10,856	---	---	---	---	---	13.4	13.4	44.8	---	44.8	44.8
Molar Flow	kgmole/h	13,578	13,588	---	13,578	13,578	1,387	13,729	1,236	1,236	1,234	---	1,387	---	602.6	1,387	602.6	---	602.6	602.6	---	---	---	---	---	0.74	0.74	2.49	---	2.49	2.49
Actual Volume Flow	m3/h	251.9	251.3	---	251.0	251.9	25.7	254.6	22.9	22.9	22.9	---	25.7	---	11.1	25.7	11.1	---	11.1	11.2	---	---	---	---	---	0.01	0.01	0.04	---	0.04	0.04
Liq Vol Flow @Std Cond	barrel/day	36,401	36,429	---	36,402	36,401	3,720	36,807	3,314	3,314	3,307	---	3,720	---	1,616	3,720	1,616	---	1,616	1,616	---	---	---	---	---	1.99	1.99	6.67	---	6.67	6.67
Mass Density	kg/m3	971.21	974.09	---	974.40	971.21	974.02	971.38	971.38	971.40	971.74	---	973.69	---	973.68	973.68	973.78	---	973.78	973.58	---	---	---	---	---	999.80	999.80	999.38	---	999.38	999.46
Viscosity	cP	0.390	0.409	---	0.412	0.390	0.407	0.391	0.391	0.391	0.395	---	0.408	---	0.408	0.408	0.408	---	0.408	0.407	---	---	---	---	---	0.718	0.718	0.711	---	0.711	0.708
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.661	0.664	0.664	0.664	0.663	---	0.661	---	0.661	0.661	0.661	---	0.661	0.661	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	4.343	4.338	---	4.338	4.343	4.337	4.343	4.343	4.343	4.343	---	4.339	---	4.339	4.339	4.339	---	4.339	4.339	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	63.80	64.45	---	64.52	63.80	64.38	63.84	63.84	63.85	63.96	---	64.41	---	64.41	64.41	64.39	---	64.39	64.38	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.24
COMPOSITION MOLE FRACTION																															
Nitrogen		0.000002	0.000756	0.002697	0.000002	0.000002	0.000000	0.000000	0.000014	0.000014	0.000014	0.002410	0.000014	0.000674	0.000003	0.000000	0.000003	0.000004	0.000000	0.000000	0.000004	0.000004	0.000000	0.000000	0.000130	0.000130	0.000130	0.000121	0.000137	0.000000	0.000000
CO2		0.000004	0.000158	0.000557	0.000004	0.000004	0.000001	0.000001	0.000018	0.000018	0.000018	0.000564	0.000019	0.000576	0.000012	0.000001	0.000012	0.000021	0.000001	0.000001	0.000021	0.000021	0.000008	0.000008	0.000426	0.000426	0.000426	0.000396	0.000450	0.000003	0.000003
Methane		0.001249	0.166323	0.656830	0.001249	0.001249	0.000000	0.000000	0.008364	0.008364	0.008364	0.633621	0.008528	0.351601	0.003002	0.000000	0.003002	0.005228	0.000000	0.000000	0.005228	0.005228	0.001052	0.001052	0.137302	0.137302	0.137302	0.127610	0.145178	0.000334	0.000334
Ethane		0.000926	0.035112	0.131276	0.000926	0.000926	0.000000	0.000000	0.006475	0.006475	0.006475	0.135356	0.006879	0.175204	0.005658	0.000000	0.005658	0.009851	0.000000	0.000000	0.009851	0.009851	0.004879	0.004879	0.167137	0.167137	0.167137	0.155380	0.176539	0.002095	0.002095
Propane		0.001832	0.028052	0.095404	0.001832	0.001832	0.000000	0.000000	0.012952	0.012952	0.012952	0.101283	0.014322	0.190338	0.016094	0.000000	0.016094	0.029591	0.000000	0.000000	0.029591	0.029591	0.021973	0.021973	0.270539	0.270539	0.270539	0.251679	0.284828	0.011515	0.011515
i-Butane		0.000768	0.005828	0.018811	0.000768	0.000768	0.000000	0.000000	0.005448	0.005448	0.005448	0.020281	0.006209	0.044219	0.008512	0.000000	0.008512	0.014822	0.000000	0.000000	0.014822	0.014822	0.012963	0.012963	0.073620	0.073620	0.073620	0.068574	0.076986	0.007631	0.007631
n-Butane		0.001777	0.010736	0.033696	0.001777	0.001777	0.000000	0.000000	0.012616	0.012616	0.012616	0.036528	0.014635	0.083009	0.020700	0.000000	0.020700	0.036044	0.000000	0.000000	0.036044	0.036044	0.032661	0.032661	0.143052	0.143052	0.143052	0.133348	0.148928	0.020476	0.020476
22-Moropane		0.000001	0.000006	0.000017	0.000001	0.000001	0.000000	0.000000	0.000009	0.000009	0.000009	0.000019	0.000010	0.000044	0.000015	0.000000	0.000015	0.000025	0.000000	0.000000	0.000025	0.000025	0.000024	0.000024	0.000078	0.000078	0.000078	0.000073	0.000081	0.000015	0.000015
i-Pentane		0.000992	0.003197	0.008807	0.000992	0.000992	0.000000	0.000000	0.007048	0.007048	0.007048	0.009680	0.008438	0.023477	0.012666	0.000000	0.012666	0.022054	0.000000	0.000000	0.022054	0.022054	0.021390	0.021390	0.043060	0.043060	0.043060	0.040288	0.043823	0.014680	0.014680
n-Pentane		0.001220	0.003357	0.008774	0.001220	0.001220	0.000000	0.000000	0.008674	0.008674	0.008674	0.009694	0.010545	0.023951	0.015989	0.000000	0.015989	0.027841	0.000000	0.000000	0.027841	0.027841	0.027318	0.027318	0.044406	0.044406	0.044406	0.041621	0.044659	0.019616	0.019616
n-Hexane		0.001648	0.002505	0.004593	0.001648	0.001648	0.000000	0.000000	0.011721	0.011721	0.011721	0.005165	0.014492	0.012909	0.022574	0.000000	0.022574	0.039307	0.000000	0.000000	0.039307	0.039307	0.039774	0.039774	0.024523	0.024523	0.024523	0.023304	0.022350	0.030209	0.030209
Mycclopentan		0.000108	0.000163	0.000295	0.000108	0.000108	0.000000	0.000000	0.000772	0.000772	0.000772	0.000331	0.000958	0.000838	0.001493	0.000000	0.001493	0.002600	0.000000	0.000000	0.002600	0.002600	0.002632	0.002632	0.001596	0.001596	0.001596	0.001518	0.001448	0.002024	0.002024
Benzene		0.000009	0.000013	0.000025	0.000009	0.000009	0.000000	0.000000	0.000063	0.000063	0.000063	0.000028	0.000079	0.000071	0.000123	0.000000	0.000123	0.000214	0.000000	0.000000	0.000214	0.000214	0.000216	0.000216	0.000135	0.000135	0.000135	0.000128	0.000123	0.000170	0.000170
Cyclohexane		0.000099	0.000136	0.000224	0.000099	0.000099	0.000000	0.000000	0.000702	0.000702	0.000702	0.000251	0.000865	0.000633	0.001352	0.000000	0.001352	0.002354	0.000000	0.000000	0.002354	0.002354	0.002390	0.002390	0.001209	0.001209	0.001209	0.001154	0.001061	0.001828	0.001828
n-Heptane		0.000721	0.000759	0.000802	0.000721	0.000721	0.000000	0.000000	0.005132	0.005132	0.005132	0.000917	0.002964	0.002109	0.009386	0.000000	0.009386	0.016344	0.000000	0.000000	0.016344	0.016344	0.016733	0.016733	0.040027	0.040027	0.040027	0.038942	0.022805	0.011532	0.011532
Mycclohexane		0.000357	0.000382	0.000422	0.000357	0.000357	0.000000	0.000000	0.002538	0.002538	0.002538	0.000479	0.002966	0.001121	0.004666	0.000000	0.004666	0.008125	0.000000	0.000000	0.008125	0.008125	0.008314	0.008314	0.002146	0.002146	0.002146	0.002095	0.001591	0.005747	0.005747
Toluene		0.000036	0.000037	0.000036	0.000036	0.000036	0.000000	0.000000	0.000254	0.000254	0.000254	0.000042	0.000294	0.000097	0.000463	0.000000	0.000463	0.000805	0.000000	0.000000	0.000805	0.000805	0.000825	0.000825	0.000186	0.000186	0.000186	0.000183	0.000128	0.000579	0.000579
n-Octane		0.001323	0.001144	0.000587	0.001323	0.001323	0.000000	0.000000	0.009411	0.009411	0.009411	0.000683	0.009791	0.001368	0.015471	0.000000	0.015471	0.026939	0.000000	0.000000	0.026939	0.026939	0.027708	0.027708	0.002608	0.002608	0.002608	0.002698	0.001177	0.013720	0.013720
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000087	0.000087	0.000087	0.000006	0.000091	0.000012	0.000143	0.000000	0.000143	0.000249	0.000000	0.000000	0.000249	0.000249	0.000256	0.000256	0.000023	0.000023	0.000023	0.000024	0.000010	0.000128	0.000128
m-Xylene		0.000031	0.000026	0.000011	0.000031	0.000031	0.000000	0.000000	0.000221	0.000221	0.000221	0.000013	0.000226	0.000026	0.000357	0.000000	0.000357	0.000621	0.000000	0.000000	0.000621	0.000621	0.000639	0.000639	0.000051	0.000051	0.000051	0.000053	0.000020	0.000297	0.000297
p-Xylene		0.000031	0.000026	0.000011	0.000031	0.000031	0.000000	0.000000	0.000221	0.000221	0.000221	0.000013	0.000226	0.000026	0.000357	0.000000	0.000357	0.000621	0.000000	0.000000	0.000621	0.000621	0.000639	0.000639	0.000051	0.000051	0.000051	0.000053	0.000020	0.000297	0.000297
o-Xylene		0.000025	0.000021	0.000009	0.000025	0.000025	0.000000	0.000000	0.000177	0.000177	0.000177	0.000010	0.000179	0.000020	0.000283	0.000000	0.000283	0.000493	0.000000	0.000000	0.000493	0.000493	0.000507	0.000507	0.000038	0.000038	0.000038	0.000040	0.000014	0.000229	0.000229
n-Nonane		0.001131	0.000896	0.000207	0.001131	0.001131	0.000000	0.000000	0.008049	0.008049	0.008049	0.000245	0.007748	0.000440	0.012263	0.000000	0.012263	0.021353	0.000000	0.000000	0.021353	0.021353	0.022002	0.022002	0.000835	0.000835	0.000835	0.000945	0.000195	0.006376	0.006376
124-MBenzene		0.000059	0.000046	0.000007	0.000059	0.000059	0.000000	0.000000	0.000422	0.000422	0.000422	0.000009	0.000399	0.000016	0.000631	0.000000	0.000631	0.001099	0.000000	0.000000	0.001099	0.001099	0.001133	0.001133	0.000030	0.000030	0.000030	0.000036	0.000005	0.000261	0.000261
n-Decane		0.001048	0.000799	0.000080	0.001048	0.001048	0.000000	0.000000	0.007455	0.007455	0.007455	0.000096	0.006908	0.000162	0.010940	0.000000	0.010940	0.019050	0.000000	0.000000	0.019050	0.019050	0.019643	0.019643	0.000305	0.000305	0.000305	0.000392	0.000034	0.002985	0.002985
C7*		0.001225	0.001372	0.001660	0.001225	0.001225	0.000000	0.000000	0.008712	0.008712	0.008712	0.001892	0.010353	0.004477	0.016268	0.000000	0.016268	0.028327	0.000000	0.000000	0.028327	0.028327	0.028952	0.028952	0.008551	0.008551	0.008551	0.008304	0.006566	0.020896	0.020896
C8*		0.001962	0.001629	0.000627	0.001962	0.001962	0.000000	0.000000	0.013962	0.013962	0.013962	0.000732	0.014017	0.001395	0.022167	0.000000	0.022167	0.038598	0.000000	0.000000	0.038598	0.038598	0.039735	0.039735	0.002644	0.002644	0.002644	0.002799	0.001027	0.015637	0.015637
C9*		0.001359	0.001047	0.000143	0.001359	0.001359	0.000000	0.000000	0.009669	0.009669	0.009669	0.000179	0.009654	0.000291	0.014336	0.000000	0.014336	0.024963	0.000000	0.000000	0.024963	0.024963	0.025735	0.025735	0.000547	0.000547	0.000547	0.000561	0.000089	0.004804	0.004804
C10-C13*		0.000202	0.000150	0.000002	0.000202	0.000202	0.000000	0.000000	0.001438	0.001438	0.001438	0.000003	0.001300	0.000004	0.002059	0.000000	0.002059	0.003586	0.000000	0.000000	0.003586	0.003586	0.003699	0.003699	0.000008	0.000008	0.000008	0.000013	0.000000	0.000110	0.000110
C14-C18*		0.000142	0.000105	0.000000	0.000142	0.000142	0.000000	0.000000	0.001007	0.001007	0.001007	0.000000	0.000907	0.000000	0.001437	0.000000	0.001437	0.002502	0.000000	0.000000	0.002502	0.002502	0.002581	0.002581	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001
C19-C21*		0.000100	0.000074	0.000000	0.000100	0.000100	0.000000	0.000000	0.000710	0.000710	0.000710	0.000000	0.000639	0.000000	0.001013	0.000000	0.001013	0.001763	0.000000	0.000000	0.001763	0.001763	0.001819	0.001819	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000098	0.000073	0.000000	0.000098	0.000098	0.000000	0.000000	0.000698	0.000698	0.000698	0.000000	0.000628	0.000000	0.000995	0.000000	0.000995	0.001733	0.000000	0.000000	0.001733	0.001733	0.001788	0.001788	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000074	0.000054	0.000000	0.000074	0.000074	0.000000	0.000000	0.000523	0.000523	0.000523	0.000000	0.000471	0.000000	0.000746	0.000000	0.000746	0.001299	0.000000	0.000000	0.001299	0.001299	0.001340	0.001340	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000070	0.000052	0.000000	0.000070	0.000070	0.000000	0.000000	0.000500	0.000500	0.000500	0.000000	0.000450	0.000000	0.000713	0.000000	0.000713	0.001241	0.000000	0.000000	0.001241	0.001241	0.001280	0.001280	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000066	0.000049	0.000000	0.000066	0.000066	0.000000	0.000000	0.000467	0.000467	0.000467	0.000000	0.000421	0.000000	0.000666	0.000000	0.000666	0.001160	0.000000	0.000000	0.001160	0.001160	0.001197	0.001197	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000045	0.000033	0.000000	0.000045	0.000045	0.000000	0.000000	0.000321	0.000321	0.000321	0.000000	0.000289	0.000000	0.000458	0.000000	0.000458	0.000798	0.000000	0.000000	0.000798	0.000798	0.000823	0.000823	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C60*		0.000038	0.000028	0.000000	0.000038	0.000038	0.000000	0.000000	0.000268	0.000268	0.000268	0.000000	0.000241	0.000000	0.000383	0.000000	0.000383	0.000666	0.000000	0.000000	0.000666	0.000666	0.000687	0.000687	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.001063	0.000788	0.000001	0.001063	0.001063	0.000000	0.000000	0.007561	0.007561	0.007561	0.000002	0.006808	0.000002	0.010786	0.000000	0.010786	0.018781	0.000000	0.000000	0.018781	0.018781	0.019375	0.019375	0.000004	0.000004	0.000004	0.000007	0.000000	0.000058	0.000058
C14-C16*		0.000502	0.000372	0.000000	0.000502	0.000502	0.000000	0.000000	0.003573	0.003573	0.003573	0.000000	0.003216	0.000000	0.005095	0.000000	0.005095	0.008872	0.000000	0.000000	0.008872	0.008872	0.009153	0.009153	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000587	0.000435	0.000000	0.000587	0.000587	0.000000	0.000000	0.004175	0.004175	0.

CASE 1C MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8467	0.9707	1.0000	0.0000	0.0036	1.0000	0.7960	0.9606	0.0000	0.0153	1.0000	1.0000	1.0000	0.0102	0.2134	0.9693	1.0000	1.0000	0.0000	0.0450	1.0000	1.0000	0.9765	0.9765	0.9998	0.0000	0.3158	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	50.69	50.35	50.35	49.65	98.72	35.00	30.34	30.34	28.98	40.01	40.01	67.94	39.64	26.30	33.00	30.34	30.34	30.10	27.65	30.10	157.32	50.00	50.00	49.85	50.00	28.51	50.33	50.33	50.33
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	47.89	47.39	47.39	47.09	47.39	8.70	45.39	45.39	45.39
Mass Flow	kg/h	1,054	1,054	2,519	2,475	44.1	44.1	2,475	2,475	143,598	8,277	8,277	11,664	11,664	134,765	0.00	0.00	134,765	135,321	67,661	0.00	0.00	67,661	67,661	67,661	135,321	128,958	6,363	6,363	127,636	114,151	57,076
Molar Flow	kgmole/h	23.6	23.6	65.9	64.0	1.90	1.90	64.0	64.0	5,611	221.1	221.1	478.5	478.5	5,420	0.00	0.00	5,420	5,390	2,695	0.00	0.00	2,695	2,695	2,695	5,390	5,263	126.8	126.8	5,236	4,683	2,341
Mass Enthalpy	kJ/kg	-2,449	-2,625	-2,873	-2,711	-11,997	-11,997	-2,625	-2,877	-3,602	-6,775	-6,775	-3,454	-3,454	-3,524	-2,556	-2,556	-3,647	-3,407	-3,407	-2,294	-2,294	-3,407	-3,158	-3,440	-3,440	-3,466	-2,922	-2,922	-3,454	-3,454	-3,454
Heat Flow	kW	-717	-768	-2,010	-1,864	-147	-147	-1,805	-1,978	-143,660	-15,578	-15,578	-11,189	-11,189	-131,906	0	0	-136,519	-128,082	-64,041	0	0	-64,041	-59,346	-64,660	-129,319	-124,154	-5,165	-5,165	-122,443	-109,506	-54,753
Mass Density	kg/m3	8.29	10.23	6.12	5.86	872.90	349.55	13.72	20.05	10.32	740.37	284.58	33.60	33.60	8.63	508.01	94.68	9.82	9.73	9.73	636.54	223.41	9.41	36.80	56.89	56.89	54.13	516.42	61.24	51.27	51.27	51.27
Molecular Weight		44.73	44.73	38.24	38.69	23.22	23.22	38.69	38.69	25.59	37.44	37.44	24.38	24.38	24.86	55.66	55.66	24.86	25.11	25.11	80.14	80.14	25.11	25.11	25.11	25.11	24.50	50.19	50.19	24.38	24.38	24.38
VAPOR																																
Mass Flow	kg/h	1,054	832.0	2,474	2,475	---	0.32	2,475	1,737	135,321	---	107.5	11,664	11,664	134,765	0.00	0.00	129,749	135,321	67,661	---	0.00	67,661	67,661	64,479	128,958	128,908	---	1,225	127,636	114,151	57,076
Molar Flow	kgmole/h	23.6	19.9	63.9	64.0	---	0.007	64.0	50.9	5,390	---	3.39	478.5	478.5	5,420	0.00	0.00	5,254	5,390	2,695	---	0.00	2,695	2,695	2,631	5,263	5,262	---	40.0	5,236	4,683	2,341
Actual Volume Flow	m3/h	127.1	102.6	411.8	422.4	---	0.08	180.4	122.2	13,909	---	18.16	347.1	347.1	15,624	0.00	0.00	13,716	13,909	6,954	---	0.00	7,191	1,839	1,183	2,366	2,382	---	95.4	2,490	2,227	1,113.3
Std Gas Flow	MMSCFD	0.47	0.40	1.28	1.28	---	0.0001	1.28	1.02	108.22	---	0.07	9.61	9.61	108.83	0.00	0.00	105.49	108.22	54.11	---	0.00	54.11	54.11	52.84	105.67	105.65	---	0.80	105.13	94.02	47.01
Mass Density	kg/m3	8.29	8.11	6.01	5.86	---	4.26	13.72	14.22	9.73	---	5.92	33.60	33.60	8.63	34.28	12.85	9.46	9.73	9.73	---	5.84	9.41	36.80	54.49	54.49	54.11	---	12.83	51.27	51.27	51.27
Molecular Weight		44.73	41.71	38.68	38.69	---	47.68	38.69	34.11	25.11	---	31.70	24.38	24.38	24.86	24.70	30.38	24.70	25.11	25.11	---	31.18	25.11	25.11	24.50	24.50	24.50	---	30.59	24.38	24.38	24.38
Viscosity	cP	0.010	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.010	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.010	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.025	0.021	0.024	0.024	---	0.020	0.030	0.025	0.029	---	0.025	0.033	0.033	0.034	0.032	0.025	0.029	0.029	0.029	---	0.025	0.029	0.049	0.036	0.036	0.036	---	0.025	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.991	1.819	1.901	1.898	---	1.833	2.138	1.943	2.026	---	1.882	2.292	2.292	2.138	2.292	1.946	2.040	2.026	2.026	---	1.883	2.022	2.603	2.521	2.521	2.517	---	1.949	2.489	2.489	2.489
Cp/Cv		1.130	1.161	1.151	1.151	---	1.121	1.154	1.215	1.246	---	1.191	1.361	1.361	1.220	1.364	1.233	1.246	1.246	1.246	---	1.194	1.245	1.233	1.455	1.455	1.453	---	1.230	1.436	1.436	1.436
Z Factor		0.945	0.935	0.960	0.961		0.965	0.932	0.910	0.952		0.963	0.864	0.864	0.967	0.859	0.923	0.955	0.952	0.952		0.963	0.954	0.932	0.810	0.810	0.811		0.923	0.820	0.820	0.820
LIQUID																																
Mass Flow	kg/h	---	213.0	13.4	---	12.3	11.9	---	706.9	5,544	5,544	5,437	---	---	---	0.00	0.00	2,559	---	---	0.00	0.00	---	---	3,094	6,188	49.2	6,188	4,964	---	---	---
Molar Flow	kgmole/h	---	3.12	0.15	---	0.13	0.13	---	11.31	69.3	69.3	66.0	---	---	---	0.00	0.00	30.0	---	---	0.00	0.00	---	---	58.5	117.1	0.93	117.1	77.1	---	---	---
Actual Volume Flow	m3/h	---	0.35	0.02	---	0.02	0.02	---	1.21	8.46	8.46	8.20	---	---	---	0.00	0.00	3.83	---	---	0.00	0.00	---	---	6.07	12.15	0.10	12.15	8.28	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	51.3	2.89	---	2.64	2.55	---	176.4	1,248.6	1,248.6	1,214.0	---	---	---	0.00	0.00	563.8	---	---	0.00	0.00	---	---	833.3	1,668	13.2	1,668	1,220.6	---	---	---
Mass Density	kg/m3	---	608.69	668.47	---	670.26	675.71	---	582.22	655.61	655.61	663.07	---	---	---	542.19	590.59	668.46	---	---	636.54	664.48	---	---	509.53	509.53	510.26	509.53	599.31	---	---	---
Viscosity (Note 4)	cP	---	0.202	0.306	---	0.310	0.325	---	0.169	0.284	0.284	0.302	---	---	---	0.132	0.181	0.312	---	---	0.280	0.306	---	---	0.112	0.112	0.112	0.112	0.192	---	---	---
Thermal Conductivity	W/m-K	---	0.098	0.103	---	0.103	0.105	---	0.093	0.103	0.103	0.105	---	---	---	0.088	0.096	0.104	---	---	0.103	0.105	---	---	0.084	0.084	0.084	0.084	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.305	2.220	---	2.215	2.202	---	2.398	2.181	2.181	2.160	---	---	---	2.545	2.347	2.163	---	---	2.178	2.152	---	---	2.676	2.676	2.673	2.676	2.322	---	---	---
Surface Tension	dyne/cm	---	12.74	14.88	---	14.98	15.51	---	10.86	14.87	14.87	15.60	---	---	---	8.66	11.62	15.24	---	---	14.93	15.72	---	---	7.27	7.27	7.30	7.27	11.98	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	8.86	32.1	---	31.8	31.8	---	31.4	2,733	2,733	2,733	---	---	---	---	---	2,457	---	---	---	---	---	---	87.5	174.9	0.66	174.9	174.3	---	---	---
Molar Flow	kgmole/h	---	0.49	1.78	---	1.77	1.77	---	1.74	151.7	151.7	151.7	---	---	---	---	---	136.4	---	---	---	---	---	---	4.85	9.71	0.04	9.71	9.68	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.03	---	0.03	0.03	---	0.03	2.72	2.72	2.72	---	---	---	---	---	2.45	---	---	---	---	---	---	0.09	0.18	0.001	0.18	0.17	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.32	4.78	---	4.73	4.73	---	4.67	406.7	406.7	406.6	---	---	---	---	---	365.6	---	---	---	---	---	---	13.0	26.0	0.10	26.0	25.9	---	---	---
Mass Density	kg/m3	---	1,002.17	987.81	---	988.07	988.56	---	1,000.05	1,003.57	1003.5719	1,004.45	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.84	989.84	989.95	989.84	1,004.97	---	---	---
Viscosity	cP	---	0.764	0.538	---	0.541	0.547	---	0.718	0.791	0.791	0.815	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.823	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.644	---	0.644	0.643	---	0.625	0.619	0.619	0.617	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.616	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.321	---	4.321	4.321	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.312	---	---	---
Surface Tension	dyne/cm	---	70.89	67.61	---	67.67	67.80	---	70.36	71.17	71.17	71.41	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	71.49	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000137	0.000137	0.000482	0.000497	0.000000	0.000000	0.000497	0.000497	0.002617	0.000014	0.000014	0.002797	0.002797	0.002697	0.000194	0.000194	0.002697	0.002724	0.002724	0.000042	0.000042	0.002724	0.002724	0.002724	0.002724	0.002782	0.000294	0.000294	0.002797	0.002797	0.002797
CO2		0.000450	0.000450	0.000531	0.000547	0.000002	0.000002	0.000547	0.000547	0.000549	0.000023	0.000023	0.000582	0.000582	0.000557	0.000197	0.000197	0.000557	0.000571	0.000571	0.000066	0.000066	0.000571	0.000571	0.000571	0.000571	0.000579	0.000238	0.000238	0.000582	0.000582	0.000582
Methane		0.145178	0.145178	0.277768	0.285997	0.000367	0.000367	0.285997	0.285997	0.641401	0.010142	0.010142	0.683022	0.683022	0.656822	0.120748	0.120748	0.656822	0.667291	0.667291	0.031801	0.031801	0.667291	0.667291	0.667291	0.667291	0.679508	0.160161	0.160161	0.683022	0.683022	0.683022
Ethane		0.176539	0.176539	0.175681	0.180862	0.001038	0.001038	0.180862	0.180862	0.131152	0.010634	0.010634	0.137641	0.137641	0.131277	0.093700	0.093700	0.131277	0.136095	0.136095	0.033492	0.033492	0.136095	0.136095	0.136095	0.136095	0.136932	0.101326	0.101326	0.137641	0.137641	0.137641
Propane		0.284828	0.284828	0.224135	0.230663	0.004074	0.004074	0.230663	0.230663	0.098760	0.026873	0.026873	0.105527	0.105527	0.095496	0.185930	0.185930	0.095496	0.101708	0.101708	0.084923	0.084923	0.101708	0.101708	0.101708	0.101708	0.100010	0.172205	0.172205	0.105527	0.105527	0.105527
i-Butane		0.076986	0.076986	0.055939	0.057529	0.002319	0.002319	0.057529	0.057529	0.020218	0.013132	0.013132	0.019620	0.019620	0.018812	0.074404	0.074404	0.018812	0.020508	0.020508	0.041609	0.041609	0.020508	0.020508	0.020508	0.020508	0.019519	0.061580	0.061580	0.019620	0.019620	0.019620
n-Butane		0.148928	0.148928	0.106587	0.109572	0.005944	0.005944	0.109572	0.109572	0.036909	0.032988	0.032988	0.034825	0.034825	0.033696	0.173036	0.173036	0.033696	0.037069	0.037069	0.104608	0.104608	0.037069	0.037069	0.037069	0.037069	0.034646	0.137677	0.137677	0.034825	0.034825	0.034825
22-Mpropane		0.000081	0.000081	0.000057	0.000059	0.000004	0.000004	0.000059	0.000059	0.000019	0.000023	0.000023	0.000000	0.000000	0.000017	0.000000	0.000000	0.000017	0.000019	0.000019	0.000073	0.000073	0.000019	0.000019	0.000019	0.000019	0.000018	0.000085	0.000085	0.000000	0.000000	0.000000
i-Pentane		0.043823	0.043823	0.030754	0.031551	0.003897	0.003897	0.031551	0.031551	0.010274	0.021043	0.021043	0.008614	0.008614	0.008807	0.087584	0.087584	0.008807	0.009832	0.009832	0.066903	0.066903	0.009832	0.009832	0.009832	0.009832	0.008569	0.062263	0.062263	0.008614	0.008614	0.008614
n-Pentane		0.044659	0.044659	0.031358	0.032138	0.005055	0.005055	0.032138	0.032138	0.010475	0.027500	0.027500	0.008314	0.008314	0.008774	0.105304	0.105304	0.008774	0.009777	0.009777	0.087501	0.087501	0.009777	0.009777	0.009777	0.009777	0.008271	0.072264	0.072264	0.008314	0.008314	0.008314
n-Hexane		0.022350	0.022350	0.016286	0.016552	0.007300	0.007300	0.016552	0.016552	0.006003	0.039560	0.039560	0.003286	0.003286	0.004593	0.102420	0.102420	0.004593	0.004627	0.004627	0.126293	0.126293	0.004627	0.004627	0.004627	0.004627	0.003269	0.060972	0.060972	0.003286	0.003286	0.003286
Mycyclopentan		0.001448	0.001448	0.001056	0.001073	0.000492	0.000492	0.001073	0.001073	0.000389	0.002648	0.002648	0.000000	0.000000	0.000295	0.000000	0.000000	0.000295	0.000297	0.000297	0.008447	0.008447	0.000297	0.000297	0.000297	0.000297	0.000206	0.004074	0.004074	0.000000	0.000000	0.000000
Benzene		0.000123	0.000123	0.000089	0.000091	0.000041	0.000041	0.000091	0.000091	0.000032	0.000220	0.000220	0.000000	0.000000	0.000025	0.000000	0.000000	0.000025	0.000025	0.000025	0.000701	0.000701	0.000025	0.000025	0.000025	0.000025	0.000017	0.000338	0.000338	0.000000	0.000000	0.000000
Cyclohexane		0.001061	0.001061	0.000786	0.000796	0.000444	0.000444	0.000796	0.000796	0.000298	0.002343	0.002343	0.000000	0.000000	0.000224	0.000000	0.000000	0.000224	0.000214	0.000214	0.007477	0.007477	0.000214	0.000214	0.000214	0.000214	0.000142	0.003219	0.003219	0.000000	0.000000	0.000000
n-Heptane		0.002895	0.002895	0.002390	0.002377	0.002825	0.002825	0.002377	0.002377	0.001052	0.013484	0.013484	0.000000	0.000000	0.000802	0.000000	0.000000	0.000802	0.000542	0.000542	0.043188	0.043188	0.000542	0.000542	0.000542	0.000542	0.000288	0.011086	0.011086	0.000000	0.000000	0.000000
Mycyclohexane		0.001591	0.001591	0.001289	0.001285	0.001426	0.001426	0.001285	0.001285	0.000560	0.006837	0.006837	0.000000	0.000000	0.000422	0.000000	0.000000	0.000422	0.000303	0.000303	0.021869	0.021869	0.000303	0.000303	0.000303	0.000303	0.000163	0.006096	0.006096	0.000000	0.000000	0.000000
Toluene		0.000128	0.000128	0.000108	0.000107	0.000143	0.000143	0.000107	0.000107	0.000048	0.000653	0.000653	0.000000	0.000000	0.000036	0.000000	0.000000	0.000036	0.000023	0.000023	0.002088	0.002088	0.000023	0.000023	0.000023	0.000023	0.000011	0.000498	0.000498	0.000000	0.000000	0.000000
n-Octane		0.001177	0.001177	0.001300	0.001223	0.003887	0.003887	0.001223	0.001223	0.000697	0.013200	0.013200	0.000000	0.000000	0.000587	0.000000	0.000000	0.000587	0.000184	0.000184	0.042420	0.042420	0.000184	0.000184	0.000184	0.000184	0.000065	0.005116	0.005116	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000011	0.000010	0.000037	0.000037	0.000010	0.000010	0.000006	0.000118	0.000118	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000001	0.000001	0.000380	0.000380	0.000001	0.000001	0.000001	0.000001	0.000000	0.000042	0.000042	0.000000	0.000000	0.000000
m-Xylene		0.000020	0.000020	0.000024	0.000022	0.000090	0.000090	0.000022	0.000022	0.000013	0.000266	0.000266	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.000853	0.000853	0.000003	0.000003	0.000003	0.000003	0.000001	0.000083	0.000083	0.000000	0.000000	0.000000
p-Xylene		0.000020	0.000020	0.000024	0.000022	0.000090	0.000090	0.000022	0.000022	0.000013	0.000266	0.000266	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.000853	0.000853	0.000003	0.000003	0.000003	0.000003	0.000001	0.000084	0.000084	0.000000	0.000000	0.000000
o-Xylene		0.000014	0.000014	0.000018	0.000016	0.000070	0.000070	0.000016	0.000016	0.000010	0.000201	0.000201	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000645	0.000645	0.000002	0.000002	0.000002	0.000002	0.000001	0.000060	0.000060	0.000000	0.000000	0.000000
n-Nonane		0.000195	0.000195	0.000353	0.000292	0.002389	0.002389	0.000292	0.000292	0.000222	0.005023	0.005023	0.000000	0.000000	0.000207	0.000000	0.000000	0.000207	0.000025	0.000025	0.016194	0.016194	0.000025	0.000025	0.000025	0.000025	0.000005	0.000852	0.000852	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000012	0.000009	0.000115	0.000115	0.000009	0.000009	0.000008	0.000183	0.000183	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000001	0.000001	0.000589	0.000589	0.000001	0.000001	0.000001	0.000001	0.000000	0.000019	0.000019	0.000000	0.000000	0.000000
n-Decane		0.000034	0.000034	0.000116	0.000074	0.001523	0.001523	0.000074	0.000074	0.000081	0.015976	0.015976	0.000000	0.000000	0.000060	0.000000	0.000000	0.000060	0.000004	0.000004	0.006390	0.006390	0.000004	0.000004	0.000004	0.000004	0.000140	0.000140	0.000140	0.000000	0.000000	0.000000
C7*		0.006566	0.006566	0.005224	0.005229	0.005053	0.005053	0.005229	0.005229	0.002202	0.025173	0.025173	0.000720	0.000720	0.001660	0.044644	0.044644	0.001660	0.001260	0.001260	0.080564	0.080564	0.001260	0.001260	0.001260	0.001260	0.000716	0.023838	0.023838	0.000720	0.000720	0.000720
C8*		0.001027	0.001027	0.001263	0.001157	0.004833	0.004833	0.001157	0.001157	0.000725	0.014502	0.014502	0.000051	0.000051	0.000627	0.010762	0.010762	0.000627	0.000160	0.000160	0.046660	0.046660	0.000160	0.000160	0.000160	0.000160	0.000051	0.004665	0.004665	0.000051	0.000051	0.000051
C9*		0.000089	0.000089	0.000219	0.000161	0.002158	0.002158	0.000161	0.000161	0.000149	0.003498	0.003498	0.000002	0.000002	0.000143	0.010073	0.010073	0.000143	0.000011	0.000011	0.011300	0.011300	0.000011	0.000011	0.000011	0.000011	0.000002	0.000395	0.000395	0.000002	0.000002	0.000002
C10-C13*		0.000000	0.000000	0.000003	0.000001	0.000081	0.000081	0.000001	0.000001	0.000002	0.000058	0.000058	0.000000	0.000000	0.000002	0.000002	0.000002	0.000002	0.000000	0.000000	0.000189	0.000189	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 1C MAXIMUM GAS AND OIL, GAS SG 0.8668 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1629	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9294	1.0000	1.0000	1.0000	0.7960	1.0000
Temperature	C	50.33	43.99	50.33	140.56	45.00	45.00	45.00	44.87	59.00	12.44	70.01	50.33	40.01	35.00	50.33
Pressure	bar_g	45.39	30.00	45.39	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.39	30.00	8.70	45.39
Mass Flow	kg/h	0.00	0.00	57,076	57,076	57,076	95,919	18,232	95,919	18,232	18,232	11,664	11,664	11,664	2,475	1,821
Molar Flow	kgmole/h	0.00	0.00	2,341	2,341	2,341	3,935	747.9	3,935	747.9	747.9	478.5	478.5	478.5	64.0	74.7
Mass Enthalpy	kJ/kg	-2,626	-2,626	-3,454	-3,298	-3,602	-3,602	-3,602	-3,602	-3,552	-3,552	-3,384	-3,454	-3,454	-2,877	-3,454
Heat Flow	kW	0	0	-54,753	-52,291	-57,115	-95,985	-18,245	-95,985	-17,987	-17,987	-10,964	-11,189	-11,189	-1,978	-1,747
Mass Density	kg/m3	499.07	244.42	51.27	112.30	204.00	204.00	204.00	203.52	179.63	34.96	28.88	51.27	33.60	20.05	51.27
Molecular Weight		49.67	49.67	24.38	24.38	24.38	24.38	24.38	24.38	24.38	24.38	24.38	24.38	24.38	38.69	24.38
VAPOR																
Mass Flow	kg/h	---	0.00	57,076	57,076	57,076	95,919	18,232	95,919	18,232	15,626	11,664	11,664	11,664	1,737	1,821
Molar Flow	kgmole/h	---	0.00	2,341	2,341	2,341	3,935	747.9	3,935	747.9	695.1	478.5	478.5	478.5	50.9	74.7
Actual Volume Flow	m3/h	---	0.00	1,113.3	508.2	279.8	470.2	89.4	471.3	101.5	516.7	403.9	227.5	347.1	122.2	35.53
Std Gas Flow	MMSCFD	---	0.00	47.01	47.01	47.01	79.00	15.02	79.00	15.02	13.96	9.61	9.61	9.61	1.02	1.50
Mass Density	kg/m3	---	36.75	51.27	112.30	204.00	204.00	204.00	203.52	179.63	30.24	28.88	51.27	33.60	14.22	51.27
Molecular Weight		---	26.36	24.38	24.38	24.38	24.38	24.38	24.38	24.38	22.48	24.38	24.38	24.38	34.11	24.38
Viscosity	cP	---	0.012	0.013	0.019	0.023	0.023	0.023	0.023	0.021	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	W/m-K	---	0.032	0.036	0.056	0.058	0.058	0.058	0.058	0.056	0.030	0.036	0.036	0.033	0.025	0.036
Mass Heat Capacity	kJ/kg-C	---	2.296	2.489	2.938	3.713	3.713	3.713	3.716	3.484	2.254	2.315	2.489	2.292	1.943	2.489
Cp/Cv		---	1.362	1.436	1.400	2.045	2.045	2.045	2.048	1.885	1.407	1.297	1.436	1.361	1.215	1.436
Z Factor		---	0.844	0.820	0.858	0.614	0.614	0.614	0.613	0.665	0.861	0.903	0.820	0.864	0.910	0.820
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	2,606	---	---	---	706.9	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	52.8	---	---	---	11.31	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	4.83	---	---	---	1.21	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	714.4	---	---	---	176.4	---
Mass Density	kg/m3	499.07	525.63	---	---	---	---	---	---	---	540.03	---	---	---	582.22	---
Viscosity (Note 4)	cP	0.099	0.120	---	---	---	---	---	---	---	0.137	---	---	---	0.169	---
Thermal Conductivity	W/m-K	0.081	0.085	---	---	---	---	---	---	---	0.094	---	---	---	0.093	---
Mass Heat Capacity	kJ/kg-C	2.824	2.629	---	---	---	---	---	---	---	2.480	---	---	---	2.398	---
Surface Tension	dyne/cm	6.34	7.83	---	---	---	---	---	---	---	9.51	---	---	---	10.86	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	31.4	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.74	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.67	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000346	0.000346	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.002797	0.000497	0.002797
CO2		0.000272	0.000272	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000582	0.000547	0.000582
Methane		0.187154	0.187154	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.683022	0.285997	0.683022
Ethane		0.117905	0.117905	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.137641	0.180862	0.137641
Propane		0.200495	0.200495	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.100527	0.230663	0.100527
i-Butane		0.071839	0.071839	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.019620	0.057529	0.019620
n-Butane		0.160111	0.160111	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.034825	0.109572	0.034825
22-Mpropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000059	0.000000
i-Pentane		0.072686	0.072686	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.008614	0.031551	0.008614
n-Pentane		0.084179	0.084179	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.008314	0.032138	0.008314
n-Hexane		0.071129	0.071129	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.003286	0.016552	0.003286
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001073	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000091	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000796	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002377	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001285	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000107	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001223	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000010	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000022	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000022	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000016	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000292	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000009	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000074	0.000000
C7*		0.027825	0.027825	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.000720	0.005229	0.000720
C8*		0.005583	0.005583	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.000051	0.001157	0.000051
C9*		0.000476	0.000476	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000161	0.000002
C10-C13*		0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.031980	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000078	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000017	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000045	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004236	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002097	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001309	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000301	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58	883

CASE 2A MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		0.0001	0.2044	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0151	1.0000	0.0161	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0243	0.0000	0.0000	0.0000	1.0000	0.9352	0.9352	0.8748	1.0000	0.0000	0.0000
Temperature	C	72.00	68.76	68.00	68.00	72.00	69.65	71.85	71.85	71.84	71.31	71.85	69.50	69.52	69.52	69.52	69.58	69.58	69.58	69.66	69.23	69.61	69.23	55.00	69.23	35.00	35.00	35.55	35.55	35.55	35.69
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	409,691	503,810	105,602	409,691	409,691	24,655	247,338	186,970	186,970	186,970	37.7	193,311	1,163	178,329	24,655	178,329	167,496	10,833	10,833	167,496	167,496	166,665	166,665	831.1	831.1	831.1	858.9	775.2	83.7	83.7
Molar Flow	kgmole/h	14,391	18,137	4,418	14,391	14,391	1,369	13,729	2,029	2,029	2,029	1.54	2,204	35.5	1,401	1,369	1,401	800.0	601.3	601.3	800.0	800.0	780.6	780.6	19.4	19.4	19.4	20.8	18.2	2.61	2.61
Mass Enthalpy	kJ/kg	-10,225	-8,987	-3,627	-10,239	-10,225	-15,693	-15,685	-3,724	-3,724	-3,724	-3,597	-3,837	-3,179	-2,922	-15,695	-2,921	-2,095	-15,694	-15,694	-2,095	-2,095	-2,092	-2,122	-2,669	-2,792	-2,792	-3,154	-2,589	-8,383	-8,381
Heat Flow	kW	-1,163,600	-1,257,739	-106,398	-1,165,183	-1,163,600	-107,478	-1,077,608	-193,433	-193,433	-193,433	-38	-206,014	-1,027	-144,729	-107,489	-144,694	-97,467	-47,227	-47,227	-97,467	-97,467	-96,851	-98,254	-616	-645	-645	-752	-557	-195	-195
Mass Density	kg/m3	881.36	45.56	8.36	893.13	881.36	973.33	971.33	809.76	789.44	421.86	8.39	400.54	4.73	800.86	972.99	801.16	792.11	973.09	972.89	354.53	792.04	793.56	803.61	3.17	3.54	3.54	3.65	3.29	794.99	795.45
Molecular Weight		28.47	27.78	23.90	28.47	28.47	18.02	18.02	92.16	92.16	92.16	24.52	87.71	32.75	127.26	18.02	127.26	209.37	18.02	18.02	209.37	209.37	213.51	213.51	42.77	42.77	42.77	41.27	42.58	32.14	32.14
VAPOR																															
Mass Flow	kg/h	38.9	92,309	105,602	---	38.9	---	---	---	48.7	977.9	37.7	1,162	1,163	---	---	---	---	---	---	831.1	---	---	---	831.1	773.8	773.8	775.2	775.2	---	---
Molar Flow	kgmole/h	1.59	3,706	4,418	---	1.59	---	---	---	1.96	30.7	1.54	35.5	35.5	---	---	---	---	---	---	19.4	---	---	---	19.4	18.2	18.2	18.2	18.2	---	---
Actual Volume Flow	m3/h	4.63	10,597	12,635	---	4.63	---	---	---	6.04	214.2	4.49	245.7	245.9	---	---	---	---	---	---	262.4	---	---	---	262.4	234.5	234.5	235.3	235.3	---	---
Std Gas Flow	MMSCFD	0.03	74.42	88.70	---	0.03	---	---	---	0.04	0.62	0.03	0.71	0.71	---	---	---	---	---	---	0.39	---	---	---	0.39	0.36	0.36	0.37	0.37	---	---
Mass Density	kg/m3	8.39	8.71	8.36	---	8.39	---	---	---	8.06	4.56	8.39	4.73	4.73	---	---	---	---	---	---	3.17	---	---	---	3.17	3.30	3.30	3.29	3.29	---	---
Molecular Weight		24.54	24.91	23.90	---	24.54	---	---	---	24.88	31.83	24.51	32.74	32.75	---	---	---	---	---	---	42.77	---	---	---	42.77	42.57	42.57	42.58	42.58	---	---
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.034	0.034	0.034	---	0.034	---	---	---	0.034	0.029	0.034	0.028	0.028	---	---	---	---	---	---	0.024	---	---	---	0.024	0.021	0.021	0.021	0.021	---	---
Mass Heat Capacity	kJ/kg-C	2.158	2.143	2.158	---	2.158	---	---	---	2.148	2.020	2.158	2.008	2.008	---	---	---	---	---	---	1.929	---	---	---	1.929	1.794	1.794	1.796	1.796	---	---
Cp/Cv		1.220	1.220	1.226	---	1.220	---	---	---	1.216	1.165	1.220	1.162	1.162	---	---	---	---	---	---	1.123	---	---	---	1.123	1.136	1.136	1.136	1.136	---	---
Z Factor		0.969	0.967	0.969	---	0.969	---	---	---	0.970	0.977	0.969	0.976	0.976	---	---	---	---	---	---	0.979	---	---	---	0.979	0.973	0.973	0.973	0.973	---	---
LIQUID																															
Mass Flow	kg/h	164,541	166,063	---	164,573	164,541	---	---	164,542	164,495	163,608	---	167,495	---	167,496	---	167,496	167,496	---	---	166,665	167,496	166,665	166,665	---	43.3	43.3	45.8	---	45.8	45.8
Molar Flow	kgmole/h	783.7	806.5	---	784.9	783.7	---	---	783.7	781.8	755.4	---	800.0	---	800.0	---	800.0	800.0	---	---	780.6	800.0	780.6	780.6	---	0.48	0.48	0.50	---	0.50	0.50
Actual Volume Flow	m3/h	207.8	209.7	---	207.2	207.8	---	---	207.8	207.7	205.9	---	211.5	---	211.5	---	211.5	211.5	---	---	210.0	211.5	210.0	207.4	---	0.06	0.06	0.07	---	0.07	0.07
Liq Vol Flow @Std Cond	barrel/day	29,878	30,223	---	29,887	29,878	---	---	29,878	29,866	29,644	---	30,477	---	30,477	---	30,477	30,477	---	---	30,278	30,477	30,278	30,278	---	9.4	9.4	9.9	---	9.9	9.9
Mass Density	kg/m3	791.71	791.81	---	794.44	791.71	---	---	791.81	791.96	794.51	---	791.81	---	791.80	---	792.11	792.11	---	---	793.56	792.04	793.56	803.61	---	678.35	678.35	679.98	---	679.98	680.56
Viscosity (Note 4)	cP	1.927	1.943	---	2.050	1.927	---	---	1.931	1.938	2.057	---	1.950	---	1.950	---	1.948	1.948	---	---	2.028	1.947	2.028	2.590	---	0.337	0.337	0.342	---	0.342	0.342
Thermal Conductivity	W/m-K	0.110	0.110	---	0.111	0.110	---	---	0.110	0.110	0.112	---	0.112	---	0.112	---	0.112	0.112	---	---	0.112	0.112	0.112	0.115	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	kJ/kg-C	2.171	2.160	---	2.155	2.171	---	---	2.171	2.171	2.166	---	2.161	---	2.161	---	2.161	2.161	---	---	2.158	2.161	2.158	2.099	---	2.147	2.147	2.146	---	2.146	2.144
Surface Tension	dyne/cm	16.67	16.63	---	16.89	16.67	---	---	16.68	16.72	17.26	---	17.12	---	17.12	---	17.11	17.11	---	---	17.37	17.11	17.37	18.34	---	16.54	16.54	16.57	---	16.57	16.56
AQUEOUS (Note 3)																															
Mass Flow	kg/h	245,111	245,439	---	245,118	245,111	24,655	247,338	22,427	22,426	22,384	---	24,654	---	10,833	24,655	10,833	---	10,833	10,833	---	---	---	---	---	14.1	14.1	37.9	---	37.9	37.9
Molar Flow	kgmole/h	13,606	13,624	---	13,606	13,606	1,369	13,729	1,245	1,245	1,243	---	1,369	---	601.3	1,369	601.3	---	601.3	601.3	---	---	---	---	---	0.78	0.78	2.10	---	2.10	2.10
Actual Volume Flow	m3/h	252.4	252.0	---	251.6	252.4	25.3	254.6	23.1	23.1	23.0	---	25.3	---	11.1	25.3	11.1	---	11.1	11.1	---	---	---	---	---	0.01	0.01	0.04	---	0.04	0.04
Liq Vol Flow @Std Cond	barrel/day	36,476	36,524	---	36,477	36,476	3,669	36,807	3,337	3,337	3,331	---	3,669	---	1,612	3,669	1,612	---	1,612	1,612	---	---	---	---	---	2.10	2.10	5.64	---	5.64	5.64
Mass Density	kg/m3	971.21	973.80	---	974.40	971.21	973.33	971.33	971.33	971.32	971.55	---	973.00	---	972.99	972.99	973.09	---	973.09	972.89	---	---	---	---	---	999.80	999.80	999.38	---	999.38	999.47
Viscosity	cP	0.390	0.407	---	0.412	0.390	0.402	0.390	0.390	0.390	0.393	---	0.403	---	0.403	0.403	0.403	---	0.403	0.402	---	---	---	---	---	0.718	0.718	0.711	---	0.711	0.709
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	4.343	4.339	---	4.338	4.343	4.339	4.343	4.343	4.343	4.343	---	4.340	---	4.341	4.341	4.340	---	4.340	4.341	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	63.80	64.38	---	64.52	63.80	64.22	63.83	63.83	63.83	63.92	---	64.25	---	64.25	64.25	64.24	---	64.24	64.22	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.24
COMPOSITION MOLE FRACTION																															
Nitrogen		0.000002	0.000526	0.002152	0.000002	0.000002	0.000000	0.000000	0.000012	0.000012	0.000012	0.001939	0.000011	0.000616	0.000002	0.000000	0.000002	0.000004	0.000000	0.000000	0.000004	0.000004	0.000000	0.000000	0.000145	0.000145	0.000145	0.000136	0.000155	0.000000	0.000000
CO2		0.000003	0.000112	0.000450	0.000003	0.000003	0.000000	0.000001	0.000015	0.000015	0.000015	0.000457	0.000015	0.000504	0.000010	0.000000	0.000010	0.000018	0.000000	0.000000	0.000018	0.000018	0.000008	0.000008	0.000423	0.000423	0.000423	0.000395	0.000451	0.000002	0.000002
Methane		0.001326	0.136996	0.698911	0.001326	0.001326	0.000000	0.000000	0.008888	0.008888	0.008888	0.677132	0.008933	0.416136	0.003505	0.000000	0.003505	0.006140	0.000000	0.000000	0.006140	0.006140	0.001476	0.001476	0.193466	0.193466	0.193466	0.180687	0.206486	0.000387	0.000387
Ethane		0.000785	0.025005	0.111417	0.000785	0.000785	0.000000	0.000000	0.005482	0.005482	0.005482	0.115077	0.005673	0.156421	0.004961	0.000000	0.004961	0.008690	0.000000	0.000000	0.008690	0.008690	0.004795	0.004795	0.165147	0.165147	0.165147	0.154251	0.176080	0.001702	0.001702
Propane		0.001527	0.020582	0.079523	0.001527	0.001527	0.000000	0.000000	0.010768	0.010768	0.010768	0.084448	0.011460	0.159915	0.013981	0.000000	0.013981	0.024489	0.000000	0.000000	0.024489	0.024489	0.019183	0.019183	0.237585	0.237585	0.237585	0.221960	0.252529	0.008329	0.008329
I-Butane		0.000675	0.004554	0.016496	0.000675	0.000675	0.000000	0.000000	0.004775	0.004775	0.004775	0.017806	0.005189	0.038243	0.007194	0.000000	0.007194	0.012601	0.000000	0.000000	0.012601	0.012601	0.011306	0.011306	0.064607	0.064607	0.064607	0.060383	0.068232	0.005525	0.005525
n-Butane		0.001600	0.008640	0.030260	0.001600	0.001600	0.000000	0.000000	0.011326	0.011326	0.011326	0.032843	0.012460	0.072930	0.017755	0.000000	0.017755	0.031101	0.000000	0.000000	0.031101	0.031101	0.028723	0.028723	0.126604	0.126604	0.126604	0.118356	0.133151	0.014961	0.014961
22-Moropane		0.000001	0.000006	0.000020	0.000001	0.000001	0.000000	0.000000	0.000010	0.000010	0.000010	0.000021	0.000011	0.000048	0.000016	0.000000	0.000016	0.000028	0.000000	0.000000	0.000028	0.000028	0.000026	0.000026	0.000086	0.000086	0.000086	0.000080	0.000090	0.000014	0.000014
I-Pentane		0.000961	0.002834	0.008504	0.000961	0.000961	0.000000	0.000000	0.006811	0.006811	0.006811	0.009358	0.007658	0.021862	0.011493	0.000000	0.011493	0.020132	0.000000	0.000000	0.020132	0.020132	0.019642	0.019642	0.039800	0.039800	0.039800	0.037252	0.040976	0.011232	0.011232
n-Pentane		0.001207	0.003063	0.008644	0.001207	0.001207	0.000000	0.000000	0.008555	0.008555	0.008555	0.009565	0.009725	0.022658	0.014725	0.000000	0.014725	0.025792	0.000000	0.000000	0.025792	0.025792	0.025400	0.025400	0.041568	0.041568	0.041568	0.038930	0.042322	0.015218	0.015218
n-Hexane		0.001728	0.002538	0.004789	0.001728	0.001728	0.000000	0.000000	0.012254	0.012254	0.012254	0.005394	0.014154	0.012920	0.021936	0.000000	0.021936	0.038423	0.000000	0.000000	0.038423	0.038423	0.038781	0.038781	0.024079	0.024079	0.024079	0.022655	0.022351	0.024776	0.024776
Mcyclopentan		0.000118	0.000172	0.000321	0.000118	0.000118	0.000000	0.000000	0.000840	0.000840	0.000840	0.000360	0.000974	0.000873	0.001510	0.000000	0.001510	0.002645	0.000000	0.000000	0.002645	0.002645	0.002671	0.002671	0.001631	0.001631	0.001631	0.001535	0.001507	0.001728	0.001728
Benzene		0.000010	0.000014	0.000027	0.000010	0.000010	0.000000	0.000000	0.000069	0.000069	0.000069	0.000030	0.000080	0.000074	0.000124	0.000000	0.000124	0.000217	0.000000	0.000000	0.000217	0.000217	0.000219	0.000219	0.000138	0.000138	0.000138	0.000130	0.000128	0.000145	0.000145
Cyclohexane		0.000107	0.000144	0.000241	0.000107	0.000107	0.000000	0.000000	0.000759	0.000759	0.000759	0.000272	0.000877	0.000657	0.001363	0.000000	0.001363	0.002388	0.000000	0.000000	0.002388	0.002388	0.002417	0.002417	0.001231	0.001231	0.001231	0.001160	0.001103	0.001559	0.001559
n-Heptane		0.000762	0.000810	0.000841	0.000762	0.000762	0.000000	0.000000	0.005406	0.005406	0.005406	0.000640	0.002188	0.000428	0.006515	0.000000	0.006515	0.016825	0.000000	0.000000	0.016825	0.016825	0.016125	0.016125	0.040079	0.040079	0.040079	0.038878	0.030019	0.009881	0.009881
Mcyclohexane		0.000378	0.000408	0.000444	0.000378	0.000378	0.000000	0.000000	0.002679	0.002679	0.002679	0.000505	0.002999	0.001162	0.004687	0.000000	0.004687	0.008210	0.000000	0.000000	0.008210	0.008210	0.008361	0.008361	0.002173	0.002173	0.002173	0.002064	0.001656	0.004915	0.004915
Toluene		0.000038	0.000039	0.000038	0.000038	0.000038	0.000000	0.000000	0.000267	0.000267	0.000267	0.000044	0.000297	0.000101	0.000465	0.000000	0.000465	0.000815	0.000000	0.000000	0.000815	0.000815	0.000830	0.000830	0.000189	0.000189	0.000189	0.000180	0.000134	0.000497	0.000497
n-Octane		0.001363	0.001227	0.000600	0.001363	0.001363	0.000000	0.000000	0.009666	0.009666	0.009666	0.000700	0.009974	0.001433	0.015651	0.000000	0.015651	0.027416	0.000000	0.000000	0.027416	0.027416	0.028032	0.028032	0.002658	0.002658	0.002658	0.002581	0.001244	0.011931	0.011931
E-Benzene		0.000013	0.000011	0.000005	0.000013	0.000013	0.000000	0.000000	0.000090	0.000090	0.000090	0.000006	0.000092	0.000013	0.000145	0.000000	0.000145	0.000254	0.000000	0.000000	0.000254	0.000254	0.000259	0.000259	0.000024	0.000024	0.000024	0.000023	0.000010	0.000111	0.000111
m-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000226	0.000226	0.000226	0.000014	0.000230	0.000028	0.000361	0.000000	0.000361	0.000633	0.000000	0.000000	0.000633	0.000633	0.000648	0.000648	0.000052	0.000052	0.000052	0.000051	0.000021	0.000260	0.000260
p-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000226	0.000226	0.000226	0.000014	0.000230	0.000028	0.000361	0.000000	0.000361	0.000633	0.000000	0.000000	0.000633	0.000633	0.000647	0.000647	0.000052	0.000052	0.000052	0.000050	0.000021	0.000259	0.000259
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000180	0.000180	0.000180	0.000010	0.000183	0.000021	0.000287	0.000000	0.000287	0.000502	0.000000	0.000000	0.000502	0.000502	0.000514	0.000514	0.000039	0.000039	0.000039	0.000038	0.000015	0.000199	0.000199
n-Nonane		0.001150	0.000963	0.000208	0.001150	0.001150	0.000000	0.000000	0.008157	0.008157	0.008157	0.000247	0.007925	0.000464	0.012452	0.000000	0.012452	0.021812	0.000000	0.000000	0.021812	0.021812	0.022333	0.022333	0.000854	0.000854	0.000854	0.000864	0.000204	0.005480	0.005480
124-MBenzene		0.000060	0.000050	0.000007	0.000060	0.000060	0.000000	0.000000	0.000427	0.000427	0.000427	0.000009	0.000408	0.000016	0.000641	0.000000	0.000641	0.001123	0.000000	0.000000	0.001123	0.001123	0.001150	0.001150	0.000030	0.000030	0.000030	0.000032	0.000005	0.000221	0.000221
n-Decane		0.001058	0.000859	0.000080	0.001058	0.001058	0.000000	0.000000	0.007507	0.007507	0.007507	0.000097	0.007075	0.000171	0.011123	0.000000	0.011123	0.019483	0.000000	0.000000	0.019483	0.019483	0.019960	0.019960	0.000313	0.000313	0.000313	0.000342	0.000034	0.002494	0.002494
C7*		0.001292	0.001449	0.001740	0.001292	0.001292	0.000000	0.000000	0.009165	0.009165	0.009165	0.001987	0.010368	0.004600	0.016192	0.000000	0.016192	0.028363	0.000000	0.000000	0.028363	0.028363	0.028856	0.028856	0.008585	0.008585	0.008585	0.008138	0.006771	0.017696	0.017696
C8*		0.002010	0.001750	0.000636	0.002010	0.002010	0.000000	0.000000	0.014255	0.014255	0.014255	0.000744	0.014309	0.001463	0.022468	0.000000	0.022468	0.039356	0.000000	0.000000	0.039356	0.039356	0.040269	0.040269	0.002698	0.002698	0.002698	0.002646	0.001082	0.013576	0.013576
C9*		0.001375	0.001126	0.000143	0.001375	0.001375	0.000000	0.000000	0.009755	0.009755	0.009755	0.000170	0.009269	0.000306	0.014568	0.000000	0.014568	0.025517	0.000000	0.000000	0.025517	0.025517	0.026139	0.026139	0.000559	0.000559	0.000559	0.000588	0.000091	0.004057	0.004057
C10-C13*		0.002013	0.000162	0.000002	0.002013	0.002013	0.000000	0.000000	0.011442	0.011442	0.011442	0.000005	0.012095	0.000001	0.018332	0.000000	0.018332	0.036670	0.000000	0.000000	0.036670	0.036670	0.036761	0.036761	0.000009	0.000009	0.000009	0.000012	0.000000	0.000098	0.000098
C14-C18*		0.000142	0.000113	0.000000	0.000142	0.000142	0.000000	0.000000	0.001010	0.001010	0.001010	0.000000	0.000929	0.000000	0.001462	0.000000	0.001462	0.002560	0.000000	0.000000	0.002560	0.002560	0.002624	0.002624	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001
C19-C21*		0.000100	0.000080	0.000000	0.000100	0.000100	0.000000	0.000000	0.000712	0.000712	0.000712	0.000000	0.000655	0.000000	0.001030	0.000000	0.001030	0.001805	0.000000	0.000000	0.001805	0.001805	0.001850	0.001850	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000099	0.000078	0.000000	0.000099	0.000099	0.000000	0.000000	0.000699	0.000699	0.000699	0.000000	0.000644	0.000000	0.001013	0.000000	0.001013	0.001774	0.000000	0.000000	0.001774	0.001774	0.001818	0.001818	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000074	0.000059	0.000000	0.000074	0.000074	0.000000	0.000000	0.000524	0.000524	0.000524	0.000000	0.000483	0.000000	0.000759	0.000000	0.000759	0.001330	0.000000	0.000000	0.001330	0.001330	0.001363	0.001363	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000071	0.000056	0.000000	0.000071	0.000071	0.000000	0.000000	0.000501	0.000501	0.000501	0.000000	0.000461	0.000000	0.000725	0.000000	0.000725	0.001270	0.000000	0.000000	0.001270	0.001270	0.001302	0.001302	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000066	0.000052	0.000000	0.000066	0.000066	0.000000	0.000000	0.000468	0.000468	0.000468	0.000000	0.000431	0.000000	0.000678	0.000000	0.000678	0.001187	0.000000	0.000000	0.001187	0.001187	0.001217	0.001217	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000045	0.000036	0.000000	0.000045	0.000045	0.000000	0.000000	0.000322	0.000322	0.000322	0.000000	0.000297	0.000000	0.000466	0.000000	0.000466	0.000817	0.000000	0.000000	0.000817	0.000817	0.000837	0.000837	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000038	0.000030	0.000000	0.000038	0.000038	0.000000	0.000000	0.000269	0.000269	0.000269	0.000000	0.000247	0.000000	0.000389	0.000000	0.000389	0.000682	0.000000	0.000000	0.000682	0.000682	0.000699	0.000699	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.001068	0.000848	0.000001	0.001068	0.001068	0.000000	0.000000	0.007578	0.007578	0.007578	0.000002	0.006978	0.000002	0.010974	0.000000	0.010974	0.019223	0.000000	0.000000	0.019223	0.019223	0.019701	0.019701	0.000004	0.000004	0.000004	0.000008	0.000000	0.000060	0.000060
C14-C16*		0.000505	0.000401	0.000000	0.000505	0.000505	0.000000	0.000000	0.003581	0.003581	0.003581	0.000000	0.003296	0.000000	0.005184	0.000000	0.005184	0.009081	0.000000	0.000000	0.009081	0.009081	0.009307	0.009307	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000590	0.000468	0.000000	0.000590	0.000590	0.000000	0.000000	0.004184	0.004184	0.004

CASE 2A MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP Fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O. Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8697	0.9740	1.0000	0.0000	0.0010	1.0000	0.8284	0.9620	0.0000	0.0122	1.0000	1.0000	1.0000	0.0183	0.2078	0.9694	1.0000	1.0000	0.0000	0.0403	1.0000	1.0000	0.9827	0.9827	0.9999	0.0000	0.2829	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	53.41	53.07	53.07	52.89	103.71	35.00	31.13	31.13	30.13	40.46	40.46	67.94	39.83	28.05	33.00	31.13	31.13	30.91	28.95	30.91	163.80	50.00	50.00	49.85	50.00	31.82	50.40	50.40	50.40
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.29	47.79	47.79	47.49	47.79	8.70	45.79	45.79	45.79
Mass Flow	kg/h	775.2	775.2	1,938	1,910	27.8	27.8	1,910	1,910	111,399	6,258	6,258	10,982	10,982	105,639	0.00	0.00	105,639	105,141	52,570	0.00	0.00	52,570	52,570	52,570	101,278	101,278	3,863	3,863	100,018	87,288	43,644
Molar Flow	kgmole/h	18.2	18.2	53.7	52.3	1.38	1.38	52.3	52.3	4,547	172.8	172.8	469.4	469.4	4,419	0.00	0.00	4,419	4,374	2,187	0.00	0.00	2,187	2,187	2,187	4,374	4,299	75.6	75.6	4,275	3,731	1,865
Mass Enthalpy	kJ/kg	-2,516	-2,685	-2,982	-2,822	-13,986	-13,986	-2,729	-2,989	-3,716	-7,125	-7,125	-3,553	-3,553	-3,627	-2,531	-2,531	-3,753	-3,513	-3,513	-2,272	-2,272	-3,513	-3,245	-3,543	-3,543	-3,561	-3,064	-3,064	-3,553	-3,553	-3,553
Heat Flow	kW	-542	-578	-1,605	-1,497	-108	-108	-1,448	-1,586	-114,997	-12,386	-12,386	-10,839	-10,839	-106,435	0	0	-110,130	-102,611	-51,306	0	0	-51,306	-47,380	-51,740	-103,481	-100,193	-3,288	-3,288	-98,715	-86,151	-43,075
Mass Density	kg/m3	7.85	9.43	5.67	5.45	931.84	608.99	12.63	18.03	9.79	754.13	320.11	31.73	31.73	8.27	493.96	98.58	9.40	9.25	9.25	639.25	244.38	8.94	34.60	53.58	53.58	51.47	537.67	67.68	48.69	48.69	48.69
Molecular Weight		42.58	42.58	36.08	36.50	20.18	20.18	36.50	36.50	24.50	36.22	36.22	23.40	23.40	23.90	57.51	57.51	23.90	24.04	24.04	82.77	82.77	24.04	24.04	24.04	24.04	23.56	51.11	51.11	23.40	23.40	23.40
VAPOR																																
Mass Flow	kg/h	775.2	628.3	1,910	1,910	---	0.06	1,910	1,404	105,141	---	63.5	10,982	10,982	105,639	0.00	0.00	101,569	105,141	52,570	---	0.00	52,570	52,570	50,639	101,278	101,244	---	638.7	100,018	87,288	43,644
Molar Flow	kgmole/h	18.2	15.8	52.3	52.3	---	0.001	52.3	43.4	4,374	---	2.11	469.4	469.4	4,419	0.00	0.00	4,284	4,374	2,187	---	0.00	2,187	2,187	2,149	4,299	4,298	---	21.4	4,275	3,731	1,865
Actual Volume Flow	m3/h	98.8	82.0	341.6	350.4	---	0.02	151.3	105.1	11,371	---	11.41	346.1	346.1	12,774	0.00	0.00	11,228	11,371	5,685	---	0.00	5,878	1,520	977.5	1,955	1,968	---	51.9	2,054	1,793	896.4
Std Gas Flow	MMSCFD	0.37	0.32	1.05	1.05	---	0.00003	1.05	0.87	87.83	---	0.04	9.42	9.42	88.73	0.00	0.00	86.02	87.83	43.91	---	0.00	43.91	43.91	43.16	86.31	86.30	---	0.43	85.83	74.91	37.45
Mass Density	kg/m3	7.85	7.66	5.59	5.45	---	4.03	12.63	13.36	9.25	---	5.57	31.73	31.73	8.27	32.78	12.32	9.05	9.25	9.25	---	5.51	8.94	34.60	51.80	51.80	51.45	---	12.31	48.69	48.69	48.69
Molecular Weight		42.58	39.68	36.50	36.50	---	45.70	36.50	32.38	24.04	---	30.08	23.40	23.40	23.90	23.92	29.50	23.71	24.04	24.04	---	29.64	24.04	24.04	23.56	23.56	23.56	---	29.87	23.40	23.40	23.40
Viscosity	cP	0.011	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.026	0.022	0.025	0.025	---	0.021	0.032	0.025	0.030	---	0.026	0.033	0.033	0.034	0.033	0.026	0.030	0.030	0.030	---	0.026	0.030	0.051	0.037	0.037	0.037	---	0.026	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.999	1.832	1.926	1.924	---	1.854	2.164	1.957	2.050	---	1.907	2.298	2.298	2.157	2.296	1.964	2.061	2.050	2.050	---	1.909	2.047	2.631	2.509	2.509	2.506	---	1.969	2.482	2.482	2.482
Cp/Cv		1.134	1.165	1.156	1.156	---	1.124	1.155	1.218	1.251	---	1.197	1.356	1.356	1.226	1.359	1.233	1.252	1.251	1.251	---	1.199	1.250	1.231	1.442	1.442	1.440	---	1.228	1.425	1.425	1.425
Z Factor		0.951	0.942	0.965	0.966	---	0.969	0.942	0.919	0.957	---	0.967	0.877	0.877	0.970	0.870	0.929	0.959	0.957	0.957	---	0.968	0.958	0.943	0.826	0.826	0.827	---	0.930	0.836	0.836	0.836
LIQUID																																
Mass Flow	kg/h	---	140.1	4.1	---	3.63	3.57	---	476.5	4,023	4,023	3,960	---	---	---	0.00	0.00	2,066	---	---	0.00	0.00	---	---	1,852	3,704	33.3	3,704	3,066	---	---	---
Molar Flow	kgmole/h	---	2.00	0.04	---	0.04	0.04	---	7.32	48.7	48.7	46.6	---	---	---	0.00	0.00	23.8	---	---	0.00	0.00	---	---	33.4	66.7	0.60	66.7	45.4	---	---	---
Actual Volume Flow	m3/h	---	0.23	0.01	---	0.01	0.01	---	0.80	6.07	6.07	5.92	---	---	---	0.00	0.00	3.07	---	---	0.00	0.00	---	---	3.51	7.02	0.06	7.02	5.03	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	33.4	0.86	---	0.77	0.75	---	116.8	895.8	895.8	875.0	---	---	---	0.00	0.00	452.5	---	---	0.00	0.00	---	---	486	971.6	8.72	971.6	738.3	---	---	---
Mass Density	kg/m3	---	616.60	681.06	---	683.00	686.79	---	593.80	662.79	662.79	669.26	---	---	---	553.82	598.60	672.60	---	---	639.25	670.54	---	---	527.28	527.28	527.94	527.28	608.96	---	---	---
Viscosity (Note 4)	cP	---	0.213	0.340	---	0.346	0.358	---	0.182	0.299	0.299	0.315	---	---	---	0.141	0.190	0.323	---	---	0.293	0.320	---	---	0.124	0.124	0.124	0.124	0.202	---	---	---
Thermal Conductivity	W/m-K	---	0.099	0.104	---	0.104	0.105	---	0.095	0.104	0.104	0.106	---	---	---	0.089	0.097	0.105	---	---	0.104	0.106	---	---	0.085	0.085	0.085	0.085	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.282	2.203	---	2.198	2.189	---	2.360	2.167	2.167	2.150	---	---	---	2.500	2.329	2.154	---	---	2.165	2.143	---	---	2.598	2.598	2.596	2.598	2.303	---	---	---
Surface Tension	dyne/cm	---	13.21	15.40	---	15.51	15.90	---	11.49	15.32	15.32	15.98	---	---	---	9.18	11.99	15.60	---	---	15.38	16.09	---	---	7.96	7.96	7.98	7.96	12.43	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	6.78	24.4	---	24.1	24.1	---	29.9	2,235	2,235	2,234	---	---	---	---	---	2,004	---	---	---	---	---	---	79.9	159.7	0.47	159.7	159.0	---	---	---
Molar Flow	kgmole/h	---	0.38	1.36	---	1.34	1.34	---	1.66	124.0	124.0	124.0	---	---	---	---	---	111.2	---	---	---	---	---	---	4.43	8.87	0.03	8.87	8.83	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.23	2.23	2.23	---	---	---	---	---	2.00	---	---	---	---	---	---	0.08	0.16	0.0005	0.16	0.16	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.01	3.64	---	3.59	3.59	---	4.45	332.6	332.6	332.5	---	---	---	---	---	298.2	---	---	---	---	---	---	11.9	23.8	0.07	23.8	23.7	---	---	---
Mass Density	kg/m3	---	1,002.17	985.69	---	985.95	986.04	---	1,000.05	1,002.97	1002.9743	1,003.58	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.85	989.85	989.95	989.85	1002.4672	---	---	---
Viscosity	cP	---	0.764	0.514	---	0.517	0.518	---	0.718	0.778	0.778	0.795	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.767	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.647	---	0.647	0.646	---	0.625	0.620	0.620	0.618	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.621	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.323	---	4.323	4.323	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	67.13	---	67.19	67.22	---	70.36	71.04	71.04	71.21	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	70.92	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000155	0.000155	0.000460	0.000472	0.000000	0.000000	0.000472	0.000472	0.002100	0.000010	0.000010	0.002229	0.002229	0.002152	0.000154	0.000154	0.002152	0.002182	0.002182	0.000033	0.000033	0.002182	0.002182	0.002182	0.002182	0.002217	0.000211	0.000211	0.002229	0.002229	0.002229
CO2		0.000451	0.000451	0.000486	0.000499	0.000001	0.000001	0.000499	0.000499	0.000446	0.000016	0.000016	0.000470	0.000470	0.000450	0.000163	0.000163	0.000450	0.000463	0.000463	0.000053	0.000053	0.000463	0.000463	0.000463	0.000463	0.000467	0.000182	0.000182	0.000470	0.000470	0.000470
Methane		0.206486	0.206486	0.345081	0.354148	0.000168	0.000168	0.354148	0.354148	0.686007	0.009584	0.009584	0.726542	0.726542	0.698903	0.129278	0.129278	0.698903	0.712722	0.712722	0.033449	0.033449	0.712722	0.712722	0.712722	0.712722	0.722486	0.157524	0.157524	0.726542	0.726542	0.726542
Ethane		0.176080	0.176080	0.163884	0.167362	0.000350	0.000350	0.167362	0.167362	0.111552	0.007976	0.007976	0.116890	0.116890	0.111418	0.081106	0.081106	0.111418	0.115643	0.115643	0.027951	0.027951	0.115643	0.115643	0.115643	0.115643	0.116237	0.081827	0.081827	0.116890	0.116890	0.116890
Propane		0.252529	0.252529	0.191304	0.196300	0.001249	0.001249	0.196300	0.196300	0.081831	0.019635	0.019635	0.083788	0.083788	0.079525	0.159566	0.159566	0.079525	0.084287	0.084287	0.069029	0.069029	0.084287	0.084287	0.084287	0.084287	0.083320	0.139259	0.139259	0.083788	0.083788	0.083788
I-Butane		0.068232	0.068232	0.048407	0.049661	0.000716	0.000716	0.049661	0.049661	0.017485	0.010041	0.010041	0.017250	0.017250	0.016497	0.067917	0.067917	0.016497	0.017779	0.017779	0.035386	0.035386	0.017779	0.017779	0.017779	0.017779	0.017154	0.053306	0.053306	0.017250	0.017250	0.017250
n-Butane		0.133151	0.133151	0.093340	0.095745	0.001851	0.001851	0.095745	0.095745	0.032545	0.025741	0.025741	0.031403	0.031403	0.030261	0.162382	0.162382	0.030261	0.032814	0.032814	0.090786	0.090786	0.032814	0.032814	0.032814	0.032814	0.031228	0.123009	0.123009	0.031403	0.031403	0.031403
22-Maropane		0.000090	0.000090	0.000062	0.000064	0.000002	0.000002	0.000064	0.000064	0.000021	0.000022	0.000022	0.000000	0.000000	0.000020	0.000000	0.000000	0.000020	0.000021	0.000021	0.000079	0.000079	0.000021	0.000021	0.000021	0.000021	0.000020	0.000096	0.000096	0.000000	0.000000	0.000000
I-Pentane		0.040976	0.040976	0.028340	0.029052	0.001271	0.001271	0.029052	0.029052	0.009614	0.017552	0.017552	0.008434	0.008434	0.008504	0.089997	0.089997	0.008504	0.009301	0.009301	0.062055	0.062055	0.009301	0.009301	0.009301	0.009301	0.008387	0.061262	0.061262	0.008434	0.008434	0.008434
n-Pentane		0.042322	0.042322	0.029322	0.030049	0.001668	0.001668	0.030049	0.030049	0.009964	0.023387	0.023387	0.008357	0.008357	0.008645	0.111306	0.111306	0.008645	0.009434	0.009434	0.042748	0.042748	0.009434	0.009434	0.009434	0.009434	0.008310	0.073367	0.073367	0.008357	0.008357	0.008357
n-Hexane		0.022351	0.022351	0.016117	0.016474	0.002542	0.002542	0.016474	0.016474	0.006012	0.036298	0.036298	0.003684	0.003684	0.004789	0.122014	0.122014	0.004789	0.004816	0.004816	0.128832	0.128832	0.004816	0.004816	0.004816	0.004816	0.003663	0.070353	0.070353	0.003684	0.003684	0.003684
Mcyclopentan		0.001507	0.001507	0.001088	0.001112	0.000178	0.000178	0.001112	0.001112	0.000407	0.002537	0.002537	0.000000	0.000000	0.000321	0.000000	0.000000	0.000321	0.000322	0.000322	0.008997	0.008997	0.000322	0.000322	0.000322	0.000322	0.000241	0.004945	0.004945	0.000000	0.000000	0.000000
Benzene		0.000128	0.000128	0.000092	0.000094	0.000015	0.000015	0.000094	0.000094	0.000034	0.000212	0.000212	0.000000	0.000000	0.000027	0.000000	0.000000	0.000027	0.000027	0.000027	0.000751	0.000751	0.000027	0.000027	0.000027	0.000027	0.000020	0.000414	0.000414	0.000000	0.000000	0.000000
Cyclohexane		0.001103	0.001103	0.000808	0.000825	0.000161	0.000161	0.000825	0.000825	0.000310	0.002257	0.002257	0.000000	0.000000	0.000241	0.000000	0.000000	0.000241	0.000233	0.000233	0.008008	0.008008	0.000233	0.000233	0.000233	0.000233	0.000167	0.003982	0.003982	0.000000	0.000000	0.000000
n-Heptane		0.003819	0.003819	0.002469	0.002507	0.001034	0.001034	0.002507	0.002507	0.001068	0.013294	0.013294	0.000000	0.000000	0.000841	0.000000	0.000000	0.000841	0.000606	0.000606	0.047331	0.047331	0.000606	0.000606	0.000606	0.000606	0.000361	0.014553	0.014553	0.000000	0.000000	0.000000
Mcyclohexane		0.001656	0.001656	0.001329	0.001351	0.000522	0.000522	0.001351	0.001351	0.000579	0.006724	0.006724	0.000000	0.000000	0.000444	0.000000	0.000000	0.000444	0.000337	0.000337	0.023910	0.023910	0.000337	0.000337	0.000337	0.000337	0.000202	0.007979	0.007979	0.000000	0.000000	0.000000
Toluene		0.000134	0.000134	0.000112	0.000114	0.000053	0.000053	0.000114	0.000114	0.000050	0.000651	0.000651	0.000000	0.000000	0.000038	0.000000	0.000000	0.000038	0.000026	0.000026	0.002316	0.002316	0.000026	0.000026	0.000026	0.000026	0.000014	0.000673	0.000673	0.000000	0.000000	0.000000
n-Octane		0.001244	0.001244	0.001369	0.001366	0.001495	0.001495	0.001366	0.001366	0.000721	0.013564	0.013564	0.000000	0.000000	0.000600	0.000000	0.000000	0.000600	0.000214	0.000214	0.048441	0.048441	0.000214	0.000214	0.000214	0.000214	0.000888	0.007387	0.007387	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000012	0.000012	0.000014	0.000014	0.000012	0.000012	0.000006	0.000123	0.000123	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000437	0.000437	0.000002	0.000002	0.000002	0.000002	0.000001	0.000062	0.000062	0.000000	0.000000	0.000000
m-Xylene		0.000021	0.000021	0.000025	0.000025	0.000035	0.000035	0.000025	0.000025	0.000014	0.000276	0.000276	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.000986	0.000986	0.000003	0.000003	0.000003	0.000003	0.000001	0.000124	0.000124	0.000000	0.000000	0.000000
p-Xylene		0.000021	0.000021	0.000025	0.000025	0.000035	0.000035	0.000025	0.000025	0.000014	0.000276	0.000276	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.000984	0.000984	0.000003	0.000003	0.000003	0.000003	0.000001	0.000124	0.000124	0.000000	0.000000	0.000000
o-Xylene		0.000015	0.000015	0.000019	0.000018	0.000028	0.000028	0.000018	0.000018	0.000010	0.000209	0.000209	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000745	0.000745	0.000002	0.000002	0.000002	0.000002	0.000001	0.000089	0.000089	0.000000	0.000000	0.000000
n-Nonane		0.000204	0.000204	0.000376	0.000359	0.001005	0.001005	0.000359	0.000359	0.000228	0.005239	0.005239	0.000000	0.000000	0.000208	0.000000	0.000000	0.000208	0.000030	0.000030	0.018768	0.018768	0.000030	0.000030	0.000030	0.000030	0.000008	0.001298	0.001298	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000012	0.000052	0.000052	0.000012	0.000012	0.000008	0.000191	0.000191	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000001	0.000001	0.000685	0.000685	0.000001	0.000001	0.000001	0.000001	0.000000	0.000030	0.000030	0.000000	0.000000	0.000000
n-Decane		0.000034	0.000034	0.000125	0.000108	0.000755	0.000755	0.000108	0.000108	0.000083	0.002064	0.002064	0.000000	0.000000	0.000080	0.000000	0.000000	0.000080	0.000004	0.000004	0.007414	0.007414	0.000004	0.000004	0.000004	0.000004	0.000001	0.000218	0.000218	0.000000	0.000000	0.000000
C7*		0.006771	0.006771	0.005336	0.005428	0.001823	0.001823	0.005428	0.005428	0.002259	0.024386	0.024386	0.000879	0.000879	0.001740	0.058407	0.058407	0.001740	0.001385	0.001385	0.086755	0.086755	0.001385	0.001385	0.001385	0.001385	0.000874	0.030410	0.030410	0.000879	0.000879	0.000879
C8*		0.001082	0.001082	0.001334	0.001318	0.001908	0.001908	0.001318	0.001318	0.000747	0.014944	0.014944	0.000070	0.000070	0.000636	0.016034	0.016034	0.000636	0.000186	0.000186	0.053434	0.053434	0.000186	0.000186	0.000186	0.000186	0.000070	0.006792	0.006792	0.000070	0.000070	0.000070
C9*		0.000091	0.000091	0.000233	0.000214	0.000986	0.000986	0.000214	0.000214	0.000151	0.003648	0.003648	0.000003	0.000003	0.000143	0.001674	0.001674	0.000143	0.000013	0.000013	0.013091	0.013091	0.000013	0.000013	0.000013	0.000013	0.000003	0.000607	0.000607	0.000003	0.000003	0.000003
C10-C13*		0.000000	0.000000	0.000003	0.000002	0.000068	0.000068	0.000002	0.000002	0.000002	0.000060	0.000060	0.000000	0.000000	0.000002	0.000004	0.000004	0.000002	0.000000	0.000000	0.000218	0.000218	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 2A MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1699	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9485	1.0000	1.0000	1.0000	0.8283	1.0000
Temperature	*C*	50.40	44.16	50.40	143.42	45.00	45.00	45.00	44.86	59.00	12.84	70.46	50.40	40.46	35.00	50.40
Pressure	*bar_g*	45.79	30.00	45.79	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.79	30.00	8.70	45.79
Mass Flow	*kg/h*	0.00	0.00	43,644	43,644	43,644	69,922	17,366	69,922	17,366	17,366	10,982	10,982	10,982	1,910	1,748
Molar Flow	*kgmole/h*	0.00	0.00	1,865	1,865	1,865	2,988	742.2	2,988	742.2	742.2	469.4	469.4	469.4	52.3	74.7
Mass Enthalpy	*kJ/kg*	-2,606	-2,606	-3,553	-3,385	-3,693	-3,693	-3,693	-3,693	-3,643	-3,643	-3,483	-3,553	-3,553	-2,989	-3,553
Heat Flow	*kW*	0	0	-43,075	-41,043	-44,770	-71,726	-17,813	-71,726	-17,575	-17,575	-10,626	-10,839	-10,839	-1,586	-1,725
Mass Density	*kg/m3*	506.82	242.26	48.69	104.75	186.19	186.19	186.19	185.71	165.07	32.57	27.41	48.69	31.73	18.03	48.69
Molecular Weight		51.00	51.00	23.40	23.40	23.40	23.40	23.40	23.40	23.40	23.40	23.40	23.40	23.40	36.50	23.40
VAPOR																
Mass Flow	*kg/h*	---	0.00	43,644	43,644	43,644	69,922	17,366	69,922	17,366	15,396	10,982	10,982	10,982	1,404	1,748
Molar Flow	*kgmole/h*	---	0.00	1,865	1,865	1,865	2,988	742.2	2,988	742.2	704.0	469.4	469.4	469.4	43.4	74.7
Actual Volume Flow	*m3/h*	---	0.00	896.4	416.6	234.4	375.5	93.3	376.5	105.2	529.6	400.7	225.6	346.1	105.1	35.90
Std Gas Flow	*MMSCFD*	---	0.00	37.45	37.45	37.45	60.00	14.90	60.00	14.90	14.13	9.42	9.42	9.42	0.87	1.50
Mass Density	*kg/m3*	---	35.08	48.69	104.75	186.19	186.19	186.19	185.71	165.07	29.07	27.41	48.69	31.73	13.36	48.69
Molecular Weight		---	25.53	23.40	23.40	23.40	23.40	23.40	23.40	23.40	21.87	23.40	23.40	23.40	32.38	23.40
Viscosity	*cP*	---	0.012	0.013	0.019	0.022	0.022	0.022	0.022	0.020	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	*W/m-K*	---	0.033	0.036	0.057	0.057	0.057	0.057	0.056	0.054	0.030	0.037	0.036	0.033	0.025	0.036
Mass Heat Capacity	*kJ/kg-C*	---	2.295	2.482	2.922	3.612	3.612	3.612	3.614	3.387	2.261	2.327	2.482	2.298	1.957	2.482
Cp/Cv		---	1.355	1.425	1.385	1.988	1.988	1.988	1.990	1.831	1.402	1.297	1.425	1.356	1.218	1.425
Z Factor		---	0.856	0.836	0.877	0.645	0.645	0.645	0.645	0.695	0.870	0.912	0.836	0.877	0.919	0.836
LIQUID																
Mass Flow	*kg/h*	0.00	0.00	---	---	---	---	---	---	---	1,969	---	---	---	476.5	---
Molar Flow	*kgmole/h*	0.00	0.00	---	---	---	---	---	---	---	38.2	---	---	---	7.32	---
Actual Volume Flow	*m3/h*	0.00	0.00	---	---	---	---	---	---	---	3.57	---	---	---	0.80	---
Liq Vol Flow @Std Cond	*barrel/day*	0.00	0.00	---	---	---	---	---	---	---	542.2	---	---	---	116.8	---
Mass Density	*kg/m3*	506.82	537.14	---	---	---	---	---	---	---	551.88	---	---	---	593.80	---
Viscosity (Note 4)	*cP*	0.104	0.128	---	---	---	---	---	---	---	0.148	---	---	---	0.182	---
Thermal Conductivity	*W/m-K*	0.082	0.086	---	---	---	---	---	---	---	0.095	---	---	---	0.095	---
Mass Heat Capacity	*kJ/kg-C*	2.770	2.578	---	---	---	---	---	---	---	2.431	---	---	---	2.360	---
Surface Tension	*dyne/cm*	6.71	8.33	---	---	---	---	---	---	---	10.09	---	---	---	11.49	---
AQUEOUS (Note 3)																
Mass Flow	*kg/h*	---	---	---	---	---	---	---	---	---	---	---	---	---	29.9	---
Molar Flow	*kgmole/h*	---	---	---	---	---	---	---	---	---	---	---	---	---	1.66	---
Actual Volume Flow	*m3/h*	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	*barrel/day*	---	---	---	---	---	---	---	---	---	---	---	---	---	4.45	---
Mass Density	*kg/m3*	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	*cP*	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	*W/m-K*	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	*kJ/kg-C*	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	*dyne/cm*	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000274	0.000274	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.002229	0.000472	0.002229
CO2		0.000225	0.000225	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000470	0.000499	0.000470
Methane		0.200916	0.200916	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.726542	0.354148	0.726542
Ethane		0.103014	0.103014	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.116890	0.167362	0.116890
Propane		0.174499	0.174499	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.083788	0.196300	0.083788
i-Butane		0.066714	0.066714	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.017250	0.049661	0.017250
n-Butane		0.153071	0.153071	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.031403	0.095745	0.031403
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000064	0.000000
i-Pentane		0.076327	0.076327	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.008434	0.029052	0.008434
n-Pentane		0.091031	0.091031	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.008357	0.030049	0.008357
n-Hexane		0.087039	0.087039	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.003684	0.016474	0.003684
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001112	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000094	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000825	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002507	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001351	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000114	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001366	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000012	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000359	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000012	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000108	0.000000
C7*		0.037507	0.037507	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.000879	0.005428	0.000879
C8*		0.038608	0.038608	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.001318	0.000070
C9*		0.000773	0.000773	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000214	0.000003
C10-C13*		0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.036656	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000106	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000028	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000071	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000026	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004400	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002197	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001425	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000355	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	397.44	363.24	880.94	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.

CASE 2B MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		0.0001	0.2291	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0151	1.0000	0.0161	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0245	0.0000	0.0000	0.0000	1.0000	0.9367	0.9367	0.8766	1.0000	0.0000	0.0000
Temperature	C	72.00	68.71	68.00	68.00	72.00	69.46	71.83	71.83	71.82	71.30	71.83	69.31	69.32	69.32	69.32	69.39	69.39	69.39	69.47	69.03	69.42	69.03	55.00	69.03	35.00	35.00	35.55	35.55	35.55	35.69
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	409,078	516,884	119,240	409,078	409,078	24,884	247,334	186,591	186,591	186,591	37.4	193,563	1,172	178,341	24,884	178,341	167,508	10,833	10,833	167,508	167,508	166,671	166,671	836.9	836.9	836.9	864.7	782.1	82.6	82.6
Molar Flow	kgmole/h	14,371	18,690	4,988	14,371	14,371	1,381	13,729	2,022	2,022	2,022	1.52	2,217	35.7	1,401	1,381	1,401	799.9	601.3	601.3	799.9	799.9	780.3	780.3	19.6	19.6	19.6	20.9	18.4	2.58	2.58
Mass Enthalpy	kJ/kg	-10,227	-8,846	-3,627	-10,241	-10,227	-15,694	-15,685	-3,724	-3,724	-3,724	-3,597	-3,851	-3,174	-2,922	-15,696	-2,922	-2,095	-15,695	-15,695	-2,095	-2,095	-2,093	-2,122	-2,666	-2,787	-2,787	-3,146	-2,588	-8,436	-8,435
Heat Flow	kW	-1,162,155	-1,270,077	-120,121	-1,163,736	-1,162,155	-108,483	-1,077,591	-193,010	-193,010	-193,010	-37	-207,061	-1,033	-144,765	-108,495	-144,730	-97,499	-47,231	-47,231	-97,499	-97,499	-96,880	-98,263	-620	-648	-648	-756	-562	-194	-194
Mass Density	kg/m3	881.60	40.68	8.36	893.35	881.60	973.48	971.34	810.10	789.81	422.39	8.39	399.65	4.74	801.02	973.14	801.32	792.27	973.24	973.05	353.46	792.21	793.74	803.64	3.17	3.54	3.54	3.64	3.30	796.31	796.77
Molecular Weight		28.47	27.66	23.91	28.47	28.47	18.02	18.02	92.29	92.29	92.29	24.51	87.31	32.79	127.27	18.02	127.27	209.41	18.02	18.02	209.41	209.41	213.59	213.59	42.79	42.79	42.79	41.30	42.62	31.97	31.97
VAPOR																															
Mass Flow	kg/h	38.7	106,152	119,240	---	38.7	---	---	---	48.5	973.2	37.4	1,171	1,172	---	---	---	---	---	---	836.9	---	---	---	836.9	780.7	780.7	782.1	782.1	---	---
Molar Flow	kgmole/h	1.58	4,282	4,988	---	1.58	---	---	---	1.95	30.6	1.52	35.7	35.7	---	---	---	---	---	---	19.6	---	---	---	19.6	18.3	18.3	18.4	18.4	---	---
Actual Volume Flow	m3/h	4.61	12,245	14,265	---	4.61	---	---	---	6.02	213.3	4.45	247.2	247.3	---	---	---	---	---	---	263.9	---	---	---	263.9	236.3	236.3	237.2	237.2	---	---
Std Gas Flow	MMSCFD	0.03	85.98	100.15	---	0.03	---	---	---	0.04	0.61	0.03	0.72	0.72	---	---	---	---	---	---	0.39	---	---	---	0.39	0.37	0.37	0.37	0.37	---	---
Mass Density	kg/m3	8.39	8.67	8.36	---	8.39	---	---	---	8.06	4.56	8.39	4.74	4.74	---	---	---	---	---	---	3.17	---	---	---	3.17	3.30	3.30	3.30	3.30	---	---
Molecular Weight		24.54	24.79	23.91	---	24.54	---	---	---	24.88	31.81	24.51	32.78	32.79	---	---	---	---	---	---	42.79	---	---	---	42.79	42.61	42.61	42.62	42.62	---	---
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.034	0.034	0.034	---	0.034	---	---	---	0.034	0.029	0.034	0.028	0.028	---	---	---	---	---	---	0.024	---	---	---	0.024	0.021	0.021	0.021	0.021	---	---
Mass Heat Capacity	kJ/kg-C	2.158	2.144	2.158	---	2.158	---	---	---	2.148	2.020	2.158	2.007	2.007	---	---	---	---	---	---	1.928	---	---	---	1.928	1.793	1.793	1.796	1.796	---	---
Cp/Cv		1.220	1.220	1.226	---	1.220	---	---	---	1.216	1.165	1.220	1.162	1.162	---	---	---	---	---	---	1.123	---	---	---	1.123	1.136	1.136	1.136	1.136	---	---
Z Factor		0.969	0.967	0.969	---	0.969	---	---	---	0.970	0.977	0.969	0.975	0.975	---	---	---	---	---	---	0.979	---	---	---	0.979	0.973	0.973	0.973	0.973	---	---
LIQUID																															
Mass Flow	kg/h	164,217	165,589	---	164,249	164,217	---	---	164,218	164,170	163,288	---	167,508	---	167,508	---	167,508	167,508	---	---	166,671	167,508	166,671	166,671	---	42.3	42.3	44.9	---	44.9	44.9
Molar Flow	kgmole/h	779.8	800.2	---	781.0	779.8	---	---	779.8	777.9	751.6	---	799.9	---	799.9	---	799.9	799.9	---	---	780.3	799.9	780.3	780.3	---	0.47	0.47	0.49	---	0.49	0.49
Actual Volume Flow	m3/h	207.3	209.0	---	206.7	207.3	---	---	207.3	207.2	205.4	---	211.5	---	211.5	---	211.4	211.4	---	---	210.0	211.4	210.0	207.4	---	0.06	0.06	0.07	---	0.07	0.07
Liq Vol Flow @Std Cond	barrel/day	29,808	30,119	---	29,816	29,808	---	---	29,808	29,795	29,575	---	30,478	---	30,478	---	30,478	30,478	---	---	30,278	30,478	30,278	30,278	---	9.16	9.16	9.70	---	9.70	9.70
Mass Density	kg/m3	792.07	792.44	---	794.80	792.07	---	---	792.19	792.34	794.87	---	791.97	---	791.96	---	792.27	792.27	---	---	793.74	792.21	793.74	803.64	---	678.53	678.53	680.18	---	680.18	680.75
Viscosity (Note 4)	cP	1.942	1.968	---	2.066	1.942	---	---	1.947	1.954	2.074	---	1.957	---	1.957	---	1.956	1.956	---	---	2.037	1.955	2.037	2.593	---	0.338	0.338	0.343	---	0.343	0.343
Thermal Conductivity	W/m-K	0.110	0.110	---	0.111	0.110	---	---	0.110	0.111	0.112	---	0.112	---	0.112	---	0.112	0.112	---	---	0.112	0.112	0.112	0.115	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	kJ/kg-C	2.171	2.160	---	2.155	2.171	---	---	2.171	2.170	2.165	---	2.160	---	2.160	---	2.160	2.160	---	---	2.157	2.160	2.157	2.099	---	2.147	2.147	2.145	---	2.145	2.144
Surface Tension	dyne/cm	16.69	16.67	---	16.90	16.69	---	---	16.70	16.73	17.27	---	17.12	---	17.12	---	17.12	17.12	---	---	17.37	17.11	17.37	18.34	---	16.54	16.54	16.57	---	16.57	16.56
AQUEOUS (Note 3)																															
Mass Flow	kg/h	244,822	245,142	---	244,829	244,822	24,884	247,334	22,373	22,372	22,330	---	24,884	---	10,833	24,884	10,833	---	10,833	10,833	---	---	---	---	---	13.9	13.9	37.7	---	37.7	37.7
Molar Flow	kgmole/h	13,590	13,608	---	13,590	13,590	1,381	13,729	1,242	1,242	1,239	---	1,381	---	601.3	1,381	601.3	---	601.3	601.3	---	---	---	---	---	0.77	0.77	2.09	---	2.09	2.09
Actual Volume Flow	m3/h	252.1	251.7	---	251.3	252.1	25.6	254.6	23.0	23.0	23.0	---	25.6	---	11.1	25.6	11.1	---	11.1	11.1	---	---	---	---	---	0.01	0.01	0.04	---	0.04	0.04
Liq Vol Flow @Std Cond	barrel/day	36,433	36,480	---	36,434	36,433	3,703	36,806	3,329	3,329	3,323	---	3,703	---	1,612	3,703	1,612	---	1,612	1,612	---	---	---	---	---	2.07	2.07	5.61	---	5.61	5.61
Mass Density	kg/m3	971.21	973.84	---	974.40	971.21	973.48	971.34	971.34	971.33	971.56	---	973.15	---	973.14	973.14	973.24	---	973.24	973.05	---	---	---	---	---	999.80	999.80	999.39	---	999.39	999.47
Viscosity	cP	0.390	0.408	---	0.412	0.390	0.403	0.391	0.391	0.391	0.393	---	0.404	---	0.404	0.404	0.404	---	0.404	0.403	---	---	---	---	---	0.718	0.718	0.711	---	0.711	0.709
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	4.343	4.338	---	4.338	4.343	4.338	4.343	4.343	4.343	4.343	---	4.340	---	4.340	4.340	4.340	---	4.340	4.340	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	63.80	64.39	---	64.52	63.80	64.26	63.83	63.83	63.83	63.93	---	64.29	---	64.28	64.28	64.27	---	64.27	64.26	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.25
COMPOSITION MOLE FRACTION																															
Nitrogen		0.000002	0.000583	0.002177	0.000002	0.000002	0.000000	0.000000	0.000012	0.000012	0.000012	0.001962	0.000011	0.000620	0.000002	0.000000	0.000002	0.000004	0.000000	0.000000	0.000004	0.000004	0.000000	0.000000	0.000145	0.000145	0.000145	0.000136	0.000155	0.000000	0.000000
CO2		0.000003	0.000124	0.000454	0.000003	0.000003	0.000000	0.000001	0.000015	0.000015	0.000015	0.000461	0.000015	0.000508	0.000011	0.000000	0.000011	0.000018	0.000000	0.000000	0.000018	0.000018	0.000008	0.000008	0.000425	0.000425	0.000425	0.000397	0.000453	0.000002	0.000002
Methane		0.001318	0.154168	0.697990	0.001318	0.001318	0.000000	0.000000	0.008859	0.008859	0.008859	0.676284	0.008888	0.414414	0.003493	0.000000	0.003493	0.006119	0.000000	0.000000	0.006119	0.006119	0.001465	0.001465	0.191818	0.191818	0.191818	0.179216	0.204402	0.000377	0.000377
Ethane		0.000786	0.027838	0.112071	0.000786	0.000786	0.000000	0.000000	0.005502	0.005502	0.005502	0.115739	0.005696	0.157345	0.004999	0.000000	0.004999	0.008758	0.000000	0.000000	0.008758	0.008758	0.004822	0.004822	0.165771	0.165771	0.165771	0.154894	0.176472	0.001682	0.001682
Propane		0.001531	0.022548	0.080080	0.001531	0.001531	0.000000	0.000000	0.010819	0.010819	0.010819	0.085021	0.011541	0.161358	0.014144	0.000000	0.014144	0.024777	0.000000	0.000000	0.024777	0.024777	0.019394	0.019394	0.239522	0.239522	0.239522	0.223856	0.254217	0.008269	0.008269
i-Butane		0.000673	0.004929	0.016530	0.000673	0.000673	0.000000	0.000000	0.004773	0.004773	0.004773	0.017837	0.005206	0.038447	0.007256	0.000000	0.007256	0.012711	0.000000	0.000000	0.012711	0.012711	0.011402	0.011402	0.064926	0.064926	0.064926	0.060704	0.068483	0.005470	0.005470
n-Butane		0.001593	0.009301	0.030261	0.001593	0.001593	0.000000	0.000000	0.011299	0.011299	0.011299	0.032834	0.012487	0.073220	0.017888	0.000000	0.017888	0.031336	0.000000	0.000000	0.031336	0.031336	0.028936	0.028936	0.127069	0.127069	0.127069	0.118837	0.133490	0.014792	0.014792
22-Moropane		0.000001	0.000006	0.000018	0.000001	0.000001	0.000000	0.000000	0.000009	0.000009	0.000009	0.000020	0.000010	0.000044	0.000014	0.000000	0.000014	0.000025	0.000000	0.000000	0.000025	0.000025	0.000024	0.000024	0.000078	0.000078	0.000078	0.000073	0.000082	0.000012	0.000012
i-Pentane		0.000952	0.002989	0.008459	0.000952	0.000952	0.000000	0.000000	0.006758	0.006758	0.006758	0.009306	0.007646	0.021860	0.011539	0.000000	0.011539	0.020214	0.000000	0.000000	0.020214	0.020214	0.019723	0.019723	0.039789	0.039789	0.039789	0.037257	0.040945	0.011070	0.011070
n-Pentane		0.001193	0.003209	0.008585	0.001193	0.001193	0.000000	0.000000	0.008476	0.008476	0.008476	0.009496	0.009703	0.022634	0.014774	0.000000	0.014774	0.025880	0.000000	0.000000	0.025880	0.025880	0.025488	0.025488	0.041519	0.041519	0.041519	0.038900	0.042267	0.014990	0.014990
n-Hexane		0.001700	0.002570	0.004733	0.001700	0.001700	0.000000	0.000000	0.012081	0.012081	0.012081	0.005329	0.014086	0.012866	0.021957	0.000000	0.021957	0.038464	0.000000	0.000000	0.038464	0.038464	0.038827	0.038827	0.023974	0.023974	0.023974	0.022566	0.022309	0.024391	0.024391
Mcyclopentan		0.000112	0.000167	0.000304	0.000112	0.000112	0.000000	0.000000	0.000795	0.000795	0.000795	0.000342	0.000931	0.000835	0.001452	0.000000	0.001452	0.002544	0.000000	0.000000	0.002544	0.002544	0.002569	0.002569	0.001560	0.001560	0.001560	0.001469	0.001446	0.001634	0.001634
Benzene		0.000009	0.000014	0.000025	0.000009	0.000009	0.000000	0.000000	0.000065	0.000065	0.000065	0.000028	0.000077	0.000070	0.000119	0.000000	0.000119	0.000209	0.000000	0.000000	0.000209	0.000209	0.000211	0.000211	0.000132	0.000132	0.000132	0.000124	0.000122	0.000138	0.000138
Cyclohexane		0.000102	0.000140	0.000230	0.000102	0.000102	0.000000	0.000000	0.000723	0.000723	0.000723	0.000259	0.000844	0.000632	0.001318	0.000000	0.001318	0.002310	0.000000	0.000000	0.002310	0.002310	0.002338	0.002338	0.001184	0.001184	0.001184	0.001117	0.001065	0.001484	0.001484
n-Hepane		0.000739	0.000786	0.000819	0.000739	0.000739	0.000000	0.000000	0.005249	0.005249	0.005249	0.000938	0.005910	0.002144	0.009295	0.000000	0.009295	0.016283	0.000000	0.000000	0.016283	0.016283	0.016591	0.016591	0.003997	0.003997	0.003997	0.003801	0.002981	0.009626	0.009626
Mcyclohexane		0.000365	0.000396	0.000431	0.000365	0.000365	0.000000	0.000000	0.002597	0.002597	0.002597	0.000490	0.002935	0.001137	0.004614	0.000000	0.004614	0.008083	0.000000	0.000000	0.008083	0.008083	0.008232	0.008232	0.002127	0.002127	0.002127	0.002021	0.001633	0.004779	0.004779
Toluene		0.000037	0.000038	0.000037	0.000037	0.000037	0.000000	0.000000	0.000260	0.000260	0.000260	0.000043	0.000292	0.000099	0.000459	0.000000	0.000459	0.000805	0.000000	0.000000	0.000805	0.000805	0.000820	0.000820	0.000185	0.000185	0.000185	0.000177	0.000133	0.000485	0.000485
n-Octane		0.001344	0.001192	0.000594	0.001344	0.001344	0.000000	0.000000	0.009552	0.009552	0.009552	0.000693	0.009894	0.001420	0.015618	0.000000	0.015618	0.027359	0.000000	0.000000	0.027359	0.027359	0.027979	0.027979	0.002634	0.002634	0.002634	0.002560	0.001252	0.011848	0.011848
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000089	0.000089	0.000089	0.000006	0.000092	0.000013	0.000145	0.000000	0.000145	0.000253	0.000000	0.000000	0.000253	0.000253	0.000259	0.000259	0.000023	0.000023	0.000023	0.000023	0.000010	0.000111	0.000111
m-Xylene		0.000032	0.000027	0.000012	0.000032	0.000032	0.000000	0.000000	0.000224	0.000224	0.000224	0.000013	0.000229	0.000027	0.000361	0.000000	0.000361	0.000633	0.000000	0.000000	0.000633	0.000633	0.000647	0.000647	0.000051	0.000051	0.000051	0.000050	0.000021	0.000259	0.000259
p-Xylene		0.000032	0.000027	0.000012	0.000032	0.000032	0.000000	0.000000	0.000224	0.000224	0.000224	0.000013	0.000229	0.000027	0.000361	0.000000	0.000361	0.000632	0.000000	0.000000	0.000632	0.000632	0.000647	0.000647	0.000051	0.000051	0.000051	0.000050	0.000021	0.000258	0.000258
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000179	0.000179	0.000179	0.000010	0.000181	0.000021	0.000287	0.000000	0.000287	0.000502	0.000000	0.000000	0.000502	0.000502	0.000514	0.000514	0.000038	0.000038	0.000038	0.000038	0.000015	0.000198	0.000198
n-Nonane		0.001144	0.000935	0.000208	0.001144	0.001144	0.000000	0.000000	0.008132	0.008132	0.008132	0.000246	0.007881	0.000461	0.012457	0.000000	0.012457	0.021823	0.000000	0.000000	0.021823	0.021823	0.022348	0.022348	0.000848	0.000848	0.000848	0.000859	0.000207	0.005488	0.005488
124-MBenzene		0.000060	0.000048	0.000007	0.000060	0.000060	0.000000	0.000000	0.000426	0.000426	0.000426	0.000009	0.000406	0.000016	0.000642	0.000000	0.000642	0.001124	0.000000	0.000000	0.001124	0.001124	0.001151	0.001151	0.000030	0.000030	0.000030	0.000032	0.000005	0.000222	0.000222
n-Decane		0.001057	0.000834	0.000080	0.001057	0.001057	0.000000	0.000000	0.007515	0.007515	0.007515	0.000097	0.007038	0.000170	0.011130	0.000000	0.011130	0.019498	0.000000	0.000000	0.019498	0.019498	0.019979	0.019979	0.000310	0.000310	0.000310	0.000340	0.000035	0.002507	0.002507
C7*		0.001270	0.001434	0.001717	0.001270	0.001270	0.000000	0.000000	0.009023	0.009023	0.009023	0.001960	0.010310	0.004574	0.016195	0.000000	0.016195	0.028370	0.000000	0.000000	0.028370	0.028370	0.028868	0.028868	0.008535	0.008535	0.008535	0.008095	0.006775	0.017467	0.017467
C8*		0.001992	0.001701	0.000634	0.001992	0.001992	0.000000	0.000000	0.014162	0.014162	0.014162	0.000740	0.014230	0.001453	0.022476	0.000000	0.022476	0.039373	0.000000	0.000000	0.039373	0.039373	0.040292	0.040292	0.002679	0.002679	0.002679	0.002630	0.001093	0.013542	0.013542
C9*		0.001372	0.001093	0.000143	0.001372	0.001372	0.000000	0.000000	0.009751	0.009751	0.009751	0.000170	0.009218	0.000304	0.014576	0.000000	0.014576	0.025535	0.000000	0.000000	0.025535	0.025535	0.026161	0.026161	0.000555	0.000555	0.000555	0.000584	0.000093	0.004073	0.004073
C10-C13*		0.000203	0.000157	0.000002	0.000203	0.000203	0.000000	0.000000	0.001446	0.001446	0.001446	0.000003	0.001324	0.000002	0.002095	0.000000	0.002095	0.003670	0.000000	0.000000	0.003670	0.003670	0.003762	0.003762	0.000008	0.000008	0.000008	0.000012	0.000000	0.000099	0.000099
C14-C18*		0.000143	0.000110	0.000000	0.000143	0.000143	0.000000	0.000000	0.001013	0.001013	0.001013	0.000000	0.000924	0.000000	0.001462	0.000000	0.001462	0.002561	0.000000	0.000000	0.002561	0.002561	0.002625	0.002625	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001
C19-C21*		0.000100	0.000077	0.000000	0.000100	0.000100	0.000000	0.000000	0.000714	0.000714	0.000714	0.000000	0.000651	0.000000	0.001030	0.000000	0.001030	0.001805	0.000000	0.000000	0.001805	0.001805	0.001850	0.001850	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000099	0.000076	0.000000	0.000099	0.000099	0.000000	0.000000	0.000702	0.000702	0.000702	0.000000	0.000640	0.000000	0.001013	0.000000	0.001013	0.001774	0.000000	0.000000	0.001774	0.001774	0.001818	0.001818	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000074	0.000057	0.000000	0.000074	0.000074	0.000000	0.000000	0.000526	0.000526	0.000526	0.000000	0.000480	0.000000	0.000759	0.000000	0.000759	0.001330	0.000000	0.000000	0.001330	0.001330	0.001363	0.001363	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000071	0.000054	0.000000	0.000071	0.000071	0.000000	0.000000	0.000503	0.000503	0.000503	0.000000	0.000458	0.000000	0.000725	0.000000	0.000725	0.001270	0.000000	0.000000	0.001270	0.001270	0.001302	0.001302	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000066	0.000051	0.000000	0.000066	0.000066	0.000000	0.000000	0.000470	0.000470	0.000470	0.000000	0.000429	0.000000	0.000678	0.000000	0.000678	0.001188	0.000000	0.000000	0.001188	0.001188	0.001217	0.001217	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000045	0.000035	0.000000	0.000045	0.000045	0.000000	0.000000	0.000323	0.000323	0.000323	0.000000	0.000295	0.000000	0.000466	0.000000	0.000466	0.000817	0.000000	0.000000	0.000817	0.000817	0.000838	0.000838	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000038	0.000029	0.000000	0.000038	0.000038	0.000000	0.000000	0.000270	0.000270	0.000270	0.000000	0.000246	0.000000	0.000389	0.000000	0.000389	0.000682	0.000000	0.000000	0.000682	0.000682	0.000699	0.000699	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.001070	0.000823	0.000001	0.001070	0.001070	0.000000	0.000000	0.007604	0.007604	0.007604	0.000002	0.006937	0.000002	0.010975	0.000000	0.010975	0.019226	0.000000	0.000000	0.019226	0.019226	0.019708	0.019708	0.000004	0.000004	0.000004	0.000007	0.000000	0.000060	0.000060
C14-C16*		0.000506	0.000389	0.000000	0.000506	0.000506	0.000000	0.000000	0.003594	0.003594	0.003594	0.000000	0.003277	0.000000	0.005185	0.000000	0.005185	0.009083	0.000000	0.000000	0.009083	0.009083	0.009310	0.009310	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000591	0.000454	0.000000	0.000591	0.000591	0.000000	0.000000	0.004199	0.004199	0.004

CASE 2B MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP Fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8703	0.9741	1.0000	0.0000	0.0010	1.0000	0.8290	0.9624	0.0000	0.0119	1.0000	1.0000	1.0000	0.0180	0.2077	0.9696	1.0000	1.0000	0.0000	0.0403	1.0000	1.0000	0.9831	0.9831	0.9999	0.0000	0.2825	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	53.24	52.91	52.91	52.72	103.50	35.00	31.16	31.16	30.18	40.45	40.45	67.94	39.83	28.04	33.00	31.16	31.16	30.94	28.98	30.94	163.84	50.00	50.00	49.85	50.00	31.80	50.40	50.40	50.40
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.29	47.79	47.79	47.49	47.79	8.70	45.79	45.79	45.79
Mass Flow	kg/h	782.1	782.1	1,954	1,926	27.8	27.8	1,926	1,926	125,472	6,890	6,890	11,085	11,085	119,277	0.00	0.00	119,277	118,582	59,291	0.00	0.00	59,291	59,291	59,291	118,582	114,323	4,259	4,259	112,924	100,090	50,045
Molar Flow	kgmole/h	18.4	18.4	54.1	52.7	1.38	1.38	52.7	52.7	5,126	192.6	192.6	473.4	473.4	4,989	0.00	0.00	4,989	4,933	2,467	0.00	0.00	2,467	2,467	2,467	4,933	4,850	83.5	83.5	4,823	4,275	2,137
Mass Enthalpy	kJ/kg	-2,514	-2,684	-2,978	-2,819	-13,977	-13,977	-2,727	-2,985	-3,718	-7,240	-7,240	-3,551	-3,551	-3,627	-2,530	-2,530	-3,752	-3,513	-3,513	-2,272	-2,272	-3,513	-3,244	-3,543	-3,543	-3,560	-3,079	-3,079	-3,551	-3,551	-3,551
Heat Flow	kW	-546	-583	-1,616	-1,508	-108	-108	-1,459	-1,597	-129,570	-13,858	-13,858	-10,934	-10,934	-120,158	0	0	-124,323	-115,713	-57,856	0	0	-57,856	-53,429	-58,345	-116,690	-113,048	-3,642	-3,642	-111,391	-98,731	-49,366
Mass Density	kg/m3	7.86	9.43	5.68	5.46	931.65	605.93	12.65	18.04	9.78	757.07	323.22	31.77	31.77	8.27	495.23	98.70	9.40	9.25	9.25	638.92	244.68	8.94	34.60	53.59	53.59	51.51	537.99	67.65	48.74	48.74	48.74
Molecular Weight		42.62	42.62	36.12	36.54	20.19	20.19	36.54	36.54	24.48	35.77	35.77	23.41	23.41	23.91	57.54	57.54	23.91	24.04	24.04	82.99	82.99	24.04	24.04	24.04	24.04	23.57	51.00	51.00	23.41	23.41	23.41
VAPOR																																
Mass Flow	kg/h	782.1	634.9	1,925	1,926	---	0.07	1,926	1,418	118,582	---	69.0	11,085	11,085	119,277	0.00	0.00	114,755	118,582	59,291	---	0.00	59,291	59,291	57,162	114,323	114,285	---	705.0	112,924	100,090	50,045
Molar Flow	kgmole/h	18.4	16.0	52.7	52.7	---	0.001	52.7	43.7	4,933	---	2.29	473.4	473.4	4,989	0.00	0.00	4,838	4,933	2,467	---	0.00	2,467	2,467	2,425	4,850	4,849	---	23.6	4,823	4,275	2,137
Actual Volume Flow	m3/h	99.6	82.7	343.8	352.7	---	0.02	152.3	105.9	12,825	---	12.38	348.9	348.9	14,422	0.00	0.00	12,678	12,825	6,412	---	0.00	6,630	1,714	1,102	2,205	2,219	---	57.2	2,317	2,054	1,027
Std Gas Flow	MMSCFD	0.37	0.32	1.06	1.06	---	0.00003	1.06	0.88	99.05	---	0.05	9.51	9.51	100.18	0.00	0.00	97.13	99.05	49.52	---	0.00	49.52	49.52	48.69	97.37	97.36	---	0.47	96.83	85.83	42.91
Mass Density	kg/m3	7.86	7.68	5.60	5.46	---	4.03	12.65	13.39	9.25	---	5.57	31.77	31.77	8.27	32.80	12.33	9.05	9.25	9.25	---	5.50	8.94	34.60	51.85	51.85	51.50	---	12.32	48.74	48.74	48.74
Molecular Weight		42.62	39.75	36.54	36.54	---	45.73	36.54	32.45	24.04	---	30.09	23.41	23.41	23.91	23.91	29.51	23.72	24.04	24.04	---	29.64	24.04	24.04	23.57	23.57	23.57	---	29.89	23.41	23.41	23.41
Viscosity	cP	0.011	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.026	0.021	0.025	0.025	---	0.021	0.032	0.025	0.030	---	0.026	0.033	0.033	0.034	0.033	0.026	0.030	0.030	0.030	---	0.026	0.030	0.051	0.037	0.037	0.037	---	0.026	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.999	1.831	1.925	1.923	---	1.853	2.164	1.956	2.050	---	1.907	2.297	2.297	2.157	2.296	1.963	2.061	2.050	2.050	---	1.909	2.047	2.631	2.509	2.509	2.506	---	1.969	2.482	2.482	2.482
Cp/Cv		1.134	1.165	1.156	1.156	---	1.124	1.155	1.218	1.251	---	1.197	1.356	1.356	1.226	1.359	1.233	1.252	1.251	1.251	---	1.199	1.250	1.231	1.442	1.442	1.441	---	1.228	1.425	1.425	1.425
Z Factor		0.951	0.941	0.965	0.966	---	0.968	0.942	0.919	0.957	---	0.967	0.877	0.877	0.970	0.870	0.929	0.959	0.957	0.957	---	0.968	0.958	0.943	0.826	0.826	0.827	---	0.929	0.836	0.836	0.836
LIQUID																																
Mass Flow	kg/h	---	140.3	4.12	---	3.66	3.59	---	478.0	4,371	4,371	4,302	---	---	---	0.00	0.00	2,260	---	---	0.00	0.00	---	---	2,039	4,078	37.4	4,078	3,373	---	---	---
Molar Flow	kgmole/h	---	2.00	0.04	---	0.04	0.04	---	7.36	52.8	52.8	50.5	---	---	---	0.00	0.00	26.0	---	---	0.00	0.00	---	---	36.7	73.5	0.67	73.5	49.9	---	---	---
Actual Volume Flow	m3/h	---	0.23	0.01	---	0.01	0.01	---	0.81	6.59	6.59	6.42	---	---	---	0.00	0.00	3.36	---	---	0.00	0.00	---	---	3.87	7.73	0.07	7.73	5.54	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	33.4	0.87	---	0.77	0.75	---	117.3	972.4	972.4	949.9	---	---	---	0.00	0.00	494.7	---	---	0.00	0.00	---	---	534.8	1,070	9.80	1,070	812.3	---	---	---
Mass Density	kg/m3	---	616.38	681.00	---	682.95	686.77	---	593.33	663.34	663.34	669.79	---	---	---	554.01	598.84	673.05	---	---	638.92	671.09	---	---	527.31	527.31	527.96	527.31	609.10	---	---	---
Viscosity (Note 4)	cP	---	0.213	0.340	---	0.346	0.358	---	0.181	0.300	0.300	0.317	---	---	---	0.141	0.190	0.324	---	---	0.294	0.321	---	---	0.124	0.124	0.124	0.124	0.202	---	---	---
Thermal Conductivity	W/m-K	---	0.099	0.104	---	0.104	0.105	---	0.095	0.104	0.104	0.106	---	---	---	0.089	0.097	0.105	---	---	0.104	0.106	---	---	0.085	0.085	0.085	0.085	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.283	2.202	---	2.197	2.189	---	2.361	2.167	2.167	2.149	---	---	---	2.499	2.328	2.154	---	---	2.164	2.142	---	---	2.598	2.598	2.596	2.598	2.303	---	---	---
Surface Tension	dyne/cm	---	13.20	15.40	---	15.51	15.90	---	11.46	15.33	15.33	15.99	---	---	---	9.18	11.99	15.60	---	---	15.39	16.10	---	---	7.95	7.95	7.97	7.95	12.42	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	6.83	24.5	---	24.1	24.1	---	29.8	2,519	2,519	2,519	---	---	---	---	---	2,262	---	---	---	---	---	---	90.4	180.9	0.53	180.9	180.2	---	---	---
Molar Flow	kgmole/h	---	0.38	1.36	---	1.34	1.34	---	1.66	139.8	139.8	139.8	---	---	---	---	---	125.6	---	---	---	---	---	---	5.02	10.04	0.03	10.04	10.00	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.51	2.51	2.51	---	---	---	---	---	2.26	---	---	---	---	---	---	0.09	0.18	0.001	0.18	0.18	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.02	3.64	---	3.59	3.59	---	4.44	374.9	374.9	374.8	---	---	---	---	---	336.7	---	---	---	---	---	---	13.5	26.9	0.08	26.9	26.8	---	---	---
Mass Density	kg/m3	---	1,002.17	985.82	---	986.08	986.17	---	1,000.05	1,002.95	1002.9498	1,003.54	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.85	989.85	989.95	989.85	1,002.48	---	---	---
Viscosity	cP	---	0.764	0.515	---	0.518	0.520	---	0.718	0.778	0.778	0.794	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.767	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.647	---	0.646	0.646	---	0.625	0.620	0.620	0.618	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.621	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.323	---	4.323	4.323	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	67.16	---	67.22	67.25	---	70.36	71.03	71.03	71.20	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	70.92	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000155	0.000155	0.000462	0.000474	0.000000	0.000000	0.000474	0.000474	0.002128	0.000010	0.000010	0.002258	0.002258	0.002177	0.000155	0.000155	0.002177	0.002211	0.002211	0.000034	0.000034	0.002211	0.002211	0.002211	0.002211	0.002245	0.000214	0.000214	0.002258	0.002258	0.002258
CO2		0.000453	0.000453	0.000489	0.000502	0.000001	0.000001	0.000502	0.000502	0.000450	0.000016	0.000016	0.000475	0.000475	0.000454	0.000164	0.000164	0.000454	0.000467	0.000467	0.000054	0.000054	0.000467	0.000467	0.000467	0.000467	0.000472	0.000184	0.000184	0.000475	0.000475	0.000475
Methane		0.204402	0.204402	0.343160	0.352118	0.000169	0.000169	0.352118	0.352118	0.685569	0.009303	0.009303	0.725544	0.725544	0.697984	0.128942	0.128942	0.697984	0.711975	0.711975	0.033405	0.033405	0.711975	0.711975	0.711975	0.711975	0.721533	0.156838	0.156838	0.725544	0.725544	0.725544
Ethane		0.176472	0.176472	0.163834	0.168104	0.000355	0.000355	0.168104	0.168104	0.112173	0.007786	0.007786	0.117489	0.117489	0.112072	0.081414	0.081414	0.112072	0.116249	0.116249	0.028073	0.028073	0.116249	0.116249	0.116249	0.116249	0.116839	0.081970	0.081970	0.117489	0.117489	0.117489
Propane		0.254217	0.254217	0.192864	0.197868	0.001271	0.001271	0.197868	0.197868	0.082274	0.019165	0.019165	0.084261	0.084261	0.080081	0.160250	0.160250	0.080081	0.084739	0.084739	0.069321	0.069321	0.084739	0.084739	0.084739	0.084739	0.083795	0.139539	0.139539	0.084261	0.084261	0.084261
i-Butane		0.068483	0.068483	0.048637	0.049889	0.000727	0.000727	0.049889	0.049889	0.017471	0.009745	0.009745	0.017259	0.017259	0.016530	0.067861	0.067861	0.016530	0.017773	0.017773	0.035333	0.035333	0.017773	0.017773	0.017773	0.017773	0.017164	0.053133	0.053133	0.017259	0.017259	0.017259
n-Butane		0.133490	0.133490	0.093668	0.096066	0.001876	0.001876	0.096066	0.096066	0.032441	0.024925	0.024925	0.031364	0.031364	0.030261	0.161961	0.161961	0.030261	0.032734	0.032734	0.090443	0.090443	0.032734	0.032734	0.032734	0.032734	0.031191	0.122385	0.122385	0.031364	0.031364	0.031364
22-Mpropane		0.000082	0.000082	0.000057	0.000058	0.000002	0.000002	0.000058	0.000058	0.000019	0.000020	0.000020	0.000000	0.000000	0.000018	0.000000	0.000000	0.000018	0.000019	0.000019	0.000072	0.000072	0.000019	0.000019	0.000019	0.000019	0.000018	0.000088	0.000088	0.000000	0.000000	0.000000
i-Pentane		0.040945	0.040945	0.028335	0.029042	0.000128	0.000128	0.029042	0.029042	0.009522	0.016914	0.016914	0.008393	0.008393	0.008459	0.089438	0.089438	0.008459	0.009234	0.009234	0.061525	0.061525	0.009234	0.009234	0.009234	0.009234	0.008847	0.060721	0.060721	0.008393	0.008393	0.008393
n-Pentane		0.042267	0.042267	0.029295	0.030016	0.001685	0.001685	0.030016	0.030016	0.009851	0.022511	0.022511	0.008312	0.008312	0.008586	0.110559	0.110559	0.008586	0.009356	0.009356	0.081947	0.081947	0.009356	0.009356	0.009356	0.009356	0.008266	0.072679	0.072679	0.008312	0.008312	0.008312
n-Hexane		0.022309	0.022309	0.016070	0.016423	0.002565	0.002565	0.016423	0.016423	0.005918	0.034985	0.034985	0.003680	0.003680	0.004733	0.121725	0.121725	0.004733	0.004783	0.004783	0.127753	0.127753	0.004783	0.004783	0.004783	0.004783	0.003660	0.069984	0.069984	0.003680	0.003680	0.003680
Mcyclopentan		0.001446	0.001446	0.001042	0.001065	0.000173	0.000173	0.001065	0.001065	0.000384	0.002348	0.002348	0.000000	0.000000	0.000304	0.000000	0.000000	0.000304	0.000308	0.000308	0.008567	0.008567	0.000308	0.000308	0.000308	0.000308	0.000232	0.004727	0.004727	0.000000	0.000000	0.000000
Benzene		0.000122	0.000122	0.000088	0.000090	0.000015	0.000015	0.000090	0.000090	0.000032	0.000196	0.000196	0.000000	0.000000	0.000025	0.000000	0.000000	0.000025	0.000026	0.000026	0.000714	0.000714	0.000026	0.000026	0.000026	0.000026	0.000019	0.000395	0.000395	0.000000	0.000000	0.000000
Cyclohexane		0.001065	0.001065	0.000779	0.000795	0.000157	0.000157	0.000795	0.000795	0.000295	0.002105	0.002105	0.000000	0.000000	0.000230	0.000000	0.000000	0.000230	0.000224	0.000224	0.007683	0.007683	0.000224	0.000224	0.000224	0.000224	0.000162	0.003839	0.003839	0.000000	0.000000	0.000000
n-Heptane		0.002981	0.002981	0.002428	0.002465	0.001030	0.001030	0.002465	0.002465	0.001059	0.012793	0.012793	0.000000	0.000000	0.000819	0.000000	0.000000	0.000819	0.000601	0.000601	0.046859	0.046859	0.000601	0.000601	0.000601	0.000601	0.000361	0.014510	0.014510	0.000000	0.000000	0.000000
Mcyclohexane		0.001633	0.001633	0.001305	0.001326	0.000519	0.000519	0.001326	0.001326	0.000563	0.006451	0.006451	0.000000	0.000000	0.000431	0.000000	0.000000	0.000431	0.000333	0.000333	0.023599	0.023599	0.000333	0.000333	0.000333	0.000333	0.000202	0.007934	0.007934	0.000000	0.000000	0.000000
Toluene		0.000133	0.000133	0.000110	0.000112	0.000053	0.000053	0.000112	0.000112	0.000048	0.000629	0.000629	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000026	0.000026	0.002302	0.002302	0.000026	0.000026	0.000026	0.000026	0.000015	0.000675	0.000675	0.000000	0.000000	0.000000
n-Octane		0.001252	0.001252	0.001363	0.001359	0.001509	0.001509	0.001359	0.001359	0.000717	0.013466	0.013466	0.000000	0.000000	0.000594	0.000000	0.000000	0.000594	0.000219	0.000219	0.049479	0.049479	0.000219	0.000219	0.000219	0.000219	0.000091	0.007632	0.007632	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000012	0.000012	0.000015	0.000015	0.000012	0.000012	0.000006	0.000122	0.000122	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000447	0.000447	0.000002	0.000002	0.000002	0.000002	0.000001	0.000065	0.000065	0.000000	0.000000	0.000000
m-Xylene		0.000021	0.000021	0.000025	0.000025	0.000036	0.000036	0.000025	0.000025	0.000014	0.000276	0.000276	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.001012	0.001012	0.000003	0.000003	0.000003	0.000003	0.000001	0.000129	0.000129	0.000000	0.000000	0.000000
p-Xylene		0.000021	0.000021	0.000025	0.000025	0.000035	0.000035	0.000025	0.000025	0.000014	0.000275	0.000275	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.001010	0.001010	0.000003	0.000003	0.000003	0.000003	0.000001	0.000129	0.000129	0.000000	0.000000	0.000000
o-Xylene		0.000015	0.000015	0.000019	0.000018	0.000028	0.000028	0.000018	0.000018	0.000010	0.000209	0.000209	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000766	0.000766	0.000002	0.000002	0.000002	0.000002	0.000001	0.000093	0.000093	0.000000	0.000000	0.000000
n-Nonane		0.000207	0.000207	0.000375	0.000358	0.001015	0.001015	0.000358	0.000358	0.000228	0.005280	0.005280	0.000000	0.000000	0.000208	0.000000	0.000000	0.000208	0.000031	0.000031	0.019460	0.019460	0.000031	0.000031	0.000031	0.000031	0.000008	0.001367	0.001367	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000011	0.000052	0.000052	0.000011	0.000011	0.000008	0.000193	0.000193	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000001	0.000001	0.000713	0.000713	0.000001	0.000001	0.000001	0.000001	0.000000	0.000032	0.000032	0.000000	0.000000	0.000000
n-Decane		0.000035	0.000035	0.000124	0.000107	0.000760	0.000760	0.000107	0.000107	0.000083	0.002092	0.002092	0.000000	0.000000	0.000080	0.000000	0.000000	0.000080	0.000005	0.000005	0.007733	0.007733	0.000005	0.000005	0.000005	0.000005	0.000001	0.000232	0.000232	0.000000	0.000000	0.000000
C7*		0.006775	0.006775	0.005321	0.005412	0.001840	0.001840	0.005412	0.005412	0.002227	0.023722	0.023722	0.000889	0.000889	0.003172	0.059904	0.059904	0.003172	0.086829	0.086829	0.001388	0.001388	0.086829	0.086829	0.001388	0.001388	0.000884	0.030628	0.030628	0.000889	0.000889	0.000889
C8*		0.001093	0.001093	0.001331	0.001315	0.001929	0.001929	0.001315	0.001315	0.000746	0.014947	0.014947	0.000073	0.000073	0.000634	0.016744	0.016744	0.000634	0.000191	0.000191	0.054988	0.054988	0.000191	0.000191	0.000191	0.000191	0.000073	0.007071	0.007071	0.000073	0.000073	0.000073
C9*		0.000093	0.000093	0.000232	0.000212	0.000994	0.000994	0.000212	0.000212	0.000152	0.003690	0.003690	0.000003	0.000003	0.000143	0.001776	0.001776	0.000143	0.000014	0.000014	0.013625	0.013625	0.000014	0.000014	0.000014	0.000014	0.000003	0.000642	0.000642	0.000003	0.000003	0.000003
C10-C13*		0.000000	0.000000	0.000003	0.000001	0.000068	0.000068	0.000001	0.000001	0.000002	0.000061	0.000061	0.000000	0.000000	0.000002	0.000004	0.000004	0.000002	0.000000	0.000000	0.000228	0.000228	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0

CASE 2B MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1697	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9483	1.0000	1.0000	1.0000	0.8290	1.0000
Temperature	C	50.40	44.15	50.40	143.02	45.00	45.00	45.00	44.86	59.00	12.80	70.45	50.40	40.45	35.00	50.40
Pressure	bar_g	45.79	30.00	45.79	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.79	30.00	8.70	45.79
Mass Flow	kg/h	0.00	0.00	50,045	50,045	50,045	82,801	17,289	82,801	17,289	17,289	11,085	11,085	11,085	1,926	1,749
Molar Flow	kgmole/h	0.00	0.00	2,137	2,137	2,137	3,536	738.4	3,536	738.4	738.4	473.4	473.4	473.4	52.7	74.7
Mass Enthalpy	kJ/kg	-2,606	-2,606	-3,551	-3,385	-3,691	-3,691	-3,691	-3,691	-3,642	-3,642	-3,481	-3,551	-3,551	-2,985	-3,551
Heat Flow	kW	0	0	-49.366	-47.053	-51.311	-84.895	-17.726	-84.895	-17.488	-17.488	-10.719	-10.934	-10.934	-1.597	-1.726
Mass Density	kg/m3	506.75	242.45	48.74	105.03	186.49	186.49	186.49	186.02	165.32	32.62	27.43	48.74	31.77	18.04	48.74
Molecular Weight		51.00	51.00	23.41	23.41	23.41	23.41	23.41	23.41	23.41	23.41	23.41	23.41	23.41	36.54	23.41
VAPOR																
Mass Flow	kg/h	---	0.00	50,045	50,045	50,045	82,801	17,289	82,801	17,289	15,323	11,085	11,085	11,085	1,418	1,749
Molar Flow	kgmole/h	---	0.00	2,137	2,137	2,137	3,536	738.4	3,536	738.4	700.2	473.4	473.4	473.4	43.7	74.7
Actual Volume Flow	m3/h	---	0.00	1,027	476.5	268.3	444.0	92.7	445.1	104.6	526.5	404.1	227.4	348.9	105.9	35.89
Std Gas Flow	MMSCFD	---	0.00	42.91	42.91	42.91	71.00	14.83	71.00	14.83	14.06	9.51	9.51	9.51	0.88	1.50
Mass Density	kg/m3	---	35.10	48.74	105.03	186.49	186.49	186.49	186.02	165.32	29.10	27.43	48.74	31.77	13.39	48.74
Molecular Weight		---	25.54	23.41	23.41	23.41	23.41	23.41	23.41	23.41	21.89	23.41	23.41	23.41	32.45	23.41
Viscosity	cP	---	0.012	0.013	0.019	0.022	0.022	0.022	0.022	0.020	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	W/m-K	---	0.033	0.036	0.056	0.057	0.057	0.057	0.056	0.054	0.030	0.037	0.036	0.033	0.025	0.036
Mass Heat Capacity	kJ/kg-C	---	2.295	2.482	2.922	3.614	3.614	3.614	3.616	3.389	2.261	2.327	2.482	2.297	1.956	2.482
Cp/Cv		---	1.355	1.425	1.386	1.989	1.989	1.989	1.991	1.832	1.402	1.297	1.425	1.356	1.218	1.425
Z Factor		---	0.855	0.836	0.876	0.645	0.645	0.645	0.644	0.694	0.870	0.912	0.836	0.877	0.919	0.836
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,965	---	---	---	478.0	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	38.2	---	---	---	7.36	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	3.56	---	---	---	0.81	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	541.4	---	---	---	117.3	---
Mass Density	kg/m3	506.75	537.20	---	---	---	---	---	---	---	551.68	---	---	---	593.33	---
Viscosity (Note 4)	cP	0.104	0.128	---	---	---	---	---	---	---	0.147	---	---	---	0.181	---
Thermal Conductivity	W/m-K	0.082	0.086	---	---	---	---	---	---	---	0.095	---	---	---	0.095	---
Mass Heat Capacity	kJ/kg-C	2.770	2.578	---	---	---	---	---	---	---	2.432	---	---	---	2.361	---
Surface Tension	dyne/cm	6.70	8.33	---	---	---	---	---	---	---	10.08	---	---	---	11.46	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	29.8	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.66	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.44	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000277	0.000277	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.002258	0.000474	0.002258
CO2		0.000227	0.000227	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000475	0.000502	0.000475
Methane		0.200547	0.200547	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.725544	0.352118	0.725544
Ethane		0.103464	0.103464	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.117489	0.168104	0.117489
Propane		0.175317	0.175317	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.084261	0.197868	0.084261
i-Butane		0.066676	0.066676	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.049889	0.017259
n-Butane		0.152707	0.152707	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.031364	0.096066	0.031364
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000058	0.000000
i-Pentane		0.075859	0.075859	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.008393	0.029042	0.008393
n-Pentane		0.090423	0.090423	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.008312	0.030016	0.008312
n-Hexane		0.086820	0.086820	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.003680	0.016423	0.003680
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001065	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000090	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000795	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002465	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001326	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000112	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001359	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000012	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000358	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000107	0.000000
C7*		0.037879	0.037879	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.000889	0.005412	0.000889
C8*		0.008984	0.008984	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.000073	0.001315	0.000073
C9*		0.000819	0.000819	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000212	0.000003
C10-C13*		0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.036359	0.000000
HSTc20+*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000105	0.000000
HSTDc11*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000028	0.000000
HSTDc12*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
HSTDc13*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc14*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000070	0.000000
10X-DST1_2c12*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
10X-DST1_2c13*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
10X-DST1_2c14*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
10X-DST1_2c15*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c16*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004200	0.000000
HSTDc7*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002152	0.000000
HSTDc8*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001415	0.000000
HSTDc9*	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000354	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24

CASE 2C MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
Vapour Fraction		0.0001	0.2462	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0010	0.0151	1.0000	0.0161
Temperature	C	72.00	68.68	68.00	68.00	72.00	69.32	71.82	71.82	71.81	71.28	71.82	69.18
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00
Mass Flow	kg/h	408,653	526,399	129,132	408,653	408,653	25,057	247,342	186,330	186,330	186,330	37.2	193,738
Molar Flow	kgmole/h	14,357	19,093	5,401	14,357	14,357	1,391	13,730	2,017	2,017	2,017	1.52	2,226
Mass Enthalpy	kJ/kg	-10,229	-8,748	-3,626	-10,243	-10,229	-15,695	-15,685	-3,723	-3,723	-3,723	-3,597	-3,862
Heat Flow	kW	-1,161,147	-1,279,079	-130,073	-1,162,726	-1,161,147	-109,239	-1,077,630	-192,719	-192,719	-192,719	-37	-207,819
Mass Density	kg/m3	881.76	37.87	8.36	893.50	881.76	973.59	971.35	810.34	790.09	422.78	8.39	399.19
Molecular Weight		28.46	27.57	23.91	28.46	28.46	18.02	18.02	92.38	92.38	92.38	24.51	87.03
VAPOR													
Mass Flow	kg/h	38.6	116,191	129,132	---	38.6	---	---	---	48.3	969.9	37.2	1,177
Molar Flow	kgmole/h	1.57	4,700	5,401	---	1.57	---	---	---	1.94	30.5	1.52	35.9
Actual Volume Flow	m3/h	4.60	13,442	15,448	---	4.60	---	---	---	5.99	212.7	4.43	248.1
Std Gas Flow	MMSCFD	0.03	94.38	108.45	---	0.03	---	---	---	0.04	0.61	0.03	0.72
Mass Density	kg/m3	8.39	8.64	8.36	---	8.39	---	---	---	8.06	4.56	8.39	4.74
Molecular Weight		24.54	24.72	23.91	---	24.54	---	---	---	24.88	31.80	24.51	32.80
Viscosity	cP	0.012	0.012	0.012	---	0.012	---	---	---	0.012	0.011	0.012	0.011
Thermal Conductivity	W/m-K	0.034	0.034	0.034	---	0.034	---	---	---	0.034	0.029	0.034	0.028
Mass Heat Capacity	kJ/kg-C	2.158	2.145	2.157	---	2.158	---	---	---	2.148	2.020	2.157	2.006
Cp/Cv		1.220	1.221	1.226	---	1.220	---	---	---	1.216	1.165	1.220	1.162
Z Factor		0.969	0.967	0.969	---	0.969	---	---	---	0.970	0.977	0.969	0.975
LIQUID													
Mass Flow	kg/h	163,994	165,274	---	164,025	163,994	---	---	163,995	163,948	163,068	---	167,510
Molar Flow	kgmole/h	777.1	796.1	---	778.3	777.1	---	---	777.1	775.2	749.0	---	799.7
Actual Volume Flow	m3/h	207.0	208.5	---	206.3	207.0	---	---	206.9	206.8	205.1	---	211.5
Liq Vol Flow @Std Cond	barrel/day	29,759	30,049	---	29,768	29,759	---	---	29,759	29,747	29,528	---	30,478
Mass Density	kg/m3	792.32	792.85	---	795.06	792.32	---	---	792.45	792.60	795.13	---	792.09
Viscosity (Note 4)	cP	1.952	1.984	---	2.077	1.952	---	---	1.957	1.964	2.085	---	1.963
Thermal Conductivity	W/m-K	0.110	0.110	---	0.111	0.110	---	---	0.110	0.111	0.112	---	0.112
Mass Heat Capacity	kJ/kg-C	2.171	2.159	---	2.155	2.171	---	---	2.170	2.170	2.165	---	2.160
Surface Tension	dyne/cm	16.70	16.69	---	16.91	16.70	---	---	16.71	16.74	17.28	---	17.12
AQUEOUS (Note 3)													
Mass Flow	kg/h	244,620	244,934	---	244,627	244,620	25,057	247,342	22,335	22,334	22,292	---	25,052
Molar Flow	kgmole/h	13,579	13,596	---	13,579	13,579	1,391	13,730	1,240	1,240	1,237	---	1,391
Actual Volume Flow	m3/h	251.9	251.5	---	251.1	251.9	25.7	254.6	23.0	23.0	22.9	---	25.7
Liq Vol Flow @Std Cond	barrel/day	36,403	36,449	---	36,404	36,403	3,729	36,808	3,324	3,324	3,317	---	3,728
Mass Density	kg/m3	971.21	973.87	---	974.40	971.21	973.59	971.35	971.35	971.34	971.57	---	973.26
Viscosity	cP	0.390	0.408	---	0.412	0.390	0.404	0.391	0.391	0.391	0.393	---	0.405
Thermal Conductivity	W/m-K	0.664	0.661	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662
Mass Heat Capacity	kJ/kg-C	4.343	4.338	---	4.338	4.343	4.338	4.343	4.343	4.343	4.343	---	4.340
Surface Tension	dyne/cm	63.80	64.40	---	64.52	63.80	64.28	63.83	63.83	63.83	63.93	---	64.31
COMPOSITION MOLE FRACTION													
Nitrogen		0.000002	0.000623	0.002195	0.000002	0.000002	0.000000	0.000000	0.000012	0.000012	0.000012	0.001979	0.000012
CO2		0.000003	0.000132	0.000458	0.000003	0.000003	0.000000	0.000001	0.000015	0.000015	0.000015	0.000465	0.000015
Methane		0.001313	0.166004	0.697350	0.001313	0.001313	0.000000	0.000000	0.008839	0.008839	0.008839	0.675696	0.008853
Ethane		0.000787	0.029869	0.112535	0.000787	0.000787	0.000000	0.000000	0.005516	0.005516	0.005516	0.116208	0.005710
Propane		0.001534	0.023916	0.080462	0.001534	0.001534	0.000000	0.000000	0.010852	0.010852	0.010852	0.085413	0.011589
i-Butane		0.000672	0.005187	0.016550	0.000672	0.000672	0.000000	0.000000	0.004771	0.004771	0.004771	0.017856	0.005213
n-Butane		0.001588	0.009753	0.030255	0.001588	0.001588	0.000000	0.000000	0.011277	0.011277	0.011277	0.032821	0.012493
22-Mpropane		0.000001	0.000006	0.000017	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.000018	0.000009
i-Pentane		0.000945	0.003095	0.008427	0.000945	0.000945	0.000000	0.000000	0.006722	0.006722	0.006722	0.009268	0.007630
n-Pentane		0.001184	0.003308	0.008545	0.001184	0.001184	0.000000	0.000000	0.008421	0.008421	0.008421	0.009448	0.009679
n-Hexane		0.001682	0.002593	0.004696	0.001682	0.001682	0.000000	0.000000	0.011967	0.011967	0.011967	0.005286	0.014033
Mycylopentan		0.000108	0.000164	0.000293	0.000108	0.000108	0.000000	0.000000	0.000766	0.000766	0.000766	0.000329	0.000902
Benzene		0.000009	0.000014	0.000024	0.000009	0.000009	0.000000	0.000000	0.000063	0.000063	0.000063	0.000027	0.000074
Cyclohexane		0.000098	0.000137	0.000223	0.000098	0.000098	0.000000	0.000000	0.000698	0.000698	0.000698	0.000251	0.000820
n-Heptane		0.000722	0.000770	0.000803	0.000722	0.000722	0.000000	0.000000	0.005139	0.005139	0.005139	0.000919	0.005821
Mycylohexane		0.000357	0.000388	0.000423	0.000357	0.000357	0.000000	0.000000	0.002540	0.002540	0.002540	0.000480	0.002887
Toluene		0.000036	0.000037	0.000037	0.000036	0.000036	0.000000	0.000000	0.000255	0.000255	0.000255	0.000042	0.000288
n-Octane		0.001330	0.001167	0.000590	0.001330	0.001330	0.000000	0.000000	0.009467	0.009467	0.009467	0.000687	0.009833
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000088	0.000088	0.000088	0.000006	0.000091
m-Xylene		0.000031	0.000027	0.000011	0.000031	0.000031	0.000000	0.000000	0.000223	0.000223	0.000223	0.000013	0.000227
p-Xylene		0.000031	0.000027	0.000011	0.000031	0.000031	0.000000	0.000000	0.000223	0.000223	0.000223	0.000013	0.000227
o-Xylene		0.000025	0.000021	0.000009	0.000025	0.000025	0.000000	0.000000	0.000178	0.000178	0.000178	0.000010	0.000181
n-Nonane		0.001140	0.000916	0.000208	0.001140	0.001140	0.000000	0.000000	0.008112	0.008112	0.008112	0.000246	0.007848
124-MBenzene		0.000060	0.000047	0.000007	0.000060	0.000060	0.000000	0.000000	0.000426	0.000426	0.000426	0.000009	0.000404
n-Decane		0.001056	0.000817	0.000080	0.001056	0.001056	0.000000	0.000000	0.007518	0.007518	0.007518	0.000097	0.007010
C7*		0.001255	0.001425	0.001702	0.001255	0.001255	0.000000	0.000000	0.008930	0.008930	0.008930	0.001942	0.010269
C8*		0.001981	0.001668	0.000632	0.001981	0.001981	0.000000	0.000000	0.014098	0.014098	0.014098	0.000738	0.014176
C9*		0.001370	0.001071	0.000143	0.001370	0.001370	0.000000	0.000000	0.009751	0.009751	0.009751	0.000171	0.009185
C10-C13*		0.000204	0.000154	0.000002	0.000204	0.000204	0.000000	0.000000	0.001450	0.001450	0.001450	0.000003	0.001320
C14-C18*		0.000143	0.000107	0.000000	0.000143	0.000143	0.000000	0.000000	0.001016	0.001016	0.001016	0.000000	0.000921
C19-C21*		0.000101	0.000076	0.000000	0.000101	0.000101	0.000000	0.000000	0.000716	0.000716	0.000716	0.000000	0.000649
C22-C24*		0.000099	0.000074	0.000000	0.000099	0.000099	0.000000	0.000000	0.000704	0.000704	0.000704	0.000000	0.000638
C25-C27*		0.000074	0.000056	0.000000	0.000074	0.000074	0.000000	0.000000	0.000528	0.000528	0.000528	0.000000	0.000478
C28-C31*		0.000071	0.000053	0.000000	0.000071	0.000071	0.000000	0.000000	0.000504	0.000504	0.000504	0.000000	0.000457
C32-C37*		0.000066	0.000050	0.000000	0.000066	0.000066	0.000000	0.000000	0.000471	0.000471	0.000471	0.000000	0.000427
C38-C45*		0.000046	0.000034	0.000000	0.000046	0.000046	0.000000	0.000000	0.000324	0.000324	0.000324	0.000000	0.000294
C46-C80*		0.000038	0.000029	0.000000	0.000038	0.000038	0.000000	0.000000	0.000271	0.000271	0.000271	0.000000	0.000245
C10-C13_1*		0.001072	0.000806	0.000001	0.001072	0.001072	0.000000	0.000000	0.007628	0.007628	0.007628	0.000002	0.006914
C14-C16*		0.000506	0.000381	0.000000	0.000506	0.000506	0.000000	0.000000	0.003605	0.003605	0.003605	0.000000	0.003266
C17-C20*		0.000592	0.000445	0.000000	0.000592	0.000592	0.000000	0.000000	0.004212	0.004212	0.004212	0.000000	0.003816
C21-C22*		0.000537	0.000404	0.000000	0.000537	0.000537	0.000000	0.000000	0.003823	0.003823	0.003823	0.000000	0.003464
C23*		0.000211	0.000158	0.000000	0.000211	0.000211	0.000000	0.000000	0.001500	0.001500	0.001500	0.000000	0.001359
C24-C26*		0.000463	0.000348	0.000000	0.000463	0.000463	0.000000	0.000000	0.003297	0.003297	0.003297	0.000000	0.002987
C27-C29*		0.000287	0.000216	0.000000	0.000287	0.000287	0.000000	0.000000	0.002042	0.002042	0.002042	0.000000	0.001850
C30-C34*		0.000257	0.000193	0.000000	0.000257	0.000257	0.000000	0.000000	0.001828	0.001828	0.001828	0.000000	0.001656
C35-C80*		0.000210	0.000158	0.000000	0.000210	0.000210	0.000000	0.000000	0.001495	0.001495	0.001495	0.000000	0.001354
C10-C13_2*		0.000032	0.000024	0.000000	0.000032	0.000032	0.000000	0.000000	0.000226	0.000226	0.000226	0.000000	0.000205
C14-C18_1*		0.000019	0.000014	0.000000	0.000019	0.000019	0.000000	0.000000	0.000136	0.000136	0.000136	0.000000	0.000123
C19-C21_1*		0.000019	0.000014	0.000000	0.000019	0.000019	0.000000	0.000000	0.000135	0.000135	0.000135	0.000000	0.000122
C22-C23*		0.000013	0.000010	0.000000	0.000013	0.000013	0.000000	0.000000	0.000093	0.000093	0.000093	0.000000	0.000084
C24-C26_1*		0.000015	0.000011	0.000000	0.000015	0.000015	0.000000	0.000000	0.000104	0.000104	0.000104	0.000000	0.000094
C27-C29_1*		0.000010	0.000008	0.000000	0.000010	0.000010	0.000000	0.000000	0.000072	0.000072	0.000072	0.000000	0.000065
C30-C38*		0.000009	0.000007	0.000000	0.000009	0.000009	0.000000	0.000000	0.000063	0.000063	0.000063	0.000000	0.000057
C34-C40*		0.000008	0.000006	0.000000	0.000008	0.000008	0.000000	0.000000	0.000058	0.000058	0.000058	0.000000	0.000053
C41-C80*		0.000006	0.000005	0.000000	0.000006	0.000006	0.000000	0.000000	0.000044	0.000044	0.000044	0.000000	0.000040
C10-C13_3*		0.002008	0.001510	0.000002	0.002008	0.002008	0.000000	0.000000	0.014291	0.014291	0.014291	0.000003	0.012954
C14-C17*		0.000887	0.000667	0.000000	0.000887	0.000887	0.000000	0.000000	0.006316	0.006316	0.006316	0.000000	0.005723
C18-C21*		0.001252	0.000941	0.000000	0.001252	0.001252	0.000000	0.000000	0.008910	0.008910	0.008910	0.000000	0.008072
C22-C23_1*		0.000746	0.000561	0.000000	0.000746	0.000746	0.000000	0.000000	0.005309	0.005309	0.005309	0.000000	0.004810
C24-C25*		0.000579	0.000436	0.000000	0.000579	0.000579	0.000000	0.000000	0.004125	0.004125	0.004125	0.000000	0.003737
C26-C28*		0.000636	0.000478	0.000000	0.000636	0.000636	0.000000	0.000000	0.004528	0.004528	0.004528	0.000000	0.004102
C29-C32*		0.000548	0.000412	0.000000	0.000548	0.000548	0.000000	0.000000	0.003899	0.003899	0.003899	0.000000	0.003533
C33-C39*		0.000489	0.000368	0.000000	0.000489	0.000489	0.000000	0.000000	0.003483	0.003483	0.003483	0.000000	0.003156
C40-C80*		0.000343	0.000258	0.000000	0.000343	0.000343	0.000000	0.000000	0.002440	0.002440	0.002440	0.000000	0.002211
H2O		0.945942	0.719967	0.030520	0.945942	0.945942	0.999999	0.999999	0.615928	0.615928	0.615928	0.036374	0.626916
HSTc20+*		0.002951	0.002219	0.000000	0.002951	0.002951	0.000000	0.000000	0.021005	0.021005	0.021005	0.000000	0.019030
HSTc10*		0.000662	0.000518	0.000071	0.000662	0.000662	0.000000	0.000000	0.006316	0.006316	0.006316	0.000000	0.005723
HSTc11*		0.000525	0.000402	0.000024	0.000525	0.000525	0.000000	0.000000	0.003738	0.003738	0.003738	0.000030	0.003447
HSTc12*		0.000425	0.000322	0.000008	0.000425	0.000425	0.000000	0.000000	0.003026	0.003026	0.003026	0.000010	0.002761
HSTc13*		0.000402	0.000303	0.000003	0.000402	0.000402	0.000000	0.000000	0.002863	0.002863	0.002863	0.000004	0.002601
HSTc14*		0.000327	0.000246	0.000001	0.000327	0.000327	0.000000	0.000000	0.002329	0.002329	0.002329	0.000001	0.002112
HSTc15*		0.000359	0.000270	0.000000	0.000359	0.000359	0.000000	0.000000	0.002558	0.002558	0.002558	0.000000	0.002319
H5-22P_C20+*		0.001346	0.001012	0.000000	0.001346	0.001346	0.000000	0.000000	0.009582	0.009582	0.009582	0.000000	0.008681
10X-DST1_2c11*		0.001034	0.000794	0.000058	0.001034	0.001034	0.000000	0.000000	0.007362	0.007362	0.007362	0.000069	0.006813
10X-DST1_2c12*		0.000869	0.000661	0.000026	0.000869	0.000869	0.000000	0.000000	0.006189	0.006189	0.006189	0.000032	0.005672
10X-DST1_2c13*		0.000877	0.000664	0.000015	0.000877	0.000877	0.000000	0.000000	0.006243	0.006243	0.006243	0.000018	0.005693
10X-DST1_2c14*		0.000764	0.000577	0.000007	0.000764	0.000764	0.000000	0.000000	0.005440	0.005440	0.005440	0.000008	0.004945
10X-DST1_2c15*		0.000891	0.000671	0.000003	0.000891	0.000891	0.000000	0.000000	0.006345	0.006345	0.006345	0.000004	0.005757
10X-DST1_2c16*		0.000568	0.000427	0.000001	0.000568	0.000568	0.000000	0.000000	0.004044	0.004044	0.004044	0.000001	0.003666
10X-DST1_2c17*		0.000492	0.000370	0.000000	0.000492	0.000492	0.000000	0.000000	0.003500	0.003500	0.003500	0.000000	0.003172
10X-DST1_2c18*		0.000579	0.000436	0.000000	0.000579	0.000579	0.000000	0.000000	0.004124	0.004124	0.004124	0.000000	0.003737
10X-DST1_2c19*		0.000491	0.000369	0.000000	0.000491	0.000491	0.000000	0.000000	0.003492	0.003492	0.003492	0.000000	0.003164
10X-DST1_C20+*		0.002325	0.001749	0.000000	0.002325	0.002325	0.000000	0.000000	0.016552	0.016552	0.016552	0.000000	0.014996
10X-DST2_C20+*		0.001439	0.001082	0.000000	0.001439	0.001439	0.000000	0.000000	0.010241	0.010241	0.010241	0.000000	0.009278
HSTDc16*		0.000229	0.000172	0.000000	0.000229	0.000229	0.000000	0.000000	0.001630	0.001630	0.001630	0.000000	0.001477
HSTDc17*		0.000191	0.000143	0.000000	0.000191	0.000191	0.000000	0.000000	0.001356	0.001356	0.001356	0.000000	0.001229
HSTDc18*		0.000183	0.000138	0.000000	0.000183	0.000183	0.000000	0.000000	0.001305	0.001305	0.001305	0.000000	0.001183
HSTDc19*		0.000164	0.000123	0.000000	0.000164	0.000164	0.000000	0.000000	0.001165	0.001165	0.001165	0.000000	0.001056
HSDc20+*		0.001499	0.001127	0.000000	0.001499	0.001499	0.000000	0.000000	0.010670	0.010670	0.010670	0.000000	0.009667
HSTDc6*		0.000389	0.000621	0.001161	0.000389	0.000389	0.000000	0.000000	0.002770	0.002770	0.002770	0.001303	0.003238
HSTDc7*		0.000522	0.000583	0.000674	0.000522	0.000522	0.000000	0.000000	0.003716	0.003716	0.003716	0.000767	0.004246
HSTDc8*		0.000883	0.000818	0.000546	0.000883	0.000883	0.000000	0.000000	0.006285	0.006285	0.006285	0.000629	0.006745
HSTDc9*		0.000746	0.000613	0.000185	0.000746	0.000746	0.000000	0.000000	0.005308	0.005308	0.005308	0.000217	0.005243
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Stream Name	Unit	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0247	0.0000	0.0000	0.0000	1.0000	0.9376	0.9376	0.8775	1.0000	0.0000	0.0000
Temperature	C	69.18	69.18	69.18	69.25	69.25	69.25	69.33	69.00	69.39	69.00	55.00	69.00	35.00	35.00	35.54	35.54	35.54	35.68
Pressure	bar_g	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	1,178	178,363	25,057	178,363	167,529	10,834	167,529	167,529	167,529	166,683	166,683	845.3	845.3	845.3	873.4	790.6	82.8	82.8
Molar Flow	kgmole/h	35.9	1,401	1,391	1,401	799.9	601.4	601.4	799.9	799.9	780.2	780.2	19.7	19.7	19.7	21.1	18.5	2.59	2.59
Mass Enthalpy	kJ/kg	-3,170	-2,923	-15,697	-2,922	-2,096	-15,696	-15,696	-2,096	-2,096	-2,093	-2,123	-2,661	-2,781	-2,781	-3,139	-2,586	-8,426	-8,425
Heat Flow	kW	-1,038	-144,802	-109,251	-144,767	-97,530	-47,238	-47,238	-97,519	-97,519	-96,894	-98,274	-625	-653	-653	-762	-568	-194	-194
Mass Density	kg/m3	4.74	801.12	973.25	801.43	792.38	973.35	973.16	351.84	792.23	793.79	803.67	3.18	3.54	3.54	3.65	3.30	796.10	796.55
Molecular Weight		32.81	127.28	18.02	127.28	209.43	18.02	18.02	209.43	209.43	213.64	213.64	42.85	42.85	42.85	41.37	42.67	32.01	32.01
VAPOR																			
Mass Flow	kg/h	1,178	---	---	---	---	---	---	845.3	---	---	---	845.3	789.3	789.3	790.6	790.6	---	---
Molar Flow	kgmole/h	35.9	---	---	---	---	---	---	19.7	---	---	---	19.7	18.5	18.5	18.5	18.5	---	---
Actual Volume Flow	m3/h	248.4	---	---	---	---	---	---	266.2	---	---	---	266.2	238.6	238.6	239.4	239.4	---	---
Std Gas Flow	MMSCFD	0.72	---	---	---	---	---	---	0.40	---	---	---	0.40	0.37	0.37	0.37	0.37	---	---
Mass Density	kg/m3	4.74	---	---	---	---	---	---	3.18	---	---	---	3.18	3.31	3.31	3.30	3.30	---	---
Molecular Weight		32.81	---	---	---	---	---	---	42.85	---	---	---	42.85	42.67	42.67	42.67	42.67	---	---
Viscosity	cP	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.028	---	---	---	---	---	---	0.024	---	---	---	0.024	0.021	0.021	0.021	0.021	---	---
Mass Heat Capacity	kJ/kg-C	2.006	---	---	---	---	---	---	1.928	---	---	---	1.928	1.793	1.793	1.795	1.795	---	---
Cp/Cv		1.162	---	---	---	---	---	---	1.122	---	---	---	1.122	1.136	1.136	1.136	1.136	---	---
Z Factor		0.975	---	---	---	---	---	---	0.979	---	---	---	0.979	0.973	0.973	0.973	0.973	---	---
LIQUID																			
Mass Flow	kg/h	---	167,529	---	167,529	167,529	---	---	166,683	167,529	166,683	166,683	---	42.2	42.2	45.0	---	45.0	45.0
Molar Flow	kgmole/h	---	799.9	---	799.9	799.9	---	---	780.2	799.9	780.2	780.2	---	0.47	0.47	0.49	---	0.49	0.49
Actual Volume Flow	m3/h	---	211.5	---	211.4	211.4	---	---	210.0	211.5	210.0	207.4	---	0.06	0.06	0.07	---	0.07	0.07
Liq Vol Flow @Std Cond	barrel/day	---	30,482	---	30,482	30,482	---	---	30,280	30,482	30,280	30,280	---	9.15	9.15	9.73	---	9.73	9.73
Mass Density	kg/m3	---	792.06	---	792.38	792.38	---	---	793.79	792.23	793.79	803.67	---	678.54	678.54	680.20	---	680.20	680.78
Viscosity (Note 4)	cP	---	1.962	---	1.961	1.961	---	---	2.039	1.956	2.039	2.595	---	0.338	0.338	0.343	---	0.343	0.343
Thermal Conductivity	W/m-K	---	0.112	---	0.112	0.112	---	---	0.112	0.112	0.112	0.115	---	0.107	0.107	0.107	---	0.107	0.107
Mass Heat Capacity	kJ/kg-C	---	2.160	---	2.160	2.160	---	---	2.157	2.160	2.157	2.099	---	2.147	2.147	2.146	---	2.146	2.144
Surface Tension	dyne/cm	---	17.12	---	17.12	17.12	---	---	17.37	17.11	17.37	18.33	---	16.53	16.53	16.56	---	16.56	16.55
AQUEOUS (Note 3)																			

CASE 2C MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1stst STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP Fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8703	0.9741	1.0000	0.0000	0.0011	1.0000	0.8292	0.9627	0.0000	0.0117	1.0000	1.0000	1.0000	0.0177	0.2076	0.9697	1.0000	1.0000	0.0000	0.0404	1.0000	1.0000	0.9833	0.9833	0.9999	0.0000	0.2821	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	53.06	52.72	52.72	52.53	103.26	35.00	31.19	31.19	30.23	40.44	40.44	67.94	39.83	28.04	33.00	31.19	31.19	30.97	29.01	30.97	163.09	50.00	50.00	49.85	50.00	31.79	50.40	50.40	50.40
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.29	47.79	47.79	47.49	47.79	8.70	45.79	45.79	45.79
Mass Flow	kg/h	790.6	790.6	1,969	1,941	28.1	28.1	1,941	1,941	135,644	7,325	7,325	11,567	11,567	129,169	0.00	0.00	129,169	128,319	64,159	0.00	0.00	64,159	64,159	64,159	128,319	123,786	4,533	4,533	122,287	108,969	54,485
Molar Flow	kgmole/h	18.5	18.5	54.4	53.1	1.39	1.39	53.1	53.1	5,545	206.7	206.7	493.8	493.8	5,403	0.00	0.00	5,403	5,338	2,669	0.00	0.00	2,669	2,669	2,669	5,338	5,249	89.0	89.0	5,220	4,652	2,326
Mass Enthalpy	kJ/kg	-2,512	-2,682	-2,974	-2,816	-13,923	-13,923	-2,723	-2,980	-3,719	-7,326	-7,326	-3,550	-3,550	-3,626	-2,530	-2,530	-3,752	-3,513	-3,513	-2,271	-2,271	-3,513	-3,246	-3,542	-3,542	-3,559	-3,091	-3,091	-3,550	-3,550	-3,550
Heat Flow	kW	-552	-589	-1,627	-1,518	-109	-109	-1,468	-1,607	-140,111	-14,906	-14,906	-11,406	-11,406	-130,110	0	0	-134,615	-125,205	-62,603	0	0	-62,603	-57,848	-63,131	-126,261	-122,369	-3,892	-3,892	-120,584	-107,452	-53,726
Mass Density	kg/m3	7.87	9.45	5.69	5.47	930.11	596.79	12.68	18.07	9.77	759.25	325.60	31.79	31.79	8.27	496.11	98.79	9.40	9.25	9.25	638.68	244.93	8.94	34.67	53.59	53.59	51.54	538.25	67.65	48.77	48.77	48.77
Molecular Weight		42.67	42.67	36.17	36.58	20.26	20.26	36.58	36.58	24.46	35.44	35.44	23.43	23.43	23.91	57.57	57.57	23.91	24.04	24.04	83.15	83.15	24.04	24.04	24.04	24.04	23.58	50.92	50.92	23.43	23.43	23.43
VAPOR																																
Mass Flow	kg/h	790.6	642.1	1,940	1,941	---	0.07	1,941	1,430	128,319	---	72.5	11,567	11,567	129,169	0.00	0.00	124,325	128,319	64,159	---	0.00	64,159	64,159	61,893	123,786	123,745	---	750.9	122,287	108,969	54,485
Molar Flow	kgmole/h	18.5	16.1	53.0	53.1	---	0.001	53.1	44.0	5,338	---	2.41	494	494	5,403	0.00	0.00	5,239	5,338	2,669	---	0.00	2,669	2,669	2,625	5,249	5,248	---	25.1	5,220	4,652	2,326
Actual Volume Flow	m3/h	100.5	83.5	345.8	354.7	---	0.02	153.1	106.6	13,879	---	13.03	363.9	363.9	15,617	0.00	0.00	13,730	13,879	6,940	---	0.00	7,175	1,850	1,193	2,386	2,402	---	60.9	2,507	2,234	1,117.1
Std Gas Flow	MMSCFD	0.37	0.32	1.06	1.07	---	0.00003	1.07	0.88	107.18	---	0.05	9.91	9.91	108.48	0.00	0.00	105.20	107.18	53.59	---	0.00	53.59	53.59	52.70	105.39	105.38	---	0.50	104.82	93.40	46.70
Mass Density	kg/m3	7.87	7.69	5.61	5.47	---	4.04	12.68	13.42	9.25	---	5.57	31.79	31.79	8.27	32.80	12.33	9.06	9.25	9.25	---	5.50	8.94	34.67	51.88	51.88	51.52	---	12.32	48.77	48.77	48.77
Molecular Weight		42.67	39.82	36.59	36.58	---	45.77	36.58	32.51	24.04	---	30.09	23.43	23.43	23.91	23.91	29.52	23.73	24.04	24.04	---	28.64	24.04	24.04	23.58	23.58	23.58	---	29.90	23.43	23.43	23.43
Viscosity	cP	0.011	0.009	0.010	0.010	---	0.009	0.012	0.010	0.011	---	0.010	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	---	0.010	0.011	0.016	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.026	0.021	0.025	0.025	---	0.021	0.032	0.025	0.030	---	0.026	0.033	0.033	0.034	0.033	0.026	0.030	0.030	0.030	---	0.026	0.030	0.051	0.037	0.037	0.037	---	0.026	0.036	0.036	0.036
Mass Heat Capacity	kJ/kg-C	1.999	1.831	1.924	1.922	---	1.852	2.163	1.956	2.050	---	1.907	2.297	2.297	2.157	2.295	1.963	2.061	2.050	2.050	---	1.909	2.047	2.629	2.509	2.509	2.506	---	1.969	2.482	2.482	2.482
Cp/Cv		1.134	1.164	1.156	1.156	---	1.124	1.155	1.217	1.251	---	1.197	1.356	1.356	1.226	1.359	1.233	1.252	1.251	1.251	---	1.199	1.250	1.232	1.442	1.442	1.441	---	1.228	1.425	1.425	1.425
Z Factor		0.951	0.941	0.965	0.966	---	0.968	0.942	0.919	0.957	---	0.967	0.877	0.877	0.970	0.870	0.929	0.959	0.957	0.957	---	0.968	0.958	0.942	0.826	0.826	0.826	---	0.929	0.836	0.836	0.836
LIQUID																																
Mass Flow	kg/h	---	141.6	4.3	---	3.81	3.74	---	481.0	4,601	4,601	4,529	---	---	---	0.00	0.00	2,394	---	---	0.00	0.00	---	---	2,168	4,336	40.3	4,336	3,586	---	---	---
Molar Flow	kgmole/h	---	2.02	0.04	---	0.04	0.04	---	7.42	55.5	55.5	53.1	---	---	---	0.00	0.00	27.5	---	---	0.00	0.00	---	---	39.1	78.1	0.73	78.1	53.0	---	---	---
Actual Volume Flow	m3/h	---	0.23	0.01	---	0.01	0.01	---	0.81	6.93	6.93	6.76	---	---	---	0.00	0.00	3.56	---	---	0.00	0.00	---	---	4.11	8.22	0.08	8.22	5.89	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	33.7	0.90	---	0.80	0.78	---	118.1	1,022.9	1,022.9	999.2	---	---	---	0.00	0.00	523.8	---	---	0.00	0.00	---	---	569	1,137	10.6	1,137	863.4	---	---	---
Mass Density	kg/m3	---	616.11	680.64	---	682.58	686.44	---	592.90	663.76	663.76	670.19	---	---	---	554.18	599.03	673.36	---	---	638.68	671.50	---	---	527.35	527.35	528.01	527.35	609.23	---	---	---
Viscosity (Note 4)	cP	---	0.212	0.339	---	0.345	0.357	---	0.181	0.301	0.301	0.318	---	---	---	0.141	0.190	0.325	---	---	0.295	0.323	---	---	0.124	0.124	0.124	0.124	0.202	---	---	---
Thermal Conductivity	W/m-K	---	0.099	0.104	---	0.104	0.105	---	0.095	0.104	0.104	0.106	---	---	---	0.089	0.097	0.105	---	---	0.104	0.106	---	---	0.085	0.085	0.085	0.085	0.097	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.284	2.203	---	2.198	2.189	---	2.363	2.166	2.166	2.149	---	---	---	2.499	2.327	2.153	---	---	2.164	2.142	---	---	2.598	2.598	2.596	2.598	2.302	---	---	---
Surface Tension	dyne/cm	---	13.18	15.38	---	15.49	15.89	---	11.44	15.34	15.34	15.99	---	---	---	9.18	11.99	15.60	---	---	15.39	16.10	---	---	7.94	7.94	7.97	7.94	12.42	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	6.89	24.6	---	24.3	24.3	---	29.7	2,724	2,724	2,724	---	---	---	---	---	2,450	---	---	---	---	---	---	98.3	196.5	0.58	196.5	195.7	---	---	---
Molar Flow	kgmole/h	---	0.38	1.36	---	1.35	1.35	---	1.65	151.2	151.2	151.2	---	---	---	---	---	136.0	---	---	---	---	---	---	5.45	10.9	0.03	10.9	10.9	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.72	2.72	2.71	---	---	---	---	---	2.45	---	---	---	---	---	---	0.10	0.20	0.001	0.20	0.20	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	1.03	3.66	---	3.61	3.61	---	4.42	405.4	405.4	405.4	---	---	---	---	---	364.5	---	---	---	---	---	---	14.6	29.2	0.09	29.2	29.1	---	---	---
Mass Density	kg/m3	---	1,002.17	985.97	---	986.23	986.32	---	1,000.05	1,002.93	1002.9280	1,003.50	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.85	989.85	989.95	989.85	1,002.49	---	---	---
Viscosity	cP	---	0.764	0.517	---	0.520	0.522	---	0.718	0.777	0.777	0.793	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.546	0.544	0.768	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.647	---	0.646	0.646	---	0.625	0.620	0.620	0.619	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.621	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.323	---	4.323	4.323	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	67.19	---	67.25	67.29	---	70.36	71.03	71.03	71.19	---	---	---	---	---	70.71	---	---	---	---	---	---	67.73	67.73	67.76	67.73	70.92	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000155	0.000155	0.000464	0.000476	0.000000	0.000000	0.000476	0.000476	0.002149	0.000009	0.000009	0.002279	0.002279	0.002195	0.000157	0.000157	0.002195	0.002232	0.002232	0.000034	0.000034	0.002232	0.002232	0.002232	0.002232	0.002266	0.000215	0.000215	0.002279	0.002279	0.002279
CO2		0.000454	0.000454	0.000492	0.000505	0.000001	0.000001	0.000505	0.000505	0.000454	0.000016	0.000016	0.000478	0.000478	0.000458	0.000165	0.000165	0.000458	0.000471	0.000471	0.000054	0.000054	0.000471	0.000471	0.000471	0.000471	0.000476	0.000185	0.000185	0.000478	0.000478	0.000478
Methane		0.202345	0.202345	0.341375	0.350283	0.000174	0.000174	0.350283	0.350283	0.685302	0.009100	0.009100	0.724877	0.724877	0.697344	0.128714	0.128714	0.697344	0.711483	0.711483	0.033374	0.033374	0.711483	0.711483	0.711483	0.711483	0.720897	0.156319	0.156319	0.724877	0.724877	0.724877
Ethane		0.176614	0.176614	0.164360	0.168642	0.000370	0.000370	0.168642	0.168642	0.112609	0.007646	0.007646	0.117907	0.117907	0.112536	0.081632	0.081632	0.112536	0.116673	0.116673	0.028155	0.028155	0.116673	0.116673	0.116673	0.116673	0.117260	0.082047	0.082047	0.117907	0.117907	0.117907
Propane		0.255640	0.255640	0.194161	0.199196	0.001331	0.001331	0.199196	0.199196	0.082575	0.018815	0.018815	0.084582	0.084582	0.080463	0.160715	0.160715	0.080463	0.085044	0.085044	0.069505	0.069505	0.085044	0.085044	0.085044	0.085044	0.084117	0.139684	0.139684	0.084582	0.084582	0.084582
i-Butane		0.068747	0.068747	0.048850	0.050106	0.000760	0.000760	0.050106	0.050106	0.017455	0.009526	0.009526	0.017259	0.017259	0.016550	0.067802	0.067802	0.016550	0.017762	0.017762	0.035278	0.035278	0.017762	0.017762	0.017762	0.017762	0.017165	0.052983	0.052983	0.017259	0.017259	0.017259
n-Butane		0.133908	0.133908	0.093995	0.096398	0.001960	0.001960	0.096398	0.096398	0.032352	0.024323	0.024323	0.031322	0.031322	0.030255	0.161600	0.161600	0.030255	0.032663	0.032663	0.090144	0.090144	0.032663	0.032663	0.032663	0.032663	0.031150	0.121869	0.121869	0.031322	0.031322	0.031322
22-Mpropane		0.000077	0.000077	0.000054	0.000055	0.000001	0.000001	0.000055	0.000055	0.000018	0.000018	0.000018	0.000000	0.000000	0.000017	0.000000	0.000000	0.000017	0.000018	0.000018	0.000068	0.000068	0.000018	0.000018	0.000018	0.000018	0.000017	0.000082	0.000082	0.000000	0.000000	0.000000
i-Pentane		0.040991	0.040991	0.028364	0.029070	0.001339	0.001339	0.029070	0.029070	0.009454	0.016451	0.016451	0.008362	0.008362	0.008427	0.089021	0.089021	0.008427	0.009183	0.009183	0.061119	0.061119	0.009183	0.009183	0.009183	0.009183	0.008316	0.060313	0.060313	0.008362	0.008362	0.008362
n-Pentane		0.042305	0.042305	0.029314	0.030034	0.001756	0.001756	0.030034	0.030034	0.009768	0.021681	0.021681	0.008278	0.008278	0.008545	0.110019	0.110019	0.008545	0.009299	0.009299	0.081351	0.081351	0.009299	0.009299	0.009299	0.009299	0.008233	0.072172	0.072172	0.008278	0.008278	0.008278
n-Hexane		0.022331	0.022331	0.016067	0.016417	0.002673	0.002673	0.016417	0.016417	0.005853	0.034055	0.034055	0.003679	0.003679	0.004697	0.121576	0.121576	0.004697	0.004761	0.004761	0.127009	0.127009	0.004761	0.004761	0.004761	0.004761	0.003659	0.069742	0.069742	0.003679	0.003679	0.003679
Mcyclopentan		0.001407	0.001407	0.001013	0.001035	0.000175	0.000175	0.001035	0.001035	0.000369	0.002220	0.002220	0.000000	0.000000	0.000293	0.000000	0.000000	0.000293	0.000298	0.000298	0.008275	0.008275	0.000298	0.000298	0.000298	0.000298	0.000225	0.004580	0.004580	0.000000	0.000000	0.000000
Benzene		0.000119	0.000119	0.000086	0.000087	0.000015	0.000015	0.000087	0.000087	0.000031	0.000185	0.000185	0.000000	0.000000	0.000024	0.000000	0.000000	0.000024	0.000025	0.000025	0.000690	0.000690	0.000025	0.000025	0.000025	0.000025	0.000019	0.000383	0.000383	0.000000	0.000000	0.000000
Cyclohexane		0.001040	0.001040	0.000760	0.000776	0.000160	0.000160	0.000776	0.000776	0.000285	0.002001	0.002001	0.000000	0.000000	0.000223	0.000000	0.000000	0.000223	0.000218	0.000218	0.007458	0.007458	0.000218	0.000218	0.000218	0.000218	0.000158	0.003740	0.003740	0.000000	0.000000	0.000000
n-Hepta:ne		0.002955	0.002955	0.002400	0.002435	0.001062	0.001062	0.002435	0.002435	0.001038	0.012428	0.012428	0.000000	0.000000	0.000803	0.000000	0.000000	0.000803	0.000597	0.000597	0.046496	0.046496	0.000597	0.000597	0.000597	0.000597	0.000362	0.014473	0.014473	0.000000	0.000000	0.000000
Mcyclohexane		0.001617	0.001617	0.001289	0.001309	0.000535	0.000535	0.001309	0.001309	0.000551	0.006253	0.006253	0.000000	0.000000	0.000423	0.000000	0.000000	0.000423	0.000330	0.000330	0.023365	0.023365	0.000330	0.000330	0.000330	0.000330	0.000202	0.007898	0.007898	0.000000	0.000000	0.000000
Toluene		0.000132	0.000132	0.000109	0.000111	0.000054	0.000054	0.000111	0.000111	0.000048	0.000613	0.000613	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000026	0.000026	0.002290	0.002290	0.000026	0.000026	0.000026	0.000026	0.000015	0.000676	0.000676	0.000000	0.000000	0.000000
n-Octane		0.001254	0.001254	0.001358	0.001352	0.001567	0.001567	0.001352	0.001352	0.000713	0.013378	0.013378	0.000000	0.000000	0.000590	0.000000	0.000000	0.000590	0.000222	0.000222	0.050205	0.050205	0.000222	0.000222	0.000222	0.000222	0.000094	0.007810	0.007810	0.000000	0.000000	0.000000
E-Benzene		0.000010	0.000010	0.000012	0.000012	0.000015	0.000015	0.000012	0.000012	0.000006	0.000121	0.000121	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000455	0.000455	0.000002	0.000002	0.000002	0.000002	0.000001	0.000066	0.000066	0.000000	0.000000	0.000000
m-Xylene		0.000021	0.000021	0.000025	0.000025	0.000037	0.000037	0.000025	0.000025	0.000014	0.000275	0.000275	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.001028	0.001028	0.000003	0.000003	0.000003	0.000003	0.000001	0.000132	0.000132	0.000000	0.000000	0.000000
p-Xylene		0.000021	0.000021	0.000025	0.000025	0.000037	0.000037	0.000025	0.000025	0.000014	0.000274	0.000274	0.000000	0.000000	0.000011	0.000000	0.000000	0.000011	0.000003	0.000003	0.001028	0.001028	0.000003	0.000003	0.000003	0.000003	0.000001	0.000133	0.000133	0.000000	0.000000	0.000000
o-Xylene		0.000015	0.000015	0.000019	0.000018	0.000029	0.000029	0.000018	0.000018	0.000010	0.000208	0.000208	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000781	0.000781	0.000002	0.000002	0.000002	0.000002	0.000001	0.000096	0.000096	0.000000	0.000000	0.000000
n-Nonane		0.000208	0.000208	0.000373	0.000355	0.001053	0.001053	0.000355	0.000355	0.000228	0.005305	0.005305	0.000000	0.000000	0.000208	0.000000	0.000000	0.000208	0.000032	0.000032	0.019967	0.019967	0.000032	0.000032	0.000032	0.000032	0.000008	0.001418	0.001418	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000012	0.000011	0.000054	0.000054	0.000011	0.000011	0.000008	0.000195	0.000195	0.000000	0.000000	0.000007	0.000000	0.000000	0.000007	0.000001	0.000001	0.000733	0.000733	0.000001	0.000001	0.000001	0.000001	0.000000	0.000033	0.000033	0.000000	0.000000	0.000000
n-Decane		0.000035	0.000035	0.000123	0.000106	0.000785	0.000785	0.000106	0.000106	0.000083	0.002111	0.002111	0.000000	0.000000	0.000080	0.000000	0.000000	0.000080	0.000005	0.000005	0.007971	0.007971	0.000005	0.000005	0.000005	0.000005	0.000001	0.000242	0.000242	0.000000	0.000000	0.000000
C7*		0.006789	0.006789	0.005319	0.005408	0.001919	0.001919	0.005408	0.005408	0.002205	0.023244	0.023244	0.000897	0.000897	0.001703	0.059462	0.059462	0.001703	0.001391	0.001391	0.086894	0.086894	0.001391	0.001391	0.001391	0.001391	0.000892	0.030794	0.030794	0.000897	0.000897	0.000897
C8*		0.001098	0.001098	0.001328	0.001310	0.002007	0.002007	0.001310	0.001310	0.000745	0.014939	0.014939	0.000076	0.000076	0.000632	0.017279	0.017279	0.000632	0.000195	0.000195	0.056130	0.056130	0.000195	0.000195	0.000195	0.000195	0.000075	0.007279	0.007279	0.000076	0.000076	0.000076
C9*		0.000093	0.000093	0.000231	0.000211	0.001030	0.001030	0.000211	0.000211	0.000152	0.003720	0.003720	0.000003	0.000003	0.000143	0.001854	0.001854	0.000143	0.000014	0.000014	0.014029	0.014029	0.000014	0.000014	0.000014	0.000014	0.000003	0.000669	0.000669	0.000003	0.000003	0.000003
C10-C13*		0.000000	0.000000	0.000003	0.000001	0.000069	0.000069	0.000001	0.000001	0.000002	0.000062	0.000062	0.000000	0.000000	0.000002	0.000004	0.000004	0.000002	0.000000	0.000000	0.000236	0.000236	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000001	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 2C MAXIMUM GAS AND OIL, GAS SG 0.83 AT 1st1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1696	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9481	1.0000	1.0000	1.0000	0.8292	1.0000
Temperature	C	50.40	44.15	50.40	142.19	45.00	45.00	45.00	44.86	59.00	12.77	70.44	50.40	40.44	35.00	50.40
Pressure	bar_g	45.79	30.00	45.79	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.79	30.00	8.70	45.79
Mass Flow	kg/h	0.00	0.00	54,485	54,485	54,485	92,173	16,797	92,173	16,797	16,797	11,567	11,567	11,567	1,941	1,750
Molar Flow	kgmole/h	0.00	0.00	2,326	2,326	2,326	3,935	717.0	3,935	717.0	717.0	493.8	493.8	493.8	53.1	74.7
Mass Enthalpy	kJ/kg	-2,606	-2,606	-3,550	-3,386	-3,690	-3,690	-3,690	-3,690	-3,640	-3,640	-3,480	-3,550	-3,550	-2,980	-3,550
Heat Flow	kW	0	0	-53,726	-51,245	-55,845	-94,474	-17,216	-94,474	-16,985	-16,985	-11,182	-11,406	-11,406	-1,607	-1,726
Mass Density	kg/m3	506.71	242.57	48.77	105.44	186.68	186.68	186.68	186.21	165.48	32.64	27.45	48.77	31.79	18.07	48.77
Molecular Weight		51.01	51.01	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	23.43	36.58	23.43
VAPOR																
Mass Flow	kg/h	---	0.00	54,485	54,485	54,485	92,173	16,797	92,173	16,797	14,885	11,567	11,567	11,567	1,430	1,750
Molar Flow	kgmole/h	---	0.00	2,326	2,326	2,326	3,935	717.0	3,935	717.0	679.8	493.8	493.8	493.8	44.0	74.7
Actual Volume Flow	m3/h	---	0.00	1,117.1	516.7	291.9	493.7	90.0	495.0	101.5	511.1	421.4	237.2	363.9	106.6	35.88
Std Gas Flow	MMSCFD	---	0.00	46.70	46.70	46.70	79.00	14.40	79.00	14.40	13.65	9.91	9.91	9.91	0.88	1.50
Mass Density	kg/m3	---	35.12	48.77	105.44	186.68	186.68	186.68	186.21	165.48	29.13	27.45	48.77	31.79	13.42	48.77
Molecular Weight		---	25.55	23.43	23.43	23.43	23.43	23.43	23.43	23.43	21.89	23.43	23.43	23.43	32.51	23.43
Viscosity	cP	---	0.012	0.013	0.019	0.022	0.022	0.022	0.022	0.020	0.011	0.013	0.013	0.012	0.010	0.013
Thermal Conductivity	W/m-K	---	0.033	0.036	0.056	0.057	0.057	0.057	0.056	0.054	0.030	0.037	0.036	0.033	0.025	0.036
Mass Heat Capacity	kJ/kg-C	---	2.295	2.482	2.923	3.615	3.615	3.615	3.617	3.390	2.261	2.326	2.482	2.297	1.956	2.482
Cp/Cv		---	1.355	1.425	1.388	1.990	1.990	1.990	1.992	1.833	1.402	1.297	1.425	1.356	1.217	1.425
Z Factor		---	0.855	0.836	0.875	0.644	0.644	0.644	0.644	0.694	0.870	0.912	0.836	0.877	0.919	0.836
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,912	---	---	---	481.0	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	37.2	---	---	---	7.42	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	3.47	---	---	---	0.81	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	526.9	---	---	---	118.1	---
Mass Density	kg/m3	506.71	537.27	---	---	---	---	---	---	---	551.56	---	---	---	592.90	---
Viscosity (Note 4)	cP	0.104	0.128	---	---	---	---	---	---	---	0.147	---	---	---	0.181	---
Thermal Conductivity	W/m-K	0.082	0.086	---	---	---	---	---	---	---	0.095	---	---	---	0.095	---
Mass Heat Capacity	kJ/kg-C	2.769	2.578	---	---	---	---	---	---	---	2.432	---	---	---	2.363	---
Surface Tension	dyne/cm	6.70	8.32	---	---	---	---	---	---	---	10.07	---	---	---	11.44	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	29.7	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.65	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.42	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000280	0.000280	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.002279	0.000476	0.002279
CO2		0.000229	0.000229	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000478	0.000505	0.000478
Methane		0.200302	0.200302	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.724877	0.350283	0.724877
Ethane		0.103783	0.103783	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.117907	0.168642	0.117907
Propane		0.175879	0.175879	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.084582	0.199196	0.084582
i-Butane		0.066631	0.066631	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.017259	0.050106	0.017259
n-Butane		0.152395	0.152395	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.031322	0.096398	0.031322
22-Mpropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000055	0.000000
i-Pentane		0.075512	0.075512	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.008362	0.029070	0.008362
n-Pentane		0.089988	0.089988	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.008278	0.030034	0.008278
n-Hexane		0.086709	0.086709	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.003679	0.016417	0.003679
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001035	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000087	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000776	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002435	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001309	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000111	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001352	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000012	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000355	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000106	0.000000
C7*		0.038168	0.038168	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.000897	0.005408	0.000897
C8*		0.009267	0.009267	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.000076	0.001310	0.000076
C9*		0.000854	0.000854	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000211	0.000003
C10-C13*		0.000002	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.036032	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000104	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000028	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000069	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000025	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004071	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002121	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001406	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000352	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58

CASE 3A MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Vapour Fraction		0.0001	0.1817	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0009	0.0136	1.0000
Temperature	C	72.00	69.30	68.00	68.00	72.00	70.09	71.88	71.88	71.87	71.47	71.88
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50
Mass Flow	kg/h	410,580	491,790	100,725	410,580	410,580	24,717	247,335	187,930	187,930	187,930	33.0
Molar Flow	kgmole/h	14,384	17,657	4,402	14,384	14,384	1,372	13,729	2,025	2,025	2,025	1.41
Mass Enthalpy	kJ/kg	-10,207	-9,129	-3,742	-10,220	-10,207	-15,692	-15,684	-3,720	-3,720	-3,720	-3,715
Heat Flow	kW	-1,164,061	-1,247,034	-104,685	-1,165,646	-1,164,061	-107,737	-1,077,584	-194,180	-194,180	-194,180	-34
Mass Density	kg/m3	882.73	50.89	7.98	893.74	882.73	972.98	971.31	811.24	791.94	444.05	7.99
Molecular Weight		28.54	27.85	22.88	28.54	28.54	18.02	18.02	92.80	92.80	92.80	23.43
VAPOR												
Mass Flow	kg/h	33.8	78,226	100,725	---	33.8	---	---	---	44.0	828.3	33.0
Molar Flow	kgmole/h	1.44	3,208	4,402	---	1.44	---	---	---	1.85	27.6	1.41
Actual Volume Flow	m3/h	4.23	9,200	12,623	---	4.23	---	---	---	5.74	193.2	4.12
Std Gas Flow	MMSCFD	0.03	64.40	88.38	---	0.03	---	---	---	0.04	0.55	0.03
Mass Density	kg/m3	8.00	8.50	7.98	---	8.00	---	---	---	7.67	4.29	7.99
Molecular Weight		23.45	24.39	22.88	---	23.45	---	---	---	23.75	29.99	23.43
Viscosity	cP	0.013	0.012	0.012	---	0.013	---	---	---	0.013	0.012	0.013
Thermal Conductivity	W/m-K	0.035	0.034	0.035	---	0.035	---	---	---	0.035	0.030	0.035
Mass Heat Capacity	kJ/kg-C	2.177	2.154	2.177	---	2.177	---	---	---	2.168	2.039	2.177
Cp/Cv		1.227	1.222	1.233	---	1.227	---	---	---	1.223	1.173	1.227
Z Factor		0.972	0.968	0.972	---	0.972	---	---	---	0.973	0.980	0.972
LIQUID												
Mass Flow	kg/h	165,428	167,887	---	165,455	165,428	---	---	165,429	165,386	164,640	---
Molar Flow	kgmole/h	776.1	811.7	---	777.2	776.1	---	---	776.1	774.4	750.7	---
Actual Volume Flow	m3/h	208.5	212.0	---	207.8	208.5	---	---	208.5	208.4	206.9	---
Liq Vol Flow @Std Cond	bbl/day	29,988	30,542	---	29,996	29,988	---	---	29,988	29,977	29,790	---
Mass Density	kg/m3	793.37	791.87	---	796.10	793.37	---	---	793.45	793.59	795.75	---
Viscosity (Note 4)	cP	1.991	1.942	---	2.120	1.991	---	---	1.994	2.001	2.109	---
Thermal Conductivity	W/m-K	0.111	0.110	---	0.112	0.111	---	---	0.111	0.111	0.113	---
Mass Heat Capacity	kJ/kg-C	2.170	2.162	---	2.154	2.170	---	---	2.169	2.169	2.165	---
Surface Tension	dyne/cm	16.90	16.70	---	17.11	16.90	---	---	16.90	16.94	17.43	---
AQUEOUS (Note 3)												
Mass Flow	kg/h	245,119	245,676	---	245,125	245,119	24,717	247,335	22,501	22,500	22,462	---
Molar Flow	kgmole/h	13,606	13,637	---	13,607	13,606	1,372	13,729	1,249	1,249	1,247	---
Actual Volume Flow	m3/h	252.4	252.4	---	251.6	252.4	25.4	254.6	23.2	23.2	23.1	---
Liq Vol Flow @Std Cond	bbl/day	36,477	36,560	---	36,478	36,477	3,678	36,807	3,348	3,348	3,343	---
Mass Density	kg/m3	971.21	973.37	---	974.40	971.21	972.98	971.31	971.31	971.29	971.43	---
Viscosity	cP	0.390	0.404	---	0.412	0.390	0.400	0.390	0.390	0.390	0.392	---
Thermal Conductivity	W/m-K	0.664	0.662	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---
Mass Heat Capacity	kJ/kg-C	4.343	4.339	---	4.338	4.343	4.339	4.343	4.343	4.343	4.343	---
Surface Tension	dyne/cm	63.80	64.29	---	64.52	63.80	64.14	63.82	63.82	63.82	63.90	---
COMPOSITION MOLE FRACTION												
Nitrogen		0.000001	0.000383	0.001531	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.001390
CO2		0.000002	0.000083	0.000326	0.000002	0.000002	0.000000	0.000001	0.000011	0.000011	0.000011	0.000332
Methane		0.001371	0.125395	0.732294	0.001371	0.001371	0.000000	0.000000	0.009240	0.009240	0.009240	0.712295
Ethane		0.000749	0.021752	0.107524	0.000749	0.000749	0.000000	0.000000	0.005242	0.005242	0.005242	0.111201
Propane		0.001145	0.015953	0.060250	0.001145	0.001145	0.000000	0.000000	0.008089	0.008089	0.008089	0.064025
i-Butane		0.000541	0.003766	0.013338	0.000541	0.000541	0.000000	0.000000	0.003832	0.003832	0.003832	0.014405
n-Butane		0.001321	0.007356	0.025191	0.001321	0.001321	0.000000	0.000000	0.009360	0.009360	0.009360	0.027356
22-Meropane		0.000001	0.000006	0.000018	0.000001	0.000001	0.000000	0.000000	0.000009	0.000009	0.000009	0.000020
i-Pentane		0.000869	0.002640	0.007750	0.000869	0.000869	0.000000	0.000000	0.006169	0.006169	0.006169	0.008533
n-Pentane		0.001119	0.002925	0.008075	0.001119	0.001119	0.000000	0.000000	0.007944	0.007944	0.007944	0.008939
n-Hexane		0.001729	0.002609	0.004818	0.001729	0.001729	0.000000	0.000000	0.012275	0.012275	0.012275	0.005430
Mcyclopentan		0.000116	0.000173	0.000316	0.000116	0.000116	0.000000	0.000000	0.000825	0.000825	0.000825	0.000355
Benzene		0.000010	0.000014	0.000026	0.000010	0.000010	0.000000	0.000000	0.000068	0.000068	0.000068	0.000030
Cyclohexane		0.000105	0.000145	0.000239	0.000105	0.000105	0.000000	0.000000	0.000749	0.000749	0.000749	0.000269
n-Heptane		0.000760	0.000829	0.000842	0.000760	0.000760	0.000000	0.000000	0.005400	0.005400	0.005400	0.000966
Mcyclohexane		0.000376	0.000417	0.000444	0.000376	0.000376	0.000000	0.000000	0.002673	0.002673	0.002673	0.000506
Toluene		0.000038	0.000040	0.000038	0.000038	0.000038	0.000000	0.000000	0.000267	0.000267	0.000267	0.000044
n-Octane		0.001371	0.001267	0.000605	0.001371	0.001371	0.000000	0.000000	0.009736	0.009736	0.009736	0.000706
E-Benzene		0.000013	0.000012	0.000005	0.000013	0.000013	0.000000	0.000000	0.000090	0.000090	0.000090	0.000006
m-Xylene		0.000032	0.000029	0.000012	0.000032	0.000032	0.000000	0.000000	0.000228	0.000228	0.000228	0.000014
p-Xylene		0.000032	0.000029	0.000012	0.000032	0.000032	0.000000	0.000000	0.000228	0.000228	0.000228	0.000014
o-Xylene		0.000026	0.000023	0.000009	0.000026	0.000026	0.000000	0.000000	0.000182	0.000182	0.000182	0.000010
n-Nonane		0.001161	0.000998	0.000210	0.001161	0.001161	0.000000	0.000000	0.008244	0.008244	0.008244	0.000249
124-MBenzene		0.000061	0.000051	0.000008	0.000061	0.000061	0.000000	0.000000	0.000432	0.000432	0.000432	0.000009
n-Decane		0.001070	0.000892	0.000081	0.001070	0.001070	0.000000	0.000000	0.007598	0.007598	0.007598	0.000098
C7*		0.001316	0.001516	0.001780	0.001316	0.001316	0.000000	0.000000	0.009347	0.009347	0.009347	0.002034
C8*		0.002033	0.001817	0.000644	0.002033	0.002033	0.000000	0.000000	0.014438	0.014438	0.014438	0.000754
C9*		0.001390	0.001168	0.000144	0.001390	0.001390	0.000000	0.000000	0.009872	0.009872	0.009872	0.000172
C10-C13*		0.000206	0.000168	0.000002	0.000206	0.000206	0.000000	0.000000	0.001461	0.001461	0.001461	0.000003
C14-C18*		0.000144	0.000117	0.000000	0.000144	0.000144	0.000000	0.000000	0.001023	0.001023	0.001023	0.000000
C19-C21*		0.000102	0.000083	0.000000	0.000102	0.000102	0.000000	0.000000	0.000721	0.000721	0.000721	0.000000
C22-C24*		0.000100	0.000081	0.000000	0.000100	0.000100	0.000000	0.000000	0.000709	0.000709	0.000709	0.000000
C25-C27*		0.000075	0.000061	0.000000	0.000075	0.000075	0.000000	0.000000	0.000531	0.000531	0.000531	0.000000
C28-C31*		0.000071	0.000058	0.000000	0.000071	0.000071	0.000000	0.000000	0.000507	0.000507	0.000507	0.000000
C32-C37*		0.000067	0.000054	0.000000	0.000067	0.000067	0.000000	0.000000	0.000474	0.000474	0.000474	0.000000
C38-C45*		0.000046	0.000037	0.000000	0.000046	0.000046	0.000000	0.000000	0.000326	0.000326	0.000326	0.000000
C46-C80*		0.000038	0.000031	0.000000	0.000038	0.000038	0.000000	0.000000	0.000272	0.000272	0.000272	0.000000
C10-C13_1*		0.001081	0.000881	0.000001	0.001081	0.001081	0.000000	0.000000	0.007677	0.007677	0.007677	0.000002
C14-C16*		0.000511	0.000416	0.000000	0.000511	0.000511	0.000000	0.000000	0.003628	0.003628	0.003628	0.000000
C17-C20*		0.000597	0.000486	0.000000	0.000597	0.000597	0.000000	0.000000	0.004239	0.004239	0.004239	0.000000
C21-C22*		0.000542	0.000441	0.000000	0.000542	0.000542	0.000000	0.000000	0.003848	0.003848	0.003848	0.000000
C23*		0.000213	0.000173	0.000000	0.000213	0.000213	0.000000	0.000000	0.001509	0.001509	0.001509	0.000000
C24-C26*		0.000467	0.000381	0.000000	0.000467	0.000467	0.000000	0.000000	0.003318	0.003318	0.003318	0.000000
C27-C29*		0.000289	0.000236	0.000000	0.000289	0.000289	0.000000	0.000000	0.002055	0.002055	0.002055	0.000000
C30-C34*		0.000259	0.000211	0.000000	0.000259	0.000259	0.000000	0.000000	0.001839	0.001839	0.001839	0.000000
C35-C80*		0.000212	0.000173	0.000000	0.000212	0.000212	0.000000	0.000000	0.001504	0.001504	0.001504	0.000000
C10-C13_2*		0.000032	0.000026	0.000000	0.000032	0.000032	0.000000	0.000000	0.000228	0.000228	0.000228	0.000000
C14-C18_1*		0.000019	0.000016	0.000000	0.000019	0.000019	0.000000	0.000000	0.000136	0.000136	0.000136	0.000000
C19-C21_1*		0.000019	0.000016	0.000000	0.000019	0.000019	0.000000	0.000000	0.000136	0.000136	0.000136	0.000000
C22-C23*		0.000013	0.000011	0.000000	0.000013	0.000013	0.000000	0.000000	0.000094	0.000094	0.000094	0.000000
C24-C26_1*		0.000015	0.000012	0.000000	0.000015	0.000015	0.000000	0.000000	0.000104	0.000104	0.000104	0.000000
C27-C29_1*		0.000010	0.000008	0.000000	0.000010	0.000010	0.000000	0.000000	0.000073	0.000073	0.000073	0.000000
C30-C33*		0.000009	0.000007	0.000000	0.000009	0.000009	0.000000	0.000000	0.000064	0.000064	0.000064	0.000000
C34-C40*		0.000008	0.000006	0.000000	0.000008	0.000008	0.000000	0.000000	0.000059	0.000059	0.000059	0.000000
C41-C80*		0.000006	0.000005	0.000000	0.000006	0.000006	0.000000	0.000000	0.000044	0.000044	0.000044	0.000000
C10-C13_3*		0.002025	0.001650	0.000002	0.002025	0.002025	0.000000	0.000000	0.014382	0.014382	0.014382	0.000003
C14-C17*		0.000895	0.000729	0.000000	0.000895	0.000895	0.000000	0.000000	0.006356	0.006356	0.006356	0.000000
C18-C21*		0.001262	0.001028	0.000000	0.001262	0.001262	0.000000	0.000000	0.008966	0.008966	0.008966	0.000000
C22-C23_1*		0.000752	0.000613	0.000000	0.000752	0.000752	0.000000	0.000000	0.005342	0.005342	0.005342	0.000000
C24-C25*		0.000584	0.000476	0.000000	0.000584	0.000584	0.000000	0.000000	0.004151	0.004151	0.004151	0.000000
C26-C28*		0.000641	0.000523	0.000000	0.000641	0.000641	0.000000	0.000000	0.004556	0.004556	0.004556	0.000000
C29-C32*		0.000552	0.000450	0.000000	0.000552	0.000552	0.000000	0.000000	0.003924	0.003924	0.003924	0.000000
C33-C39*		0.000493	0.000402	0.000000	0.000493	0.000493	0.000000	0.000000	0.003505	0.003505	0.003505	0.000000
C40-C80*		0.000346	0.000282	0.000000	0.000346	0.000346	0.000000	0.000000	0.002455	0.002455	0.002455	0.000000
H2O		0.946117	0.778363	0.030530	0.946117	0.946117	1.000000	0.999999	0.617967	0.617967	0.617967	0.036478
HSTc20+*		0.002976	0.002424	0.000000	0.002976	0.002976	0.000000	0.000000	0.021136	0.021136	0.021136	0.000000
HSTc10*		0.000671	0.000565	0.000071	0.000671	0.000671	0.000000	0.000000	0.004769	0.004769	0.004769	0.000085
HSTc11*		0.000531	0.000439	0.000024	0.000531	0.000531	0.000000	0.000000	0.003771	0.003771	0.003771	0.000030
HSTc12*		0.000429	0.000352	0.000008	0.000429	0.000429	0.000000	0.000000	0.003048	0.003048	0.003048	0.000010
HSTc13*		0.000406	0.000331	0.000003	0.000406	0.000406	0.000000	0.000000	0.002882	0.002882	0.002882	0.000004
HSTc14*		0.000330	0.000269	0.000001	0.000330	0.000330	0.000000	0.000000	0.002344	0.002344	0.002344	0.000001
HSTc15*		0.000362	0.000295	0.000000	0.000362	0.000362	0.000000	0.000000	0.002574	0.002574	0.002574	0.000000
H5-22P_C20+*		0.001357	0.001106	0.000000	0.001357	0.001357	0.000000	0.000000	0.009642	0.009642	0.009642	0.000000
10X-DST1_2c11*		0.001046	0.000867	0.000058	0.001046	0.001046	0.000000	0.000000	0.007432	0.007432	0.007432	0.000070
10X-DST1_2c12*		0.000878	0.000722	0.000026	0.000878	0.000878	0.000000	0.000000	0.006239	0.006239	0.006239	0.000032
10X-DST1_2c13*		0.000885	0.000725	0.000015	0.000885	0.000885	0.000000	0.000000	0.006288	0.006288	0.006288	0.000018
10X-DST1_2c14*		0.000771	0.000630	0.000007	0.000771	0.000771	0.000000	0.000000	0.005477	0.005477	0.005477	0.000008
10X-DST1_2c15*		0.000899	0.000733	0.000003	0.000899	0.000899	0.000000	0.000000	0.006386	0.006386	0.006386	0.000004
10X-DST1_2c16*		0.000573	0.000467	0.000001	0.000573	0.000573	0.000000	0.000000	0.004069	0.004069	0.004069	0.000001
10X-DST1_2c17*		0.000496	0.000404	0.000000	0.000496	0.000496	0.000000	0.000000	0.003522	0.003522	0.003522	0.000000
10X-DST1_2c18*		0.000584	0.000476	0.000000	0.000584	0.000584	0.000000	0.000000	0.004150	0.004150	0.004150	0.000000
10X-DST1_2c19*		0.000495	0.000403	0.000000	0.000495	0.000495	0.000000	0.000000	0.003513	0.003513	0.003513	0.000000
10X-DST1_C20+*		0.002345	0.001910	0.000000	0.002345	0.002345	0.000000	0.000000	0.016655	0.016655	0.016655	0.000000
10X-DST2_C20+*		0.001451	0.001182	0.000000	0.001451	0.001451	0.000000	0.000000	0.010305	0.010305	0.010305	0.000000
HSTc16*		0.000231	0.000188	0.000000	0.000231	0.000231	0.000000	0.000000	0.001641	0.001641	0.001641	0.000000
HSTc17*		0.000192	0.000157	0.000000	0.000192	0.000192	0.000000	0.000000	0.001365	0.001365	0.001365	0.000000
HSTc18*		0.000185	0.000151	0.000000	0.000185	0.000185	0.000000	0.000000	0.001313	0.001313	0.001313	0.000000
HSTc19*		0.000165	0.000134	0.000000	0.000165	0.000165	0.000000	0.000000	0.001173	0.001173	0.001173	0.000000
HSc20+*		0.001512	0.001231	0.000000	0.001512	0.001512	0.000000	0.000000	0.010736	0.010736	0.010736	0.000000
HSTc6*		0.000421	0.000656	0.001254	0.000421	0.000421	0.000000	0.000000	0.002991	0.002991	0.002991	0.001408
HSTc7*		0.000552	0.000627	0.00071	0.000552	0.000552	0.000000	0.000000	0.003921	0.003921	0.003921	0.000810
HSTc8*		0.000916	0.000887	0.000564	0.000916	0.000916	0.000000	0.000000	0.006506	0.006506	0.006506	0.000651
HSTc9*		0.000762	0.000668	0.000188	0.000762	0.000762	0.000000	0.000000	0.005412	0.005412	0.005412	0.000221
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Stream Name	Unit	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0198	0.0000	0.0000	0.0000	1.0000	0.9279	0.9279	0.8729	1.0000	0.0000	0.0000
Temperature	C	69.96	69.96	69.96	70.02	70.02	70.02	70.10	69.87	70.05	69.87	55.00	69.87	35.00	35.00	35.53	35.53	35.53	35.66
Pressure	bar_g	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	193,382	931	178,552	24,717	178,552	167,735	10,817	167,735	167,735	167,116	167,116	618.1	618.1	618.1	636.9	572.9	64.0	64.0
Molar Flow	kgmole/h	30.4	1.385	1.372	1.385	784.9	784.9	600.4	784.9	784.9	769.4	769.4	15.5	15.5	15.5	16.5	14.4	2.10	2.10
Mass Enthalpy	kJ/kg	-3,333	-2,917	-15,693	-2,916	-2,092	-15,693	-15,693	-2,092	-2,092	-2,089	-2,121	-2,814	-2,952	-2,952	-3,313	-2,686	-8,924	-8,923
Heat Flow	kW	-862	-144,655	-107,748	-144,621	-97,468	-47,152	-47,152	-97,468	-97,468	-96,985	-98,454	-483	-507	-507	-586	-427	-159	-159
Mass Density	kg/m3	4.39	802.74	972.63	803.04	794.11	972.74	972.54	398.84	794.04	795.06	805.48	2.94	3.32	3.32	3.41	3.07	810.28	810.71
Molecular Weight		30.57	128.88	18.02	128.88	213.69	18.02	18.02	213.69	213.69	217.19	217.19	39.86	39.86	39.86	38.57	39.75	30.49	30.49
VAPOR																			
Mass Flow	kg/h	930.7	---	---	---	---	---	---	618.1	---	---	---	618.1	571.5	571.5	572.9	572.9	---	---
Molar Flow	kgmole/h	30.4	---	---	---	---	---	---	15.5	---	---	---	15.5	14.4	14.4	14.4	14.4	---	---
Actual Volume Flow	m3/h	211.7	---	---	---	---	---	---	210.4	---	---	---	210.4	186.2	186.2	186.9	186.9	---	---
Std Gas Flow	MMSCFD	0.61	---	---	---	---	---	---	0.31	---	---	---	0.31	0.29	0.29	0.29	0.29	---	---
Mass Density	kg/m3	4.39	---	---	---	---	---	---	2.94	---	---	---	2.94	3.07	3.07	3.07	3.07	---	---
Molecular Weight		30.57	---	---	---	---	---	---	39.86	---	---	---	39.86	39.73	39.73	39.75	39.75	---	---
Viscosity	cP	0.012	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.030	---	---	---	---	---	---	0.025	---	---	---	0.025	0.022	0.022	0.022	0.022	---	---
Mass Heat Capacity	kJ/kg-C	2.029	---	---	---	---	---	---	1.945	---	---	---	1.945	1.811	1.811	1.813	1.813	---	---
Cp/Cv		1.171	---	---	---	---	---	---	1.130	---	---	---	1.130	1.144	1.144	1.143	1.143	---	---
Z Factor		0.979	---	---	---	---	---	---	0.982	---	---	---	0.982	0.977	0.977	0.977	0.977	---	---
LIQUID																			
Mass Flow	kg/h	---	167,735	---	167,735	167,735	---	---	167,116	167,735	167,116	167,116	---	32.8	32.8	32.4	---	32.4	32.4
Molar Flow	kgmole/h	---	784.9	---	784.9	784.9	---	---	769.4	784.9	769.4	769.4	---	0.35	0.35	0.35	---	0.35	0.35
Actual Volume Flow	m3/h	---	211.3	---	211.2	211.2	---	---	210.2	211.2	210.2	207.5	---	0.05	0.05	0.05	---	0.05	0.05
Liq Vol Flow @Std Cond	bbl/day	---	30,447	---	30,447	30,447	---	---	30,299	30,447	30,299	30,299	---	7.06	7.06	6.97	---	6.97	6.97
Mass Density	kg/m3	---	793.80	---	794.11	794.11	---	---	795.06	794.04	795.06	805.48	---	683.42	683.42	684.44	---	684.44	685.01
Viscosity (Note 4)	cP	---	2.027	---	2.026	2.026	---	---	2.088	2.025	2.088	2.704	---	0.351	0.351	0.354	---	0.354	0.354
Thermal Conductivity	W/m-K	---	0.112	---	0.112	0.112	---	---	0.113	0.112	0.113	0.115	---	0.108	0.108	0.108	---	0.108	0.108
Mass Heat Capacity	kJ/kg-C	---	2.161	---	2.161	2.161	---	---	2.159	2.161	2.159	2.098	---	2.137	2.137	2.137	---	2.137	2.135
Surface Tension	dyne/cm	---	17.34	---	17.34	17.34	---	---	17.54	17.33	17.54	18.54	---	16.87	16.87	16.88	---	16.88	16.86
AQUEOUS (Note 3)																			
Mass Flow	kg/h	---	10,817	24,717	10,817	---	10,817	10,817	---	---	---	---	---	13.8	13.8	31.5	---	31.5	31.5
Molar Flow	kgmole/h	---	600.4	1.372	600.4	---	600.4	600.4	---	---	---	---	---	0.76	0.76	1.75	---	1.75	1.75
Actual Volume Flow	m3/h	---	11.1	25.4	11.1	---	11.1	11.1	---	---	---	---	---	0.01	0.01	0.03	---	0.03	0.03
Liq Vol Flow @Std Cond	bbl/day	---	1,610	3,678	1,610	---	1,610	1,610	---	---	---	---	---	2.05	2.05	4.69	---	4.69	4.69
Mass Density	kg/m3	---	972.63	972.63	972.74	---	972.74	972.54	---	---	---	---	---	999.80	999.80	999.40	---	999.40	999.50
Viscosity	cP	---	0.401	0.401	0.400	---	0.400	0.400	---	---	---	---	---	0.718	0.718	0.711	---	0.711	0.709
Thermal Conductivity	W/m-K	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	---	4.341	4.341	4.340	---	4.340	4.341	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	---	64.17	64.17	64.16	---	64.16	64.14	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.25
**COMPOSITION M

CASE 3A MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8942	0.9772	1.0000	0.0000	0.0002	1.0000	0.8615	0.9644	0.0000	0.0089	1.0000	1.0000	1.0000	0.0198	0.1974	0.9701	1.0000	1.0000	0.0000	0.0366	1.0000	1.0000	0.9889	0.9889	0.9999	0.0000	0.2371	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	55.79	55.45	55.45	55.45	109.26	35.00	31.92	31.92	31.26	41.17	41.17	67.95	40.53	30.38	33.00	31.92	31.92	31.71	30.17	31.71	169.34	50.00	50.00	49.86	50.00	35.60	50.46	50.46	50.46
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.19	47.69	47.69	47.39	47.69	8.70	45.69	45.69	45.69
Mass Flow	kg/h	572.9	572.9	1,504	1,485	18.8	18.8	1,485	1,485	104,688	5,389	5,389	11,109	11,109	100,758	0.00	0.00	100,758	99,299	49,650	0.00	0.00	49,650	49,650	49,650	99,299	96,865	2,434	2,434	95,409	82,627	41,314
Molar Flow	kgmole/h	14.4	14.4	44.9	43.8	1.01	1.01	43.8	43.8	4,495	160.2	160.2	496.1	496.1	4,403	0.00	0.00	4,403	4,335	2,167	0.00	0.00	2,167	2,167	2,167	4,335	4,287	47.9	47.9	4,261	3,690	1,845
Mass Enthalpy	kJ/kg	-2,612	-2,775	-3,121	-2,968	-15,180	-15,180	-2,866	-3,134	-3,849	-7,866	-7,866	-3,659	-3,659	-3,742	-2,493	-2,493	-3,870	-3,631	-3,631	-2,247	-2,247	-3,631	-3,345	-3,656	-3,656	-3,662	-3,417	-3,417	-3,659	-3,659	-3,659
Heat Flow	kW	-416	-442	-1,303	-1,224	-79	-79	-1,182	-1,293	-111,920	-11,774	-11,774	-11,291	-11,291	-104,719	0	0	-108,312	-100,146	-50,073	0	0	-50,073	-46,128	-50,426	-100,852	-98,541	-2,310	-2,310	-96,973	-83,981	-41,991
Mass Density	kg/m3	7.28	8.50	5.19	4.99	967.38	864.43	11.41	15.94	9.22	778.24	368.40	29.89	29.89	7.90	503.11	105.93	8.96	8.75	8.75	641.07	266.43	8.46	32.17	49.74	49.74	48.31	567.89	77.52	45.61	45.61	45.61
Molecular Weight		39.75	39.75	33.52	33.86	18.67	18.67	33.86	33.86	23.29	33.65	33.65	22.39	22.39	22.88	60.30	60.30	22.88	22.91	22.91	86.46	86.46	22.91	22.91	22.91	22.91	22.60	50.81	50.81	22.39	22.39	22.39
VAPOR																																
Mass Flow	kg/h	572.9	477.8	1,484	1,485	---	0.01	1,485	1,149	99,299	---	40.4	11,109	11,109	100,758	0.00	0.00	96,892	99,299	49,650	---	0.00	49,650	49,650	48,433	96,865	96,839	---	328.2	95,409	82,627	41,314
Molar Flow	kgmole/h	14.4	12.9	43.8	43.8	---	0.0002	43.8	37.8	4,335	---	1.43	496	496	4,403	0.00	0.00	4,271	4,335	2,167	---	0.00	2,167	2,167	2,143	4,287	4,286	---	11.4	4,261	3,690	1,845
Actual Volume Flow	m3/h	78.7	67.3	290.0	297.4	---	0.002	130.1	92.6	11,348	---	7.80	371.7	371.7	12,762	0.00	0.00	11,235	11,348	5,674	---	0.00	5,866	1,543	996.1	1,992	2,005	---	28.1	2,092	1,812	905.8
Std Gas Flow	MMSCFD	0.29	0.26	0.88	0.88	---	0.000004	0.88	0.76	87.04	---	0.03	9.96	9.96	88.41	0.00	0.00	85.76	87.04	43.52	---	0.00	43.52	43.52	43.04	86.07	86.06	---	0.23	85.55	74.09	37.05
Mass Density	kg/m3	7.28	7.10	5.12	4.99	---	3.70	11.41	12.41	8.75	---	5.18	29.89	29.89	7.90	31.30	11.75	8.62	8.75	8.75	---	5.13	8.46	32.17	48.62	48.62	48.29	---	11.67	45.61	45.61	45.61
Molecular Weight		39.75	37.08	33.87	33.86	---	42.53	33.86	30.42	22.91	---	28.21	22.39	22.39	22.88	23.15	28.55	22.68	22.91	22.91	---	27.85	22.91	22.91	22.60	22.60	22.59	---	28.89	22.39	22.39	22.39
Viscosity	cP	0.011	0.010	0.011	0.011	---	0.010	0.013	0.011	0.011	---	0.011	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	---	0.011	0.011	0.017	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.027	0.023	0.027	0.027	---	0.023	0.034	0.026	0.030	---	0.027	0.034	0.034	0.035	0.034	0.027	0.031	0.030	0.030	---	0.027	0.030	0.053	0.037	0.037	0.037	---	0.027	0.037	0.037	0.037
Mass Heat Capacity	kJ/kg-C	2.012	1.849	1.955	1.953	---	1.877	2.197	1.974	2.076	---	1.937	2.306	2.306	2.176	2.301	1.982	2.084	2.076	2.076	---	1.939	2.073	2.657	2.497	2.497	2.494	---	1.992	2.473	2.473	2.473
Cp/Cv		1.140	1.171	1.164	1.163	---	1.130	1.159	1.223	1.258	---	1.205	1.353	1.353	1.233	1.355	1.233	1.259	1.258	1.258	---	1.207	1.257	1.231	1.430	1.430	1.428	---	1.227	1.415	1.415	1.415
Z Factor		0.957	0.949	0.971	0.971	---	0.973	0.953	0.929	0.961	---	0.971	0.889	0.889	0.972	0.880	0.935	0.962	0.961	0.961	---	0.972	0.962	0.952	0.842	0.842	0.843	---	0.937	0.852	0.852	0.852
LIQUID																																
Mass Flow	kg/h	---	89.8	0.91	---	0.79	0.79	---	307.1	3,164	3,164	3,124	---	---	---	0.00	0.00	1,869	---	---	0.00	0.00	---	---	1,130	2,259	26.2	2,260	1,932	---	---	---
Molar Flow	kgmole/h	---	1.23	0.01	---	0.01	0.01	---	4.49	36.7	36.7	35.2	---	---	---	0.00	0.00	20.9	---	---	0.00	0.00	---	---	19.1	38.2	0.44	38.2	26.9	---	---	---
Actual Volume Flow	m3/h	---	0.14	0.001	---	0.001	0.001	---	0.51	4.70	4.70	4.61	---	---	---	0.00	0.00	2.75	---	---	0.00	0.00	---	---	2.05	4.11	0.05	4.11	3.11	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	21.0	0.19	---	0.16	0.16	---	73.7	694.1	694.1	680.7	---	---	---	0.00	0.00	405.6	---	---	0.00	0.00	---	---	286.6	573.1	6.64	573.1	453.3	---	---	---
Mass Density	kg/m3	---	627.19	696.77	---	698.74	701.36	---	608.10	672.51	672.51	678.09	---	---	---	568.62	609.82	679.17	---	---	641.07	679.26	---	---	549.76	549.76	550.34	549.76	622.10	---	---	---
Viscosity (Note 4)	cP	---	0.228	0.393	---	0.401	0.410	---	0.199	0.321	0.321	0.338	---	---	---	0.153	0.202	0.340	---	---	0.313	0.342	---	---	0.140	0.140	0.140	0.140	0.218	---	---	---
Thermal Conductivity	W/m-K	---	0.100	0.106	---	0.106	0.107	---	0.096	0.105	0.105	0.107	---	---	---	0.090	0.097	0.106	---	---	0.106	0.107	---	---	0.088	0.088	0.088	0.088	0.098	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.254	2.180	---	2.175	2.170	---	2.316	2.150	2.150	2.136	---	---	---	2.451	2.305	2.141	---	---	2.148	2.130	---	---	2.515	2.515	2.513	2.515	2.279	---	---	---
Surface Tension	dyne/cm	---	13.85	16.01	---	16.10	16.40	---	12.27	15.86	15.86	16.46	---	---	---	9.76	12.42	16.04	---	---	15.91	16.56	---	---	8.80	8.80	8.83	8.80	13.02	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	5.30	18.3	---	18.0	18.0	---	28.5	2,225	2,225	2,224	---	---	---	---	---	1,997	---	---	---	---	---	---	87.4	174.8	0.40	174.8	174.2	---	---	---
Molar Flow	kgmole/h	---	0.29	1.01	---	1.00	1.00	---	1.58	123.5	123.5	123.5	---	---	---	---	---	110.9	---	---	---	---	---	---	4.85	9.70	0.02	9.70	9.67	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.22	2.22	2.22	---	---	---	---	---	1.99	---	---	---	---	---	---	0.09	0.18	0.0004	0.18	0.17	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	0.79	2.72	---	2.68	2.68	---	4.24	331.0	331.0	331.0	---	---	---	---	---	297.2	---	---	---	---	---	---	13.0	26.0	0.06	26.0	25.9	---	---	---
Mass Density	kg/m3	---	1,002.17	983.83	---	984.09	984.05	---	1,000.05	1,002.38	1002.3760	1,002.73	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.84	989.84	989.94	989.84	999.60	---	---	---
Viscosity	cP	---	0.764	0.495	---	0.497	0.497	---	0.718	0.766	0.766	0.776	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.545	0.544	0.710	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.649	---	0.649	0.649	---	0.625	0.621	0.621	0.620	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.626	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.325	---	4.325	4.325	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	66.71	---	66.77	66.77	---	70.36	70.90	70.90	71.02	---	---	---	---	---	70.71	---	---	---	---	---	---	67.74	67.74	67.76	67.74	70.26	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000148	0.000148	0.000381	0.000389	0.000000	0.000000	0.000389	0.000389	0.001505	0.000006	0.000006	0.001586	0.001586	0.001531	0.000103	0.000103	0.001531	0.001561	0.001561	0.000023	0.000023	0.001561	0.001561	0.001561	0.001561	0.001577	0.000127	0.000127	0.001586	0.001586	0.001586
CO2		0.000392	0.000392	0.000390	0.000399	0.000001	0.000001	0.000399	0.000399	0.000325	0.000010	0.000010	0.000341	0.000341	0.000326	0.000117	0.000117	0.000326	0.000336	0.000336	0.000039	0.000039	0.000336	0.000336	0.000336	0.000336	0.000339	0.000118	0.000118	0.000341	0.000341	0.000341
Methane		0.276538	0.276538	0.412490	0.421948	0.000054	0.000054	0.421948	0.421948	0.722894	0.008049	0.008049	0.760702	0.760702	0.732288	0.131718	0.131718	0.732288	0.749304	0.749304	0.034599	0.034599	0.749304	0.749304	0.749304	0.749304	0.756088	0.142289	0.142289	0.760702	0.760702	0.760702
Ethane		0.194485	0.194485	0.169348	0.173230	0.000095	0.000095	0.173230	0.173230	0.107801	0.006125	0.006125	0.112703	0.112703	0.107525	0.078893	0.078893	0.107525	0.111558	0.111558	0.026431	0.026431	0.111558	0.111558	0.111558	0.111558	0.112019	0.070235	0.070235	0.112703	0.112703	0.112703
Propane		0.202926	0.202926	0.148162	0.151554	0.000251	0.000251	0.151554	0.151554	0.061551	0.011741	0.011741	0.063412	0.063412	0.060251	0.124610	0.124610	0.060251	0.063392	0.063392	0.050816	0.050816	0.063392	0.063392	0.063392	0.063392	0.063027	0.095985	0.095985	0.063412	0.063412	0.063412
i-Butane		0.056431	0.056431	0.038948	0.039838	0.000149	0.000149	0.039838	0.039838	0.013885	0.006364	0.006364	0.013959	0.013959	0.013338	0.057436	0.057436	0.013338	0.014163	0.014163	0.027610	0.027610	0.014163	0.014163	0.014163	0.014163	0.013874	0.039963	0.039963	0.013959	0.013959	0.013959
n-Butane		0.112270	0.112270	0.076711	0.078461	0.000392	0.000392	0.078461	0.078461	0.026471	0.016730	0.016730	0.026219	0.026219	0.025192	0.143031	0.143031	0.025192	0.026831	0.026831	0.072631	0.072631	0.026831	0.026831	0.026831	0.026831	0.026060	0.095820	0.095820	0.026219	0.026219	0.026219
22-Mpropane		0.000084	0.000084	0.000057	0.000058	0.000000	0.000000	0.000058	0.000058	0.000019	0.000016	0.000016	0.000000	0.000000	0.000018	0.000000	0.000000	0.000018	0.000019	0.000019	0.000071	0.000071	0.000019	0.000019	0.000019	0.000019	0.000019	0.000084	0.000084	0.000000	0.000000	0.000000
i-Pentane		0.037201	0.037201	0.025155	0.025725	0.000290	0.000290	0.025725	0.025725	0.008417	0.012416	0.012416	0.007808	0.007808	0.007750	0.088965	0.088965	0.007750	0.008270	0.008270	0.054025	0.054025	0.008270	0.008270	0.008270	0.008270	0.007761	0.053785	0.053785	0.007808	0.007808	0.007808
n-Pentane		0.039243	0.039243	0.026588	0.027189	0.000387	0.000387	0.027189	0.027189	0.008890	0.016936	0.016936	0.007989	0.007989	0.008075	0.114442	0.114442	0.008075	0.008593	0.008593	0.073746	0.073746	0.008593	0.008593	0.008593	0.008593	0.007941	0.066913	0.066913	0.007989	0.007989	0.007989
n-Hexane		0.022390	0.022390	0.015771	0.016118	0.000634	0.000634	0.016118	0.016118	0.005683	0.028932	0.028932	0.004058	0.004058	0.004818	0.147086	0.147086	0.004818	0.004824	0.004824	0.126350	0.126350	0.004824	0.004824	0.004824	0.004824	0.004033	0.075559	0.075559	0.004058	0.004058	0.004058
Mcyclopentan		0.001479	0.001479	0.001042	0.001065	0.000044	0.000044	0.001065	0.001065	0.000376	0.001982	0.001982	0.000000	0.000000	0.000316	0.000000	0.000000	0.000316	0.000317	0.000317	0.008650	0.008650	0.000317	0.000317	0.000317	0.000317	0.000262	0.005267	0.005267	0.000000	0.000000	0.000000
Benzene		0.000125	0.000125	0.000088	0.000090	0.000004	0.000004	0.000090	0.000090	0.000031	0.000166	0.000166	0.000000	0.000000	0.000026	0.000000	0.000000	0.000026	0.000027	0.000027	0.000725	0.000725	0.000027	0.000027	0.000027	0.000027	0.000022	0.000445	0.000445	0.000000	0.000000	0.000000
Cyclohexane		0.001092	0.001092	0.000781	0.000798	0.000040	0.000040	0.000798	0.000798	0.000289	0.001796	0.001796	0.000000	0.000000	0.000239	0.000000	0.000000	0.000239	0.000233	0.000233	0.007840	0.007840	0.000233	0.000233	0.000233	0.000233	0.000187	0.004406	0.004406	0.000000	0.000000	0.000000
n-Heptane		0.003117	0.003117	0.002478	0.002529	0.000265	0.000265	0.002529	0.002529	0.001047	0.011531	0.011531	0.000000	0.000000	0.000842	0.000000	0.000000	0.000842	0.000660	0.000660	0.050505	0.050505	0.000660	0.000660	0.000660	0.000660	0.000461	0.018493	0.018493	0.000000	0.000000	0.000000
Mcyclohexane		0.001701	0.001701	0.001328	0.001356	0.000133	0.000133	0.001356	0.001356	0.000556	0.005774	0.005774	0.000000	0.000000	0.000444	0.000000	0.000000	0.000444	0.000363	0.000363	0.025256	0.025256	0.000363	0.000363	0.000363	0.000363	0.000255	0.010050	0.010050	0.000000	0.000000	0.000000
Toluene		0.000139	0.000139	0.000113	0.000115	0.000014	0.000014	0.000115	0.000115	0.000048	0.000577	0.000577	0.000000	0.000000	0.000038	0.000000	0.000000	0.000038	0.000029	0.000029	0.002523	0.002523	0.000029	0.000029	0.000029	0.000029	0.000019	0.000901	0.000901	0.000000	0.000000	0.000000
n-Octane		0.001348	0.001348	0.001433	0.001456	0.000403	0.000403	0.001456	0.001456	0.000731	0.013360	0.013360	0.000000	0.000000	0.000605	0.000000	0.000000	0.000605	0.000264	0.000264	0.058686	0.058686	0.000264	0.000264	0.000264	0.000264	0.000137	0.011672	0.011672	0.000000	0.000000	0.000000
E-Benzene		0.000011	0.000011	0.000012	0.000013	0.000004	0.000004	0.000013	0.000013	0.000006	0.000123	0.000123	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000538	0.000538	0.000002	0.000002	0.000002	0.000002	0.000001	0.000103	0.000103	0.000000	0.000000	0.000000
m-Xylene		0.000022	0.000022	0.000027	0.000027	0.000010	0.000010	0.000027	0.000027	0.000014	0.000280	0.000280	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001230	0.001230	0.000004	0.000004	0.000004	0.000004	0.000002	0.000209	0.000209	0.000000	0.000000	0.000000
p-Xylene		0.000023	0.000023	0.000027	0.000027	0.000010	0.000010	0.000027	0.000027	0.000014	0.000279	0.000279	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001226	0.001226	0.000004	0.000004	0.000004	0.000004	0.000002	0.000209	0.000209	0.000000	0.000000	0.000000
o-Xylene		0.000016	0.000016	0.000020	0.000020	0.000008	0.000008	0.000020	0.000020	0.000010	0.000213	0.000213	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000003	0.000003	0.000935	0.000935	0.000003	0.000003	0.000003	0.000003	0.000001	0.000152	0.000152	0.000000	0.000000	0.000000
n-Nonane		0.000223	0.000223	0.000399	0.000402	0.000283	0.000283	0.000402	0.000402	0.000235	0.005525	0.005525	0.000000	0.000000	0.000210	0.000000	0.000000	0.000210	0.000040	0.000040	0.024338	0.024338	0.000040	0.000040	0.000040	0.000040	0.000014	0.002368	0.002368	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000013	0.000015	0.000015	0.000013	0.000013	0.000008	0.000205	0.000205	0.000000	0.000000	0.000008	0.000000	0.000000	0.000008	0.000001	0.000001	0.000904	0.000904	0.000001	0.000001	0.000001	0.000001	0.000000	0.000059	0.000059	0.000000	0.000000	0.000000
n-Decane		0.000036	0.000036	0.000133	0.000131	0.000228	0.000228	0.000131	0.000131	0.000085	0.002225	0.002225	0.000000	0.000000	0.000081	0.000000	0.000000	0.000081	0.000006	0.000006	0.009827	0.009827	0.000006	0.000006	0.000006	0.000006	0.000001	0.000428	0.000428	0.000000	0.000000	0.000000
C7*		0.007071	0.007071	0.005424	0.005537	0.000472	0.000472	0.005537	0.005537	0.002202	0.021091	0.021091	0.001104	0.001104	0.001780	0.081498	0.081498	0.001780	0.001504	0.001504	0.092307	0.092307	0.001504	0.001504	0.001504	0.001504	0.001098	0.037881	0.037881	0.001104	0.001104	0.001104
C8*		0.001181	0.001181	0.001408	0.001429	0.000526	0.000526	0.001429	0.001429	0.000764	0.015103	0.015103	0.000113	0.000113	0.000644	0.028683	0.028683	0.000644	0.000234	0.000234	0.066422	0.066422	0.000234	0.000234	0.000234	0.000234	0.000112	0.011131	0.011131	0.000113	0.000113	0.000113
C9*		0.000098	0.000098	0.000248	0.000247	0.000289	0.000289	0.000247	0.000247	0.000156	0.003898	0.003898	0.000005	0.000005	0.000144	0.003408	0.003408	0.000144	0.000017	0.000017	0.017204	0.017204	0.000017	0.000017	0.000017	0.000017	0.000012	0.001144	0.001144	0.000005	0.000005	0.000005
C10-C13*		0.000000	0.000000	0.000003	0.000003	0.000031	0.000031	0.000003	0.000003	0.000002	0.000065	0.000065	0.000000	0.000000	0.000002	0.000009	0.000009	0.000002	0.000000	0.000000	0.000291	0.000291	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 3A MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1807	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9653	1.0000	1.0000	1.0000	0.8615	1.0000
Temperature	C	50.46	44.18	50.46	146.64	45.00	45.00	45.00	44.86	59.00	12.81	71.17	50.46	41.17	35.00	50.46
Pressure	bar_g	45.69	30.00	45.69	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.69	30.00	8.70	45.69
Mass Flow	kg/h	0.00	0.00	41,314	41,314	41,314	66,917	15,710	66,917	15,710	15,710	11,109	11,109	11,109	1,485	1,673
Molar Flow	kgmole/h	0.00	0.00	1,845	1,845	1,845	2,988	701.6	2,988	701.6	701.6	496.1	496.1	496.1	43.8	74.7
Mass Enthalpy	kJ/kg	-2,581	-2,581	-3,659	-3,479	-3,791	-3,791	-3,791	-3,791	-3,743	-3,743	-3,589	-3,659	-3,659	-3,134	-3,659
Heat Flow	kW	0	0	-41,991	-39,923	-43,507	-70,470	-16,545	-70,470	-16,335	-16,335	-11,074	-11,291	-11,291	-1,293	-1,700
Mass Density	kg/m3	513.63	238.51	45.61	97.55	170.09	170.09	170.09	169.63	151.88	30.43	25.93	45.61	29.89	15.94	45.61
Molecular Weight		52.58	52.58	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	33.86	22.39
VAPOR																
Mass Flow	kg/h	---	0.00	41,314	41,314	41,314	66,917	15,710	66,917	15,710	14,393	11,109	11,109	11,109	1,149	1,673
Molar Flow	kgmole/h	---	0.00	1,845	1,845	1,845	2,988	701.6	2,988	701.6	677.2	496.1	496.1	496.1	37.8	74.7
Actual Volume Flow	m3/h	---	0.00	905.8	423.5	242.9	393.4	92.4	394.5	103.4	513.9	428.5	243.6	371.7	92.6	36.68
Std Gas Flow	MMSCFD	---	0.00	37.05	37.05	37.05	60.00	14.09	60.00	14.09	13.60	9.96	9.96	9.96	0.76	1.50
Mass Density	kg/m3	---	33.45	45.61	97.55	170.09	170.09	170.09	169.63	151.88	28.01	25.93	45.61	29.89	12.41	45.61
Molecular Weight		---	24.66	22.39	22.39	22.39	22.39	22.39	22.39	22.39	21.25	22.39	22.39	22.39	30.42	22.39
Viscosity	cP	---	0.012	0.013	0.019	0.020	0.020	0.020	0.020	0.019	0.011	0.013	0.013	0.012	0.011	0.013
Thermal Conductivity	W/m-K	---	0.033	0.037	0.057	0.055	0.055	0.055	0.055	0.053	0.031	0.038	0.037	0.034	0.026	0.037
Mass Heat Capacity	kJ/kg-C	---	2.296	2.473	2.912	3.511	3.511	3.511	3.512	3.302	2.270	2.341	2.473	2.306	1.974	2.473
Cp/Cv		---	1.351	1.415	1.373	1.931	1.931	1.931	1.933	1.784	1.399	1.299	1.415	1.353	1.223	1.415
Z-Factor		---	0.866	0.852	0.894	0.676	0.676	0.676	0.676	0.722	0.878	0.921	0.852	0.889	0.929	0.852
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,318	---	---	---	307.1	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	24.4	---	---	---	4.49	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	2.33	---	---	---	0.51	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	353.5	---	---	---	73.7	---
Mass Density	kg/m3	513.63	551.65	---	---	---	---	---	---	---	566.23	---	---	---	698.10	---
Viscosity (Note 4)	cP	0.109	0.139	---	---	---	---	---	---	---	0.161	---	---	---	0.199	---
Thermal Conductivity	W/m-K	0.083	0.088	---	---	---	---	---	---	---	0.096	---	---	---	0.096	---
Mass Heat Capacity	kJ/kg-C	2.714	2.522	---	---	---	---	---	---	---	2.378	---	---	---	2.316	---
Surface Tension	dyne/cm	7.08	8.91	---	---	---	---	---	---	---	10.75	---	---	---	12.27	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	28.5	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.58	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.24	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000195	0.000195	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.001586	0.000389	0.001586
CO2		0.000169	0.000169	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000341	0.000399	0.000341
Methane		0.213560	0.213560	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.760702	0.421948	0.760702
Ethane		0.102986	0.102986	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.112703	0.173230	0.112703
Propane		0.139267	0.139267	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.063412	0.151554	0.063412
I-Butane		0.057705	0.057705	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.013959	0.039838	0.013959
n-Butane		0.137142	0.137142	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.026219	0.078461	0.026219
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000058	0.000000
I-Pentane		0.076861	0.076861	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.007808	0.025725	0.007808
n-Pentane		0.094997	0.094997	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.007989	0.027189	0.007989
n-Hexane		0.106438	0.106438	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.004058	0.016118	0.004058
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001065	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000090	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000798	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002529	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001356	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000115	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001456	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000020	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000402	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000131	0.000000
C7*		0.052974	0.052974	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.001104	0.005537	0.001104
C8*		0.016053	0.016053	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.000113	0.001429	0.000113
C9*		0.001651	0.001651	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000247	0.000005
C10-C13*		0.000003	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.041222	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000123	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000037	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000010	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000089	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000037	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004205	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002194	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001490	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000390	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58	883.21

CASE 3B MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Fiod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		0.0001	0.2075	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0009	0.0136	1.0000	0.0139	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0198	0.0000	0.0000	0.0000	1.0000	0.9293	0.9293	0.8747	1.0000	0.0000	0.0000
Temperature	C	72.00	69.22	68.00	68.00	72.00	69.92	71.86	71.86	71.86	71.45	71.86	69.77	69.78	69.78	69.78	69.85	69.85	69.85	69.92	69.69	69.88	69.69	55.00	69.69	35.00	35.00	35.52	35.52	35.52	35.65
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	410,043	504,208	113,791	410,043	410,043	24,958	247,334	187,634	187,634	187,634	32.7	193,643	935	178,567	24,958	178,567	167,750	10,817	10,817	167,750	167,750	167,130	167,130	620.6	620.6	620.6	639.3	576.4	62.9	62.9
Molar Flow	kgmole/h	14,365	18,202	4,972	14,365	14,365	1,385	13,729	2,019	2,019	2,019	1.40	2,200	30.6	1,385	1,385	1,385	784.4	600.4	600.4	784.4	784.4	768.9	768.9	15.6	15.6	15.6	16.6	14.5	2.08	2.08
Mass Enthalpy	kJ/kg	-10,208	-8,990	-3,741	-10,222	-10,208	-15,692	-15,684	-3,719	-3,719	-3,719	-3,714	-3,852	-3,329	-2,917	-15,694	-2,916	-2,092	-15,693	-15,693	-2,092	-2,092	-2,090	-2,121	-2,811	-2,948	-2,948	-3,306	-2,685	-8,991	-8,990
Heat Flow	kW	-1,162,672	-1,259,074	-118,242	-1,164,254	-1,162,672	-108,791	-1,077,584	-193,846	-193,846	-193,846	-34	-207,201	-864	-144,688	-108,803	-144,653	-97,500	-47,153	-47,153	-97,500	-97,500	-97,015	-98,467	-485	-508	-508	-587	-430	-157	-157
Mass Density	kg/m3	882.93	44.63	7.98	893.93	882.93	973.12	971.32	811.55	792.29	444.54	8.00	430.97	4.40	802.94	972.77	803.24	794.31	972.88	972.68	398.23	794.25	795.27	805.57	2.94	3.31	3.31	3.40	3.07	811.95	812.39
Molecular Weight		28.55	27.70	22.89	28.55	28.55	18.02	18.02	92.92	92.92	92.92	23.43	88.00	30.59	128.94	18.02	128.94	213.85	18.02	18.02	213.85	213.85	217.37	217.37	39.87	39.87	39.87	38.58	39.77	30.30	30.30
VAPOR																															
Mass Flow	kg/h	33.7	91,423	113,791	---	33.7	---	---	---	43.8	824.9	32.7	934.3	934.7	---	---	---	---	---	---	620.6	---	---	---	620.6	575.0	575.0	576.4	576.4	---	---
Molar Flow	kgmole/h	1.44	3,776	4,972	---	1.44	---	---	---	1.85	27.5	1.40	30.5	30.6	---	---	---	---	---	---	15.6	---	---	---	15.6	14.5	14.5	14.5	14.5	---	---
Actual Volume Flow	m3/h	4.21	10,833	14,259	---	4.21	---	---	---	5.71	192.5	4.10	212.4	212.5	---	---	---	---	---	---	211.1	---	---	---	211.1	187.3	187.3	187.9	187.9	---	---
Std Gas Flow	MMSCFD	0.03	75.82	99.83	---	0.03	---	---	---	0.04	0.55	0.03	0.61	0.61	---	---	---	---	---	---	0.31	---	---	---	0.31	0.29	0.29	0.29	0.29	---	---
Mass Density	kg/m3	8.00	8.44	7.98	---	8.00	---	---	---	7.67	4.29	8.00	4.40	4.40	---	---	---	---	---	---	2.94	---	---	---	2.94	3.07	3.07	3.07	3.07	---	---
Molecular Weight		23.45	24.21	22.89	---	23.45	---	---	---	23.75	29.98	23.43	30.59	30.59	---	---	---	---	---	---	39.87	---	---	---	39.87	39.75	39.75	39.77	39.77	---	---
Viscosity	cP	0.013	0.012	0.012	---	0.013	---	---	---	0.013	0.012	0.013	0.012	0.012	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.035	0.034	0.035	---	0.035	---	---	---	0.035	0.030	0.035	0.030	0.030	---	---	---	---	---	---	0.025	---	---	---	0.025	0.022	0.022	0.022	0.022	---	---
Mass Heat Capacity	kJ/kg-C	2.177	2.156	2.177	---	2.177	---	---	---	2.168	2.039	2.177	2.029	2.029	---	---	---	---	---	---	1.944	---	---	---	1.944	1.811	1.811	1.813	1.813	---	---
Cp/Cv		1.227	1.224	1.233	---	1.227	---	---	---	1.223	1.173	1.227	1.171	1.171	---	---	---	---	---	---	1.130	---	---	---	1.130	1.144	1.144	1.143	1.143	---	---
Z Factor		0.972	0.969	0.972	---	0.972	---	---	---	0.973	0.980	0.972	0.979	0.979	---	---	---	---	---	---	0.982	---	---	---	0.982	0.977	0.977	0.977	0.977	---	---
LIQUID																															
Mass Flow	kg/h	165,176	167,404	---	165,203	165,176	---	---	165,177	165,134	164,391	---	167,751	---	167,750	---	167,750	167,750	---	---	167,130	167,750	167,130	167,130	---	31.9	31.9	31.6	---	31.6	31.6
Molar Flow	kgmole/h	772.7	804.6	---	773.8	772.7	---	---	772.7	770.9	747.4	---	784.5	---	784.4	---	784.4	784.4	---	---	768.9	784.4	768.9	768.9	---	0.34	0.34	0.34	---	0.34	0.34
Actual Volume Flow	m3/h	208.1	211.2	---	207.4	208.1	---	---	208.1	208.0	206.5	---	211.3	---	211.3	---	211.2	211.2	---	---	210.2	211.2	210.2	207.5	---	0.05	0.05	0.05	---	0.05	0.05
Liq Vol Flow @Std Cond	barrel/day	29,931	30,432	---	29,939	29,931	---	---	29,932	29,920	29,734	---	30,447	---	30,447	---	30,447	30,447	---	---	30,298	30,447	30,298	30,298	---	6.87	6.87	6.79	---	6.79	6.79
Mass Density	kg/m3	793.71	792.61	---	796.44	793.71	---	---	793.80	793.94	796.09	---	794.01	---	794.01	---	794.31	794.31	---	---	795.27	794.25	795.27	805.57	---	683.69	683.69	684.71	---	684.71	685.28
Viscosity (Note 4)	cP	2.005	1.972	---	2.135	2.005	---	---	2.009	2.016	2.125	---	2.037	---	2.037	---	2.036	2.036	---	---	2.098	2.035	2.098	2.710	---	0.352	0.352	0.355	---	0.355	0.355
Thermal Conductivity	W/m-K	0.111	0.110	---	0.112	0.111	---	---	0.111	0.111	0.113	---	0.112	---	0.112	---	0.112	0.112	---	---	0.113	0.112	0.113	0.115	---	0.108	0.108	0.108	---	0.108	0.108
Mass Heat Capacity	kJ/kg-C	2.170	2.161	---	2.153	2.170	---	---	2.169	2.169	2.165	---	2.160	---	2.160	---	2.160	2.160	---	---	2.158	2.160	2.158	2.098	---	2.137	2.137	2.137	---	2.137	2.135
Surface Tension	dyne/cm	16.91	16.76	---	17.12	16.91	---	---	16.91	16.95	17.45	---	17.35	---	17.35	---	17.34	17.34	---	---	17.55	17.34	17.55	18.54	---	16.87	16.87	16.88	---	16.88	16.86
AQUEOUS (Note 3)																															
Mass Flow	kg/h	244,833	245,381	---	244,840	244,833	24,958	247,334	22,457	22,456	22,418	---	24,958	---	10,817	24,958	10,817	---	10,817	10,817	---	---	---	---	---	13.6	13.6	31.3	---	31.3	31.3
Molar Flow	kgmole/h	13,590	13,621	---	13,591	13,590	1,385	13,729	1,247	1,247	1,244	---	1,385	---	600.4	1,385	600.4	---	600.4	600.4	---	---	---	---	---	0.76	0.76	1.74	---	1.74	1.74
Actual Volume Flow	m3/h	252.1	252.1	---	251.3	252.1	25.6	254.6	23.1	23.1	23.1	---	25.7	---	11.1	25.7	11.1	---	11.1	11.1	---	---	---	---	---	0.01	0.01	0.03	---	0.03	0.03
Liq Vol Flow @Std Cond	barrel/day	36,434	36,516	---	36,435	36,434	3,714	36,806	3,342	3,342	3,336	---	3,714	---	1,610	3,714	1,610	---	1,610	1,610	---	---	---	---	---	2.03	2.03	4.66	---	4.66	4.66
Mass Density	kg/m3	971.21	973.43	---	974.40	971.21	973.12	971.32	971.32	971.30	971.44	---	972.78	---	972.77	972.77	972.88	---	972.88	972.68	---	---	---	---	---	999.80	999.80	999.41	---	999.41	999.50
Viscosity	cP	0.390	0.405	---	0.412	0.390	0.401	0.390	0.390	0.390	0.393	---	0.402	---	0.402	0.402	0.401	---	0.401	0.401	---	---	---	---	---	0.718	0.718	0.711	---	0.711	0.709
Thermal Conductivity	W/m-K	0.664	0.662	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---	---	---	0.625	0.625	0.626	---	0.626	0.626
Mass Heat Capacity	kJ/kg-C	4.343	4.339	---	4.338	4.343	4.339	4.343	4.343	4.343	4.343	---	4.341	---	4.341	4.341	4.340	---	4.340	4.341	---	---	---	---	---	4.314	4.314	4.314	---	4.314	4.314
Surface Tension	dyne/cm	63.80	64.30	---	64.52	63.80	64.18	63.82	63.82	63.82	63.90	---	64.20	---	64.20	64.20	64.19	---	64.19	64.17	---	---	---	---	---	70.36	70.36	70.27	---	70.27	70.25
COMPOSITION MOLE FRACTION																															
Nitrogen		0.000001	0.000428	0.001563	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.001419	0.000008	0.000500	0.000002	0.000000	0.000002	0.000003	0.000000	0.000000	0.000003	0.000003	0.000000	0.000000	0.000140	0.000140	0.000140	0.000131	0.000150	0.000000	0.000000
CO2		0.000002	0.000092	0.000332	0.000002	0.000002	0.000000	0.000000	0.000011	0.000011	0.000011	0.000338	0.000011	0.000396	0.000008	0.000000	0.000008	0.000014	0.000014	0.000000	0.000000	0.000014	0.000014	0.000007	0.000007	0.000370	0.000370	0.000370	0.000347	0.000397	0.000002	0.000002
Methane		0.001364	0.144039	0.731326	0.001364	0.001364	0.000000	0.000000	0.009210	0.009210	0.009210	0.711380	0.009087	0.475400	0.003949	0.000000	0.003949	0.006971	0.000000	0.000000	0.006971	0.006971	0.001937	0.001937	0.255578	0.255578	0.255578	0.240125	0.274469	0.000432	0.000432
Ethane		0.000751	0.024602	0.108208	0.000751	0.000751	0.000000	0.000000	0.005265	0.005265	0.005265	0.111896	0.005318	0.158488	0.004953	0.000000	0.004953	0.008744	0.008744	0.000000	0.000000	0.008744	0.008744	0.005237	0.005237	0.181966	0.181966	0.181966	0.170967	0.195236	0.001590	0.001590
Propane		0.001152	0.017530	0.060845	0.001152	0.001152	0.000000	0.000000	0.008151	0.008151	0.008151	0.064646	0.008418	0.123636	0.010647	0.000000	0.010647	0.018796	0.000000	0.000000	0.018796	0.018796	0.015300	0.015300	0.191477	0.191477	0.191477	0.179913	0.204874	0.005704	0.005704
i-Butane		0.000539	0.004073	0.013351	0.000539	0.000539	0.000000	0.000000	0.003827	0.003827	0.003827	0.014416	0.004016	0.030769	0.005702	0.000000	0.005702	0.010067	0.000000	0.000000	0.010067	0.010067	0.009195	0.009195	0.053137	0.053137	0.053137	0.049933	0.056533	0.003872	0.003872
n-Butane		0.001314	0.007913	0.025171	0.001314	0.001314	0.000000	0.000000	0.009331	0.009331	0.009331	0.027327	0.009887	0.059991	0.014385	0.000000	0.014385	0.025395	0.000000	0.000000	0.025395	0.025395	0.023764	0.023764	0.105995	0.105995	0.105995	0.099608	0.112350	0.010679	0.010679
22-Micropane		0.000001	0.000006	0.000017	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.000018	0.000009	0.000041	0.000013	0.000000	0.000013	0.000023	0.000000	0.000000	0.000023	0.000023	0.000022	0.000022	0.000073	0.000073	0.000073	0.000069	0.000077	0.000010	0.000010
i-Pentane		0.000860	0.002782	0.007700	0.000860	0.000860	0.000000	0.000000	0.006115	0.006115	0.006115	0.008475	0.006589	0.019390	0.010041	0.000000	0.010041	0.017727	0.000000	0.000000	0.017727	0.017727	0.017364	0.017364	0.035635	0.035635	0.035635	0.033497	0.037063	0.008611	0.008611
n-Pentane		0.001107	0.003063	0.008014	0.001107	0.001107	0.000000	0.000000	0.007867	0.007867	0.007867	0.008869	0.008551	0.020519	0.013134	0.000000	0.013134	0.023188	0.000000	0.000000	0.023188	0.023188	0.022889	0.022889	0.037955	0.037955	0.037955	0.035683	0.039088	0.011918	0.011918
n-Hexane		0.001706	0.002651	0.004774	0.001706	0.001706	0.000000	0.000000	0.012135	0.012135	0.012135	0.005379	0.013418	0.012581	0.021041	0.000000	0.021041	0.037147	0.000000	0.000000	0.037147	0.037147	0.037422	0.037422	0.023571	0.023571	0.023571	0.022184	0.022346	0.021056	0.021056
Mcyclopentan		0.000110	0.000169	0.000300	0.000110	0.000110	0.000000	0.000000	0.000781	0.000781	0.000781	0.000337	0.000866	0.000797	0.001359	0.000000	0.001359	0.002399	0.000000	0.000000	0.002399	0.002399	0.002418	0.002418	0.001498	0.001498	0.001498	0.001410	0.001414	0.001377	0.001377
Benzene		0.000009	0.000014	0.000025	0.000009	0.000009	0.000000	0.000000	0.000064	0.000064	0.000064	0.000028	0.000071	0.000067	0.000112	0.000000	0.000112	0.000197	0.000000	0.000000	0.000197	0.000197	0.000198	0.000198	0.000127	0.000127	0.000127	0.000119	0.000120	0.000116	0.000116
Cyclohexane		0.000100	0.000141	0.000228	0.000100	0.000100	0.000000	0.000000	0.000713	0.000713	0.000713	0.000257	0.000790	0.000608	0.001243	0.000000	0.001243	0.002194	0.000000	0.000000	0.002194	0.002194	0.002215	0.002215	0.001144	0.001144	0.001144	0.001077	0.001051	0.001262	0.001262
n-Heptane		0.000737	0.000805	0.000820	0.000737	0.000737	0.000000	0.000000	0.005242	0.005242	0.005242	0.000940	0.005714	0.012127	0.009031	0.000000	0.009031	0.015944	0.000000	0.000000	0.015944	0.016186	0.016186	0.003985	0.003985	0.003985	0.003760	0.003071	0.008569	0.008569	0.008569
Mcyclohexane		0.000364	0.000405	0.000432	0.000364	0.000364	0.000000	0.000000	0.002591	0.002591	0.002591	0.000491	0.002828	0.001124	0.004469	0.000000	0.004469	0.007890	0.000000	0.000000	0.007890	0.007890	0.008007	0.008007	0.002113	0.002113	0.002113	0.001993	0.001673	0.004226	0.004226
Toluene		0.000036	0.000039	0.000037	0.000036	0.000036	0.000000	0.000000	0.000260	0.000260	0.000260	0.000043	0.000284	0.000098	0.000448	0.000000	0.000448	0.000791	0.000000	0.000000	0.000791	0.000791	0.000804	0.000804	0.000185	0.000185	0.000185	0.000175	0.000138	0.000434	0.000434
n-Octane		0.001352	0.001231	0.000599	0.001352	0.001352	0.000000	0.000000	0.009618	0.009618	0.009618	0.000699	0.009908	0.001460	0.015710	0.000000	0.015710	0.027735	0.000000	0.000000	0.027735	0.027735	0.028241	0.028241	0.002723	0.002723	0.002723	0.002582	0.001357	0.011132	0.011132
E-Benzene		0.000013	0.000011	0.000005	0.000013	0.000013	0.000000	0.000000	0.000089	0.000089	0.000089	0.000006	0.000092	0.000013	0.000146	0.000000	0.000146	0.000257	0.000000	0.000000	0.000257	0.000257	0.000262	0.000262	0.000024	0.000024	0.000024	0.000023	0.000011	0.000104	0.000104
m-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000226	0.000226	0.000226	0.000014	0.000230	0.000028	0.000365	0.000000	0.000365	0.000644	0.000000	0.000000	0.000644	0.000644	0.000656	0.000656	0.000053	0.000053	0.000053	0.000051	0.000023	0.000245	0.000245
p-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000226	0.000226	0.000226	0.000014	0.000230	0.000028	0.000365	0.000000	0.000365	0.000644	0.000000	0.000000	0.000644	0.000644	0.000656	0.000656	0.000053	0.000053	0.000053	0.000051	0.000023	0.000244	0.000244
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000180	0.000180	0.000180	0.000010	0.000183	0.000021	0.000290	0.000000	0.000290	0.000512	0.000000	0.000000	0.000512	0.000512	0.000522	0.000522	0.000040	0.000040	0.000040	0.000038	0.000016	0.000188	0.000188
n-Nonane		0.001155	0.000969	0.000210	0.001155	0.001155	0.000000	0.000000	0.008216	0.008216	0.008216	0.000249	0.007996	0.000480	0.012694	0.000000	0.012694	0.022410	0.000000	0.000000	0.022410	0.022410	0.022846	0.022846	0.008669	0.008669	0.008669	0.008173	0.007084	0.015770	0.015770
124-MBenzene		0.000061	0.000050	0.000008	0.000061	0.000061	0.000000	0.000000	0.000431	0.000431	0.000431	0.000009	0.000413	0.000017	0.000655	0.000000	0.000655	0.001157	0.000000	0.000000	0.001157	0.001157	0.001179	0.001179	0.000032	0.000032	0.000032	0.000031	0.000005	0.000208	0.000208
n-Decane		0.001069	0.000866	0.000081	0.001069	0.001069	0.000000	0.000000	0.007603	0.007603	0.007603	0.000098	0.007162	0.000178	0.011376	0.000000	0.011376	0.020083	0.000000	0.000000	0.020083	0.020083	0.020483	0.020483	0.000327	0.000327	0.000327	0.000321	0.000037	0.002305	0.002305
C7*		0.001299	0.001506	0.001763	0.001299	0.001299	0.000000	0.000000	0.009236	0.009236	0.009236	0.002014	0.010152	0.004622	0.016028	0.000000	0.016028	0.028297	0.000000	0.000000	0.028297	0.028297	0.028694	0.028694	0.008669	0.008669	0.008669	0.008673	0.007084	0.015770	0.015770
C8*		0.002018	0.001768	0.000642	0.002018	0.002018	0.000000	0.000000	0.014355	0.014355	0.014355	0.000751	0.014408	0.001508	0.022860	0.000000	0.022860	0.040357	0.000000	0.000000	0.040357	0.040357	0.041118	0.041118	0.002799	0.002799	0.002799	0.002661	0.001197	0.012879	0.012879
C9*		0.001387	0.001134	0.000144	0.001387	0.001387	0.000000	0.000000	0.009869	0.009869	0.009869	0.000172	0.009389	0.000317	0.014897	0.000000	0.014897	0.026299	0.000000	0.000000	0.026299	0.026299	0.026820	0.026820	0.000584	0.000584	0.000584	0.000566	0.000100	0.003818	0.003818
C10-C13*		0.000206	0.000163	0.000002	0.000206	0.000206	0.000000	0.000000	0.001465	0.001465	0.001465	0.000003	0.001350	0.000005	0.002145	0.000000	0.002145	0.003787	0.000000	0.000000	0.003787	0.003787	0.003864	0.003864	0.000009	0.000009	0.000009	0.000010	0.000000	0.000081	0.000081
C14-C18*		0.000144	0.000114	0.000000	0.000144	0.000144	0.000000	0.000000	0.001027	0.001027	0.001027	0.000000	0.000942	0.000000	0.001497	0.000000	0.001497	0.002643	0.000000	0.000000	0.002643	0.002643	0.002696	0.002696	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001
C19-C21*		0.000102	0.000080	0.000000	0.000102	0.000102	0.000000	0.000000	0.000724	0.000724	0.000724	0.000000	0.000664	0.000000	0.001055	0.000000	0.001055	0.001863	0.000000	0.000000	0.001863	0.001863	0.001900	0.001900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000100	0.000079	0.000000	0.000100	0.000100	0.000000	0.000000	0.000711	0.000711	0.000711	0.000000	0.000653	0.000000	0.001037	0.000000	0.001037	0.001831	0.000000	0.000000	0.001831	0.001831	0.001868	0.001868	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000075	0.000059	0.000000	0.000075	0.000075	0.000000	0.000000	0.000533	0.000533	0.000533	0.000000	0.000489	0.000000	0.000777	0.000000	0.000777	0.001372	0.000000	0.000000	0.001372	0.001372	0.001400	0.001400	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000072	0.000056	0.000000	0.000072	0.000072	0.000000	0.000000	0.000509	0.000509	0.000509	0.000000	0.000467	0.000000	0.000743	0.000000	0.000743	0.001311	0.000000	0.000000	0.001311	0.001311	0.001337	0.001337	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000067	0.000053	0.000000	0.000067	0.000067	0.000000	0.000000	0.000476	0.000476	0.000476	0.000000	0.000437	0.000000	0.000694	0.000000	0.000694	0.001226	0.000000	0.000000	0.001226	0.001226	0.001250	0.001250	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000046	0.000036	0.000000	0.000046	0.000046	0.000000	0.000000	0.000328	0.000328	0.000328	0.000000	0.000301	0.000000	0.000478	0.000000	0.000478	0.000843	0.000000	0.000000	0.000843	0.000843	0.000860	0.000860	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000038	0.000030	0.000000	0.000038	0.000038	0.000000	0.000000	0.000273	0.000273	0.000273	0.000000	0.000251	0.000000	0.000399	0.000000	0.000399	0.000704	0.000000	0.000000	0.000704	0.000704	0.000718	0.000718	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.001083	0.000855	0.000001	0.001083	0.001083	0.000000	0.000000	0.007705	0.007705	0.007705	0.000002	0.007073	0.000002	0.011238	0.000000	0.011238	0.019841	0.000000	0.000000	0.019841	0.019841	0.020242	0.020242	0.000004	0.000004	0.000004	0.000007	0.000000	0.000058	0.000058
C14-C16*		0.000512	0.000404	0.000000	0.000512	0.000512	0.000000	0.000000	0.003641	0.003641	0.003641	0.000000	0.003341	0.000000	0.005309	0.000000	0.005309	0.009373	0.000000	0.000000	0.009373	0.009373	0.009563	0.009563	0.000053	0.000053	0.000053	0.000051	0.000023	0.000245	0.000245
C17-C20*		0.000598	0.000472	0.000000	0.000598	0.000598	0.000000	0.000000	0.004254

CASE 3B MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP Fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8951	0.9774	1.0000	0.0000	0.0002	1.0000	0.8626	0.9647	0.0000	0.0087	1.0000	1.0000	1.0000	0.0194	0.1973	0.9702	1.0000	1.0000	0.0000	0.0366	1.0000	1.0000	0.9892	0.9892	0.9999	0.0000	0.2359	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	55.66	55.32	55.32	55.31	109.10	35.00	31.95	31.95	31.30	41.15	41.15	67.95	40.52	30.37	33.00	31.95	31.95	31.74	30.20	31.74	169.24	50.00	50.00	49.86	50.00	35.61	50.45	50.45	50.45
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.20	47.70	47.70	47.40	47.70	8.70	45.70	45.70	45.70
Mass Flow	kg/h	576.4	576.4	1,511	1,492	18.7	18.7	1,492	1,492	118,003	5,946	5,946	11,107	11,107	113,824	0.00	0.00	113,824	112,057	56,028	0.00	0.00	56,028	56,028	56,028	112,057	109,392	2,665	2,665	107,774	94,993	47,497
Molar Flow	kgmole/h	14.5	14.5	45.0	44.0	1.00	1.00	44.0	44.0	5,071	179.0	179.0	495.7	495.7	4,973	0.00	0.00	4,973	4,891	2,446	0.00	0.00	2,446	2,446	2,446	4,891	4,839	52.7	52.7	4,810	4,239	2,120
Mass Enthalpy	kJ/kg	-2,611	-2,774	-3,117	-2,966	-15,187	-15,187	-2,864	-3,130	-3,850	-7,991	-7,991	-3,657	-3,657	-3,741	-2,492	-2,492	-3,869	-3,630	-3,630	-2,247	-2,247	-3,630	-3,345	-3,656	-3,656	-3,661	-3,450	-3,450	-3,657	-3,657	-3,657
Heat Flow	kW	-418	-444	1,308	-1,229	-79	-79	-1,187	-1,298	-126,197	-13,199	-13,199	-11,283	-11,283	-138,276	0	0	-122,329	-112,998	-56,499	0	0	-56,499	-52,054	-56,896	-113,793	-111,239	-2,554	-2,554	-109,481	-96,497	-48,249
Mass Density	kg/m3	7.28	8.49	5.19	5.00	967.68	865.21	11.43	15.94	9.21	781.40	372.40	29.92	29.92	7.90	504.57	106.11	8.96	8.75	8.75	640.67	266.80	8.46	32.19	49.75	49.75	48.36	568.68	77.58	45.67	45.67	45.67
Molecular Weight		39.77	39.77	33.54	33.88	18.67	18.67	33.88	33.88	23.27	33.22	33.22	22.41	22.41	22.89	60.35	60.35	22.89	22.91	22.91	86.71	86.71	22.91	22.91	22.91	22.91	22.61	50.58	50.58	22.41	22.41	22.41
VAPOR																																
Mass Flow	kg/h	576.4	481.8	1,492	1,492	---	0.01	1,492	1,158	112,057	---	43.8	11,107	11,107	113,824	0.00	0.00	109,520	112,057	56,028	---	0.00	56,028	56,028	54,696	109,392	109,362	---	359.4	107,774	94,993	47,497
Molar Flow	kgmole/h	14.5	13.0	44.0	44.0	---	0.0002	44.0	38.0	4,891	---	1.55	496	496	4,973	0.00	0.00	4,825	4,891	2,446	---	0.00	2,446	2,446	2,419	4,839	4,838	---	12.4	4,810	4,239	2,120
Actual Volume Flow	m3/h	79.2	67.7	291.1	298.6	---	0.002	130.6	93.1	12,807	---	8.47	371.3	371.3	14,414	0.00	0.00	12,692	12,807	6,403	---	0.00	6,620	1,740	1,124	2,248	2,262	---	30.8	2,360	2,080	1,040
Std Gas Flow	MMSCFD	0.29	0.26	0.88	0.88	---	0.000004	0.88	0.76	98.21	---	0.03	9.95	9.95	99.86	0.00	0.00	96.88	98.21	49.11	---	0.00	49.11	49.11	48.58	97.16	97.15	---	0.25	96.57	85.12	42.56
Mass Density	kg/m3	7.28	7.12	5.12	5.00	---	3.70	11.43	12.44	8.75	---	5.18	29.92	29.92	7.90	31.31	11.76	8.63	8.75	8.75	---	5.13	8.46	32.19	48.67	48.67	48.34	---	11.68	45.67	45.67	45.67
Molecular Weight		39.77	37.14	33.89	33.88	---	42.54	33.88	30.48	22.91	---	28.21	22.41	22.41	22.89	23.16	28.55	22.70	22.91	22.91	---	27.84	22.91	22.91	22.61	22.61	22.60	---	28.92	22.41	22.41	22.41
Viscosity	cP	0.011	0.010	0.011	0.011	---	0.010	0.013	0.011	0.011	---	0.011	0.012	0.012	0.012	0.012	0.011	0.011	0.017	0.017	---	0.013	0.013	0.013	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m-K	0.027	0.023	0.027	0.027	---	0.023	0.034	0.026	0.030	---	0.027	0.034	0.034	0.035	0.034	0.027	0.031	0.030	0.030	---	0.027	0.030	0.053	0.037	0.037	0.037	---	0.027	0.037	0.037	0.037
Mass Heat Capacity	kJ/kg-C	2.011	1.848	1.954	1.952	---	1.876	2.196	1.974	2.076	---	1.937	2.306	2.306	2.176	2.301	1.982	2.083	2.076	2.076	---	1.939	2.073	2.657	2.497	2.497	2.494	---	1.992	2.473	2.473	2.473
Cp/Cv		1.140	1.171	1.164	1.163	---	1.130	1.159	1.222	1.258	---	1.205	1.353	1.353	1.233	1.356	1.233	1.259	1.258	1.258	---	1.207	1.257	1.231	1.430	1.430	1.429	---	1.227	1.415	1.415	1.415
Z Factor		0.957	0.949	0.971	0.971	---	0.973	0.953	0.929	0.961	---	0.971	0.889	0.889	0.972	0.880	0.935	0.962	0.961	0.961	---	0.972	0.962	0.952	0.842	0.842	0.843	---	0.937	0.852	0.852	0.852
LIQUID																																
Mass Flow	kg/h	---	89.3	0.89	---	0.78	0.77	---	305.7	3,437	3,437	3,393	---	---	---	0.00	0.00	2,048	---	---	0.00	0.00	---	---	1,234	2,467	29.4	2,467	2,108	---	---	---
Molar Flow	kgmole/h	---	1.22	0.01	---	0.01	0.01	---	4.47	39.7	39.7	38.2	---	---	---	0.00	0.00	22.9	---	---	0.00	0.00	---	---	20.9	41.7	0.50	41.7	29.3	---	---	---
Actual Volume Flow	m3/h	---	0.14	0.001	---	0.001	0.001	---	0.50	5.11	5.11	5.00	---	---	---	0.00	0.00	3.01	---	---	0.00	0.00	---	---	2.24	4.49	0.05	4.49	3.39	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	20.9	0.18	---	0.16	0.16	---	73.4	753.4	753.4	738.8	---	---	---	0.00	0.00	444.3	---	---	0.00	0.00	---	---	312.8	625.6	7.44	625.7	494.6	---	---	---
Mass Density	kg/m3	---	627.08	696.96	---	698.93	701.56	---	607.76	673.08	673.08	678.65	---	---	---	568.96	610.20	679.61	---	---	640.67	679.84	---	---	549.90	549.90	550.48	549.90	622.34	---	---	---
Viscosity (Note 4)	cP	---	0.228	0.394	---	0.401	0.411	---	0.199	0.323	0.323	0.339	---	---	---	0.154	0.203	0.342	---	---	0.314	0.344	---	---	0.140	0.140	0.140	0.140	0.218	---	---	---
Thermal Conductivity	W/m-K	---	0.100	0.106	---	0.106	0.107	---	0.096	0.105	0.105	0.107	---	---	---	0.090	0.097	0.106	---	---	0.106	0.107	---	---	0.087	0.087	0.088	0.087	0.098	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.254	2.179	---	2.174	2.169	---	2.318	2.149	2.149	2.135	---	---	---	2.450	2.304	2.140	---	---	2.147	2.129	---	---	2.514	2.514	2.512	2.514	2.278	---	---	---
Surface Tension	dyne/cm	---	13.83	16.01	---	16.11	16.41	---	12.25	15.87	15.87	16.47	---	---	---	9.75	12.42	16.05	---	---	15.92	16.57	---	---	8.80	8.80	8.82	8.80	13.02	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	5.32	18.2	---	17.9	17.9	---	28.4	2,509	2,509	2,509	---	---	---	---	---	2,256	---	---	---	---	---	---	99.0	198.0	0.46	198.0	197.3	---	---	---
Molar Flow	kgmole/h	---	0.30	1.01	---	1.00	1.00	---	1.58	139.3	139.3	139.3	---	---	---	---	---	125.2	---	---	---	---	---	---	5.50	10.99	0.03	10.99	10.95	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.50	2.50	2.50	---	---	---	---	---	2.25	---	---	---	---	---	---	0.10	0.20	0.0005	0.20	0.20	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	0.79	2.71	---	2.67	2.67	---	4.23	373.4	373.4	373.4	---	---	---	---	---	335.7	---	---	---	---	---	---	14.7	29.5	0.07	29.5	29.4	---	---	---
Mass Density	kg/m3	---	1,002.17	983.94	---	984.20	984.15	---	1,000.05	1,002.35	1,002.3540	1,002.69	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.84	989.84	989.94	989.84	999.59	---	---	---
Viscosity	cP	---	0.764	0.496	---	0.498	0.498	---	0.718	0.765	0.765	0.775	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.545	0.544	0.710	---	---	---
Thermal Conductivity	W/m-K	---	0.621	0.649	---	0.649	0.649	---	0.625	0.621	0.621	0.620	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.626	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.325	---	4.325	4.325	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	66.73	---	66.79	66.79	---	70.36	70.90	70.90	71.01	---	---	---	---	---	70.71	---	---	---	---	---	---	67.74	67.74	67.76	67.74	70.26	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000150	0.000150	0.000387	0.000396	0.000000	0.000000	0.000396	0.000396	0.001538	0.000006	0.000006	0.001620	0.001620	0.001563	0.000105	0.000105	0.001563	0.001594	0.001594	0.000024	0.000024	0.001594	0.001594	0.001594	0.001594	0.001610	0.000128	0.000128	0.001620	0.001620	0.001620
CO2		0.000397	0.000397	0.000396	0.000405	0.000001	0.000001	0.000405	0.000405	0.000330	0.000010	0.000010	0.000346	0.000346	0.000332	0.000118	0.000118	0.000332	0.000342	0.000342	0.000039	0.000039	0.000342	0.000342	0.000342	0.000342	0.000344	0.000119	0.000119	0.000346	0.000346	0.000346
Methane		0.274469	0.274469	0.410759	0.420105	0.000053	0.000053	0.420105	0.420105	0.722400	0.007790	0.007790	0.759724	0.759724	0.731320	0.131370	0.131370	0.731320	0.748552	0.748552	0.034557	0.034557	0.748552	0.748552	0.748552	0.748552	0.755167	0.141096	0.141096	0.759724	0.759724	0.759724
Ethane		0.195236	0.195236	0.170310	0.174184	0.000095	0.000095	0.174184	0.174184	0.108406	0.005962	0.005962	0.113293	0.113293	0.108209	0.079189	0.079189	0.108209	0.112155	0.112155	0.026549	0.026549	0.112155	0.112155	0.112155	0.112155	0.112613	0.070071	0.070071	0.113293	0.113293	0.113293
Propane		0.204874	0.204874	0.149771	0.153173	0.000252	0.000252	0.153173	0.153173	0.062045	0.011456	0.011456	0.063930	0.063930	0.060847	0.125433	0.125433	0.060847	0.063896	0.063896	0.051164	0.051164	0.063896	0.063896	0.063896	0.063896	0.063546	0.096016	0.096016	0.063930	0.063930	0.063930
i-Butane		0.056533	0.056533	0.039058	0.039943	0.000148	0.000148	0.039943	0.039943	0.013854	0.006149	0.006149	0.013942	0.013942	0.013352	0.057274	0.057274	0.013352	0.014136	0.014136	0.027526	0.027526	0.014136	0.014136	0.014136	0.014136	0.013858	0.039598	0.039598	0.013942	0.013942	0.013942
n-Butane		0.112350	0.112350	0.076836	0.078575	0.000389	0.000389	0.078575	0.078575	0.026376	0.016143	0.016143	0.026166	0.026166	0.025172	0.142512	0.142512	0.025172	0.026751	0.026751	0.072317	0.072317	0.026751	0.026751	0.026751	0.026751	0.026009	0.094859	0.094859	0.026166	0.026166	0.026166
22-Moropane		0.000077	0.000077	0.000052	0.000054	0.000000	0.000000	0.000054	0.000054	0.000018	0.000014	0.000014	0.000000	0.000000	0.000017	0.000000	0.000000	0.000017	0.000018	0.000018	0.000065	0.000065	0.000018	0.000018	0.000018	0.000018	0.000017	0.000077	0.000077	0.000000	0.000000	0.000000
i-Pentane		0.037063	0.037063	0.025075	0.025639	0.000286	0.000286	0.025639	0.025639	0.008328	0.011912	0.011912	0.007756	0.007756	0.007700	0.088222	0.088222	0.007700	0.008197	0.008197	0.053483	0.053483	0.008197	0.008197	0.008197	0.008197	0.007710	0.052989	0.052989	0.007756	0.007756	0.007756
n-Pentane		0.039088	0.039088	0.026493	0.027087	0.000383	0.000383	0.027087	0.027087	0.008784	0.016236	0.016236	0.007934	0.007934	0.008015	0.113463	0.113463	0.008015	0.008512	0.008512	0.072949	0.072949	0.008512	0.008512	0.008512	0.008512	0.007886	0.063907	0.063907	0.007934	0.007934	0.007934
n-Hexane		0.022346	0.022346	0.015723	0.016066	0.000628	0.000628	0.016066	0.016066	0.005602	0.027801	0.027801	0.004052	0.004052	0.004774	0.146604	0.146604	0.004774	0.004790	0.004790	0.123280	0.123280	0.004790	0.004790	0.004790	0.004790	0.004027	0.074809	0.074809	0.004052	0.004052	0.004052
Mcyclopentan		0.001414	0.001414	0.000996	0.001018	0.000041	0.000041	0.001018	0.001018	0.000355	0.001824	0.001824	0.000000	0.000000	0.000300	0.000000	0.000000	0.000300	0.000302	0.000302	0.008214	0.008214	0.000302	0.000302	0.000302	0.000302	0.000251	0.004998	0.004998	0.000000	0.000000	0.000000
Benzene		0.000120	0.000120	0.000084	0.000086	0.000003	0.000003	0.000086	0.000086	0.000030	0.000153	0.000153	0.000000	0.000000	0.000025	0.000000	0.000000	0.000025	0.000025	0.000025	0.000688	0.000688	0.000025	0.000025	0.000025	0.000025	0.000021	0.000422	0.000422	0.000000	0.000000	0.000000
Cyclohexane		0.001051	0.001051	0.000750	0.000767	0.000038	0.000038	0.000767	0.000767	0.000274	0.001664	0.001664	0.000000	0.000000	0.000228	0.000000	0.000000	0.000228	0.000224	0.000224	0.007494	0.007494	0.000224	0.000224	0.000224	0.000224	0.000180	0.004214	0.004214	0.000000	0.000000	0.000000
n-Heptane		0.003071	0.003071	0.002431	0.002480	0.000258	0.000258	0.002480	0.002480	0.001016	0.011001	0.011001	0.000000	0.000000	0.000820	0.000000	0.000000	0.000820	0.000650	0.000650	0.049721	0.049721	0.000650	0.000650	0.000650	0.000650	0.000459	0.018261	0.018261	0.000000	0.000000	0.000000
Mcyclohexane		0.001673	0.001673	0.001301	0.001327	0.000130	0.000130	0.001327	0.001327	0.000538	0.005491	0.005491	0.000000	0.000000	0.000432	0.000000	0.000000	0.000432	0.000357	0.000357	0.024785	0.024785	0.000357	0.000357	0.000357	0.000357	0.000253	0.009896	0.009896	0.000000	0.000000	0.000000
Toluene		0.000138	0.000138	0.000111	0.000113	0.000013	0.000013	0.000113	0.000113	0.000047	0.000552	0.000552	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000028	0.000028	0.002492	0.002492	0.000028	0.000028	0.000028	0.000028	0.000019	0.000894	0.000894	0.000000	0.000000	0.000000
n-Octane		0.001357	0.001357	0.001427	0.001450	0.000399	0.000399	0.001450	0.001450	0.000725	0.013168	0.013168	0.000000	0.000000	0.000599	0.000000	0.000000	0.000599	0.000269	0.000269	0.059689	0.059689	0.000269	0.000269	0.000269	0.000269	0.000142	0.011977	0.011977	0.000000	0.000000	0.000000
E-Benzene		0.000011	0.000011	0.000012	0.000013	0.000004	0.000004	0.000013	0.000013	0.000006	0.000121	0.000121	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000548	0.000548	0.000002	0.000002	0.000002	0.000002	0.000001	0.000106	0.000106	0.000000	0.000000	0.000000
m-Xylene		0.000023	0.000023	0.000027	0.000027	0.000010	0.000010	0.000027	0.000027	0.000014	0.000278	0.000278	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001258	0.001258	0.000004	0.000004	0.000004	0.000004	0.000002	0.000216	0.000216	0.000000	0.000000	0.000000
p-Xylene		0.000023	0.000023	0.000027	0.000027	0.000009	0.000009	0.000027	0.000027	0.000014	0.000277	0.000277	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001254	0.001254	0.000004	0.000004	0.000004	0.000004	0.000002	0.000217	0.000217	0.000000	0.000000	0.000000
o-Xylene		0.000016	0.000016	0.000020	0.000020	0.000007	0.000007	0.000020	0.000020	0.000010	0.000211	0.000211	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000003	0.000003	0.000957	0.000957	0.000003	0.000003	0.000003	0.000003	0.000001	0.000158	0.000158	0.000000	0.000000	0.000000
n-Nonane		0.000226	0.000226	0.000398	0.000401	0.000281	0.000281	0.000401	0.000401	0.000235	0.005543	0.005543	0.000000	0.000000	0.000210	0.000000	0.000000	0.000210	0.000041	0.000041	0.025195	0.025195	0.000041	0.000041	0.000041	0.000041	0.000014	0.002488	0.002488	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000013	0.000015	0.000015	0.000013	0.000013	0.000008	0.000207	0.000207	0.000000	0.000000	0.000008	0.000000	0.000000	0.000008	0.000001	0.000001	0.000940	0.000940	0.000001	0.000001	0.000001	0.000001	0.000000	0.000062	0.000062	0.000000	0.000000	0.000000
n-Decane		0.000037	0.000037	0.000132	0.000130	0.000226	0.000226	0.000130	0.000130	0.000085	0.002248	0.002248	0.000000	0.000000	0.000081	0.000000	0.000000	0.000081	0.000006	0.000006	0.010248	0.010248	0.000006	0.000006	0.000006	0.000006	0.000001	0.000455	0.000455	0.000000	0.000000	0.000000
C7*		0.007084	0.007084	0.005414	0.005527	0.000468	0.000468	0.005527	0.005527	0.002173	0.020421	0.020421	0.001115	0.001115	0.001763	0.082150	0.082150	0.001763	0.001505	0.001505	0.092228	0.092228	0.001505	0.001505	0.001505	0.001505	0.001108	0.037926	0.037926	0.001115	0.001115	0.001115
C8*		0.001197	0.001197	0.001408	0.001424	0.000522	0.000522	0.001424	0.001424	0.000762	0.015028	0.015028	0.000118	0.000118	0.000642	0.029923	0.029923	0.000642	0.000240	0.000240	0.068197	0.068197	0.000240	0.000240	0.000240	0.000240	0.000117	0.011536	0.011536	0.000118	0.000118	0.000118
C9*		0.000100	0.000100	0.000247	0.000246	0.000287	0.000287	0.000246	0.000246	0.000156	0.003931	0.003931	0.000005	0.000005	0.000144	0.003627	0.003627	0.000144	0.000018	0.000018	0.017900	0.017900	0.000018	0.000018	0.000018	0.000018	0.000005	0.001209	0.001209	0.000005	0.000005	0.000005
C10-C13*		0.000000	0.000000	0.000003	0.000003	0.000031	0.000031	0.000003	0.000003	0.000002	0.000066	0.000066	0.000000	0.000000	0.000002	0.000009	0.000009	0.000002	0.000000	0.000000	0.000305	0.000305	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

CASE 3B MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 71MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1806	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9652	1.0000	1.0000	1.0000	0.8626	1.0000
Temperature	C	50.45	44.17	50.45	146.27	45.00	45.00	45.00	44.86	59.00	12.75	71.15	50.45	41.15	35.00	50.45
Pressure	bar_g	45.70	30.00	45.70	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.70	30.00	8.70	45.70
Mass Flow	kg/h	0.00	0.00	47,497	47,497	47,497	79,239	15,754	79,239	15,754	15,754	11,107	11,107	11,107	1,492	1,674
Molar Flow	kgmole/h	0.00	0.00	2,120	2,120	2,120	3,536	703.1	3,536	703.1	703.1	495.7	495.7	495.7	44.0	74.7
Mass Enthalpy	kJ/kg	-2,581	-2,581	-3,657	-3,478	-3,789	-3,789	-3,789	-3,789	-3,741	-3,741	-3,587	-3,657	-3,657	-3,130	-3,657
Heat Flow	kW	0	0	-48,249	-45,887	-49,994	-83,405	-16,582	-83,405	-16,372	-16,372	-11,066	-11,283	-11,283	-1,298	-1,701
Mass Density	kg/m3	513.52	238.70	45.67	97.78	170.34	170.34	170.34	169.88	152.08	30.47	25.95	45.67	29.92	15.94	45.67
Molecular Weight		52.59	52.59	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	33.88	22.41
VAPOR																
Mass Flow	kg/h	---	0.00	47,497	47,497	47,497	79,239	15,754	79,239	15,754	14,431	11,107	11,107	11,107	1,158	1,674
Molar Flow	kgmole/h	---	0.00	2,120	2,120	2,120	3,536	703.1	3,536	703.1	678.6	495.7	495.7	495.7	38.0	74.7
Actual Volume Flow	m3/h	---	0.00	1,040	485.8	278.8	465.2	92.5	466.4	103.6	514.7	428.0	243.2	371.3	93.1	36.66
Std Gas Flow	MMSCFD	---	0.00	42.56	42.56	42.56	71.00	14.12	71.00	14.12	13.62	9.95	9.95	9.95	0.76	1.50
Mass Density	kg/m3	---	33.47	45.67	97.78	170.34	170.34	170.34	169.88	152.08	28.04	25.95	45.67	29.92	12.44	45.67
Molecular Weight		---	24.67	22.41	22.41	22.41	22.41	22.41	22.41	22.41	21.27	22.41	22.41	22.41	30.48	22.41
Viscosity	cP	---	0.012	0.013	0.019	0.020	0.020	0.020	0.020	0.020	0.011	0.013	0.013	0.012	0.011	0.013
Thermal Conductivity	W/m-K	---	0.033	0.037	0.057	0.055	0.055	0.055	0.055	0.053	0.031	0.038	0.037	0.034	0.026	0.037
Mass Heat Capacity	kJ/kg-C	---	2.296	2.473	2.912	3.513	3.513	3.513	3.513	3.303	2.269	2.341	2.473	2.306	1.974	2.473
Cp/Cv		---	1.352	1.415	1.374	1.932	1.932	1.932	1.934	1.785	1.400	1.299	1.415	1.353	1.222	1.415
Z Factor		---	0.866	0.852	0.894	0.675	0.675	0.675	0.675	0.722	0.878	0.920	0.852	0.889	0.929	0.852
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,323	---	---	---	305.7	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	24.5	---	---	---	4.47	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	2.34	---	---	---	0.50	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	355.1	---	---	---	73.4	---
Mass Density	kg/m3	513.52	551.82	---	---	---	---	---	---	---	566.06	---	---	---	607.76	---
Viscosity (Note 4)	cP	0.110	0.139	---	---	---	---	---	---	---	0.161	---	---	---	0.199	---
Thermal Conductivity	W/m-K	0.083	0.088	---	---	---	---	---	---	---	0.096	---	---	---	0.096	---
Mass Heat Capacity	kJ/kg-C	2.713	2.521	---	---	---	---	---	---	---	2.378	---	---	---	2.318	---
Surface Tension	dyne/cm	7.08	8.90	---	---	---	---	---	---	---	10.74	---	---	---	12.25	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	28.4	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.58	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.23	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000199	0.000199	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.001620	0.000396	0.001620
CO2		0.000171	0.000171	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000346	0.000405	0.000346
Methane		0.213193	0.213193	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.759724	0.420105	0.759724
Ethane		0.109445	0.109445	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.113293	0.174184	0.113293
Propane		0.140263	0.140263	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.063930	0.153173	0.063930
i-Butane		0.057568	0.057568	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.013942	0.039943	0.013942
n-Butane		0.136700	0.136700	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.026166	0.078575	0.026166
22-Mpropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000054	0.000000
i-Pentane		0.076242	0.076242	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.007756	0.025639	0.007756
n-Pentane		0.094209	0.094209	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.007934	0.027087	0.007934
n-Hexane		0.106105	0.106105	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.004052	0.016066	0.004052
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001018	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000086	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000767	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002480	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001327	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000113	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001450	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000020	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000401	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000130	0.000000
C7*		0.053400	0.053400	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.001115	0.005527	0.001115
C8*		0.016745	0.016745	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.000118	0.001428	0.000118
C9*		0.001756	0.001756	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000246	0.000005
C10-C13*		0.000003	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.040954	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000122	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000037	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000010	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000089	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000036	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004003	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002143	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001478	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000389	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58	883.21

CASE 3C MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Vapour Fraction		0.0001	0.2254	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0009	0.0136	1.0000
Temperature	C	72.00	69.17	68.00	68.00	72.00	69.81	71.85	71.85	71.86	71.46	71.85
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50
Mass Flow	kg/h	409,679	513,315	123,262	409,679	409,679	25,135	247,337	187,445	187,445	187,445	32.6
Molar Flow	kgmole/h	14,351	18,602	5,386	14,351	14,351	1,395	13,729	2,015	2,015	2,015	1.39
Mass Enthalpy	kJ/kg	-10,208	-8,892	-3,741	-10,222	-10,208	-15,693	-15,685	-3,719	-3,719	-3,719	-3,714
Heat Flow	kW	-1,161,693	-1,267,926	-128,073	-1,163,274	-1,161,693	-109,568	-1,077,597	-193,629	-193,629	-193,629	-34
Mass Density	kg/m3	883.07	41.09	7.98	894.05	883.07	973.20	971.33	811.78	792.49	444.85	7.99
Molecular Weight		28.55	27.60	22.89	28.55	28.55	18.02	18.02	93.00	93.00	93.00	23.43
VAPOR												
Mass Flow	kg/h	33.6	101,050	123,262	---	33.6	---	---	---	43.8	822.8	32.6
Molar Flow	kgmole/h	1.43	4,192	5,386	---	1.43	---	---	---	1.84	27.5	1.39
Actual Volume Flow	m3/h	4.20	12,029	15,445	---	4.20	---	---	---	5.71	192.1	4.08
Std Gas Flow	MMSCFD	0.03	84.18	108.13	---	0.03	---	---	---	0.04	0.55	0.03
Mass Density	kg/m3	8.00	8.40	7.98	---	8.00	---	---	---	7.67	4.28	7.99
Molecular Weight		23.45	24.10	22.89	---	23.45	---	---	---	23.75	29.97	23.43
Viscosity	cP	0.013	0.012	0.012	---	0.013	---	---	---	0.013	0.012	0.013
Thermal Conductivity	W/m-K	0.035	0.034	0.035	---	0.035	---	---	---	0.035	0.030	0.035
Mass Heat Capacity	kJ/kg-C	2.177	2.158	2.177	---	2.177	---	---	---	2.168	2.039	2.177
Cp/Cv		1.227	1.224	1.233	---	1.227	---	---	---	1.223	1.173	1.227
Z Factor		0.972	0.969	0.972	---	0.972	---	---	---	0.973	0.980	0.972
LIQUID												
Mass Flow	kg/h	165,016	167,096	---	165,042	165,016	---	---	165,015	164,974	164,233	---
Molar Flow	kgmole/h	770.4	800.1	---	771.5	770.4	---	---	770.5	768.7	745.2	---
Actual Volume Flow	m3/h	207.8	210.7	---	207.2	207.8	---	---	207.8	207.7	206.2	---
Liq Vol Flow @Std Cond	barrel/day	29,895	30,362	---	29,903	29,895	---	---	29,895	29,884	29,698	---
Mass Density	kg/m3	793.94	793.10	---	796.67	793.94	---	---	794.04	794.17	796.32	---
Viscosity (Note 4)	cP	2.015	1.991	---	2.146	2.015	---	---	2.020	2.026	2.136	---
Thermal Conductivity	W/m-K	0.111	0.111	---	0.112	0.111	---	---	0.111	0.111	0.113	---
Mass Heat Capacity	kJ/kg-C	2.169	2.160	---	2.153	2.169	---	---	2.169	2.169	2.165	---
Surface Tension	dyne/cm	16.91	16.79	---	17.12	16.91	---	---	16.92	16.96	17.46	---
AQUEOUS (Note 3)												
Mass Flow	kg/h	244,630	245,170	---	244,636	244,630	25,135	247,337	22,429	22,428	22,389	---
Molar Flow	kgmole/h	13,579	13,609	---	13,579	13,579	1,395	13,729	1,245	1,245	1,243	---
Actual Volume Flow	m3/h	251.9	251.9	---	251.1	251.9	25.8	254.6	23.1	23.1	23.0	---
Liq Vol Flow @Std Cond	barrel/day	36,404	36,484	---	36,405	36,404	3,740	36,807	3,338	3,338	3,332	---
Mass Density	kg/m3	971.21	973.47	---	974.40	971.21	973.20	971.33	971.33	971.30	971.43	---
Viscosity	cP	0.390	0.405	---	0.412	0.390	0.401	0.390	0.390	0.390	0.392	---
Thermal Conductivity	W/m-K	0.664	0.662	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---
Mass Heat Capacity	kJ/kg-C	4.343	4.339	---	4.338	4.343	4.339	4.343	4.343	4.343	4.343	---
Surface Tension	dyne/cm	63.80	64.31	---	64.52	63.80	64.19	63.82	63.82	63.82	63.90	---
COMPOSITION MOLE FRACTION												
Nitrogen		0.000001	0.000460	0.001586	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.001440
CO2		0.000002	0.000099	0.000336	0.000002	0.000002	0.000000	0.000000	0.000011	0.000011	0.000011	0.000342
Methane		0.001360	0.157050	0.730816	0.001360	0.001360	0.000000	0.000000	0.009192	0.009192	0.009192	0.710907
Ethane		0.000751	0.026559	0.108487	0.000751	0.000751	0.000000	0.000000	0.005271	0.005271	0.005271	0.112177
Propane		0.001157	0.018628	0.061257	0.001157	0.001157	0.000000	0.000000	0.008194	0.008194	0.008194	0.065075
i-Butane		0.000539	0.004291	0.013382	0.000539	0.000539	0.000000	0.000000	0.003830	0.003830	0.003830	0.014447
n-Butane		0.001310	0.008295	0.025159	0.001310	0.001310	0.000000	0.000000	0.009312	0.009312	0.009312	0.027308
22-Mpropane		0.000001	0.000005	0.000016	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.000017
i-Pentane		0.000855	0.002880	0.007669	0.000855	0.000855	0.000000	0.000000	0.006081	0.006081	0.006081	0.008440
n-Pentane		0.001099	0.003157	0.007977	0.001099	0.001099	0.000000	0.000000	0.007817	0.007817	0.007817	0.008826
n-Hexane		0.001692	0.002679	0.004745	0.001692	0.001692	0.000000	0.000000	0.012041	0.012041	0.012041	0.005344
Mcyclopentan		0.000106	0.000165	0.000290	0.000106	0.000106	0.000000	0.000000	0.000752	0.000752	0.000752	0.000325
Benzene		0.000009	0.000014	0.000024	0.000009	0.000009	0.000000	0.000000	0.000062	0.000062	0.000062	0.000027
Cyclohexane		0.000097	0.000139	0.000221	0.000097	0.000097	0.000000	0.000000	0.000689	0.000689	0.000689	0.000248
n-Heptane		0.000721	0.000789	0.000804	0.000721	0.000721	0.000000	0.000000	0.005132	0.005132	0.005132	0.000921
Mcyclohexane		0.000356	0.000397	0.000423	0.000356	0.000356	0.000000	0.000000	0.002534	0.002534	0.002534	0.000481
Toluene		0.000036	0.000038	0.000037	0.000036	0.000036	0.000000	0.000000	0.000254	0.000254	0.000254	0.000042
n-Octane		0.001339	0.001205	0.000594	0.001339	0.001339	0.000000	0.000000	0.009532	0.009532	0.009532	0.000693
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000089	0.000089	0.000089	0.000006
m-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000224	0.000224	0.000224	0.000014
p-Xylene		0.000032	0.000028	0.000012	0.000032	0.000032	0.000000	0.000000	0.000224	0.000224	0.000224	0.000013
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000179	0.000179	0.000179	0.000010
n-Nonane		0.001151	0.000949	0.000210	0.001151	0.001151	0.000000	0.000000	0.008195	0.008195	0.008195	0.000249
124-MBenzene		0.000060	0.000049	0.000008	0.000060	0.000060	0.000000	0.000000	0.000431	0.000431	0.000431	0.000009
n-Decane		0.001068	0.000848	0.000081	0.001068	0.001068	0.000000	0.000000	0.007605	0.007605	0.007605	0.000098
C7*		0.001287	0.001500	0.001752	0.001287	0.001287	0.000000	0.000000	0.009160	0.009160	0.009160	0.002000
C8*		0.002008	0.001734	0.000640	0.002008	0.002008	0.000000	0.000000	0.014295	0.014295	0.014295	0.000429
C9*		0.001386	0.001111	0.000144	0.001386	0.001386	0.000000	0.000000	0.009866	0.009866	0.009866	0.000172
C10-C13*		0.000206	0.000160	0.000002	0.000206	0.000206	0.000000	0.000000	0.001469	0.001469	0.001469	0.000003
C14-C18*		0.000145	0.000112	0.000000	0.000145	0.000145	0.000000	0.000000	0.001029	0.001029	0.001029	0.000000
C19-C21*		0.000102	0.000079	0.000000	0.000102	0.000102	0.000000	0.000000	0.000725	0.000725	0.000725	0.000000
C22-C24*		0.000100	0.000077	0.000000	0.000100	0.000100	0.000000	0.000000	0.000713	0.000713	0.000713	0.000000
C25-C27*		0.000075	0.000058	0.000000	0.000075	0.000075	0.000000	0.000000	0.000534	0.000534	0.000534	0.000000
C28-C31*		0.000072	0.000055	0.000000	0.000072	0.000072	0.000000	0.000000	0.000511	0.000511	0.000511	0.000000
C32-C37*		0.000067	0.000052	0.000000	0.000067	0.000067	0.000000	0.000000	0.000477	0.000477	0.000477	0.000000
C38-C45*		0.000046	0.000036	0.000000	0.000046	0.000046	0.000000	0.000000	0.000328	0.000328	0.000328	0.000000
C46-C80*		0.000038	0.000030	0.000000	0.000038	0.000038	0.000000	0.000000	0.000274	0.000274	0.000274	0.000000
C10-C13_1*		0.001085	0.000837	0.000001	0.001085	0.001085	0.000000	0.000000	0.007724	0.007724	0.007724	0.000000
C14-C16*		0.000513	0.000396	0.000000	0.000513	0.000513	0.000000	0.000000	0.003650	0.003650	0.003650	0.000000
C17-C20*		0.000599	0.000462	0.000000	0.000599	0.000599	0.000000	0.000000	0.004265	0.004265	0.004265	0.000000
C21-C22*		0.000544	0.000419	0.000000	0.000544	0.000544	0.000000	0.000000	0.003872	0.003872	0.003872	0.000000
C23*		0.000213	0.000165	0.000000	0.000213	0.000213	0.000000	0.000000	0.001519	0.001519	0.001519	0.000000
C24-C26*		0.000469	0.000362	0.000000	0.000469	0.000469	0.000000	0.000000	0.003339	0.003339	0.003339	0.000000
C27-C29*		0.000290	0.000224	0.000000	0.000290	0.000290	0.000000	0.000000	0.002068	0.002068	0.002068	0.000000
C30-C34*		0.000260	0.000201	0.000000	0.000260	0.000260	0.000000	0.000000	0.001851	0.001851	0.001851	0.000000
C35-C80*		0.000213	0.000164	0.000000	0.000213	0.000213	0.000000	0.000000	0.001514	0.001514	0.001514	0.000000
C10-C13_2*		0.000032	0.000025	0.000000	0.000032	0.000032	0.000000	0.000000	0.000229	0.000229	0.000229	0.000000
C10-C18_1*		0.000019	0.000015	0.000000	0.000019	0.000019	0.000000	0.000000	0.000137	0.000137	0.000137	0.000000
C19-C21_1*		0.000019	0.000015	0.000000	0.000019	0.000019	0.000000	0.000000	0.000137	0.000137	0.000137	0.000000
C22-C23*		0.000013	0.000010	0.000000	0.000013	0.000013	0.000000	0.000000	0.000094	0.000094	0.000094	0.000000
C24-C26_1*		0.000015	0.000011	0.000000	0.000015	0.000015	0.000000	0.000000	0.000105	0.000105	0.000105	0.000000
C27-C29_1*		0.000010	0.000008	0.000000	0.000010	0.000010	0.000000	0.000000	0.000073	0.000073	0.000073	0.000000
C30-C33*		0.000009	0.000007	0.000000	0.000009	0.000009	0.000000	0.000000	0.000064	0.000064	0.000064	0.000000
C34-C40*		0.000008	0.000006	0.000000	0.000008	0.000008	0.000000	0.000000	0.000059	0.000059	0.000059	0.000000
C41-C80*		0.000006	0.000005	0.000000	0.000006	0.000006	0.000000	0.000000	0.000044	0.000044	0.000044	0.000000
C10-C13_3*		0.002032	0.001569	0.000002	0.002032	0.002032	0.000000	0.000000	0.014471	0.014471	0.014471	0.000003
C14-C17*		0.000898	0.000693	0.000000	0.000898	0.000898	0.000000	0.000000	0.006396	0.006396	0.006396	0.000000
C18-C21*		0.001267	0.000977	0.000000	0.001267	0.001267	0.000000	0.000000	0.009022	0.009022	0.009022	0.000000
C22-C23_1*		0.000755	0.000582	0.000000	0.000755	0.000755	0.000000	0.000000	0.005376	0.005376	0.005376	0.000000
C24-C25*		0.000587	0.000453	0.000000	0.000587	0.000587	0.000000	0.000000	0.004177	0.004177	0.004177	0.000000
C26-C28*		0.000644	0.000497	0.000000	0.000644	0.000644	0.000000	0.000000	0.004585	0.004585	0.004585	0.000000
C29-C32*		0.000554	0.000428	0.000000	0.000554	0.000554	0.000000	0.000000	0.003948	0.003948	0.003948	0.000000
C33-C39*		0.000495	0.000382	0.000000	0.000495	0.000495	0.000000	0.000000	0.003527	0.003527	0.003527	0.000000
C40-C80*		0.000347	0.000268	0.000000	0.000347	0.000347	0.000000	0.000000	0.002471	0.002471	0.002471	0.000000
H2O		0.946389	0.738973	0.030530	0.946389	0.946389	1.000000	0.999999	0.618939	0.618939	0.618939	0.036444
HSTc20+*		0.002987	0.002304	0.000000	0.002987	0.002987	0.000000	0.000000	0.021269	0.021269	0.021269	0.000000
HSTc10*		0.000669	0.000537	0.000072	0.000669	0.000669	0.000000	0.000000	0.004764	0.004764	0.004764	0.000085
HSTc11*		0.000531	0.000417	0.000025	0.000531	0.000531	0.000000	0.000000	0.003783	0.003783	0.003783	0.000030
HSTc12*		0.000430	0.000334	0.000008	0.000430	0.000430	0.000000	0.000000	0.003063	0.003063	0.003063	0.000010
HSTc13*		0.000407	0.000315	0.000003	0.000407	0.000407	0.000000	0.000000	0.002898	0.002898	0.002898	0.000004
HSTc14*		0.000331	0.000256	0.000001	0.000331	0.000331	0.000000	0.000000	0.002358	0.002358	0.002358	0.000001
HSTc15*		0.000364	0.000281	0.000000	0.000364	0.000364	0.000000	0.000000	0.002590	0.002590	0.002590	0.000000
H5-22P_C20+*		0.001363	0.001051	0.000000	0.001363	0.001363	0.000000	0.000000	0.009702	0.009702	0.009702	0.000000
10X-DST1_2c11*		0.001046	0.000824	0.000058	0.001046	0.001046	0.000000	0.000000	0.007450	0.007450	0.007450	0.000070
10X-DST1_2c12*		0.000880	0.000686	0.000026	0.000880	0.000880	0.000000	0.000000	0.006265	0.006265	0.006265	0.000032
10X-DST1_2c13*		0.000888	0.000689	0.000015	0.000888	0.000888	0.000000	0.000000	0.006321	0.006321	0.006321	0.000018
10X-DST1_2c14*		0.000774	0.000599	0.000007	0.000774	0.000774	0.000000	0.000000	0.005508	0.005508	0.005508	0.000008
10X-DST1_2c15*		0.000902	0.000697	0.000003	0.000902	0.000902	0.000000	0.000000	0.006425	0.006425	0.006425	0.000004
10X-DST1_2c16*		0.000575	0.000444	0.000001	0.000575	0.000575	0.000000	0.000000	0.004094	0.004094	0.004094	0.000001
10X-DST1_2c17*		0.000498	0.000384	0.000000	0.000498	0.000498	0.000000	0.000000	0.003544	0.003544	0.003544	0.000000
10X-DST1_2c18*		0.000587	0.000453	0.000000	0.000587	0.000587	0.000000	0.000000	0.004176	0.004176	0.004176	0.000000
10X-DST1_2c19*		0.000497	0.000383	0.000000	0.000497	0.000497	0.000000	0.000000	0.003536	0.003536	0.003536	0.000000
10X-DST1_C20+*		0.002354	0.001816	0.000000	0.002354	0.002354	0.000000	0.000000	0.016760	0.016760	0.016760	0.000000
10X-DST2_C20+*		0.001456	0.001124	0.000000	0.001456	0.001456	0.000000	0.000000	0.010370	0.010370	0.010370	0.000000
HSTc16*		0.000232	0.000179	0.000000	0.000232	0.000232	0.000000	0.000000	0.001651	0.001651	0.001651	0.000000
HSTc17*		0.000193	0.000149	0.000000	0.000193	0.000193	0.000000	0.000000	0.001373	0.001373	0.001373	0.000000
HSTc18*		0.000186	0.000143	0.000000	0.000186	0.000186	0.000000	0.000000	0.001322	0.001322	0.001322	0.000000
HSTc19*		0.000166	0.000128	0.000000	0.000166	0.000166	0.000000	0.000000	0.001180	0.001180	0.001180	0.000000
HSc20-*		0.001517	0.001171	0.000000	0.001517	0.001517	0.000000	0.000000	0.010804	0.010804	0.010804	0.000000
HSTc6*		0.000381	0.000625	0.001143	0.000381	0.000381	0.000000	0.000000	0.002716	0.002716	0.002716	0.001283
HSTc7*		0.000520	0.000596	0.000674	0.000520	0.000520	0.000000	0.000000	0.003703	0.003703	0.003703	0.000768
HSTc8*		0.000887	0.000843	0.000549	0.000887	0.000887	0.000000	0.000000	0.006313	0.006313	0.006313	0.000634
HSTc9*		0.000753	0.000635	0.000187	0.000753	0.000753	0.000000	0.000000	0.005358	0.005358	0.005358	0.000219
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Stream Name	Unit	Inlet of MP Separator	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator
Stream Number		**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**
Vapour Fraction		0.0139	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0199	0.0000	0.0000
Temperature	C	69.66	69.68	69.68	69.68	69.74	69.74	69.74	69.82	69.58	69.77	69.58
Pressure	bar_g	3.00	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05
Mass Flow	kg/h	937.3	178,588	25,135	178,588	167,771	10,817	10,817	10,817	167,771	167,771	167,148
Molar Flow	kgmole/h	30.6	1,385	1,395	1,385	7,284.1	600.5	600.5	600.5	7,284.1	7,284.1	7,268.5
Mass Enthalpy	kJ/kg	-3,863	-3,326	-2,917	-15,694	-2,917	-2,093	-15,694	-15,694	-2,093	-2,093	-2,090
Heat Flow	kW	-208,005	-866	-144,716	-109,580	-144,682	-97,525	-47,157	-47,157	-97,525	-97,525	-97,040
Mass Density	kg/m3	430.83	4.40	803.08	972.86	803.38	794.45	972.96	972.76	397.85	794.38	795.41
Molecular Weight		18.02	30.60	128.98	18.02	128.98	213.96	18.02	18.02	213.96	213.96	217.50
VAPOR												
Mass Flow	kg/h	936.9	937.3	---	---	---	---	---	---	622.2	---	---
Molar Flow	kgmole/h	30.6	30.6	---	---	---	---	---	---	15.6	---	---
Actual Volume Flow	m3/h	212.8	212.9	---	---	---	---	---	---	211.6	---	---
Std Gas Flow	MMSCFD	0.61	0.61	---	---	---	---	---	---	0.31	---	---
Mass Density	kg/m3	4.40	4.40	---	---	---	---	---	---	2.94	---	---
Molecular Weight		30.60	30.60	---	---	---	---	---	---	39.87	---	---
Viscosity	cP	0.012	0.012	---	---	---	---	---	---	0.010	---	---
Thermal Conductivity	W/m-K	0.030	0.030	---	---	---	---	---	---	0.025	---	---
Mass Heat Capacity	kJ/kg-C	2.028	2.028	---	---	---	---	---	---	1.944	---	---
Cp/Cv		1.171	1.171	---	---	---	---	---	---	1.130	---	---
Z Factor		0.979	0.979	---	---	---	---	---	---	0.981	---	---
LIQUID												
Mass Flow	kg/h	167,771	---	167,771	---	167,771	167,771	---	---	167,148	167,771	167,148
Molar Flow	kgmole/h	784.1	---	784.1	---	784.1	784.1	---	---	768.5	784.1	768.5
Actual Volume Flow	m3/h	211.3	---	211.3	---	211.2	211.2	---	---	210.1	211.2	210.1
Liq Vol Flow @Std Cond	barrel/day	30,449	---	30,449	---	30,448	30,448	---	---	30,300	30,448	30,300
Mass Density	kg/m3	794.15	---	794.14	---	794.45	794.45	---	---	795.41	794.38	795.41
Viscosity (Note 4)	cP	2.043	---	2.043	---	2.042	2.042	---	---	2.105	2.041	2.105
Thermal Conductivity	W/m-K	0.112	---	0.112	---	0.112	0.112	---	---	0.113	0.112	0.113
Mass Heat Capacity	kJ/kg-C	2.160	---	2.160	---	2.159	2.159	---	---	2.158	2.160	2.158
Surface Tension	dyne/cm	17.35	---	17.35	---	17.35	17.35	---	---	17.55	17.35	17.55
AQUEOUS (Note 3)												
Mass Flow	kg/h	25,135	---	10,817	25,135	10,817	---	10,817	10,817	---	---	---
Molar Flow	kgmole/h	1,395	---	600.5	1,395	600.5	---	600.5	600.5	---	---	---
Actual Volume Flow	m3/h	25.8	---	11.1	25.8	11.1	---	11.1	11.1	---	---	---
Liq Vol Flow @Std Cond	barrel/day	3,740	---	1,610	3,740	1,610	---	1,610	1,610	---	---	---
Mass Density	kg/m3	972.87	---	972.86	972.86	972.96	---	972.96	972.76	---	---	---
Viscosity	cP	0.402	---	0.402	0.402	0.402	---	0.402	0.401	---	---	---
Thermal Conductivity	W/m-K	0.662	---	0.662	0.662	0.662	---	0.662	0.662	---	---	---
Mass Heat Capacity	kJ/kg-C	4.341	---	4.341	4.341	4.340	---	4.340	4.341	---	---	---
Surface Tension	dyne/cm	64.22	---	64.22	64.22	64.21	---	64.21	64.19	---	---	---
COMPOSITION MOLE FRACTION												
Nitrogen		0.000008	0.000506	0.000002	0.000000	0.000002	0.000003	0.000000	0.000000	0.000003	0.000003	0.000000
CO2		0.000008	0.000000	0.000008	0.000000	0.000008	0.000014	0.000000	0.000000	0.000014	0.000014	0.000007
Methane		0.009046	0.474536	0.003942	0.000000	0.003942	0.006960	0.000000	0.000000	0.006960	0.006960	0.001931
Ethane		0.005316	0.158926	0.004970	0.000000	0.004970	0.008776	0.000000	0.000000	0.008776	0.008776	0.005252
Propane		0.008457	0.124602	0.010743	0.000000	0.010743	0.018969	0.000000	0.000000	0.018969	0.018969	0.015437
i-Butane		0.004020	0.030891	0.005733	0.000000	0.005733	0.010123	0.000000	0.000000	0.010123	0.010123	0.009246
n-Butane		0.009871	0.060069	0.014427	0.000000	0.014427	0.025475	0.000000	0.000000	0.025475	0.025475	0.023837
22-Mpropane		0.000017	0.000038	0.000012	0.000000	0.000012	0.000022	0.000000	0.000000	0.000022	0.000022	0.000021
i-Pentane		0.006561	0.019358	0.010045	0.000000	0.010045	0.017736	0.000000	0.000000	0.017736	0.017736	0.017374
n-Pentane		0.008513	0.020476	0.013134	0.000000	0.013134	0.023192	0.000000	0.000000	0.023192	0.023192	0.022894
n-Hexane		0.013354	0.012546	0.021037	0.000000	0.021037	0.037147	0.000000	0.000000	0.037147	0.037147	0.037424
Mcyclopentan		0.000837	0.000772	0.001319	0.000000	0.001319	0.002329	0.000000	0.000000	0.002329	0.002329	0.002347
Benzene		0.000069	0.000065	0.000108	0.000000	0.000108	0.000191	0.000000	0.000000	0.000191	0.000191	0.000193
Cyclohexane		0.000766	0.000591	0.001210	0.000000	0.001210	0.002137	0.000000	0.000000	0.002137	0.002137	0.002158
n-Heptane		0.005614	0.002093	0.008915	0.000000	0.008915	0.015742	0.000000	0.000000	0.015742	0.015742	0.015982
Mcyclohexane		0.002776	0.001105	0.004406	0.000000	0.004406	0.007781	0.000000	0.000000	0.007781	0.007781	0.007896
Toluene		0.000279	0.000097	0.000443	0.000000	0.000443	0.000783	0.000000	0.000000	0.000783	0.000783	0.000795
n-Octane		0.009838	0.001451	0.015670	0.000000	0.015670	0.027670	0.000000

CASE 3C MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Feed Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8957	0.9775	1.0000	0.0000	0.0002	1.0000	0.8633	0.9649	0.0000	0.0085	1.0000	1.0000	1.0000	0.0187	0.1965	0.9703	1.0000	1.0000	0.0000	0.0366	1.0000	1.0000	0.9893	0.9893	0.9999	0.0000	0.2360	1.0000	1.0000	1.0000
Temperature	*C*	77.80	32.00	55.57	55.24	55.24	55.23	109.00	35.00	31.97	31.97	31.34	41.04	41.04	67.95	40.43	30.30	33.00	31.97	31.97	31.76	30.23	31.76	169.29	50.00	50.00	49.86	50.00	35.56	50.45	50.45	50.45
Pressure	*bar_g*	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.39	47.89	47.89	47.59	47.89	8.70	45.89	45.89	45.89
Mass Flow	*kg/h*	578.7	578.7	1,516	1,497	18.7	18.7	1,497	1,497	127,598	6,336	6,336	11,472	11,472	123,295	0.00	0.00	123,295	121,262	60,631	0.00	0.00	60,631	60,631	60,631	121,262	118,422	2,840	2,840	116,693	103,546	51,773
Molar Flow	*kgmole/h*	14.5	14.5	45.2	44.2	1.00	1.00	44.2	44.2	5,486	192.5	192.5	511.9	511.9	5,387	0.00	0.00	5,387	5,294	2,647	0.00	0.00	2,647	2,647	2,647	5,294	5,238	56.4	56.4	5,206	4,620	2,310
Mass Enthalpy	*kJ/kg*	-2,610	-2,772	-3,115	-2,964	-15,193	-15,193	-2,863	-3,128	-3,851	-8,079	-8,079	-3,656	-3,656	-3,741	-2,491	-2,491	-3,869	-3,630	-3,630	-2,246	-2,246	-3,630	-3,345	-3,656	-3,656	-3,661	-3,474	-3,474	-3,656	-3,656	-3,656
Heat Flow	*kW*	-420	-446	-1,312	-1,233	-79	-79	-1,191	-1,301	-136,504	-14,219	-14,219	-11,652	-11,652	-128,107	0	0	-132,493	-122,285	-61,142	0	0	-61,142	-56,333	-61,577	-123,153	-120,412	-2,741	-2,741	-118,523	-105,169	-52,585
Mass Density	*kg/m3*	7.28	8.49	5.19	5.00	967.89	865.85	11.43	15.94	9.20	783.67	375.39	29.94	29.94	7.90	507.05	106.55	6.96	8.75	8.75	640.39	267.14	8.46	32.31	49.97	49.97	48.59	568.83	77.29	45.90	45.90	45.90
Molecular Weight		39.79	39.79	33.56	33.90	18.66	18.66	33.90	33.90	23.26	32.92	32.92	22.41	22.41	22.89	60.42	60.42	22.89	22.91	22.91	86.89	86.89	22.91	22.91	22.91	22.91	22.61	50.37	50.37	22.41	22.41	22.41
VAPOR																																
Mass Flow	*kg/h*	578.7	484.3	1,497	1,497	---	0.01	1,497	1,164	121,262	---	46.1	11,472	11,472	123,295	0.00	0.00	118,679	121,262	60,631	---	0.00	60,631	60,631	59,211	118,422	118,389	---	384.9	116,693	103,546	51,773
Molar Flow	*kgmole/h*	14.5	13.0	44.2	44.2	---	0.0002	44.2	38.1	5,294	---	1.63	511.9	511.9	5,387	0.00	0.00	5,227	5,294	2,647	---	0.00	2,647	2,647	2,619	5,238	5,237	---	13.3	5,206	4,620	2,310
Actual Volume Flow	*m3/h*	79.4	68.0	291.9	299.3	---	0.002	130.9	93.4	13,862	---	8.91	383.1	383.1	15,613	0.00	0.00	13,748	13,862	6,931	---	0.00	7,165	1,876	1,211	2,422	2,437	---	32.9	2,542	2,256	1,128.0
Std Gas Flow	*MMSCFD*	0.29	0.26	0.89	0.89	---	0.000004	0.89	0.77	106.29	---	0.03	10.28	10.28	108.16	0.00	0.00	104.95	106.29	53.15	---	0.00	53.15	53.15	52.58	105.16	105.15	---	0.27	104.54	92.76	46.38
Mass Density	*kg/m3*	7.28	7.12	5.13	5.00	---	3.70	11.43	12.46	8.75	---	5.18	29.94	29.94	7.90	31.30	11.75	8.63	8.75	8.75	---	5.13	8.46	32.31	48.90	48.90	48.57	---	11.69	45.90	45.90	45.90
Molecular Weight		39.79	37.18	33.90	33.90	---	42.55	33.90	30.53	22.91	---	28.21	22.41	22.41	22.89	23.14	28.54	22.70	22.91	22.91	---	27.84	22.91	22.91	22.61	22.61	22.61	---	28.92	22.41	22.41	22.41
Viscosity	*cP*	0.011	0.010	0.011	0.011	---	0.010	0.013	0.011	---	---	0.011	0.012	0.012	0.013	0.012	0.011	0.011	0.011	0.011	---	0.011	0.011	0.011	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	*W/m-K*	0.027	0.023	0.027	0.027	---	0.023	0.034	0.026	0.030	---	0.027	0.034	0.034	0.035	0.034	0.027	0.031	0.030	0.030	---	0.027	0.030	0.053	0.037	0.037	0.037	---	0.027	0.037	0.037	0.037
Mass Heat Capacity	*kJ/kg-C*	2.011	1.848	1.954	1.952	---	1.876	2.195	1.973	2.076	---	1.937	2.306	2.306	2.176	2.301	1.982	2.083	2.076	2.076	---	1.939	2.073	2.658	2.499	2.499	2.496	---	1.991	2.475	2.475	2.475
Cp/Cv		1.140	1.171	1.164	1.163	---	1.130	1.159	1.222	1.258	---	1.205	1.354	1.354	1.233	1.356	1.233	1.259	1.258	1.258	---	1.207	1.257	1.231	1.431	1.431	1.430	---	1.227	1.416	1.416	1.416
Z Factor		0.957	0.949	0.971	0.971	---	0.973	0.953	0.929	0.961	---	0.971	0.889	0.889	0.972	0.880	0.935	0.962	0.961	0.961	---	0.972	0.962	0.952	0.842	0.842	0.842	---	0.937	0.851	0.851	0.851
LIQUID																																
Mass Flow	*kg/h*	---	89.0	0.88	---	0.77	0.77	---	304.8	3,621	3,621	3,575	---	---	---	0.00	0.00	2,173	---	---	0.00	0.00	---	---	1,312	2,624	31.8	2,624	2,240	---	---	---
Molar Flow	*kgmole/h*	---	1.22	0.01	---	0.01	0.01	---	4.46	41.8	41.8	40.1	---	---	---	0.00	0.00	24.3	---	---	0.00	0.00	---	---	22.2	44.4	0.54	44.4	31.1	---	---	---
Actual Volume Flow	*m3/h*	---	0.14	0.001	---	0.001	0.001	---	0.50	5.38	5.38	5.26	---	---	---	0.00	0.00	3.20	---	---	0.00	0.00	---	---	2.39	4.77	0.06	4.78	3.60	---	---	---
Liq Vol Flow @Std Cond	*barrel/day*	---	20.9	0.18	---	0.16	0.16	---	73.2	793.2	793.2	777.9	---	---	---	0.00	0.00	471.1	---	---	0.00	0.00	---	---	332.9	665.8	8.08	665.8	525.4	---	---	---
Mass Density	*kg/m3*	---	626.99	697.09	---	699.07	701.71	---	607.50	673.49	673.49	679.05	---	---	---	569.32	610.52	679.91	---	---	640.39	680.23	---	---	549.59	549.59	550.17	549.59	622.47	---	---	---
Viscosity (Note 4)	*cP*	---	0.228	0.394	---	0.402	0.412	---	0.198	0.324	0.324	0.341	---	---	---	0.154	0.203	0.343	---	---	0.315	0.345	---	---	0.140	0.140	0.140	0.140	0.218	---	---	---
Thermal Conductivity	*W/m-K*	---	0.100	0.106	---	0.106	0.107	---	0.096	0.105	0.105	0.107	---	---	---	0.090	0.097	0.106	---	---	0.106	0.107	---	---	0.087	0.087	0.088	0.087	0.098	---	---	---
Mass Heat Capacity	*kJ/kg-C*	---	2.254	2.179	---	2.174	2.169	---	2.318	2.148	2.148	2.135	---	---	---	2.448	2.303	2.140	---	---	2.147	2.128	---	---	2.515	2.515	2.513	2.515	2.278	---	---	---
Surface Tension	*dyne/cm*	---	13.82	16.01	---	16.11	16.41	---	12.23	15.87	15.87	16.48	---	---	---	9.76	12.43	16.05	---	---	15.92	16.57	---	---	8.77	8.77	8.80	8.77	13.01	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	*kg/h*	---	5.34	18.2	---	17.9	17.9	---	28.4	2,715	2,715	2,715	---	---	---	---	---	2,443	---	---	---	---	---	---	108.0	216.0	0.50	216.0	215.2	---	---	---
Molar Flow	*kgmole/h*	---	0.30	1.01	---	0.99	0.99	---	1.57	150.7	150.7	150.7	---	---	---	---	---	135.6	---	---	---	---	---	---	5.99	11.99	0.03	11.99	11.95	---	---	---
Actual Volume Flow	*m3/h*	---	0.01	0.02	---	0.02	0.02	---	0.03	2.71	2.71	2.71	---	---	---	---	---	2.44	---	---	---	---	---	---	0.11	0.22	0.001	0.22	0.22	---	---	---
Liq Vol Flow @Std Cond	*barrel/day*	---	0.79	2.71	---	2.66	2.66	---	4.22	404.0	404.0	404.0	---	---	---	---	---	363.6	---	---	---	---	---	---	16.1	32.1	0.07	32.1	32.0	---	---	---
Mass Density	*kg/m3*	---	1,002.17	984.00	---	984.26	984.21	---	1,000.05	1,002.33	1002.3330	1,002.66	---	---	---	---	---	1,001.56	---	---	---	---	---	---	989.85	989.85	989.95	989.85	999.63	---	---	---
Viscosity	*cP*	---	0.764	0.496	---	0.499	0.499	---	0.718	0.765	0.765	0.775	---	---	---	---	---	0.748	---	---	---	---	---	---	0.544	0.544	0.545	0.544	0.710	---	---	---
Thermal Conductivity	*W/m-K*	---	0.621	0.649	---	0.649	0.649	---	0.625	0.621	0.621	0.620	---	---	---	---	---	0.622	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.626	---	---	---
Mass Heat Capacity	*kJ/kg-C*	---	4.313	4.325	---	4.325	4.325	---	4.313	4.313	4.313	4.313	---	---	---	---	---	4.313	---	---	---	---	---	---	4.315	4.315	4.314	4.315	4.313	---	---	---
Surface Tension	*dyne/cm*	---	70.89	66.75	---	66.81	66.81	---	70.36	70.89	70.89	71.00	---	---	---	---	---	70.71	---	---	---	---	---	---	67.74	67.74	67.76	67.74	70.27	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000152	0.000152	0.000392	0.000401	0.000000	0.000000	0.000401	0.000401	0.001561	0.000006	0.000006	0.001644	0.001644	0.001586	0.000106	0.000106	0.001586	0.001618	0.001618	0.000024	0.000024	0.001618	0.001618	0.001618	0.001618	0.001634	0.000130	0.000130	0.001644	0.001644	0.001644
CO2		0.000401	0.000401	0.000400	0.000409	0.000001	0.000001	0.000409	0.000409	0.000334	0.000010	0.000010	0.000350	0.000350	0.000336	0.000120	0.000120	0.000336	0.000346	0.000346	0.000040	0.000040	0.000346	0.000346	0.000346	0.000346	0.000348	0.000120	0.000120	0.000350	0.000350	0.000350
Methane		0.273185	0.273185	0.409712	0.418990	0.000052	0.000052	0.418990	0.418990	0.722281	0.007613	0.007613	0.759312	0.759312	0.730810	0.131001	0.131001	0.730810	0.748264	0.748264	0.034537	0.034537	0.748264	0.748264	0.748264	0.748264	0.754803	0.140884	0.140884	0.759312	0.759312	0.759312
Ethane		0.195432	0.195432	0.170679	0.174543	0.000094	0.000094	0.174543	0.174543	0.108611	0.005836	0.005836	0.113477	0.113477	0.108488	0.079189	0.079189	0.108488	0.112347	0.112347	0.026576	0.026576	0.112347	0.112347	0.112347	0.112347	0.112803	0.070007	0.070007	0.113477	0.113477	0.113477
Propane		0.206233	0.206233	0.150883	0.154295	0.000251	0.000251	0.154295	0.154295	0.062353	0.011247	0.011247	0.064249	0.064249	0.061258	0.125915	0.125915	0.061258	0.064211	0.064211	0.051368	0.051368	0.064211	0.064211	0.064211	0.064211	0.063868	0.096138	0.096138	0.064249	0.064249	0.064249
i-Butane		0.056706	0.056706	0.039202	0.040086	0.000147	0.000147	0.040086	0.040086	0.013861	0.006012	0.006012	0.013957	0.013957	0.011383	0.057289	0.057289	0.011383	0.027522	0.027522	0.014147	0.014147	0.027522	0.027522	0.014147	0.014147	0.013874	0.039461	0.039461	0.013957	0.013957	0.013957
n-Butane		0.112410	0.112410	0.076920	0.078653	0.000386	0.000386	0.078653	0.078653	0.026291	0.015723	0.015723	0.026103	0.026103	0.025159	0.142071	0.142071	0.025159	0.026675	0.026675	0.072029	0.072029	0.026675	0.026675	0.026675	0.026675	0.025948	0.094169	0.094169	0.026103	0.026103	0.026103
22-Mpropane		0.000073	0.000073	0.000050	0.000051	0.000000	0.000000	0.000051	0.000051	0.000017	0.000013	0.000013	0.000000	0.000000	0.000016	0.000000	0.000000	0.000016	0.000017	0.000017	0.000061	0.000061	0.000017	0.000017	0.000017	0.000017	0.000016	0.000072	0.000072	0.000000	0.000000	0.000000
i-Pentane		0.036990	0.036990	0.025035	0.025595	0.000284	0.000284	0.025595	0.025595	0.008271	0.011569	0.011569	0.007720	0.007720	0.007669	0.087778	0.087778	0.007669	0.008151	0.008151	0.053122	0.053122	0.008151	0.008151	0.008151	0.008151	0.007674	0.052442	0.052442	0.007720	0.007720	0.007720
n-Pentane		0.039002	0.039002	0.026440	0.027031	0.000379	0.000379	0.027031	0.027031	0.008716	0.015760	0.015760	0.007896	0.007896	0.007977	0.112885	0.112885	0.007977	0.008459	0.008459	0.072416	0.072416	0.008459	0.008459	0.008459	0.008459	0.007849	0.065197	0.065197	0.007896	0.007896	0.007896
n-Hexane		0.022318	0.022318	0.015693	0.016034	0.000622	0.000622	0.016034	0.016034	0.005548	0.027023	0.027023	0.004044	0.004044	0.004745	0.146367	0.146367	0.004745	0.004767	0.004767	0.124534	0.124534	0.004767	0.004767	0.004767	0.004767	0.004020	0.074152	0.074152	0.004044	0.004044	0.004044
Mcyclopentan		0.001371	0.001371	0.000965	0.000986	0.000040	0.000040	0.000986	0.000986	0.000342	0.001720	0.001720	0.000000	0.000000	0.000290	0.000000	0.000000	0.000290	0.000291	0.000291	0.007921	0.007921	0.000291	0.000291	0.000291	0.000291	0.000243	0.004809	0.004809	0.000000	0.000000	0.000000
Benzene		0.000116	0.000116	0.000082	0.000083	0.000003	0.000003	0.000083	0.000083	0.000029	0.000144	0.000144	0.000000	0.000000	0.000024	0.000000	0.000000	0.000024	0.000024	0.000024	0.000663	0.000663	0.000024	0.000024	0.000024	0.000024	0.000020	0.000406	0.000406	0.000000	0.000000	0.000000
Cyclohexane		0.001023	0.001023	0.000730	0.000746	0.000036	0.000036	0.000746	0.000746	0.000265	0.001576	0.001576	0.000000	0.000000	0.000221	0.000000	0.000000	0.000221	0.000217	0.000217	0.007258	0.007258	0.000217	0.000217	0.000217	0.000217	0.000175	0.004073	0.004073	0.000000	0.000000	0.000000
n-Heptane		0.003038	0.003038	0.002397	0.002446	0.000253	0.000253	0.002446	0.002446	0.000994	0.010631	0.010631	0.000000	0.000000	0.000804	0.000000	0.000000	0.000804	0.000644	0.000644	0.049136	0.049136	0.000644	0.000644	0.000644	0.000644	0.000456	0.018025	0.018025	0.000000	0.000000	0.000000
Mcyclohexane		0.001652	0.001652	0.001282	0.001308	0.000127	0.000127	0.001308	0.001308	0.000526	0.005294	0.005294	0.000000	0.000000	0.000423	0.000000	0.000000	0.000423	0.000352	0.000352	0.024439	0.024439	0.000352	0.000352	0.000352	0.000352	0.000251	0.009750	0.009750	0.000000	0.000000	0.000000
Toluene		0.000137	0.000137	0.000110	0.000112	0.000013	0.000013	0.000112	0.000112	0.000046	0.000535	0.000535	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000028	0.000028	0.002468	0.002468	0.000028	0.000028	0.000028	0.000028	0.000019	0.000886	0.000886	0.000000	0.000000	0.000000
n-Octane		0.001363	0.001363	0.001423	0.001446	0.000395	0.000395	0.001446	0.001446	0.000720	0.013023	0.013023	0.000000	0.000000	0.000594	0.000000	0.000000	0.000594	0.000272	0.000272	0.060365	0.060365	0.000272	0.000272	0.000272	0.000272	0.000145	0.012134	0.012134	0.000000	0.000000	0.000000
E-Benzene		0.000011	0.000011	0.000012	0.000013	0.000004	0.000004	0.000013	0.000013	0.000006	0.000120	0.000120	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000555	0.000555	0.000002	0.000002	0.000002	0.000002	0.000001	0.000108	0.000108	0.000000	0.000000	0.000000
m-Xylene		0.000023	0.000023	0.000027	0.000027	0.000009	0.000009	0.000027	0.000027	0.000014	0.000276	0.000276	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001278	0.001278	0.000004	0.000004	0.000004	0.000004	0.000002	0.000220	0.000220	0.000000	0.000000	0.000000
p-Xylene		0.000023	0.000023	0.000027	0.000027	0.000009	0.000009	0.000027	0.000027	0.000014	0.000275	0.000275	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000004	0.000004	0.001274	0.001274	0.000004	0.000004	0.000004	0.000004	0.000002	0.000221	0.000221	0.000000	0.000000	0.000000
o-Xylene		0.000016	0.000016	0.000020	0.000020	0.000007	0.000007	0.000020	0.000020	0.000010	0.000210	0.000210	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000003	0.000003	0.000973	0.000973	0.000003	0.000003	0.000003	0.000003	0.000001	0.000162	0.000162	0.000000	0.000000	0.000000
n-Nonane		0.000229	0.000229	0.000398	0.000401	0.000279	0.000279	0.000401	0.000401	0.000235	0.005555	0.005555	0.000000	0.000000	0.000216	0.000000	0.000000	0.000210	0.000042	0.000042	0.025821	0.025821	0.000042	0.000042	0.000042	0.000042	0.000015	0.002562	0.002562	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000013	0.000015	0.000015	0.000013	0.000013	0.000008	0.000208	0.000208	0.000000	0.000000	0.000008	0.000000	0.000000	0.000008	0.000001	0.000001	0.000967	0.000967	0.000001	0.000001	0.000001	0.000001	0.000000	0.000065	0.000065	0.000000	0.000000	0.000000
n-Decane		0.000037	0.000037	0.000132	0.000130	0.000225	0.000225	0.000130	0.000130	0.000086	0.002264	0.002264	0.000000	0.000000	0.000081	0.000000	0.000000	0.000081	0.000006	0.000006	0.010556	0.010556	0.000006	0.000006	0.000006	0.000006	0.000001	0.000472	0.000472	0.000000	0.000000	0.000000
C7*		0.007093	0.007093	0.005409	0.005521	0.000464	0.000464	0.005521	0.005521	0.002153	0.019952	0.019952	0.001121	0.001121	0.001752	0.082640	0.082640	0.001752	0.001506	0.001506	0.092148	0.092148	0.001506	0.001506	0.001506	0.001506	0.001114	0.037837	0.037837	0.001121	0.001121	0.001121
C8*		0.001207	0.001207	0.001408	0.001428	0.000519	0.000519	0.001428	0.001428	0.000761	0.014964	0.014964	0.000121	0.000121	0.000640	0.030833	0.030833	0.000640	0.000245	0.000245	0.069448	0.069448	0.000245	0.000245	0.000245	0.000245	0.000121	0.011767	0.011767	0.000121	0.000121	0.000121
C9*		0.000101	0.000101	0.000247	0.000246	0.000285	0.000285	0.000246	0.000246	0.000157	0.003953	0.003953	0.000005	0.000005	0.000144	0.018411	0.018411	0.000144	0.000019	0.000019	0.013794	0.013794	0.000019	0.000019	0.000019	0.000019	0.000005	0.001250	0.001250	0.000005	0.000005	0.000005
C10-C13*		0.000000	0.000000	0.000003	0.000003	0.000031	0.000031	0.000003	0.000003	0.000002	0.000067	0.000067	0.000000	0.000000	0.000002	0.000010	0.000010	0.000002	0.000000	0.000000	0.000315	0.000315	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000

CASE 3C MAXIMUM GAS AND OIL, GAS SG 0.7909 AT 1st STAGE HP COMPRESSOR AND GAS LIFT 79MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1817	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9651	1.0000	1.0000	1.0000	0.8633	1.0000
Temperature	C	50.45	44.13	50.45	144.91	45.00	45.00	45.00	44.86	59.00	12.72	71.04	50.45	41.04	35.00	50.45
Pressure	bar_g	45.89	30.00	45.89	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	45.89	30.00	8.70	45.89
Mass Flow	kg/h	0.00	0.00	51,773	51,773	51,773	88,191	15,355	88,191	15,355	15,355	11,472	11,472	11,472	1,497	1,675
Molar Flow	kgmole/h	0.00	0.00	2,310	2,310	2,310	3,935	685.1	3,935	685.1	685.1	511.9	511.9	511.9	44.2	74.7
Mass Enthalpy	kJ/kg	-2,582	-2,582	-3,656	-3,481	-3,788	-3,788	-3,788	-3,788	-3,740	-3,740	-3,586	-3,656	-3,656	-3,128	-3,656
Heat Flow	kW	0	0	-52,585	-50,064	-54,484	-92,809	-16,159	-92,809	-15,954	-15,954	-11,428	-11,652	-11,652	1,301	-1,701
Mass Density	kg/m3	513.14	237.84	45.90	98.31	170.44	170.44	170.44	169.98	152.16	30.49	25.97	45.90	29.94	15.94	45.90
Molecular Weight		52.55	52.55	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	22.41	33.90	22.41
VAPOR																
Mass Flow	kg/h	---	0.00	51,773	51,773	51,773	88,191	15,355	88,191	15,355	14,066	11,472	11,472	11,472	1,164	1,675
Molar Flow	kgmole/h	---	0.00	2,310	2,310	2,310	3,935	685.1	3,935	685.1	661.2	511.9	511.9	511.9	38.1	74.7
Actual Volume Flow	m3/h	---	0.00	1,128.0	526.6	303.8	517.4	90.1	518.8	100.9	501.4	441.8	249.9	383.1	93.4	36.48
Std Gas Flow	MMSCFD	---	0.00	46.38	46.38	46.38	79.00	13.76	79.00	13.76	13.28	10.28	10.28	10.28	0.77	1.50
Mass Density	kg/m3	---	33.49	45.90	98.31	170.44	170.44	170.44	169.98	152.16	28.05	25.97	45.90	29.94	12.46	45.90
Molecular Weight		---	24.67	22.41	22.41	22.41	22.41	22.41	22.41	22.41	21.27	22.41	22.41	22.41	30.53	22.41
Viscosity	cP	---	0.012	0.013	0.019	0.020	0.020	0.020	0.020	0.020	0.011	0.013	0.013	0.012	0.011	0.013
Thermal Conductivity	W/m-K	---	0.033	0.037	0.057	0.055	0.055	0.055	0.055	0.053	0.031	0.038	0.037	0.034	0.026	0.037
Mass Heat Capacity	kJ/kg-C	---	2.295	2.475	2.912	3.513	3.513	3.513	3.514	3.304	2.269	2.340	2.475	2.306	1.973	2.475
Cp/Cv		---	1.352	1.416	1.377	1.933	1.933	1.933	1.934	1.785	1.400	1.299	1.416	1.354	1.222	1.416
Z Factor		---	0.866	0.851	0.892	0.675	0.675	0.675	0.675	0.722	0.878	0.920	0.851	0.889	0.929	0.851
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,289	---	---	---	304.8	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	23.9	---	---	---	4.46	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	2.28	---	---	---	0.50	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	346.0	---	---	---	73.2	---
Mass Density	kg/m3	513.14	551.90	---	---	---	---	---	---	---	565.99	---	---	---	607.50	---
Viscosity (Note 4)	cP	0.109	0.139	---	---	---	---	---	---	---	0.160	---	---	---	0.198	---
Thermal Conductivity	W/m-K	0.083	0.088	---	---	---	---	---	---	---	0.096	---	---	---	0.096	---
Mass Heat Capacity	kJ/kg-C	2.714	2.521	---	---	---	---	---	---	---	2.379	---	---	---	2.318	---
Surface Tension	dyne/cm	7.07	8.90	---	---	---	---	---	---	---	10.73	---	---	---	12.23	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	28.4	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.57	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.22	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000203	0.000203	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.001644	0.000401	0.001644
CO2		0.000174	0.000174	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000350	0.000409	0.000350
Methane		0.213668	0.213668	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.759312	0.418990	0.759312
Ethane		0.103748	0.103748	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.113477	0.174543	0.113477
Propane		0.140990	0.140990	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.064249	0.154295	0.064249
i-Butane		0.057594	0.057594	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.013957	0.040086	0.013957
n-Butane		0.136245	0.136245	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.026103	0.078653	0.026103
22-Mpropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000051	0.000000
i-Pentane		0.075754	0.075754	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.007720	0.025595	0.007720
n-Pentane		0.093567	0.093567	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.007896	0.027031	0.007896
n-Hexane		0.105597	0.105597	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.044044	0.016034	0.044044
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000986	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000083	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000746	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002446	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001308	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000112	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000020	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000401	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000130	0.000000
C7*		0.053489	0.053489	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.001121	0.005521	0.001121
C8*		0.017146	0.017146	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.000121	0.001428	0.000121
C9*		0.001823	0.001823	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000246	0.000005
C10-C13*		0.000003	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.040794	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000122	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000037	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000010	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000089	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000136	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003870	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002108	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001470	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000389	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41	439.58	883

CASE 4 MAXIMUM GAS AND OIL, GAS SG 0.7909 AND 27.3°C AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Inlet of HP Separator	Incoming Well Fluid from Prod. Manifold	Gas Outlet from Slug Catcher	Liquid Outlet from Slug Catcher	Inlet Heater Discharge	PW Recycle to HP Separator	Water Outlet from HP Separator	Liquid Outlet from HP Separator	Interstage Heater Discharge	Liquid from Interstage Heater to MP Separator	Gas Outlet from HP Separator	Inlet of MP Separator
Stream Number		**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
Vapour Fraction		0.0001	0.2310	1.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0009	0.0139	1.0000	0.0145
Temperature	C	72.00	69.03	68.00	68.00	72.00	69.45	71.83	71.83	71.83	71.41	71.83	69.31
Pressure	bar_g	8.50	8.60	8.60	8.60	8.50	15.20	8.50	8.50	8.00	3.00	8.50	3.00
Mass Flow	kg/h	409,239	516,321	124,494	409,239	409,239	25,092	247,335	186,962	186,962	186,962	33.3	193,758
Molar Flow	kgmole/h	14,351	18,730	5,390	14,351	14,351	1,393	13,729	2,013	2,013	2,013	1.41	2,214
Mass Enthalpy	kJ/kg	-10,217	-8,860	-3,716	-10,231	-10,217	-15,694	-15,685	-3,720	-3,720	-3,720	-3,689	-3,862
Heat Flow	kW	-1,161,424	-1,270,673	-128,519	-1,163,004	-1,161,424	-109,389	-1,077,598	-193,180	-193,180	-193,180	-34	-207,873
Mass Density	kg/m3	882.89	40.13	8.06	894.01	882.89	973.49	971.35	811.51	792.04	440.51	8.08	421.10
Molecular Weight		28.52	27.57	23.10	28.52	28.52	18.02	18.02	92.88	92.88	92.88	23.65	87.53
VAPOR													
Mass Flow	kg/h	34.5	104,775	124,494	---	34.5	---	---	---	44.6	849.8	33.3	1,003
Molar Flow	kgmole/h	1.46	4,327	5,390	---	1.46	---	---	---	1.86	28.0	1.41	32.2
Actual Volume Flow	m3/h	4.27	12,406	15,449	---	4.27	---	---	---	5.75	195.7	4.12	223.1
Std Gas Flow	MMSCFD	0.03	86.88	108.22	---	0.03	---	---	---	0.04	0.56	0.03	0.65
Mass Density	kg/m3	8.08	8.45	8.06	---	8.08	---	---	---	7.75	4.34	8.08	4.50
Molecular Weight		23.67	24.21	23.10	---	23.67	---	---	---	23.98	30.35	23.65	31.20
Viscosity	cP	0.013	0.012	0.012	---	0.013	---	---	---	0.012	0.012	0.013	0.011
Thermal Conductivity	W/m-K	0.035	0.034	0.035	---	0.035	---	---	---	0.035	0.030	0.035	0.029
Mass Heat Capacity	kJ/kg-C	2.173	2.155	2.173	---	2.173	---	---	---	2.163	2.035	2.173	2.021
Cp/Cv		1.225	1.224	1.232	---	1.225	---	---	---	1.222	1.172	1.225	1.168
Z Factor		0.971	0.969	0.971	---	0.971	---	---	---	0.972	0.979	0.971	0.978
LIQUID													
Mass Flow	kg/h	164,583	166,445	---	164,610	164,583	---	---	164,582	164,540	163,774	---	167,664
Molar Flow	kgmole/h	770.6	797.4	---	771.7	770.6	---	---	770.7	768.9	744.9	---	788.7
Actual Volume Flow	m3/h	207.4	209.9	---	206.7	207.4	---	---	207.3	207.3	205.7	---	211.3
Liq Vol Flow @Std Cond	barrel/day	29,826	30,245	---	29,834	29,826	---	---	29,826	29,815	29,623	---	30,452
Mass Density	kg/m3	793.63	793.15	---	796.36	793.63	---	---	793.75	793.88	796.10	---	793.67
Viscosity (Note 4)	cP	2.002	1.994	---	2.132	2.002	---	---	2.008	2.015	2.126	---	2.025
Thermal Conductivity	W/m-K	0.111	0.111	---	0.112	0.111	---	---	0.111	0.111	0.113	---	0.112
Mass Heat Capacity	kJ/kg-C	2.170	2.160	---	2.154	2.170	---	---	2.169	2.169	2.165	---	2.159
Surface Tension	dyne/cm	16.87	16.78	---	17.08	16.87	---	---	16.88	16.92	17.42	---	17.30
AQUEOUS (Note 3)													
Mass Flow	kg/h	244,621	245,101	---	244,628	244,621	25,092	247,335	22,379	22,378	22,339	---	25,091
Molar Flow	kgmole/h	13,579	13,605	---	13,579	13,579	1,393	13,729	1,242	1,242	1,240	---	1,393
Actual Volume Flow	m3/h	251.9	251.8	---	251.1	251.9	25.8	254.6	23.0	23.0	23.0	---	25.8
Liq Vol Flow @Std Cond	barrel/day	36,403	36,474	---	36,404	36,403	3,734	36,807	3,330	3,330	3,324	---	3,734
Mass Density	kg/m3	971.21	973.58	---	974.40	971.21	973.49	971.35	971.35	971.32	971.47	---	973.15
Viscosity	cP	0.390	0.406	---	0.412	0.390	0.403	0.391	0.391	0.390	0.393	---	0.404
Thermal Conductivity	W/m-K	0.664	0.662	---	0.661	0.664	0.662	0.664	0.664	0.664	0.663	---	0.662
Mass Heat Capacity	kJ/kg-C	4.343	4.339	---	4.338	4.343	4.338	4.343	4.343	4.343	4.343	---	4.340
Surface Tension	dyne/cm	63.80	64.34	---	64.52	63.80	64.26	63.83	63.83	63.83	63.91	---	64.29
COMPOSITION MOLE FRACTION													
Nitrogen		0.000002	0.000497	0.001724	0.000002	0.000002	0.000000	0.000000	0.000009	0.000009	0.000009	0.001564	0.000009
CO2		0.000002	0.000106	0.000364	0.000002	0.000002	0.000000	0.000001	0.000012	0.000012	0.000012	0.000370	0.000012
Methane		0.001350	0.160073	0.724450	0.001350	0.001350	0.000000	0.000000	0.009128	0.009128	0.009128	0.704268	0.009075
Ethane		0.000750	0.027181	0.108226	0.000750	0.000750	0.000000	0.000000	0.005267	0.005267	0.005267	0.111865	0.005411
Propane		0.001241	0.019853	0.065683	0.001241	0.001241	0.000000	0.000000	0.008800	0.008800	0.008800	0.069750	0.009321
i-Butane		0.000569	0.004496	0.014108	0.000569	0.000569	0.000000	0.000000	0.004043	0.004043	0.004043	0.015224	0.004376
n-Butane		0.001370	0.008620	0.026307	0.001370	0.001370	0.000000	0.000000	0.009750	0.009750	0.009750	0.028541	0.010683
22-Mpropane		0.000001	0.000005	0.000016	0.000001	0.000001	0.000000	0.000000	0.000008	0.000008	0.000008	0.000018	0.000009
i-Pentane		0.000870	0.002914	0.007888	0.000870	0.000870	0.000000	0.000000	0.006198	0.006198	0.006198	0.008588	0.006925
n-Pentane		0.001110	0.003169	0.008058	0.001110	0.001110	0.000000	0.000000	0.007905	0.007905	0.007905	0.008910	0.008923
n-Hexane		0.001674	0.002634	0.004698	0.001674	0.001674	0.000000	0.000000	0.011930	0.011930	0.011930	0.005288	0.013604
Mcyclopentan		0.000106	0.000165	0.000291	0.000106	0.000106	0.000000	0.000000	0.007556	0.007556	0.007556	0.000326	0.000864
Benzene		0.000009	0.000014	0.000024	0.000009	0.000009	0.000000	0.000000	0.000062	0.000062	0.000062	0.000027	0.000071
Cyclohexane		0.000097	0.000138	0.000221	0.000097	0.000097	0.000000	0.000000	0.006991	0.006991	0.006991	0.000249	0.000787
n-Heptane		0.000721	0.000783	0.000804	0.000721	0.000721	0.000000	0.000000	0.005136	0.005136	0.005136	0.000921	0.005671
Mcyclohexane		0.000356	0.000394	0.000423	0.000356	0.000356	0.000000	0.000000	0.002537	0.002537	0.002537	0.000481	0.002805
Toluene		0.000036	0.000038	0.000037	0.000036	0.000036	0.000000	0.000000	0.000255	0.000255	0.000255	0.000042	0.000281
n-Octane		0.001336	0.001194	0.000593	0.001336	0.001336	0.000000	0.000000	0.009521	0.009521	0.009521	0.000692	0.009804
E-Benzene		0.000012	0.000011	0.000005	0.000012	0.000012	0.000000	0.000000	0.000088	0.000088	0.000088	0.000006	0.000091
m-Xylene		0.000031	0.000027	0.000012	0.000031	0.000031	0.000000	0.000000	0.000224	0.000224	0.000224	0.000013	0.000228
p-Xylene		0.000031	0.000027	0.000012	0.000031	0.000031	0.000000	0.000000	0.000224	0.000224	0.000224	0.000013	0.000228
o-Xylene		0.000025	0.000022	0.000009	0.000025	0.000025	0.000000	0.000000	0.000179	0.000179	0.000179	0.000010	0.000181
n-Nonane		0.001147	0.000939	0.000209	0.001147	0.001147	0.000000	0.000000	0.008179	0.008179	0.008179	0.000248	0.008179
124-MBenzene		0.000060	0.000048	0.000008	0.000060	0.000060	0.000000	0.000000	0.000430	0.000430	0.000430	0.000009	0.000409
n-Decane		0.001064	0.000839	0.000081	0.001064	0.001064	0.000000	0.000000	0.007589	0.007589	0.007589	0.000098	0.007098
C7*		0.001274	0.001476	0.001736	0.001274	0.001274	0.000000	0.000000	0.009085	0.009085	0.009085	0.001981	0.010157
C8*		0.002003	0.001719	0.000640	0.002003	0.002003	0.000000	0.000000	0.014280	0.014280	0.014280	0.000747	0.014292
C9*		0.001381	0.000710	0.000100	0.001381	0.001381	0.000000	0.000000	0.009847	0.009847	0.009847	0.000172	0.009298
C10-C13*		0.000205	0.000158	0.000002	0.000205	0.000205	0.000000	0.000000	0.001465	0.001465	0.001465	0.000003	0.001338
C14-C18*		0.000144	0.000110	0.000000	0.000144	0.000144	0.000000	0.000000	0.001027	0.001027	0.001027	0.000000	0.000934
C19-C21*		0.000102	0.000078	0.000000	0.000102	0.000102	0.000000	0.000000	0.000724	0.000724	0.000724	0.000000	0.000658
C22-C24*		0.000100	0.000076	0.000000	0.000100	0.000100	0.000000	0.000000	0.000711	0.000711	0.000711	0.000000	0.000647
C25-C27*		0.000075	0.000057	0.000000	0.000075	0.000075	0.000000	0.000000	0.000533	0.000533	0.000533	0.000000	0.000485
C28-C31*		0.000071	0.000055	0.000000	0.000071	0.000071	0.000000	0.000000	0.000509	0.000509	0.000509	0.000000	0.000463
C32-C37*		0.000067	0.000051	0.000000	0.000067	0.000067	0.000000	0.000000	0.000476	0.000476	0.000476	0.000000	0.000433
C38-C45*		0.000046	0.000035	0.000000	0.000046	0.000046	0.000000	0.000000	0.000328	0.000328	0.000328	0.000000	0.000298
C46-C60*		0.000038	0.000029	0.000000	0.000038	0.000038	0.000000	0.000000	0.000273	0.000273	0.000273	0.000000	0.000249
C10-C13_1*		0.000081	0.000028	0.000001	0.000081	0.000081	0.000000	0.000000	0.000705	0.000705	0.000705	0.000002	0.000710
C14-C16*		0.000511	0.000391	0.000000	0.000511	0.000511	0.000000	0.000000	0.003642	0.003642	0.003642	0.000000	0.003311
C17-C20*		0.000597	0.000457	0.000000	0.000597	0.000597	0.000000	0.000000	0.004255	0.004255	0.004255	0.000000	0.003869
C21-C22*		0.000542	0.000415	0.000000	0.000542	0.000542	0.000000	0.000000	0.003862	0.003862	0.003862	0.000000	0.003512
C23*		0.000213	0.000163	0.000000	0.000213	0.000213	0.000000	0.000000	0.001515	0.001515	0.001515	0.000000	0.001378
C24-C26*		0.000467	0.000358	0.000000	0.000467	0.000467	0.000000	0.000000	0.003331	0.003331	0.003331	0.000000	0.003029
C27-C29*		0.000289	0.000222	0.000000	0.000289	0.000289	0.000000	0.000000	0.002063	0.002063	0.002063	0.000000	0.001876
C30-C34*		0.000259	0.000198	0.000000	0.000259	0.000259	0.000000	0.000000	0.001846	0.001846	0.001846	0.000000	0.001679
C35-C80*		0.000212	0.000162	0.000000	0.000212	0.000212	0.000000	0.000000	0.001510	0.001510	0.001510	0.000000	0.001373
C10-C13_2*		0.000032	0.000025	0.000000	0.000032	0.000032	0.000000	0.000000	0.000228	0.000228	0.000228	0.000000	0.000208
C14-C18_1*		0.000019	0.000015	0.000000	0.000019	0.000019	0.000000	0.000000	0.000137	0.000137	0.000137	0.000000	0.000125
C19-C21_1*		0.000019	0.000015	0.000000	0.000019	0.000019	0.000000	0.000000	0.000136	0.000136	0.000136	0.000000	0.000124
C22-C24*		0.000013	0.000010	0.000000	0.000013	0.000013	0.000000	0.000000	0.000094	0.000094	0.000094	0.000000	0.000085
C24-C26_1*		0.000015	0.000011	0.000000	0.000015	0.000015	0.000000	0.000000	0.000105	0.000105	0.000105	0.000000	0.000095
C27-C29_1*		0.000010	0.000008	0.000000	0.000010	0.000010	0.000000	0.000000	0.000073	0.000073	0.000073	0.000000	0.000066
C30-C33*		0.000009	0.000007	0.000000	0.000009	0.000009	0.000000	0.000000	0.000064	0.000064	0.000064	0.000000	0.000058
C34-C40*		0.000006	0.000006	0.000000	0.000006	0.000006	0.000000	0.000000	0.000059	0.000059	0.000059	0.000000	0.000054
C41-C80*		0.000006	0.000005	0.000000	0.000006	0.000006	0.000000	0.000000	0.000044	0.000044	0.000044	0.000000	0.000040
C10-C13_3*		0.002025	0.001552	0.000002	0.002025	0.002025	0.000000	0.000000	0.014436	0.014436	0.014436	0.000003	0.013133
C14-C17*		0.000895	0.000686	0.000000	0.000895	0.000895	0.000000	0.000000	0.006380	0.006380	0.006380	0.000000	0.005802
C18-C21*		0.001262	0.000967	0.000000	0.001262	0.001262	0.000000	0.000000	0.009000	0.009000	0.009000	0.000000	0.008184
C22-C23_1*		0.000752	0.000576	0.000000	0.000752	0.000752	0.000000	0.000000	0.005363	0.005363	0.005363	0.000000	0.004876
C24-C25*		0.000584	0.000448	0.000000	0.000584	0.000584	0.000000	0.000000	0.004167	0.004167	0.004167	0.000000	0.003789
C26-C28*		0.000642	0.000492	0.000000	0.000642	0.000642	0.000000	0.000000	0.004574	0.004574	0.004574	0.000000	0.004159
C29-C32*		0.000552	0.000423	0.000000	0.000552	0.000552	0.000000	0.000000	0.003939	0.003939	0.003939	0.000000	0.003581
C33-C39*		0.000494	0.000378	0.000000	0.000494	0.000494	0.000000	0.000000	0.003518	0.003518	0.003518	0.000000	0.003199
C40-C80*		0.000346	0.000265	0.000000	0.000346	0.000346	0.000000	0.000000	0.002465	0.002465	0.002465	0.000000	0.002241
H2O		0.946372	0.733898	0.980529	0.946372	0.946372	0.999999	0.999999	0.618344	0.618344	0.618344	0.036401	0.631310
HSTc20+*		0.002976	0.002280	0.000000	0.002976	0.002976	0.000000	0.000000	0.021218	0.021218	0.021218	0.000000	0.019294
HSTDc10*		0.000667	0.000531	0.000071	0.000667	0.000667	0.000000	0.000000	0.004754	0.004754	0.004754	0.000085	0.004495
HSTDc11*		0.000529	0.000413	0.000025	0.000529	0.000529	0.000000	0.000000	0.003774	0.003774	0.003774	0.000030	0.003493
HSTDc12*		0.000429	0.000331	0.000008	0.000429	0.000429	0.000000	0.000000	0.003056	0.003056	0.003056	0.000010	0.002799
HSTDc13*		0.000406	0.000312	0.000003	0.000406	0.000406	0.000000	0.000000	0.002892	0.002892	0.002892	0.000004	0.002637
HSTDc14*		0.000330	0.000253	0.000001	0.000330	0.000330	0.000000	0.000000	0.002352	0.002352	0.002352	0.000001	0.002141
HSTDc15*		0.000362	0.000278	0.000000	0.000362	0.000362	0.000000	0.000000	0.002584	0.002584	0.002584	0.000000	0.002351
HS-22P_C20+*		0.001358	0.001040	0.000000	0.001358	0.001358	0.000000	0.000000	0.009679	0.009679	0.009679	0.000000	0.008801
10X-DST1_2c11*		0.001043	0.000816	0.000058	0.001043	0.001043	0.000000	0.000000	0.007433	0.007433	0.007433	0.000070	0.006902
10X-DST1_2c12*		0.000877	0.000679	0.000026	0.000877	0.000877	0.000000	0.000000	0.006250	0.006250	0.006250	0.000032	0.005748
10X-DST1_2c13*		0.000884	0.000682	0.000015	0.000884	0.000884	0.000000	0.000000	0.006306	0.006306	0.006306	0.000018	0.005771
10X-DST1_2c14*		0.000771	0.000592	0.000007	0.000771	0.000771	0.000000	0.000000	0.005495	0.005495	0.005495	0.000008	0.005013
10X-DST1_2c15*		0.000899	0.000690	0.000003	0.000899	0.000899	0.000000	0.000000	0.006409	0.006409	0.006409	0.000004	0.005836
10X-DST1_2c16*		0.000573	0.000439	0.000001	0.000573	0.000573	0.000000	0.000000	0.004085	0.004085	0.004085	0.000001	0.003716
10X-DST1_2c17*		0.000496	0.000380	0.000000	0.000496	0.000496	0.000000	0.000000	0.003535	0.003535	0.003535	0.000000	0.003215
10X-DST1_2c18*		0.000584	0.000448	0.000000	0.000584	0.000584	0.000000	0.000000	0.004166	0.004166	0.004166	0.000000	0.003789
10X-DST1_2c19*		0.000495	0.000379	0.000000	0.000495	0.000495	0.000000	0.000000	0.003527	0.003527	0.003527	0.000000	0.003207
10X-DST1_C20+*		0.002345	0.001797	0.000000	0.002345	0.002345	0.000000	0.000000	0.016720	0.016720	0.016720	0.000000	0.015203
10X-DST2_C20+*		0.001451	0.001112	0.000000	0.001451	0.001451	0.000000	0.000000	0.010345	0.010345	0.010345	0.000000	0.009407
HSTDc16*		0.000231	0.000177	0.000000	0.000231	0.000231	0.000000	0.000000	0.001647	0.001647	0.001647	0.000000	0.001498
HSTDc17*		0.000192	0.000147	0.000000	0.000192	0.000192	0.000000	0.000000	0.001370	0.001370	0.001370	0.000000	0.001246
HSTDc18*		0.000185	0.000142	0.000000	0.000185	0.000185	0.000000	0.000000	0.001319	0.001319	0.001319	0.000000	0.001199
HSTDc19*		0.000165	0.000127	0.000000	0.000165	0.000165	0.000000	0.000000	0.001177	0.001177	0.001177	0.000000	0.001070
HSDc20+*		0.001512	0.001158	0.000000	0.001512	0.001512	0.000000	0.000000	0.010778	0.010778	0.010778	0.000000	0.009801
HSTDc6*		0.000383	0.000624	0.001148	0.000383	0.000383	0.000000	0.000000	0.002730	0.002730	0.002730	0.001288	0.003104
HSTDc7*		0.000520	0.000593	0.000674	0.000520	0.000520	0.000000	0.000000	0.003708	0.003708	0.003708	0.000767	0.004120
HSTDc8*		0.000885	0.000836	0.000549	0.000885	0.000885	0.000000	0.000000	0.006309	0.006309	0.006309	0.000633	0.006668
HSTDc9*		0.000750	0.000629	0.000187	0.000750	0.000750	0.000000	0.000000	0.005349	0.005349	0.005349	0.000219	0.005276
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Stream Name	Unit	Gas Outlet from MP Separator	Liquid Outlet from MP Separator	Water Outlet from MP Separator	Crude Transfer Pump Discharge	Oil Outlet from Elect. Coalescer	Water Outlet from Elect. Coalescer	Water from Elect. Coalescer to MP Separator	Inlet of LP Separator	Final Stage Heater Discharge	Liquid Outlet from LP Separator	Crude Cooler Discharge	Gas Outlet from LP Separator	LP Separator Gas Cooler Discharge	Flash Gas to LP Comp Suction Scrubber	Inlet of LP Comp Suct Scrubber	Inlet of LP Comp	Cond. Outlet from LP Comp. Suction Scrubber	LP Scrubber Cond. Pump Discharge
Stream Number		**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32A/B**	**33A/B**	**34A/B**	**35A/B**	**36A/B**
Vapour Fraction		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0211	0.0000	0.0000	0.0000	1.0000	0.9334	0.9334	0.8775	1.0000	0.0000	0.0000
Temperature	C	69.31	69.31	69.31	69.38	69.38	69.38	69.46	69.17	69.41	69.17	55.00	69.17	35.00	35.00	35.52	35.52	35.52	35.65
Pressure	bar_g	3.00	3.00	3.00	7.20	7.20	7.20	3.50	1.05	6.70	1.05	0.98	1.05	0.92	0.92	0.92	0.92	0.92	7.10
Mass Flow	kg/h	1,004	178,487	25,092	178,487	167,667	10,820	10,820	167,667	167,667	166,990	166,990	677.0	677.0	677.0	697.7	631.6	66.0	66.0
Molar Flow	kgmole/h	32.2	1,389	1,393	1,389	788.8	600.6	600.6	788.8	788.8	772.2	772.2	16.6	16.6	16.6	17.7	15.5	2.17	2.17
Mass Enthalpy	kJ/kg	-3,278	-2,919	-15,696	-2,919	-2,094	-15,695	-15,695	-2,094	-2,094	-2,091	-2,122	-2,763	-2,892	-2,892	-3,249	-2,654	-8,939	-8,938
Heat Flow	kW	-914	-144,740	-109,401	-144,705	-97,531	-47,175	-47,175	-97,531	-97,531	-97,011	-98,410	-520	-544	-544	-630	-466	-164	-164
Mass Density	kg/m3	4.50	802.63	973.15	802.94	793.97	973.25	973.05	385.50	793.90	795.06	805.01	3.01	3.37	3.37	3.46	3.14	809.95	810.38
Molecular Weight		31.21	128.46	18.02	128.46	212.57	18.02	18.02	212.57	212.57	216.27	216.27	40.72	40.72	40.72	39.38	40.63	30.44	30.44
VAPOR																			
Mass Flow	kg/h	1,004	---	---	---	---	---	---	677.0	---	---	---	677.0	630.3	630.3	631.6	631.6	---	---
Molar Flow	kgmole/h	32.2	---	---	---	---	---	---	16.6	---	---	---	16.6	15.5	15.5	15.5	15.5	---	---
Actual Volume Flow	m3/h	223.2	---	---	---	---	---	---	224.9	---	---	---	224.9	200.7	200.7	201.4	201.4	---	---
Std Gas Flow	MMSCFD	0.65	---	---	---	---	---	---	0.33	---	---	---	0.33	0.31	0.31	0.31	0.31	---	---
Mass Density	kg/m3	4.50	---	---	---	---	---	---	3.01	---	---	---	3.01	3.14	3.14	3.14	3.14	---	---
Molecular Weight		31.21	---	---	---	---	---	---	40.72	---	---	---	40.72	40.62	40.62	40.63	40.63	---	---
Viscosity	cP	0.011	---	---	---	---	---	---	0.010	---	---	---	0.010	0.009	0.009	0.009	0.009	---	---
Thermal Conductivity	W/m-K	0.029	---	---	---	---	---	---	0.025	---	---	---	0.025	0.021	0.021	0.021	0.021	---	---
Mass Heat Capacity	kJ/kg-C	2.021	---	---	---	---	---	---	1.938	---	---	---	1.938	1.805	1.805	1.807	1.807	---	---
Cp/Cv		1.168	---	---	---	---	---	---	1.128	---	---	---	1.128	1.141	1.141	1.141	1.141	---	---
Z Factor		0.978	---	---	---	---	---	---	0.981	---	---	---	0.981	0.976	0.976	0.976	0.976	---	---
LIQUID																			
Mass Flow	kg/h	---	167,667	---	167,667	167,667	---	---	166,990	167,667	166,990	166,990	---	33.3	33.3	33.4	---	33.4	33.4
Molar Flow	kgmole/h	---	788.8	---	788.8	788.8	---	---	772.2	788.8	772.2	772.2	---	0.36	0.36	0.36	---	0.36	0.36
Actual Volume Flow	m3/h	---	211.3	---	211.2	211.2	---	---	210.0	211.2	210.0	207.4	---	0.05	0.05	0.05	---	0.05	0.05
Liq Vol Flow @Std Cond	barrel/day	---	30,453	---	30,453	30,453	---	---	30,291	30,453	30,291	30,291	---	7.18	7.18	7.19	---	7.19	7.19
Mass Density	kg/m3	---	793.66	---	793.97	793.97	---	---	795.06	793.90	795.06	805.01	---	682.35	682.35	683.56	---	683.56	684.13
Viscosity (Note 4)	cP	---	2.025	---	2.024	2.024	---	---	2.092	2.023	2.092	2.676	---	0.348	0.348	0.352	---	0.352	0.352
Thermal Conductivity	W/m-K	---	0.112	---	0.112	0.112	---	---	0.113	0.112	0.113	0.115	---	0.108	0.108	0.108	---	0.108	0.108
Mass Heat Capacity	kJ/kg-C	---	2.159	---	2.159	2.159	---	---	2.156	2.159	2.156	2.098	---	2.140	2.140	2.139	---	2.139	2.137
Surface Tension	dyne/cm	---	17.30	---	17.29	17.29	---	---	17.51	17.29	17.51	18.47	---	16.77	16.77	16.78	---	16.78	16.77
AQUEOUS (Note 3)					

CASE 4 MAXIMUM GAS AND OIL, GAS SG 0.7909 AND 27.3°C AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	LP Comp. Discharge	LP Comp. Discharge Cooler Discharge	Inlet of MP Comp. Suction Scrubber	Inlet of MP Comp	Cond. Outlet from MP Comp. Suction Scrubber	Cond from MP Comp. Suct. Scrubber to LP Comp. Suct. Scrubber	MP Comp. Discharge	MP Comp. Discharge Cooler Discharge	Inlet of HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber	Condensate from HP Comp Inlet Scrubber to MP Separator	Inlet of HP fuel Gas K.O. Drum	Gas outlet from HP Fuel Gas K.O.Drum	Gas Outlet from Fuel Gas Scrubber	Condensate from HP Fuel Gas K.O.Drum	Condensate from HP Fuel Gas K.O.Drum to HP Comp Inlet Scrubber	Feed Gas Cooler Discharge	Gas Outlet of HP Comp. Inlet Scrubber	Inlet of 1st Stage HP Comp. Suction Scrubber	Cond. Outlet from 1st Stage HP Comp. Suction Scrubber	Cond. from 1st Stage HP Comp. Suction Scrubber to MP Separator	Gas Outlet from 1st Stage HP Comp. Suction Scrubber	1st Stage HP Comp. Discharge	1st Stage HP Comp. Discharge Cooler Discharge	Inlet to Contactor Inlet Scrubber	Gas Outlet from Contactor Inlet Scrubber	Cond. Outlet from Contactor Inlet Scrubber	Cond. from Contactor Inlet Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from Glycol Contactor	Total Gas to 2nd Stage HP Comp. Suction Scruber	Gas to 2nd Stage HP Comp. Suction Scruber
Stream Number		**37A/B**	**38A/B**	**39A/B**	**40A/B**	**41A/B**	**42A/B**	**43A/B**	**44A/B**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**54**	**55**	**56A/B**	**57A/B**	**58A/B**	**59A/B**	**60A/B**	**61A/B**	**62**	**63**	**64**	**65**	**66**	**67**	**68A/B**
Vapour Fraction		1.0000	0.8890	0.9768	1.0000	0.0000	0.0003	1.0000	0.8554	0.9636	0.0000	0.0097	1.0000	1.0000	1.0000	0.0161	0.1963	0.9664	1.0000	1.0000	0.0000	0.0380	1.0000	1.0000	0.9955	0.9955	0.9999	0.0000	0.2334	1.0000	1.0000	1.0000
Temperature	C	77.80	32.00	54.74	54.41	54.41	54.37	107.22	35.00	27.51	27.51	26.77	40.61	40.61	67.95	40.08	29.69	27.85	27.51	27.51	27.29	25.61	27.29	165.20	50.00	50.00	49.86	50.00	35.12	50.45	50.45	50.45
Pressure	bar_g	4.10	3.60	3.00	2.90	2.90	1.30	9.20	8.70	8.30	8.30	3.50	30.00	30.00	8.50	30.00	8.70	8.30	8.30	8.30	8.00	3.50	8.00	48.89	48.39	48.39	48.09	48.39	8.70	46.39	46.39	46.39
Mass Flow	kg/h	631.6	631.6	1,636	1,615	20.6	20.6	1,615	1,615	127,285	6,730	6,730	11,398	11,398	124,527	0.00	0.00	124,527	120,555	60,277	0.00	0.00	60,277	60,277	60,277	120,555	119,421	1,134	1,134	117,749	104,662	52,331
Molar Flow	kgmol/e/h	15.5	15.5	47.7	46.6	1.09	1.09	46.6	46.6	5,461	198.6	198.6	504.2	504.2	5,391	0.00	0.00	5,391	5,263	2,631	0.00	0.00	2,631	2,631	2,631	5,263	5,239	23.4	23.4	5,209	4,630	2,315
Mass Enthalpy	kJ/kg	-2,580	-2,744	-3,072	-2,920	-14,959	-14,959	-2,821	-3,083	-3,849	-7,772	-7,772	-3,636	-3,636	-3,716	-2,498	-2,498	-3,860	-3,630	-3,630	-2,272	-2,272	-3,630	-3,346	-3,346	-3,642	-3,642	-3,641	-3,693	-3,693	-3,636	-3,636
Heat Flow	kW	453	481	-1,396	-1,310	-86	-86	-1,266	-1,383	-136,078	-14,529	-14,529	-11,513	-11,513	-128,553	0	0	-133,529	-121,549	-60,774	0	0	-60,774	-56,026	-60,977	-121,955	-120,792	-1,163	-1,163	-118,935	-105,717	-52,858
Mass Density	kg/m3	7.45	8.76	5.33	5.13	961.21	810.58	11.78	16.48	9.39	775.27	355.67	30.33	30.33	7.97	512.78	106.26	9.26	8.90	8.90	642.16	258.94	8.60	33.03	50.50	50.50	49.75	568.31	75.60	47.03	47.03	47.03
Molecular Weight		40.63	40.63	34.28	34.64	18.94	18.94	34.64	34.64	23.31	33.89	33.89	22.60	22.60	23.10	59.96	59.96	23.10	22.91	22.91	84.44	84.44	22.91	22.91	22.91	22.91	22.79	48.40	48.40	22.60	22.60	22.60
VAPOR																																
Mass Flow	kg/h	631.6	524.5	1,615	1,615	---	0.02	1,615	1,240	120,555	---	54.6	11,398	11,398	124,527	0.00	0.00	118,702	120,555	60,277	---	0.00	60,277	60,277	59,710	119,421	119,387	---	159.9	117,749	104,662	52,331
Molar Flow	kgmol/e/h	15.5	13.8	46.6	46.6	---	0.0004	46.6	39.9	5,263	---	1.94	504	504	5,391	0.00	0.00	5,210	5,263	2,631	---	0.00	2,631	2,631	2,620	5,239	5,239	---	5.47	5,209	4,630	2,315
Actual Volume Flow	m3/h	84.7	72.0	306.8	314.7	---	0.004	137.2	97.4	13,552	---	10.37	375.8	375.8	15,617	0.00	0.00	13,440	13,552	6,776	---	0.00	7,006	1,825	1,193	2,385	2,401	---	13.5	2,504	2,225	1,112.7
Std Gas Flow	MMSCFD	0.31	0.28	0.94	0.94	---	0.00001	0.94	0.80	105.67	---	0.04	10.12	10.12	108.25	0.00	0.00	104.61	105.67	52.83	---	0.00	52.83	52.83	52.60	105.20	105.19	---	0.11	104.59	92.97	46.48
Mass Density	kg/m3	7.45	7.29	5.26	5.13	---	3.80	11.78	12.73	8.90	---	5.26	30.33	30.33	7.97	31.58	11.87	8.83	8.90	8.90	---	5.21	8.60	33.03	50.07	50.07	49.73	---	11.85	47.03	47.03	47.03
Molecular Weight		40.63	37.96	34.64	34.64	---	43.50	34.64	31.09	22.91	---	28.20	22.60	22.60	23.10	23.28	28.74	22.78	22.91	22.91	---	27.81	22.91	22.91	22.79	22.79	22.79	---	29.24	22.60	22.60	22.60
Viscosity	cP	0.011	0.010	0.011	0.011	---	0.010	0.013	0.011	0.011	---	0.011	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	---	0.011	0.011	0.016	0.013	0.013	0.013	---	0.011	0.013	0.013	0.013
Thermal Conductivity	W/m·K	0.027	0.022	0.026	0.026	---	0.022	0.033	0.026	0.030	---	0.026	0.034	0.034	0.035	0.033	0.027	0.030	0.030	0.030	---	0.026	0.030	0.052	0.037	0.037	0.037	---	0.027	0.037	0.037	0.037
Mass Heat Capacity	kJ/kg-C	2.007	1.843	1.945	1.943	---	1.868	2.186	1.968	2.064	---	1.921	2.304	2.304	2.172	2.299	1.977	2.067	2.064	2.064	---	1.923	2.061	2.648	2.507	2.507	2.503	---	1.986	2.482	2.482	2.482
Cp/Cv		1.138	1.169	1.161	1.161	---	1.128	1.158	1.221	1.262	---	1.208	1.355	1.355	1.232	1.357	1.233	1.262	1.262	1.262	---	1.211	1.261	1.235	1.436	1.436	1.435	---	1.226	1.421	1.421	1.421
Z Factor		0.955	0.947	0.969	0.970	---	0.972	0.950	0.926	0.959	---	0.970	0.886	0.886	0.972	0.878	0.934	0.960	0.959	0.959	---	0.970	0.961	0.950	0.837	0.837	0.838	---	0.935	0.847	0.847	0.847
LIQUID																																
Mass Flow	kg/h	---	101.4	1.39	---	1.22	1.20	---	346.5	4,009	4,009	3,955	---	---	---	0.00	0.00	3,245	---	---	0.00	0.00	---	---	515.1	1,030	32.7	1,030	870.6	---	---	---
Molar Flow	kgmol/e/h	---	1.41	0.01	---	0.01	0.01	---	5.15	47.6	47.6	45.7	---	---	---	0.00	0.00	38.0	---	---	0.00	0.00	---	---	8.83	17.7	0.56	17.7	12.2	---	---	---
Actual Volume Flow	m3/h	---	0.16	0.002	---	0.002	0.002	---	0.57	5.98	5.98	5.84	---	---	---	0.00	0.00	4.82	---	---	0.00	0.00	---	---	0.95	1.89	0.06	1.89	1.40	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	23.9	0.29	---	0.25	0.25	---	83.7	886.8	886.8	868.5	---	---	---	0.00	0.00	714.6	---	---	0.00	0.00	---	---	131.6	263.2	8.36	263.2	205.0	---	---	---
Mass Density	kg/m3	---	623.73	692.37	---	694.38	697.30	---	603.20	670.96	670.96	676.85	---	---	---	566.98	608.84	673.86	---	---	642.16	678.13	---	---	544.90	544.90	545.47	544.90	620.37	---	---	---
Viscosity (Note 4)	cP	---	0.223	0.377	---	0.385	0.395	---	0.193	0.323	0.323	0.339	---	---	---	0.152	0.201	0.331	---	---	0.315	0.344	---	---	0.137	0.137	0.137	0.137	0.216	---	---	---
Thermal Conductivity	W/m·K	---	0.100	0.105	---	0.105	0.106	---	0.096	0.106	0.106	0.107	---	---	---	0.090	0.097	0.106	---	---	0.106	0.107	---	---	0.087	0.087	0.087	0.087	0.098	---	---	---
Mass Heat Capacity	kJ/kg-C	---	2.263	2.185	---	2.180	2.174	---	2.331	2.139	2.139	2.124	---	---	---	2.455	2.305	2.135	---	---	2.137	2.117	---	---	2.531	2.531	2.529	2.531	2.282	---	---	---
Surface Tension	dyne/cm	---	13.63	15.85	---	15.95	16.28	---	12.00	15.87	15.87	16.51	---	---	---	9.64	12.32	15.97	---	---	15.93	16.62	---	---	8.57	8.57	8.59	8.57	12.87	---	---	---
AQUEOUS (Note 3)																																
Mass Flow	kg/h	---	5.72	19.7	---	19.4	19.4	---	28.6	2,721	2,721	2,720	---	---	---	---	---	2,580	---	---	---	---	---	---	52.0	103.9	0.54	103.9	103.6	---	---	---
Molar Flow	kgmol/e/h	---	0.32	1.09	---	1.08	1.08	---	1.59	151.0	151.0	151.0	---	---	---	---	---	143.2	---	---	---	---	---	---	2.88	5.77	0.03	5.77	5.75	---	---	---
Actual Volume Flow	m3/h	---	0.01	0.02	---	0.02	0.02	---	0.03	2.71	2.71	2.70	---	---	---	---	---	2.57	---	---	---	---	---	---	0.05	0.10	0.001	0.10	0.10	---	---	---
Liq Vol Flow @Std Cond	barrel/day	---	0.85	2.93	---	2.89	2.89	---	4.26	404.8	404.8	404.8	---	---	---	---	---	383.9	---	---	---	---	---	---	7.73	15.5	0.08	15.5	15.4	---	---	---
Mass Density	kg/m3	---	1,002.17	984.66	---	984.91	984.88	---	1,000.05	1,005.71	1005.7055	1,006.11	---	---	---	---	---	1,005.45	---	---	---	---	---	---	989.87	989.87	989.97	989.87	999.96	---	---	---
Viscosity	cP	---	0.764	0.503	---	0.506	0.506	---	0.718	0.842	0.842	0.856	---	---	---	---	---	0.835	---	---	---	---	---	---	0.544	0.544	0.545	0.544	0.717	---	---	---
Thermal Conductivity	W/m·K	---	0.621	0.648	---	0.648	0.648	---	0.625	0.615	0.615	0.614	---	---	---	---	---	0.615	---	---	---	---	---	---	0.643	0.643	0.643	0.643	0.625	---	---	---
Mass Heat Capacity	kJ/kg-C	---	4.313	4.324	---	4.324	4.324	---	4.313	4.312	4.312	4.313	---	---	---	---	---	4.312	---	---	---	---	---	---	4.314	4.314	4.314	4.314	4.313	---	---	---
Surface Tension	dyne/cm	---	70.89	66.90	---	66.96	66.96	---	70.36	71.67	71.67	71.79	---	---	---	---	---	71.61	---	---	---	---	---	---	67.74	67.74	67.76	67.74	70.34	---	---	---
COMPOSITION MOLE FRACTION																																
Nitrogen		0.000151	0.000151	0.000408	0.000418	0.000000	0.000000	0.000418	0.000418	0.001708	0.000007	0.000007	0.001790	0.001790	0.001724	0.000115	0.000115	0.001724	0.001772	0.001772	0.000027	0.000027	0.001772	0.001772	0.001772	0.001772	0.001780	0.000140	0.000140	0.001790	0.001790	0.001790
CO2		0.000415	0.000415	0.000423	0.000433	0.000001	0.000001	0.000433	0.000433	0.000363	0.000012	0.000012	0.000380	0.000380	0.000364	0.000129	0.000129	0.000364	0.000377	0.000377	0.000045	0.000045	0.000377	0.000377	0.000377	0.000377	0.000378	0.000127	0.000127	0.000380	0.000380	0.000380
Methane		0.253058	0.253058	0.391844	0.400995	0.000075	0.000075	0.400995	0.400995	0.719091	0.008639	0.008639	0.752994	0.752994	0.724444	0.129483	0.129483	0.724444	0.745901	0.745901	0.035472	0.035472	0.745901	0.745901	0.745901	0.745901	0.748627	0.136250	0.136250	0.752994	0.752994	0.752994
Ethane		0.189258	0.189258	0.168049	0.171971	0.000140	0.000140	0.171971	0.171971	0.108627	0.006913	0.006913	0.13323	0.13323	0.108227	0.078745	0.078745	0.108227	0.112465	0.112465	0.028499	0.028499	0.112465	0.112465	0.112465	0.112465	0.112666	0.067533	0.067533	0.13323	0.13323	0.13323
Propane		0.220310	0.220310	0.162748	0.166540	0.000409	0.000409	0.166540	0.166540	0.066722	0.014631	0.014631	0.068952	0.068952	0.065684	0.134459	0.134459	0.065684	0.068688	0.068688	0.060508	0.060508	0.068688	0.068688	0.068688	0.068688	0.068552	0.098972	0.098972	0.068952	0.068952	0.068952
i-Butane		0.060275	0.060275	0.041967	0.042942	0.000238	0.000238	0.042942	0.042942	0.014467	0.007745	0.007745	0.014695	0.014695	0.014109	0.059979	0.059979	0.014109	0.014721	0.014721	0.032110	0.032110	0.014721	0.014721	0.014721	0.014721	0.014610	0.039650	0.039650	0.014695	0.014695	0.014695
n-Butane		0.118963	0.118963	0.081944	0.083844	0.000623	0.000623	0.083844	0.083844	0.027089	0.020133	0.020133	0.027214	0.027214	0.026307	0.147245	0.147245	0.026307	0.027352	0.027352	0.083528	0.083528	0.027352	0.027352	0.027352	0.027352	0.027056	0.093504	0.093504	0.027214	0.027214	0.027214
22-Mpropane		0.000075	0.000075	0.000051	0.000053	0.000001	0.000001	0.000053	0.000053	0.000017	0.000016	0.000016	0.000000	0.000000	0.000016	0.000000	0.000000	0.000016	0.000017	0.000017	0.000068	0.000068	0.000017	0.000017	0.000017	0.000017	0.000016	0.000069	0.000069	0.000000	0.000000	0.000000
i-Pentane		0.038266	0.038266	0.026046	0.026643	0.000447	0.000447	0.026643	0.026643	0.008149	0.014273	0.014273	0.007774	0.007774	0.007808	0.087818	0.087818	0.007808	0.007918	0.007918	0.053361	0.053361	0.007918	0.007918	0.007918	0.007918	0.007729	0.050049	0.050049	0.007774	0.007774	0.007774
n-Pentane		0.040074	0.040074	0.027319	0.027943	0.000594	0.000594	0.027943	0.027943	0.008455	0.019208	0.019208	0.007856	0.007856	0.008058	0.111572	0.111572	0.008058	0.008049	0.008049	0.079944	0.079944	0.008049	0.008049	0.008049	0.008049	0.007811	0.061378	0.061378	0.007856	0.007856	0.007856
n-Hexane		0.022284	0.022284	0.015749	0.016095	0.000949	0.000949	0.016095	0.016095	0.005059	0.030485	0.030485	0.003844	0.003844	0.004698	0.138053	0.138053	0.004698	0.004099	0.004099	0.127270	0.127270	0.004099	0.004099	0.004099	0.004099	0.003821	0.066244	0.066244	0.003844	0.003844	0.003844
Mcyclopentan		0.001387	0.001387	0.000981	0.001003	0.000061	0.000061	0.001003	0.001003	0.000314	0.001952	0.001952	0.000000	0.000000	0.000291	0.000000	0.000000	0.000291	0.000252	0.000252	0.008144	0.008144	0.000252	0.000252	0.000252	0.000252	0.000234	0.004351	0.004351	0.000000	0.000000	0.000000
Benzene		0.000117	0.000117	0.000083	0.000085	0.000005	0.000005	0.000085	0.000085	0.000026	0.000163	0.000163	0.000000	0.000000	0.000024	0.000000	0.000000	0.000024	0.000021	0.000021	0.000679	0.000679	0.000021	0.000021	0.000021	0.000021	0.000020	0.000367	0.000367	0.000000	0.000000	0.000000
Cyclohexane		0.001030	0.001030	0.000738	0.000754	0.000056	0.000056	0.000754	0.000754	0.000241	0.001752	0.001752	0.000000	0.000000	0.000221	0.000000	0.000000	0.000221	0.000184	0.000184	0.007312	0.007312	0.000184	0.000184	0.000184	0.000184	0.000168	0.003656	0.003656	0.000000	0.000000	0.000000
n-Heptane		0.003003	0.003003	0.002381	0.002428	0.000382	0.000382	0.002428	0.002428	0.000883	0.011058	0.011058	0.000000	0.000000	0.000804	0.000000	0.000000	0.000804	0.000499	0.000499	0.046305	0.046305	0.000499	0.000499	0.000499	0.000499	0.000430	0.015860	0.015860	0.000000	0.000000	0.000000
Mcyclohexane		0.001635	0.001635	0.001274	0.001300	0.000192	0.000192	0.001300	0.001300	0.000466	0.005506	0.005506	0.000000	0.000000	0.000423	0.000000	0.000000	0.000423	0.000276	0.000276	0.023028	0.023028	0.000276	0.000276	0.000276	0.000276	0.000238	0.008625	0.008625	0.000000	0.000000	0.000000
Toluene		0.000135	0.000135	0.000109	0.000111	0.000020	0.000020	0.000111	0.000111	0.000041	0.000545	0.000545	0.000000	0.000000	0.000037	0.000000	0.000000	0.000037	0.000021	0.000021	0.002281	0.002281	0.000021	0.000021	0.000021	0.000021	0.000018	0.000782	0.000782	0.000000	0.000000	0.000000
n-Octane		0.001328	0.001328	0.001391	0.001410	0.000588	0.000588	0.001410	0.001410	0.000646	0.012655	0.012655	0.000000	0.000000	0.000594	0.000000	0.000000	0.000594	0.000193	0.000193	0.053158	0.053158	0.000193	0.000193	0.000193	0.000193	0.000144	0.011175	0.011175	0.000000	0.000000	0.000000
E-Benzene		0.000011	0.000011	0.000012	0.000012	0.000006	0.000006	0.000012	0.000012	0.000006	0.000116	0.000116	0.000000	0.000000	0.000005	0.000000	0.000000	0.000005	0.000002	0.000002	0.000485	0.000485	0.000002	0.000002	0.000002	0.000002	0.000001	0.000102	0.000102	0.000000	0.000000	0.000000
m-Xylene		0.000022	0.000022	0.000026	0.000026	0.000014	0.000014	0.000026	0.000026	0.000013	0.000265	0.000265	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.001113	0.001113	0.000003	0.000003	0.000003	0.000003	0.000002	0.000212	0.000212	0.000000	0.000000	0.000000
p-Xylene		0.000022	0.000022	0.000026	0.000026	0.000014	0.000014	0.000026	0.000026	0.000013	0.000264	0.000264	0.000000	0.000000	0.000012	0.000000	0.000000	0.000012	0.000003	0.000003	0.001110	0.001110	0.000003	0.000003	0.000003	0.000003	0.000002	0.000212	0.000212	0.000000	0.000000	0.000000
o-Xylene		0.000016	0.000016	0.000019	0.000019	0.000011	0.000011	0.000019	0.000019	0.000009	0.000202	0.000202	0.000000	0.000000	0.000009	0.000000	0.000000	0.000009	0.000002	0.000002	0.000846	0.000846	0.000002	0.000002	0.000002	0.000002	0.000001	0.000157	0.000157	0.000000	0.000000	0.000000
n-Nonane		0.000223	0.000223	0.000388	0.000387	0.000412	0.000412	0.000387	0.000387	0.000221	0.005328	0.005328	0.000000	0.000000	0.000209	0.000000	0.000000	0.000209	0.000029	0.000029	0.022448	0.022448	0.000029	0.000029	0.000029	0.000029	0.000017	0.002679	0.002679	0.000000	0.000000	0.000000
124-MBenzene		0.000005	0.000005	0.000013	0.000013	0.000022	0.000022	0.000013	0.000013	0.000008	0.000200	0.000200	0.000000	0.000000	0.000008	0.000000	0.000000	0.000008	0.000001	0.000001	0.000842	0.000842	0.000001	0.000001	0.000001	0.000001	0.000001	0.000074	0.000074	0.000000	0.000000	0.000000
n-Decane		0.000037	0.000037	0.000128	0.000124	0.000328	0.000328	0.000124	0.000124	0.000083	0.002182	0.002182	0.000000	0.000000	0.000081	0.000000	0.000000	0.000081	0.000004	0.000004	0.009222	0.009222	0.000004	0.000004	0.000004	0.000004	0.000002	0.000565	0.000565	0.000000	0.000000	0.000000
C7*		0.006980	0.006980	0.005348	0.005457	0.000699	0.000699	0.005457	0.005457	0.001902	0.020961	0.020961	0.001047	0.001047	0.001736	0.076520	0.076520	0.001736	0.001183	0.001183	0.087712	0.087712	0.001183	0.001183	0.001183	0.001183	0.001041	0.033044	0.033044	0.001047	0.001047	0.001047
C8*		0.001177	0.001177	0.001376	0.001390	0.000770	0.000770	0.001390	0.001390	0.000691	0.014433	0.014433	0.000124	0.000124	0.000640	0.031270	0.031270	0.000640	0.000173	0.000173	0.060700	0.060700	0.000173	0.000173	0.000173	0.000173	0.000124	0.011179	0.011179	0.000124	0.000124	0.000124
C9*		0.000099	0.000099	0.000241	0.000236	0.000417	0.000417	0.000236	0.000236	0.000150	0.003799	0.003799	0.000007	0.000007	0.000144	0.004595	0.004595	0.000144	0.000013	0.000013	0.016037	0.016037	0.000013	0.000013	0.000013	0.000013	0.000007	0.001410	0.001410	0.000007	0.000007	0.000007
C10-C13*		0.000000	0.000000	0.000003	0.000002	0.000041	0.000041	0.000002	0.000002	0.000002	0.000065	0.000065	0.000000	0.000000	0.000002	0.000015	0.000015	0.000002	0.000276	0.000276	0.000000	0.000000	0.000000	0.000000	0.000003	0.000003	0.000002	0.000013	0.000013	0.000000	0.000000	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000001	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0

CASE 4 MAXIMUM GAS AND OIL, GAS SG 0.7909 AND 27.3°C AT 1st STAGE HP COMPRESSOR AND GAS LIFT 60MMSCFD

Stream Name	Unit	Cond. Outlet from 2nd Stage HP Comp. Suction Scrubber	Cond. from 2nd Stage HP Comp. Suction Scrubber to HP Comp. Inlet Scrubber	Gas Outlet from 2nd Stage HP Comp. Suction Scrubber	2nd Stage HP Comp. Discharge	2nd Stage HP Comp. Discharge Cooler Discharge	Gas Lift Prior to Pressure Letdown	Inlet of Export Gas Heater	Gas Lift to Turret	Export Gas Heater Discharge	Export Gas to Turret	HP Fuel Gas Superheater Discharge	Gas from Gas/Glycol Heat Exchanger to HP Fuel Gas K.O.Drum	Fuel Gas to HP Fuel Gas K.O.Drum after pressure let down	Total Gas from MP Compressor Cooler Discharge	Gas to HP Flare
Stream Number		**69A/B**	**70A/B**	**71A/B**	**72A/B**	**73A/B**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**
Vapour Fraction		0.0000	0.1845	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9625	1.0000	1.0000	1.0000	0.8554	1.0000
Temperature	C	50.45	43.91	50.45	143.46	45.00	45.00	45.00	44.86	59.00	12.61	70.61	50.45	40.61	35.00	50.45
Pressure	bar_g	46.39	30.00	46.39	135.00	134.80	134.80	134.80	134.30	134.30	26.50	29.50	46.39	30.00	8.70	46.39
Mass Flow	kg/h	0.00	0.00	52,331	52,331	52,331	88,944	15,718	88,944	15,718	15,718	11,398	11,398	11,398	1,615	1,689
Molar Flow	kgmole/h	0.00	0.00	2,315	2,315	2,315	3,935	695.3	3,935	695.3	695.3	504.2	504.2	504.2	46.6	74.7
Mass Enthalpy	kJ/kg	-2,591	-2,591	-3,636	-3,465	-3,769	-3,769	-3,769	-3,769	-3,721	-3,721	-3,566	-3,636	-3,636	-3,083	-3,636
Heat Flow	kW	0	0	-52,858	-50,371	-54,789	-93,121	-16,456	-93,121	-16,245	-16,245	-11,290	-11,513	-11,513	-1,383	-1,706
Mass Density	kg/m3	509.49	234.35	47.03	99.98	173.38	173.38	173.38	172.92	154.58	30.90	26.28	47.03	30.33	16.48	47.03
Molecular Weight		51.97	51.97	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	34.64	22.60
VAPOR																
Mass Flow	kg/h	---	0.00	52,331	52,331	52,331	88,944	15,718	88,944	15,718	14,326	11,398	11,398	11,398	1,240	1,689
Molar Flow	kgmole/h	---	0.00	2,315	2,315	2,315	3,935	695.3	3,935	695.3	669.2	504.2	504.2	504.2	39.9	74.7
Actual Volume Flow	m3/h	---	0.00	1,112.7	523.4	301.8	513.0	90.7	514.4	101.7	506.2	433.8	242.4	375.8	97.4	35.91
Std Gas Flow	MMSCFD	---	0.00	46.48	46.48	46.48	79.00	13.96	79.00	13.96	13.44	10.12	10.12	10.12	0.80	1.50
Mass Density	kg/m3	---	33.89	47.03	99.98	173.38	173.38	173.38	172.92	154.58	28.30	26.28	47.03	30.33	12.73	47.03
Molecular Weight		---	24.87	22.60	22.60	22.60	22.60	22.60	22.60	22.60	21.41	22.60	22.60	22.60	31.09	22.60
Viscosity	cP	---	0.012	0.013	0.019	0.021	0.021	0.021	0.021	0.020	0.011	0.013	0.013	0.012	0.011	0.013
Thermal Conductivity	W/m-K	---	0.033	0.037	0.057	0.055	0.055	0.055	0.055	0.054	0.031	0.038	0.037	0.034	0.026	0.037
Mass Heat Capacity	kJ/kg-C	---	2.295	2.482	2.914	3.532	3.532	3.532	3.533	3.319	2.267	2.337	2.482	2.304	1.968	2.482
Cp/Cv		---	1.353	1.421	1.381	1.944	1.944	1.944	1.945	1.794	1.400	1.299	1.421	1.355	1.221	1.421
Z Factor		---	0.863	0.847	0.888	0.669	0.669	0.669	0.669	0.717	0.876	0.918	0.847	0.886	0.926	0.847
LIQUID																
Mass Flow	kg/h	0.00	0.00	---	---	---	---	---	---	---	1,391	---	---	---	346.5	---
Molar Flow	kgmole/h	0.00	0.00	---	---	---	---	---	---	---	26.1	---	---	---	5.15	---
Actual Volume Flow	m3/h	0.00	0.00	---	---	---	---	---	---	---	2.47	---	---	---	0.57	---
Liq Vol Flow @Std Cond	barrel/day	0.00	0.00	---	---	---	---	---	---	---	376.0	---	---	---	83.7	---
Mass Density	kg/m3	509.49	548.70	---	---	---	---	---	---	---	562.46	---	---	---	603.20	---
Viscosity (Note 4)	cP	0.107	0.136	---	---	---	---	---	---	---	0.157	---	---	---	0.193	---
Thermal Conductivity	W/m-K	0.083	0.087	---	---	---	---	---	---	---	0.095	---	---	---	0.096	---
Mass Heat Capacity	kJ/kg-C	2.732	2.532	---	---	---	---	---	---	---	2.391	---	---	---	2.331	---
Surface Tension	dyne/cm	6.91	8.75	---	---	---	---	---	---	---	10.57	---	---	---	12.00	---
AQUEOUS (Note 3)																
Mass Flow	kg/h	---	---	---	---	---	---	---	---	---	---	---	---	---	28.6	---
Molar Flow	kgmole/h	---	---	---	---	---	---	---	---	---	---	---	---	---	1.59	---
Actual Volume Flow	m3/h	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	---
Liq Vol Flow @Std Cond	barrel/day	---	---	---	---	---	---	---	---	---	---	---	---	---	4.26	---
Mass Density	kg/m3	---	---	---	---	---	---	---	---	---	---	---	---	---	1,000.05	---
Viscosity	cP	---	---	---	---	---	---	---	---	---	---	---	---	---	0.718	---
Thermal Conductivity	W/m-K	---	---	---	---	---	---	---	---	---	---	---	---	---	0.625	---
Mass Heat Capacity	kJ/kg-C	---	---	---	---	---	---	---	---	---	---	---	---	---	4.313	---
Surface Tension	dyne/cm	---	---	---	---	---	---	---	---	---	---	---	---	---	70.36	---
COMPOSITION MOLE FRACTION																
Nitrogen		0.000224	0.000224	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.001790	0.000418	0.001790
CO2		0.000189	0.000189	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000380	0.000443	0.000380
Methane		0.213894	0.213894	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.752994	0.400995	0.752994
Ethane		0.103658	0.103658	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.113323	0.171971	0.113323
Propane		0.150370	0.150370	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.068952	0.166540	0.068952
i-Butane		0.059962	0.059962	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.014695	0.042942	0.014695
n-Butane		0.140208	0.140208	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.027214	0.083844	0.027214
22-Moropane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000053	0.000000
i-Pentane		0.074929	0.074929	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.007774	0.026643	0.007774
n-Pentane		0.091309	0.091309	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.007856	0.027943	0.007856
n-Hexane		0.097808	0.097808	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.003844	0.016095	0.003844
Mcyclopentan		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001003	0.000000
Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000085	0.000000
Cyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000754	0.000000
n-Heptane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002428	0.000000
Mcyclohexane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001300	0.000000
Toluene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000111	0.000000
n-Octane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001410	0.000000
E-Benzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000012	0.000000
m-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000026	0.000000
p-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000026	0.000000
o-Xylene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000000
n-Nonane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000387	0.000000
124-MBenzene		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000000
n-Decane		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000124	0.000000
C7*		0.048439	0.048439	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.001047	0.005457	0.001047
C8*		0.016875	0.016875	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.000124	0.001390	0.000124
C9*		0.002129	0.002129	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000236	0.000007
C10-C13*		0.000005	0.000005	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
C14-C18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C24*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C25-C27*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C28-C31*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C32-C37*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C38-C45*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C46-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C17-C20*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C21-C22*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C34*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C35-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_2*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C14-C18_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C19-C21_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C26_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C27-C29_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C30-C33*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C34-C40*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C41-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C10-C13_3*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000
C14-C17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C18-C21*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C22-C23_1*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C24-C25*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C26-C28*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C29-C32*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C33-C39*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C40-C80*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H2O		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.039171	0.000000
HSTc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc10*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000117	0.000000
HSTDc11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000034	0.000000
HSTDc12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000009	0.000000
HSTDc13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
HSTDc14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
H5-22P_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c11*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000084	0.000000
10X-DST1_2c12*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000033	0.000000
10X-DST1_2c13*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000016	0.000000
10X-DST1_2c14*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
10X-DST1_2c15*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
10X-DST1_2c16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_2c19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST1_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10X-DST2_C20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc16*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc17*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc18*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc19*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSDc20+*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HSTDc6*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003944	0.000000
HSTDc7*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002100	0.000000
HSTDc8*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001441	0.000000
HSTDc9*		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000377	0.000000
Total		1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Pseudo Components Properties

Pseudo Component	Normal Boiling Point (°C)	Molecular Weight	Liquid Density (kg/m³)	Tc (°C)	Pc (barg)	Vc (m³/kgmole)	Accentricity
C7*	91.95	96.00	722.00	262.16	27.73	0.4030	0.3373
C8*	116.75	107.00	745.00	308.11	20.34	0.5819	0.3741
C9*	142.25	121.00	764.00	342.80	18.55	0.6629	0.4203
C10-C13*	195.18	151.38	793.25	399.80	15.79	0.8175	0.5185
C14-C18*	277.26	215.20	836.35	505.22	12.68	1.0979	0.6985
C19-C21*	341.15	279.31	861.00	587.68	11.08	1.3157	0.8505
C22-C24*	374.09	317.17	868.96	628.06	10.45	1.4216	0.9288
C25-C27*	407.44	358.41	876.76	675.16	9.93	1.5350	1.0021
C28-C31*	441.19	407.32	884.67	733.36	9.47	1.6691	1.0720
C32-C37*	480.25	475.10	894.36	818.85	9.01	1.8625	1.1362
C38-C45*	528.34	570.01	905.84	943.90	8.57	2.1577	1.1609
C46-C80*	612.69	761.25	924.53	1,158.60	8.05	2.8678	0.9155
C10-C13_1*	195.10	151.34	793.21	480.95	15.79	0.9159	0.5184
C14-C16*	263.78	204.07	830.39	561.54	13.07	1.1562	0.6664
C17-C20*	327.35	263.95	856.40	641.09	11.39	1.3759	0.8165
C21-C22*	356.51	297.44	863.24	680.94	10.74	1.4839	0.8891
C23*	374.85	318.00	866.78	704.71	10.42	1.5458	0.9301
C24-C26*	395.98	343.52	870.85	733.95	10.08	1.6194	0.9771
C27-C29*	427.74	386.52	876.67	780.92	9.62	1.7362	1.0446
C30-C34*	460.41