

THE TEXAS COMPANY  
MONTEBELLO SYNTHESIS UNIT  
SUMMARY OF PRELIMINARY DATA

<u>RUN NUMBER</u>		21L	21M	21N
	Start	7/19	7/20	7/21
	End	7/20	7/21	7/22
<u>GENERATOR DATA</u>				
	Pressure - psig	313	310	304
	Gas Rate - SCFH	2320	1840	1820
	Oxygen Rate - SCFH	1795	1440	1470
	Product Rate - SCFH	7020	5460	5400
	Product Composition			
	*CEO      **MS	CEO MS	CEO MS	CEO MS
	CO          CO	34.6-32.9	34.5-38.7	34.3-33.9
	H2          H2	59.0-57.3	57.8-53.7	58.0-57.2
	CO2        CO2	2.1- 2.9	2.4- 2.6	2.3- 2.2
	N2          N2	1.3- 4.7	1.7- 2.1	1.2- 4.1
	CH4        CH4	3.0- 2.2	3.6- 2.6	4.2- 2.6
			C2H6-.3	

<u>SYNTHESIS DATA</u>				
	Pressure - psig	300	298	298
	Recycle Rate - SCFH	10474	8798	8832
	Fresh Feed - SCFH	7550	5600	5630
	Wet Gas Rate - SCFH	4170	2840	3040
	Catalyst Temperature - °F	673	670	650
	Catalyst Density - #/cu ft	(63)	(36.4)	(16.8)
	Catalyst Fluidized - #	170	82.7	72.9
	Depth of Catalyst Bed - ft	(5.2)		
	Fresh Feed - SCFH/#Cat	44.5	47.9	77.3
	Inlet Velocity - ft/sec	1.1	1.1	1.0
	Recycle Ratio	1.4	1.6	1.6
	Contraction - %	40.7	49.4	46.0
	Measured Oil - gph	1.8	1.8	1.0
	Measured Water - gph	5.5	4.0	3.9
	Steam Pressure - psig	707	890	980
	Steam Rate - #/hr	91.8	76.5	79.5
	% CO2 in Wet Gas by Orsat	18.5	21.2	14.6
	Weight Balance - %	103	97	102

<u>WET GAS COMPOSITION BY ** MS</u>				
	CO	11.47	11.31	16.72
	H2	62.25	52.45	51.40
	CO2	12.75	15.82	12.50
	N2		4.07	4.22
	CH4	8.71	10.38	9.00
	C2H4	1.14	1.49	1.15
	C2H6	.57	.53	2.36
	C3H6	1.21	1.46	1.15
	C3H8	.21	.40	.06
	C4H8	1.14	1.09	.90
	C4H10		.16	.16
	C5H10	.57	.59	.40
	C5H12			
	C6H12		.25	

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