

THE TEXAS COMPANY  
MONTEBELLO SYNTHESIS UNIT  
SUMMARY OF PRELIMINARY DATA

<u>RUN NUMBER</u>	18F	18G	18H	19A	19B	19C	19D	21A	21B	
Start	6/9	6/10	6/11	6/30	7/1	7/2	7/3	7/8	7/9	
End	6/10	6/11	6/11	7/1	7/2	7/3	7/4	7/9	7/10	
			(5hrs)	(26hrs)	(8hrs)			(13hrs)		
<u>GENERATOR DATA</u>										
Pressure - psig	209	205	205	213	210	210	210	310	315	
Gas Rate - SCFH	2510	2505	2500	2240	2325	2280	2245	2260	2250	
Oxygen Rate - SCFH	1820	1830	1830	1670	1710	1780	1777	1750	1750	
Product Rate - SCFH	7610	7650	7400	6410	6450	6710	6750	7000	6500	
Product Composition										
*CEO	**MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	
CO	CO	35.1-	35.1-	34.7-	34.6-	32.8-	35.3-34.0	35.6-36.5	34.9-	35.4-34.7
H2	H2	59.8-	60.1-	59.2-	57.4-	56.4-	57.8-61.6	59.1-58.9	58.0-	57.9-55.6
CO2	CO2	1.7-	1.7-	1.6-	2.3-	2.4-	2.0- 1.9	1.9- 1.7	2.0-	2.1- 2.0
N2	N2	0.6-	0.6-	0.2-	0.7-	0.3-	1.5- 0.8	1.0- 1.3	1.2-	0.5- 3.0
CH4	CH4	2.8-	2.5-	4.3-	5.0-	8.1-	3.4- 1.7	2.4- 1.6	3.9-	4.1- 4.7
<u>SYNTHESIS DATA</u>										
Pressure - psig	200	200	200	200	200	200	200	200	200	
Recycle Rate - SCFH	11580	11540	10120	9240	9540	9410	9268	10100	8640	
Fresh Feed - SCFH	7610	7650	7400	6410	6450	6710	6750	7000	6500	
Wet Gas Rate - SCFH	4500	3920	3860	2820	3000	3360	3230	2830	3430	
Catalyst Temperature - °F	647	685	655	660	665	641	657	675	635	
Catalyst Density - #/cu ft	(70)	(112)	(90)	119	95	91		115	117	
Catalyst Fluidized - #	(200)	(170)	(165)	473	324	174	79.5	316	307	
Depth of Catalyst Bed - ft				8.5	6.8	3.5	(3.6)	5.4	5.0	
Fresh Feed - SCFH/#Cat	26.0	45		14.8	19.9	38.5	85	22.1	21.1	
Inlet Velocity - ft/sec	1.7	1.8	1.6	1.4	1.5	1.4	1.4	1.2	0.9	
Recycle Ratio	1.5	1.5	1.3	1.4	1.4	1.4	1.3	1.4	1.3	
Contraction - %	40.9	48.3	46.3	56	53.5	50.0	52.2	59.6	47.2	
Measured Oil - gph	2.1	3.2	4.5	3.4	3.0	3.0	2.7	3.8	2.9	
Measured Water - gph	3.7	5.1	6.9	6.5	7.7	4.7	4.9	7.6	3.3	
Steam Pressure - psig	610	900	750	880	880	700	500	610	450	
Steam Rate - #/hr	101	71							117	
% CO2 in Wet Gas by Orsat	13.5	16.1	23.0	22.8	21.6	20.3	19.5	24.7	20.2	
Weight Balance - %	101	103	111	101	108	100	100.2	98.5	95	
<u>WET GAS COMPOSITION BY ** MS</u>										
CO	19.09	5.27	11.19	6.47	9.15	17.30	9.16	6.39	14.06	
H2	55.25	45.49	57.05	34.49	44.47	52.20	58.25	30.87	48.42	
CO2	14.00	.38	19.10	21.30	22.71	15.29	10.52	16.04	14.77	
N2	1.27	30.11	1.88	14.07	.60	2.04	5.15	18.47	2.54	
CH4	6.34	7.98	6.78	12.53	14.92	6.82	10.57	16.91	13.83	
C2H4	.97	.79	.97	2.41	2.65	1.95	2.17	1.30	1.28	
C2H6	.45	.67	.34	.82	.82	.71	.93	1.39	.80	
C3H6	.59	.78	.89	1.38	.98	1.33	1.32	1.69	1.51	
C3H8	.11	.46	.14	.41	.35	.56	.57	.78	.68	
C4H8	.69	.57	.69	1.31	1.51	.94	.73	1.13	1.06	
C4H10	.33		.12	.33	.35		.12		.14	
C5H10	.51	.31	.42	.72	.91	.53	.39	.48	.57	
C5H12	.08			.17	.28					
C6H12	.25		.14	.27	.28	.21	.17		.17	

\* CEO - CORRECTED EXPLOSION ORSAT  
\*\* MS - MASS SPECTROMETER