

A. SUMMARIES OF RUNS 46 AND 48

SUMMARY OF SYNTHESIS RUN NO. 46 (CONT'D)

Period	N		O		P		Q		R		S		T		U		V		W		X-1		X-2		Y		
Hours	297-321		321-345		345-369		369-393		393-417		417-441		441-465		465-489		489-513		513-537		540-546		546-561		561-580		
Press., Psig	433		432		422		426		432		425		426		422		417		420		434		426		426		
Temp. °F.	649		641		642		642		640		644		644		640		639		640		655		698		698		
Flow Rates-SCFH																											
Fresh Feed	16936		16993		16725		16644		16218		16519		16506		16364		16304		16395		16874		17250		17160		
Recycle	17744		18219		17653		17027		16970		17656		16608		17088		17577		17444		25201		17280		17126		
Wet Gas (Adj.)	8366		8916		8431		7990		7322		8108		7730		6589		7449		7447		6625		7727		7219		
Catalyst Data (by Δp)																											
Weight, lbs.	936		862		854		906		996		925		1074		1034		957		1101		970		880		981		
Vol.-Cu. Ft.	7.1		6.7		6.7		7.0		7.4		6.7		7.4		8.1		7.3		6.9		6.4		6.6		7.3		
Depth.-Ft.	10.7		10.1		10.1		10.6		11.2		10.2		11.2		12.3		11.0		10.5		9.7		10.0		11.0		
Feed Rates-H2+CO																											
SCFH	15854		16247		16194		16050		15716		15837		15883		15725		15590		15737		16250		16726		16681		
SCFH/Sq.Ft.	24021		24617		24536		24318		23812		23995		24065		23826		23621		23844		24621		25342		25274		
SCFH/CF Cat.	2233		2425		2417		2293		2124		2364		2146		1941		2136		2281		2539		2534		2285		
SCFH/# Cat.	16.94		18.85		18.96		17.72		15.78		17.12		14.79		15.21		16.29		14.29		16.75		19.01		17.00		
Recycle Ratio	1.05		1.07		1.06		1.02		1.05		1.07		1.01		1.04		1.08		1.06		1.49		1.00		1.00		
Inlet Vel.Ft/Sec.	1.04		1.06		1.04		1.01		1.00		1.03		1.00		1.01		1.02		1.02		1.27		1.04		1.03		
Ratio of H2/CO in Fresh Feed	1.69		1.65		1.66		1.67		1.68		1.70		1.71		1.68		1.70		1.66		1.72		1.71		1.66		
Combined Feed	2.15		2.06		2.07		2.03		2.10		2.14		2.12		2.11		2.07		2.05		2.07		2.06		2.05		
Wet Gas	3.08		2.80		2.80		2.69		2.92		2.96		2.97		3.04		2.74		2.80		2.51		2.74		2.89		
Consumed	1.28		1.23		1.26		1.45		1.34		1.29		1.34		1.38		1.38		1.32		1.52		1.40		1.35		
Yields/MCF of CO+H2 Fed	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	lbs.	gal.	
C3	1.05		0.77		0.79		0.86		0.95		0.86		0.94		0.82		0.84		1.10		0.79		0.83		1.00		
C4	0.84		0.66		0.69		0.74		0.85		0.71		0.89		0.82		0.74		0.77		0.88		0.79		0.77		
C5	0.42		0.29		0.34		0.33		0.41		0.27		0.44		0.46		0.35		0.33		0.44		0.38		0.35		
C6	0.09		0.05		0.09		0.07		0.09		0.03		0.09		0.10		0.09		0.09		0.13		0.07		0.08		
C3 - C6	2.40	0.51	1.77	0.38	1.91	0.40	2.00	0.42	2.30	0.48	1.87	0.40	2.36	0.50	2.20	0.46	1.92	0.40	2.29	0.49	2.24	0.46	2.07	0.44	2.20	0.47	
400 EP	2.58	0.41	2.21	0.35	2.46	0.39	2.47	0.39	2.72	0.43	2.39	0.38	2.75	0.44	2.82	0.45	2.69	0.43	2.76	0.44	2.95	0.47	2.65	0.42	2.93	0.46	
C3 - 400 EP	4.98	0.92	3.98	0.73	4.37	0.79	4.47	0.81	5.02	0.91	4.26	0.78	5.11	0.94	5.02	0.91	4.61	0.83	5.05	0.93	5.19	0.93	4.72	0.86	5.13	0.93	
400+	1.22	0.17	1.00	0.14	1.10	0.16	0.98	0.14	1.05	0.15	1.08	0.16	1.28	0.18	1.23	0.17	1.22	0.17	1.17	0.17	1.27	0.18	1.13	0.16	1.14	0.16	
WS Chem	0.75	0.09	0.69	0.09	0.79	0.09	0.68	0.08	0.78	0.09	0.75	0.09	0.72	0.09	0.97	0.12	0.81	0.10	0.81	0.10	0.90	0.11	0.82	0.10	0.89	0.11	
Total C3+	6.95	1.18	5.67	0.96	6.26	1.04	6.13	1.03	6.85	1.15	6.09	1.03	7.11	1.21	7.22	1.20	6.64	1.10	7.03	1.20	7.36	1.22	6.67	1.12	7.16	1.20	
C1	0.71		0.89		0.82		0.78		0.72		0.75		0.85		0.72		0.78		0.73		0.82		0.97		1.00		
C2	0.65		0.80		0.68		0.67		0.68		0.70		0.77		0.66		0.82		0.63		0.77		0.75		0.73		
C1 + C2	1.36		1.69		1.50		1.45		1.40		1.45		1.62		1.38		1.60		1.36		1.59		1.72		1.73		
Total C1+	8.31		7.36		7.76		7.58		8.25		7.54		8.73		8.60		8.24		8.39		8.95		8.39		8.89		
CO2	8.10		8.74		8.33		8.38		8.32		7.97		7.90		7.59		7.67		8.03		6.99		7.47		7.69		
Net Water	6.75		6.16		6.38		6.86		7.00		7.10		6.52		8.71		7.29		7.32		8.10		7.38		7.97		
Shift (H2)(CO2) Ratio (H2O)(CO)		6.23		6.29		6.27		5.67		6.40		5.72		6.40		5.20		5.35		5.63		6.21		5.02		5.09	
Conv.Basis F.F.																											
CO		77.1		73.2		73.6		74.7		78.2		75.5		77.4		81.9		76.6		77.6		79.5		76.8		80.3	
H2		58.3		54.6		55.6		59.3		62.1		57.3		60.6		67.3		62.3		62.1		70.1		62.8		65.6	
H2 + CO		65.3		61.6		62.4		65.1		68.1		64.0		66.8		72.8		67.6		67.9		73.6		67.9		71.1	
Selectivity C3+ C1+		83.6		77.9		80.7		80.9		83.0		80.8		81.4		84.0		80.6		83.8		82.2		79.5		80.5	
Weight Bal. %		92.7		91.4		91.4		91.9		93.6		91.8		90.7		97.3		91.3		91.9		93.7		92.0		93.6	

