

THE TEXAS COMPANY
MONTEBELLO SYNTHESIS UNIT
SUMMARY OF PRELIMINARY DATA

<u>RUN NUMBER</u>	17J	17K	17L	17M	18A	18B	18C	18D	18E	
Start	5/16	5/17	5/18	5/19	6/4	6/5	6/6	6/7	6/8	
End	5/17	5/18	5/19	5/20	6/5	6/6	6/7	6/8	6/9	
					(15 hrs)					
<u>GENERATOR DATA</u>										
Pressure - psig	218	215	218	218	210	210	210	205	207	
Gas Rate - SCFH	2440	2440	2445	2470	2465	2420	2445	2440	2480	
Oxygen Rate - SCFH	1830	1783	1780	1800	1825	1810	1793	1785	1810	
Product Rate - SCFH	7320	7430	7550	7490	7060	6950	6920	7510	7610	
Product Composition										
*CEO	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	CEO MS	
**MS	**MS	**MS	**MS	**MS	**MS	**MS	**MS	**MS	**MS	
CO	34.8-	35.3-	34.0-	34.7-	35.0-	35.3-	34.1-	34.2-	34.9-	
H2	59.0-	59.2-	59.1-	59.0-	59.7-	59.0-	59.2-	60.1-	59.5-	
CO2	2.0-	2.0-	2.1-	1.9-	2.1-	1.9-	1.9-	1.7-	1.8-	
N2	1.0-	1.4-	2.0-	1.4-	0.0-	1.0-	0.7-	0.9-	1.4-	
CH4	3.2-	2.0-	2.8-	3.0-	3.2-	2.8-	4.1-	3.1-	2.4-	
<u>SYNTHESIS DATA</u>										
Pressure - psig	200	200	200	200	200	200	200	200	200	
Recycle Rate - SCFH	11400	10960	11290	12070	12200	12400	12450	12490	12130	
Fresh Feed - SCFH	7320	7430	7550	7490	7340	7250	7325	7510	7610	
Wet Gas Rate - SCFH	3130	3170	3100	3530	3930	4320	4500	4330	4280	
Catalyst Temperature - °F	622	621	625	621	616	600	610	620	619	
Catalyst Density - #/cu ft	66	60	48	40	89.6	(30)	(30)	(40)	(50)	
Catalyst Fluidized - #	213	197	223	192	218.6	(60)	(60)	(100)	(200)	
Depth of Catalyst Bed - ft	5.3	5.5	9.5	9.0						
Fresh Feed - SCFH/#Cat	34.4	37.7	33.8	39.0	30.4	30.5	31	32.5	25.4	
Inlet Velocity - ft/sec	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.7	
Recycle Ratio	1.6	1.5	1.5	1.6	1.7	1.7	1.7	1.7	1.6	
Contraction - %	57.3	57.4	59.0	53	46	40.4	38.5	42.4	43.8	
Measured Oil - gph	3.3	3.6	3.4	2.6	1.5	1.6	2.7	2.3	2.3	
Measured Water - gph	6.0	5.8	5.6	4.9	7.9	4.0	3.9	3.9	3.7	
Steam Pressure - psig	900	900	750	650	880	900	870	840	800	
Steam Rate - #/hr	240	235	238	228						
% CO2 in Wet Gas by Orsat	21.2	21.3	21.2	19.5	14.9	14.4	14.5	15.1	14.9	
Weight Balance - %	95	95	91	91	107	101	105	103	99.3	
<u>WET GAS COMPOSITION BY ** MS</u>										
CO	9.07	15.22	11.80	14.80		20.06	16.64	17.69	18.10	
H2	49.85	50.42	48.15	52.84		53.49	43.81	56.82	35.41	
CO2	24.65	17.67	22.44	18.26		13.01	10.17	14.27	11.45	
N2	.26	3.32	3.99	3.57		1.52	12.23	1.25	21.61	
CH4	7.14	6.85	6.49	6.11		6.35	5.54	5.73	4.67	
C2H4	2.21	1.49	1.89	1.40		2.36	.67	.97	.78	
C2H6	.75	.64	.62	.57		1.13	.41	.18	.25	
C3H6	2.07	1.18	1.36	.89		.63	.35	.45	.35	
C3H8	1.68	.78	.33	.12		.11	.31	.88	.44	
C4H8	1.05	1.19	1.19	.03		.56	.77	.62	.34	
C4H10	.32	.20	.27	.21		.18	.21	.19	.23	
C5H10	.77	.54	.95	.54		.42	.52	.43	.41	
C5H12				.36				.08	.04	
C6H12	.25	.16	.16	.30		.18	.16	.18	.17	

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