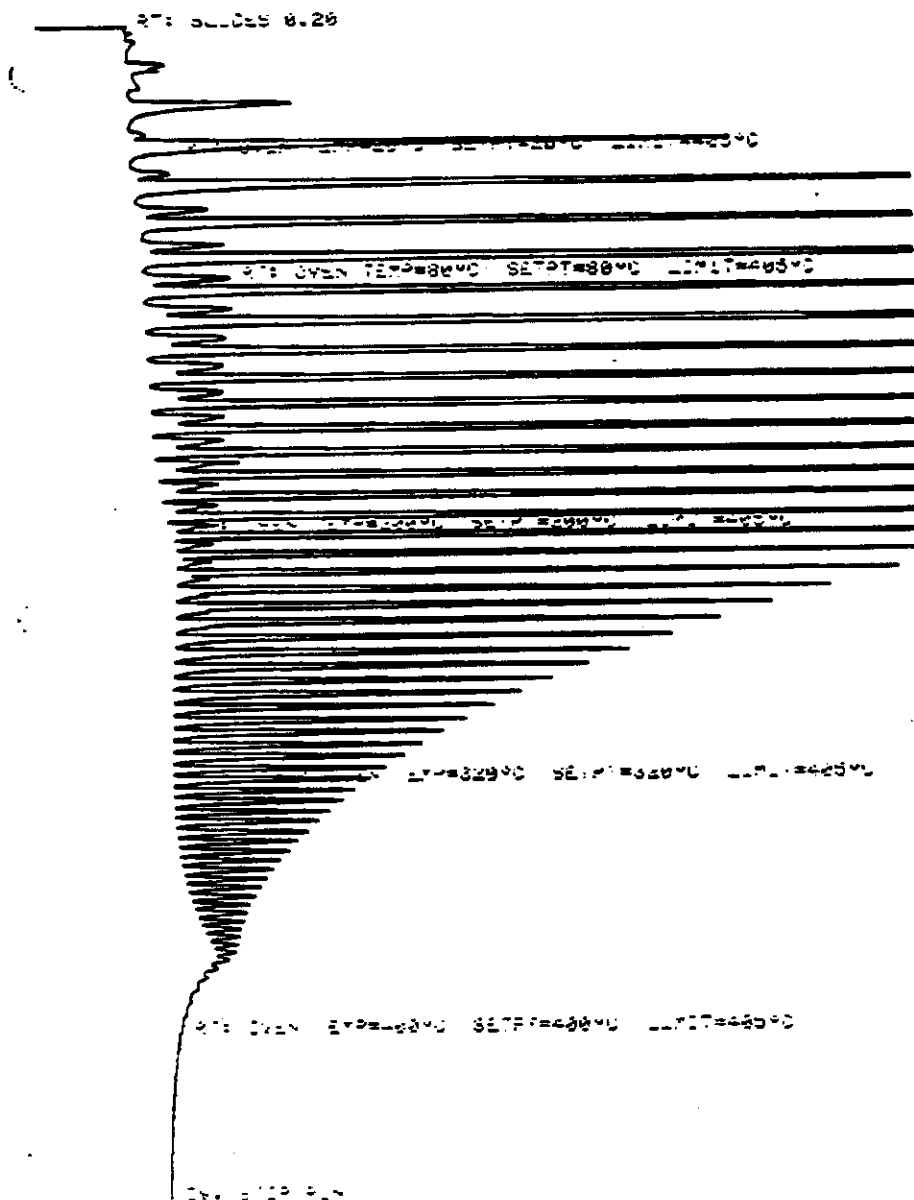


- 3124 -

27: 56-57 0.25



247-22527-23-44

Fig. B108

OVEN TEMP NOT READY

RT: SLICES 0.20

SETPT=20°C LIMIT=405°C

SETPT=30°C SETPT=30°C LIMIT=405°C

SETPT=200°C LIMIT=405°C

SETPT=320°C SETPT=320°C LIMIT=405°C

SETPT=400°C SETPT=400°C LIMIT=405°C

END OF RUN

115-13-14

Fig. B109

Table B1

FILE: 1256109A T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO. 12561-09
 CATALYST CO,X11-TC201 #12524-64 80 CC 39.67G(TO 59.95, +20G)
 FEED H2:CO:ARGON= 52:48:0 @ 400. CC/MN OR 300 GHSV

RUN & SAMPLE NO.	12561-09-01	561-09-03	561-09-04	561-09-05
FEED H2:CO:AR	67:32: 0	53:46: 0	52:47: 0	52:47: 0
HRS ON STREAM	19.5	67.0	139.0	163.0
PRESSURE,PSIG	293.00	293.00	294.00	293.00
TEMP. C	238.00	240.50	242.00	238.00
FEED CC/MIN	400.00	400.00	400.00	400.00
HOURS FEEDING	17.50	19.00	69.50	24.00
EFFLNT GAS LITER	186.20	266.20	1030.00	370.00
GM AQUEOUS LAYER	31.50	47.91	152.45	48.11
GM OIL	14.30	19.14	86.10	28.66
MATERIAL BALANCE				
GM ATOM CARBON %	107.39	95.75	100.54	99.47
GM ATOM HYDROGEN %	107.41	95.97	100.61	100.94
GM ATOM OXYGEN %	62.08	104.30	101.82	100.19
RATIO CHX/(H2O+CO2)	2.2434	0.7462	0.9561	0.9729
RATIO X IN CHX	3.2075	2.2805	2.2706	2.2610
USAGE H2/CO PRODT	1.9554	2.3462	2.0901	2.0950
FEED H2/CO FRM EFFLNT	2.0878	1.1394	1.0985	1.1047
RESIDUAL H2/CO RATIO	2.5726	0.6866	0.7026	0.7465
RATIO CO2/(H2O+CO2)	0.0714	0.0299	0.0282	0.0199
K SHIFT IN EFFLNT	0.1978	0.0212	0.0204	0.0152
SPEC ACTVITY SA,CO/X11	1.1093	0.6660	0.6504	0.7093
CONVERSION				
ON CO %	78.54	27.28	28.53	26.56
ON H2 %	73.56	56.18	54.29	50.37
ON CO+H2 %	75.18	42.67	42.02	39.06
PRDT SELECTIVITY,WT %				
CH4	54.02	7.88	7.49	7.00
C2 HC'S	5.77	1.75	1.58	1.49
C3H8	8.76	1.73	1.38	1.25
C3H6	0.50	1.57	1.31	1.31
C4H10	3.74	1.51	1.27	1.19
C4H8	1.36	4.68	3.90	3.79
C5H12	2.54	3.27	2.69	2.59
C5H10	0.68	3.83	3.09	3.01
C6H14	1.18	4.93	4.06	3.77
C6H12 & CYCLO'S	0.00	0.00	0.00	0.00
C7+ IN GAS	0.97	8.22	7.20	6.33
LIQ HC'S	20.50	60.64	66.04	68.26
TOTAL	100.00	100.00	100.00	100.00
SUB-GROUPING				
C1 -C4	74.13	19.11	16.93	16.03
C5 -420 F	12.16	40.56	38.33	36.87
420-700 F	8.58	30.71	34.04	35.80
700-END PT	5.13	9.61	10.70	11.30

Table B1 (continued)

FILE: 1256109A T6Q3

A1

1

C5+-END PT	25.87	80.89	83.07	83.97
ISO/NORMAL MOLE RATIO				
C4	0.0523	0.0289	0.0248	0.0237
C5	0.0863	0.0501	0.0453	0.0368
C6	0.4189	0.6267	0.6247	0.5928
C4=	0.1667	0.0495	0.0476	0.0392
PARAFFIN/OLEFIN RATIO				
C3	16.7889	1.0515	1.0021	0.9122
C4	2.6610	0.3122	0.3136	0.3021
C5	3.6513	0.8291	0.8453	0.8357
SCHULZ-FLORY DISTRIBTN				
ALPHA (EXP(SLOPE))		0.8535		0.8652
RATIO CH4/(1-A)**2		3.6700		3.8532
ALPHA FRM CORRELATION	0.8511	0.8978	0.8965	0.8956
ALPHA (EXPTL/CORR)		0.9507		0.9661
W4CH4 FRM CORRELATION	17.2823	4.9546	5.3491	5.4445
W4CH4 (EXPTL/CORR)	3.1255	1.5903	1.4011	1.2863
LIQ HC COLLECTION				
PHYS. APPEARANCE	OIL WAX	OIL WAX	OIL WAX	OIL WAX
DENSITY				
N, REFRACTIVE INDEX				
SIMULT'D DISTILATE				
10 WT % @ DEG F		302.00		304.00
16		341.00		344.00
50		499.00		508.00
84		698.00		705.00
90		755.00		769.00
RANGE(16-84 %)		357.00		361.00
WT % @ 420 F	33.14	33.50	32.25	31.00
WT % @ 700 F	74.98	84.15	83.80	83.44

Table B2

FILE: 1161712A T6Q3

A1

F1

RESULT OF SYNGAS OPERATION

RUN NO. 11617-12
 CATALYST CO,X9,X11-TC123 #12524-67 250 CC 117.6G(TO 172.3, +55G)
 FEED H2:CO:ARGON= 50:50:0 @ 1260 CC/MN OR 302 GHSV

RUN & SAMPLE NO.	12617-12-01	617-12-02	617-12-03	617-12-04	617-12-10
FEED H2:CO:AR	50:50: 0	50:50: 0	50:50: 0	50:50: 0	50:50: 0
HRS ON STREAM	21.75	42.25	67.25	91.55	208.00
PRESSURE, PSIG	300.00	300.00	300.00	300.00	300.00
TEMP. C	240.00	241.00	243.00	241.00	240.00
FEED CC/MIN	1260.00	1260.00	1260.00	1260.00	1260.00
HOURS FEEDING	21.75	20.50	25.00	24.50	20.50
EFFLNT GAS LITER	842.52	940.22	1092.90	1106.60	932.16
GM AQUEOUS LAYER	144.01	138.41	174.74	169.80	138.21
GM OIL	13.67	105.53	146.46	133.87	104.90
MATERIAL BALANCE					
GM ATOM CARBON %	67.83	102.46	102.24	100.81	101.88
GM ATOM HYDROGEN %	75.68	101.94	103.55	104.52	100.83
GM ATOM OXYGEN %	85.13	101.06	98.75	98.74	100.51
RATIO CHX/(H2O+CO2)	0.3462	1.0501	1.1207	1.0733	1.0498
RATIO X IN CHX	2.3180	2.1777	2.1748	2.1742	2.1791
USAGE H2/CO PRODT	3.6024	1.8881	1.8312	1.8992	1.9137
FEED H2/CO FRM EFFLNT	1.1157	0.9949	1.0128	1.0368	0.9896
RESIDUAL H2/CO RATIO	0.6833	0.6090	0.6048	0.6434	0.5989
RATIO CO2/(H2O+CO2)	0.0335	0.0556	0.0588	0.0443	0.0463
K SHIFT IN EFFLNT	0.0237	0.0359	0.0378	0.0298	0.0290
SPEC ACTVITY SA,CO/X11	0.3852	0.8573	0.8622	0.8526	0.8952
CONVERSION					
ON CO %	14.81	30.17	33.27	31.32	29.72
ON H2 %	47.83	57.25	60.15	57.38	57.47
ON CO+H2 %	32.22	43.68	46.79	44.59	43.52
PRDT SELECTIVITY, WT %					
CH4	10.39	2.90	2.64	2.60	2.72
C2 HC'S	3.89	1.35	0.87	0.92	1.00
C3H8	2.36	0.70	0.66	0.69	0.78
C3H6=	3.68	1.60	1.56	1.69	1.70
C4H10	2.64	0.79	0.73	0.78	0.88
C4H8=	6.99	2.67	2.59	2.69	2.74
C5H12	5.41	1.54	1.38	1.41	1.68
C5H10=	5.70	2.29	2.08	2.18	2.26
C6H14	6.95	2.01	1.80	1.75	2.30
C6H12= & CYCLO'S	0.00	0.00	0.00	0.00	0.00
C7+ IN GAS	21.25	4.79	3.63	3.73	4.10
LIQ HC'S	30.74	79.36	82.05	81.56	79.85
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	29.96	10.01	9.05	9.36	9.81
C5 -420 F	49.65	24.52	25.73	25.57	25.58
420-700 F	18.30	30.75	31.53	31.38	30.58
700-END PT	2.09	34.72	33.69	33.69	34.03

Table B2 (cOntinued)

FILE: 1161712A T6Q3

A1

1

C5+-END PT	70.04	89.99	90.95	90.64	90.19
ISO/NORMAL MOLE RATIO					
C4	0.0000	0.0002	0.0000	0.0002	0.0002
C5	0.0358	0.0165	0.0313	0.0258	0.0153
C6	0.4278	0.4357	0.4812	0.3902	0.3991
C4=	0.0461	0.0398	0.0427	0.0423	0.0469
PARAFFIN/OLEFIN RATIO					
C3	0.6122	0.4148	0.4054	0.3904	0.4383
C4	0.3644	0.2854	0.2739	0.2805	0.3093
C5	0.9228	0.6537	0.6429	0.6294	0.7215
SCHULZ-FLORY DISTRBTN					
ALPHA (EXP(SLOPE))	0.7833	0.9067			
RATIO CH4/(1-A)**2	2.2144	3.3340			
ALPHA FRM CORRELATION	0.8986	0.9024	0.9019	0.9004	0.9033
ALPHA (EXPTL/CORR)	0.8718	1.0048			
W4CH4 FRM CORRELATION	4.7609	3.7835	3.9646	4.3098	3.4993
W4CH4 (EXPTL/CORR)	2.1832	0.7670	0.6664	0.6026	0.7768
LIQ HC COLLECTION					
PHYS. APPEARANCE					
DENSITY					
N, REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F	308.00	373.00			
16	348.00	416.00			
50	471.00	658.00			
84	623.00	936.00			
90	670.00	1017.00			
RANGE(16-84 %)	275.00	520.00			
WT % @ 420 F	33.67	17.50	20.52	20.22	19.08
WT % @ 700 F	93.20	56.25	58.95	58.70	57.38

Table B3

FILE: 11617128 T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO. 11617-12
 CATALYST CO,X9,X11-TC123 #12524-67 250 CC 117.7G(TO 172.3,+55 G)
 FEED H2:CO:ARGON= 60:40:0 @ 1260 CC/MIN OR 302 GHSV

RUN & SAMPLE NO.	61712.11	61712.12	61712.13	61712.14	61712.15
FEED H2:CO:AR	50:50: 0	60:40: 0	60:40: 0	60:40: 0	60:40: 0
HRS ON STREAM	233.50	257.00	308.00	334.00	353.50
PRESSURE,PSIG	294.30	399.90	400.80	400.00	400.00
TEMP. C	240.00	248.00	248.50	248.50	248.00
FEED CC/MIN	1260.00	1260.00	1260.00	1260.00	1260.00
HOURS FEEDING	25.50	23.50	45.60	25.92	19.50
EFFLNT GAS LITER	1145.95	631.45	1229.20	706.20	536.31
GM AQUEOUS LAYER	180.76	247.06	493.76	276.64	207.11
GM OIL	144.35	189.14	382.28	215.33	160.65
MATERIAL BALANCE					
GM ATOM CARBON %	102.87	104.60	105.34	105.65	104.76
GM ATOM HYDROGEN %	104.40	101.02	102.13	102.28	101.97
GM ATOM OXYGEN %	100.30	98.94	99.72	98.94	98.54
RATIO CHX/(H2O+CO2)	1.0896	1.1054	1.1038	1.1261	1.1181
RATIO X IN CHX	2.1716	2.2755	2.2405	2.2420	2.2429
USAGE H2/CO PRDCT	1.8964	1.7985	1.8302	1.8249	1.8429
FEED H2/CO FRM EFFLNT	1.0149	1.4486	1.4543	1.4522	1.4600
RESIDUAL H2/CO RATIO	0.6088	0.8834	0.8749	0.8829	0.8938
RATIO CO2/(H2O+CO2)	0.0403	0.0964	0.0765	0.0734	0.0680
K SHIFT IN EFFLNT	0.0256	0.0942	0.0724	0.0699	0.0652
SPEC ACTVITY SA,CO/X11	0.9421	0.8979	0.8553	0.8494	0.8470
CONVERSION					
ON CO %	31.54	61.77	60.66	60.43	59.65
ON H2 %	58.93	76.69	76.33	75.94	75.30
ON CO+H2 %	45.34	70.59	69.95	69.62	68.94
PRDCT SELECTIVITY,WT %					
CH4	2.46	7.72	6.01	6.05	6.05
C2 HC'S	0.79	1.07	0.96	1.01	0.97
C3H8	0.63	1.47	1.21	1.22	1.22
C3H6=	1.63	0.96	1.07	1.10	1.09
C4H10	0.73	1.24	1.04	1.06	1.06
C4H8=	2.56	1.93	1.95	1.99	1.98
C5H12	1.39	2.17	1.84	1.87	1.89
C5H10=	2.21	1.33	1.33	1.42	1.39
C6H14	1.85	2.54	1.84	2.30	2.27
C6H12= & CYCLO'S	0.00	0.00	0.00	0.00	0.00
C7+ IN GAS	3.84	3.48	3.74	3.94	3.34
LIQ HC'S	81.92	76.08	79.01	78.05	78.75
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	8.80	14.39	12.24	12.43	12.37
C5 -420 F	19.94	25.05	23.76	24.42	23.99
420-700 F	26.60	24.42	28.00	27.39	27.36
700-END PT	44.67	36.14	36.00	35.76	36.29

Table B3 (continued)

FILE: 1161712B T6Q3

A1

C5+-END PT	91.20	85.61	87.76	87.57	87.63
ISO/NORMAL MOLE RATIO					
C4	0.0002	0.0235	0.0248	0.0249	0.0228
C5	0.0286	0.0584	0.0512	0.0525	0.0483
C6	0.4127	0.3805	0.1208	0.3714	0.3714
C4=	0.0449	0.0895	0.0760	0.0746	0.0730
PARAFFIN/OLEFIN RATIO					
C3	0.3681	1.4684	1.0728	1.0599	1.0675
C4	0.2754	0.6212	0.5171	0.5123	0.5157
C5	0.6124	1.5927	1.3479	1.2813	1.3177
SCHULZ-FLORY DISTRBTN					
ALPHA (EXP(SLOPE))	0.9137	0.8926	0.9051		
RATIO CH4/(1-A)**2	3.2992	6.6978	6.6737		
ALPHA FRM CORRELATION	0.9023	0.8933	0.8935	0.8931	0.8929
ALPHA (EXPTL/COER)	1.0126	0.9993	1.0130		
W4CH4 FRM CORRELATION	3.7259	6.9669	6.9233	7.0203	7.0776
W4CH4 (EXPTL/COER)	0.6593	1.1080	0.8677	0.8620	0.8546
LIQ HC COLLECTION					
PHYS. APPEARANCE					
DENSITY					
N, REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F	455.00	341.00	344.00		
16	454.00	383.00	415.00		
50	733.00	675.00	668.00		
84	1025.00	1009.00	976.00		
90	1095.00	1086.00	1058.00		
RANGE(16-84 %)	571.00	626.00	561.00		
WT % @ 420 F	13.00	20.40	19.00	19.09	19.18
WT % @ 700 F	45.47	52.50	54.44	54.18	53.92

Table B4

FILE: 1161712C T6Q3 A1

11

RESULT OF SYNGAS OPERATION

RUN NO.	11617-12				
CATALYST	CO,X9,X11-TC123 #12524-67 250 CC 117.7G(TO 172.3, +55G)				
FEED	H2:CO:ARGON= 60:40:0 @ 1260 CC/MIN OR 302 GHSV				
RUN & SAMPLE NO.	11617-12-16	617-12-17	617-12-18	617-12-19	617-12-20
FEED H2:CO:AR	60:40: 0	60:40: 0	60:40: 0	60:40: 0	60:40: 0
HRS ON STREAM	377.50	401.0	425.00	477.00	489.00
PRESSURE, PSIG	401.40	401.20	400.30	404.30	402.50
TEMP. C	251.00	249.00	249.00	249.00	249.00
FEED CC/MIN	1260.00	1260.00	1260.00	1260.00	1260.00
HOURS FEEDING	24.00	23.50	24.00	51.83	21.67
EFFLNT GAS LITER	645.32	643.62	675.05	1458.84	622.67
GM AQUEOUS LAYER	266.30	254.74	258.00	548.28	229.25
GM OIL	192.09	190.16	196.45	427.23	172.31
MATERIAL BALANCE					
GM ATOM CARBON %	103.48	103.01	104.53	105.90	105.02
GM ATOM HYDROGEN %	102.22	101.36	105.50	102.71	102.55
GM ATOM OXYGEN %	100.58	99.17	98.24	98.89	99.59
RATIO CHX/(H2O+CO2)	1.0522	1.0719	1.1169	1.1343	1.1039
RATIO X IN CHX	2.2614	2.2369	2.2827	2.2331	2.2447
USAGE H2/CO PRODT	1.8655	1.8817	1.8422	1.8441	1.8665
FEED H2/CO FRM EFFLNT	1.4818	1.4759	1.5140	1.4548	1.4647
RESIDUAL H2/CO RATIO	0.8872	0.8946	0.9905	0.8969	0.9094
RATIO CO2/(H2O+CO2)	0.0791	0.0631	0.0764	0.0614	0.0623
K SHIFT IN EFFLNT	0.0763	0.0602	0.0820	0.0587	0.0604
SPEC ACTVITY SA,CO/X11	0.7519	0.7878	0.7850	0.7912	0.7683
CONVERSION					
ON CO %	60.77	58.89	61.46	58.90	58.02
ON H2 %	76.51	75.08	74.78	74.66	73.94
ON CO+H2 %	70.17	68.54	69.48	68.24	67.48
PRDT SELECTIVITY, WT %					
CH4	7.05	5.83	8.15	5.64	6.19
C2 HC'S	1.14	0.91	1.22	0.98	0.99
C3H8	1.43	1.14	1.56	1.14	1.23
C3H6=	1.10	1.07	0.93	1.11	1.12
C4H10	1.17	1.01	1.25	1.00	1.07
C4H8=	2.07	1.92	1.86	1.97	2.04
C5H12	1.99	1.81	2.07	1.73	1.93
C5H10=	1.36	1.30	1.19	1.41	1.45
C6H14	1.98	1.83	1.96	2.20	2.38
C6H12= & CYCLO'S	0.00	0.00	0.00	0.00	0.00
C7+ IN GAS	3.76	3.63	3.37	4.32	3.99
LIQ HC'S	76.95	79.56	76.44	78.50	77.61
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	13.96	11.87	14.97	11.84	12.65
C5 -420 F	23.92	23.97	23.19	24.26	23.98
420-700 F	26.46	27.08	26.25	27.44	27.36
700-END PT	35.66	37.08	35.58	36.46	36.01

Table B4 (continued)

FILE: 1161712C T6Q3

A1

CS+-END PT	86.04	88.13	85.03	88.16	87.35
ISO/NORMAL MOLE RATIO					
C4	0.0252	0.0232	0.0267	0.0270	0.0234
C5	0.0552	0.0460	0.0557	0.0546	0.0495
C6	0.1350	0.1101	0.1305	0.3764	0.3877
C4-	0.0811	0.0720	0.0877	0.0724	0.0747
PARAFFIN/OLEFIN RATIO					
C3	1.2392	1.0195	1.6018	0.9753	1.0532
C4	0.5467	0.5089	0.6474	0.4867	0.5040
C5	1.4239	1.3525	1.6952	1.1873	1.2921
SCHULZ-FLORY DISTRBTN					
ALPHA (EXP(SLOPE))		0.9056			0.9035
RATIO CH4/(1-A)**2		6.5333			6.6422
ALPHA FRM CORRELATION	0.8923	0.8926	0.8889	0.8927	0.8921
ALPHA (EXPTL/CORR)		1.0145			1.0128
W4CH4 FRM CORRELATION	7.3489	7.1916	8.1773	7.1775	7.3325
W4CH4 (EXPTL/CORR)	0.9597	0.8103	0.9967	0.7853	0.8438
LIQ HC COLLECTION					
PHYS. APPEARANCE					
DENSITY					
N, REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F		336.00			338.00
16		404.00			407.00
50		670.00			671.00
84		957.00			953.00
90		996.00			993.00
RANGE(16-84 %)		553.00			546.00
WT % @ 420 F	19.27	19.36	19.11	18.60	18.35
WT % @ 700 F	53.66	53.40	53.45	53.55	53.60

Table B5

FILE: 1161712D T6Q3 A1

RESULT OF SYNGAS OPERATION

RUN NO.	11617-12				
CATALYST	CO,X9,X11-TC123 #12524-67		250 CC	117.7G(TO 172.3, +55G)	
FEED	H2:CO:ARGON= 60:40:0 @ 1260 CC/MN OR 302 GHSV				
RUN & SAMPLE NO.	11617-12-21	617-12-22	617-12-23	617-12-24	617-12-25
FEED H2:CO:AR	60:40: 0	60:40: 0	60:40: 0	60:40: 0	60:40: 0
HRS ON STREAM	512.00	535.50	561.00	588.00	631.50
PRESSURE,PSIG	397.90	400.50	403.50	399.80	399.80
TEMP. C	249.00	249.00	249.00	249.00	248.50
FEED CC/MIN	1260.00	1260.00	1260.00	1260.00	1260.00
HOURS FEEDING	23.00	23.50	25.50	27.00	43.50
EFFLNT GAS LITER	662.31	618.45	730.55	778.83	1293.50
GM AQUEOUS LAYER	245.85	251.45	269.16	290.40	457.99
GM OIL	182.38	188.41	201.74	212.22	345.36
MATERIAL BALANCE					
GM ATOM CARBON %	105.11	100.25	103.63	103.93	104.34
GM ATOM HYDROGEN %	102.47	99.37	101.92	102.11	101.99
GM ATOM OXYGEN %	100.47	96.02	98.96	100.58	100.50
RATIO CHX/(H2O+CO2)	1.0681	1.0808	1.0900	1.0634	1.0749
RATIO X IN CHX	2.2409	2.2340	2.2468	2.2482	2.2432
USAGE H2/CO PRODT	1.8800	1.8924	1.8837	1.9087	1.9193
FEED H2/CO PER EFFLNT	1.4623	1.4869	1.4753	1.4737	1.4663
RESIDUAL H2/CO RATIO	0.8963	0.8955	0.9194	0.8990	0.9060
RATIO CO2/(H2O+CO2)	0.0603	0.0560	0.0594	0.0569	0.0489
K SHIFT IN EFFLNT	0.0575	0.0531	0.0581	0.0543	0.0465
SPEC ACTVTY SA,CO/X11	0.7702	0.7939	0.7550	0.7530	0.7428
CONVERSION					
ON CO %	57.54	59.32	57.64	56.92	55.29
ON H2 %	73.97	75.50	73.60	73.72	72.38
ON CO+H2 %	67.30	69.00	67.15	66.92	65.45
PRDT SELECTIVITY,WT %					
CH4	6.00	5.66	6.18	6.16	6.06
C2 HC'S	0.98	0.99	1.34	1.61	0.95
C3H8	1.21	1.16	1.16	1.18	1.14
C3H6=	1.13	1.07	1.03	1.04	1.13
C4H10	1.06	1.00	0.99	0.99	1.00
C4H8=	2.01	1.91	1.89	1.94	2.05
C5H12	1.84	1.77	1.73	1.79	1.84
C5H10=	1.44	1.29	1.37	1.39	1.51
C6H14	2.32	1.78	2.19	1.80	1.88
C6H12= & CYCLO'S	0.00	0.00	0.00	0.01	0.02
C7+ IN GAS	4.07	3.49	3.50	3.30	1.42
LIQ HC'S	77.93	79.89	78.62	78.80	81.01
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	12.40	11.79	12.60	12.91	12.33
C5 -420 F	23.97	22.96	23.19	22.72	21.91
420-700 F	27.15	27.52	26.75	26.48	27.26
700-END PT	36.49	37.73	37.46	37.88	38.50

Table B5 (continued)

FILE: 1161712D T6Q3

A1

4

C5+-END PT	87.60	88.21	87.40	87.09	87.67
ISO/NORMAL MOLE RATIO					
C4	0.0228	0.0242	0.0245	0.0262	0.0260
C5	0.0477	0.0494	0.0513	0.0495	0.0464
C6	0.3662	0.1131	0.3782	0.1127	0.0970
C4=	0.0733	0.0734	0.0755	0.0757	0.0709
PARAFFIN/OLEFIN RATIO					
C3	1.0273	1.0398	1.0754	1.0759	0.9688
C4	0.5102	0.5042	0.5044	0.4911	0.4711
C5	1.2398	1.3315	1.2287	1.2482	1.1828
SCHULZ-FLORY DISTRIBUTN					
ALPHA (EXP(SLOPE))				0.9072	
RATIO CH4/(1-A)**2				7.1512	
ALPHA FRM CORRELATION	0.8923	0.8925	0.8918	0.8923	0.8922
ALPHA (EXPTL/CORR)				1.0167	
WICH4 FRM CORRELATION	7.2500	7.2096	7.4248	7.2555	7.2696
WICH4 (EXPTL/CORR)	0.8277	0.7849	0.8329	0.8484	0.8333
LIQ HC COLLECTION					
PHYS. APPEARANCE					
DENSITY					
N. REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F				338.00	
16				408.00	
50				681.00	
84				961.00	
90				999.00	
RANGE(16-84 %)				553.00	
WT % @ 420 F	18.34	18.33	18.32	18.32	18.82
WT % @ 700 F	53.18	52.77	52.35	51.93	52.47

Table B6

FILE: 1161712E T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO. 11617-12
 CATALYST CO,X9,X11-TC123 #12524-67 250 CC 117.7G(TO 172.3, +55G)
 FEED H2:CO:ARGON= 60:40:0 @ 1260 CC/MN OR 302 GHSV

RUN & SAMPLE NO. 11617-12-26 617-12-27

FEED H2:CO:AR	60:40: 0	60:40: 0
HRS ON STREAM	660.00	679.00
PRESSURE, PSIG	400.60	399.20
TEMP. C	251.00	251.50
FEED CC/MIN	1260.00	1260.00
HOURS FEEDING	29.00	19.00
EFFLNT GAS LITER	805.59	560.66
GM AQUEOUS LAYER	304.92	198.64
GM OIL	224.83	143.22
MATERIAL BALANCE		
GM ATOM CARBON %	103.29	104.05
GM ATOM HYDROGEN %	100.89	101.82
GM ATOM OXYGEN %	97.94	99.71
RATIO CHX/(H2O+CO2)	1.1030	1.0844
RATIO X IN CHX	2.2584	2.2660
USAGE H2/CO PRODT	1.8700	1.9080
FEED H2/CO FRM EFFLNT	1.4651	1.4680
RESIDUAL H2/CO RATIO	0.8898	0.9039
RATIO CO2/(H2O+CO2)	0.0637	0.0549
K SHIFT IN EFFLNT	0.0605	0.0525
SPEC ACTVITY SA,CO/X11	0.7209	0.6596
CONVERSION		
ON CO %	58.69	56.18
ON H2 %	74.91	73.02
ON CO+H2 %	68.33	66.20
PRDT SELECTIVITY, WT %		
CH4	7.03	7.17
C2 HC'S	1.00	1.41
C3H8	1.35	1.37
C3H6=	1.05	1.13
C4H10	1.10	1.17
C4H8=	2.64	2.13
C5H12	1.99	2.00
C5H10=	1.48	1.47
C6H14	1.94	2.06
C6H12= & CYCLO'S	0.03	0.04
C7+ IN GAS	4.30	3.88
LIQ HC'S	76.09	76.16
TOTAL	100.00	100.00
SUB-GROUPING		
C1 -C4	14.17	14.39
C5 -420 F	24.25	24.16
420-700 F	25.62	25.66
700-END PT	35.96	35.80

Table 36 (continued)

FILE: 1161712E T6Q3	A1	
C5+-END PT	85.83	85.61
ISO/NORMAL MOLE RATIO		
C4	0.0236	0.0235
C5	0.0484	0.0466
C6	0.0649	0.1111
C4=	0.4130	0.0777
PARAFFIN/OLEFIN RATIO		
C3	1.2301	1.1655
C4	0.4013	0.5272
C5	1.3058	1.3254
SCHULZ-FLORY DISTRBTN		
ALPHA (EXP(SLOPE))		0.9003
RATIO CH4/(1-A)**2		7.2169
ALPHA FRM CORRELATION	0.8921	0.8913
ALPHA (EXPTL/CORR)		1.0101
W1CH4 FRM CORRELATION	7.3865	7.6134
W1CH4 (EXPTL/CORR)	0.9518	0.9422
LIQ HC COLLECTION		
PHYS. APPEARANCE		
DENSITY		
N, REFRACTIVE INDEX		
SIMULT'D DISTILATN		
10 WT % @ DEG F		336.00
16		406.00
50		677.00
84		958.00
90		997.00
RANGE(16-84 %)		552.00
WT % @ 420 F	19.07	19.31
WT % @ 700 F	52.74	53.00

Table B7

FILE: 1256111A T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO.	12561-11				
CATALYST	CO-TC123 #12524-76			80 CC 39.32G(TO 55.35, +16G)	
FEED	H2:CO:ARGON= 51:49:0	@ 400. CC/MIN OR	300 GHSV		
RUN & SAMPLE NO.	12561-11-01	561-11-02	561-11-03	561-11-04	561-11-05
FEED H2:CO:AR	50:50: 0	50:50: 0	50:50: 0	50:50: 0	50:50: 0
HRS ON STREAM	24.50	51.50	72.50	95.50	173.00
PRESSURE, PSIG	299.40	299.70	298.50	294.10	294.10
TEMP. C	240.00	239.00	240.00	239.00	240.00
FEED CC/MIN	400.00	400.00	400.00	400.00	400.00
HOURS FEEDING	18.00	27.00	21.00	23.00	77.50
EFFLNT GAS LITER	184.10	396.00	315.00	347.80	1177.70
GM AQUEOUS LAYER	55.93	52.77	39.99	45.30	150.59
GM OIL	17.50	36.27	26.47	30.67	99.09
MATERIAL BALANCE					
GM ATOM CARBON %	69.04	96.24	96.58	97.92	97.41
GM ATOM HYDROGEN %	90.33	102.20	101.10	103.99	103.95
GM ATOM OXYGEN %	87.78	95.10	96.27	96.95	96.55
RATIO CHX/(H2O+CO2)	0.5106	1.0440	1.0123	1.0375	1.0336
RATIO X IN CHX	2.2829	2.2620	2.2690	2.2732	2.2853
USAGE H2/CO PRODT	2.7625	1.9110	1.9451	1.9560	1.9667
FEED H2/CO FRM EFFLNT	1.3085	1.0619	1.0468	1.0619	1.0672
RESIDUAL H2/CO RATIO	0.6592	0.7003	0.6951	0.7017	0.7105
RATIO CO2/(H2O+CO2)	0.0458	0.0638	0.0609	0.0507	0.0500
X SHIFT IN EFFLNT	0.0316	0.0477	0.0451	0.0375	0.0374
SPEC ACTVITY SA, CO/X11	0.7482	0.8053	0.7275	0.7762	0.7248
CONVERSION					
ON CO %	30.87	29.87	28.14	28.72	28.40
ON H2 %	65.17	53.75	52.29	52.90	52.33
ON CO+H2 %	50.31	42.17	40.49	41.18	40.75
PRDT SELECTIVITY, WT %					
CH4	7.77	6.71	7.06	7.43	8.01
C2 HC'S	1.28	1.18	1.32	1.09	1.16
C3H8	1.61	1.55	1.60	1.50	1.63
C3H6-	1.57	1.45	1.49	1.41	1.38
C4H10	1.65	1.61	1.65	1.57	1.68
C4H8-	3.09	2.75	2.79	2.74	2.78
C5H12	3.21	3.10	3.27	3.34	3.55
C5H10-	0.18	1.93	2.08	1.93	1.80
C6H14	3.79	3.95	3.92	3.50	3.75
C6H12- & CYCLO'S	0.00	0.00	0.00	0.00	0.00
C7+ IN GAS	5.51	5.51	5.19	5.10	5.71
LIQ HC'S	70.34	70.27	69.64	70.41	68.56
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	16.97	15.25	15.90	15.73	16.64
C5 -420 F	34.84	31.35	31.00	30.58	30.23
420-700 F	40.87	34.70	33.08	33.45	31.42
700-END PT	7.32	18.71	20.02	20.24	21.71

Table B7 (continued)

FILE: 1256111A T6Q3

A1

C5+-END PT	83.03	84.75	84.10	84.27	83.36
ISO/NORMAL MOLE RATIO					
C4	0.0166	0.0115	0.0000	0.0188	0.0168
C5	0.0418	0.0390	0.0363	0.0304	0.0350
C6	0.3077	0.2843	0.2778	0.0962	0.0996
C4=	0.0637	0.0579	0.0587	0.0593	0.0596
PARAFFIN/OLEFIN RATIO					
C3	0.9745	1.0230	1.0253	1.0149	1.1271
C4	0.5154	0.5654	0.5710	0.5536	0.5827
C5	17.6341	1.5632	1.5279	1.6816	1.9192
SCHULZ-FLORY DISTRBTN					
ALPHA (EXP(SLOPE))	0.8546	0.8852			0.8834
RATIO CH4/(1-A)**2	3.6752	5.0983			5.8878
ALPHA FRM CORRELATION	0.8998	0.8980	0.8978	0.8975	0.8968
ALPHA (EXPTL/CORR)	0.9497	0.9858			0.9850
W4CH4 FRM CORRELATION	4.4247	4.8750	4.9425	4.9628	5.2067
W4CH4 (EXPTL/CORR)	1.7567	1.3771	1.4281	1.4965	1.5385
LIQ HC COLLECTION					
PHYS. APPEARANCE	OIL WAX	OIL WAX	OIL WAX	OIL WAX	OIL WAX
DENSITY					
N, REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F	305.00	338.00			342.00
16	345.00	371.00			382.00
50	491.00	571.00			579.00
84	651.00	787.00			826.00
90	704.00	844.00			898.00
RANGE(16-84 %)	306.00	416.00			444.00
WT % @ 420 F	31.50	24.00	23.75	23.75	22.50
WT % @ 700 F	89.60	73.38	71.25	71.25	68.33

Table B8

FILE: 1256111B T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO.	12561-11				
CATALYST	CO-TC123 #12524-76			80 CC 39.32G(TO 55.35, +16G)	
FEED	H2:CO:ARGON= 51:49:0	@ 400. CC/MN OR	300 GHSV		
RUN & SAMPLE NO.	12561-11-06	561-11-07	561-11-08	561-11-09	561-11-10
FEED H2:CO:AR	50:50: 0	50:50: 0	50:50: 0	50:50: 0	50:50: 0
HRS ON STREAM	193.00	216.00	245.00	264.00	337.00
PRESSURE, PSIG	298.20	298.20	298.40	297.50	296.10
TEMP. C	240.00	240.00	240.00	240.00	241.00
FEED CC/MIN	400.00	400.00	400.00	400.00	400.00
HOURS FEEDING	20.00	23.00	29.00	19.00	73.00
EFFLNT GAS LITER	310.50	363.50	457.00	299.50	1152.50
GM AQUEOUS LAYER	37.46	42.33	53.46	34.32	133.52
GM OIL	24.03	27.78	33.30	21.02	82.91
MATERIAL BALANCE					
GM ATOM CARBON %	97.57	98.86	96.69	96.16	97.16
GM ATOM HYDROGEN %	104.09	104.78	103.98	102.67	103.51
GM ATOM OXYGEN %	96.53	97.44	96.49	96.20	96.81
RATIO CHX/(H2O+CO2)	1.0422	1.0586	1.0085	0.9984	1.0148
RATIO X IN CHX	2.2961	2.3007	2.3049	2.2871	2.2986
USAGE H2/CO PRDPT	1.9833	1.9787	2.0343	2.0373	2.0269
FEED H2/CO FRM EFFLNT	1.0668	1.0599	1.0754	1.0677	1.0654
RESIDUAL H2/CO RATIO	0.7219	0.7216	0.7377	0.7373	0.7297
RATIO CO2/(H2O+CO2)	0.0434	0.0413	0.0364	0.0355	0.0361
R SHIFT IN EFFLNT	0.0328	0.0311	0.0279	0.0271	0.0274
SPEC ACTVITY SA, CO/XL1	0.6870	0.6775	0.6427	0.6293	0.6157
CONVERSION					
ON CO %	27.35	26.92	26.04	25.42	25.88
ON H2 %	50.84	50.25	49.26	48.49	49.23
ON CO+H2 %	39.47	38.92	38.07	37.33	37.93
PRDPT SELECTIVITY, WT %					
CH4	8.59	8.77	9.03	7.89	8.60
C2 HC'S	1.35	1.23	1.20	1.34	1.25
C3H8	1.69	1.73	1.76	1.86	1.88
C3H6=	1.53	1.49	1.51	1.59	1.47
C4H10	1.78	1.82	1.87	1.92	1.91
C4H8=	2.83	2.83	2.90	3.01	2.93
C5H12	3.68	3.82	3.65	3.88	3.77
C5H10=	1.85	1.83	1.81	1.92	1.75
C6H14	3.95	4.02	3.95	4.05	4.04
C6H12= & CYCLO'S	0.01	0.06	0.09	0.11	0.17
C7+ IN GAS	6.43	5.75	5.47	6.12	6.10
LIQ HC'S	66.31	66.65	66.76	66.31	66.12
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	17.78	17.87	18.27	17.61	18.05
C5 -420 F	31.94	31.59	31.11	31.99	31.87
420-700 F	31.22	31.38	31.43	31.27	31.34
700-END PT	19.06	19.16	19.19	19.13	18.75

Table B8 (continued)

FILE: 12561118 T6Q3 A1

C5+-END PT	82.22	82.13	81.73	82.39	81.95
ISO/NORMAL MOLE RATIO					
C4	0.0189	0.0154	0.0144	0.0000	0.0189
C5	0.0310	0.0291	0.0278	0.0283	0.0284
C6	0.0881	0.0840	0.0893	0.0788	0.0759
C4=	0.0598	0.0558	0.0591	0.0552	0.0601
PARAFFIN/OLEFIN RATIO					
C3	1.0580	1.1127	1.1089	1.1164	1.2220
C4	0.6072	0.6191	0.6214	0.6156	0.6284
C5	1.9338	2.0223	1.9559	1.9602	2.0976
SCHULZ-FLORY DISTRIBUTN					
ALPHA (EXP(SLOPE))				0.8791	
RATIO CH4/(1-A)**2				5.3974	
ALPHA FRM CORRELATION	0.8965	0.8965	0.8957	0.8957	0.8956
ALPHA (EXPTL/CORR)				0.9815	
W4CH4 FRM CORRELATION	5.3084	5.3044	5.5136	5.5199	5.5610
W4CH4 (EXPTL/CORR)	1.6185	1.6529	1.6382	1.4300	1.5471
LIQ HC COLLECTION	OIL WAX	OIL WAX	OIL WAX	OIL WAX	OIL WAX
PHYS. APPEARANCE					
DENSITY					
N, REFRACTIVE INDEX					
SIMULT'D DISTILATN					
10 WT % @ DEG F				339.00	
16				380.00	
50				573.00	
84				804.00	
90				870.00	
RANGE(16-84 %)				424.00	
WT % @ 420 F	24.17	24.17	24.17	24.00	24.25
WT % @ 700 F	71.25	71.25	71.25	71.15	71.65

Table B9

FILE: 1256111C T6Q3

A1

RESULT OF SYNGAS OPERATION

RUN NO.	12561-11				
CATALYST	CO-TCL23 #12524-76				
FEED	H2:CO:ARGON= 51:49:0 & 62:38:0 @ 400. CC/MIN OR 300 GHSV				
	80 CC 39.32G(TO 55.35,+16 G)				
RUN & SAMPLE NO.	12561-11-11	561-11-12	561-11-13	561-11-14	561-11-15
FEED H2:CO:AR	50:50: 0	50:50: 0	60:40: 0	60:40: 0	60:40: 0
HRS ON STREAM	364.00	388.00	409.50	431.00	455.50
PRESSURE, PSIG	296.00	299.40	498.10	501.40	499.30
TEMP. C	241.00	240.00	263.50	261.00	258.50
FEED CC/MIN	400.00	400.00	400.00	400.00	400.00
HOURS FEEDING	27.00	24.00	21.50	21.50	66.25
EFFLNT GAS LITER	429.50	385.90	185.10	189.30	684.75
GM AQUEOUS LAYER	48.10	40.72	63.01	71.58	216.94
GM OIL	30.66	25.32	30.39	30.94	88.21
MATERIAL BALANCE					
GM ATOM CARBON %	97.67	96.45	98.43	93.09	93.89
GM ATOM HYDROGEN %	103.06	101.57	98.28	102.69	103.93
GM ATOM OXYGEN %	96.94	96.25	94.55	92.49	96.53
RATIO CHX/(H2O+CO2)	1.0313	1.0091	1.0726	1.0111	0.9478
RATIO X IN CHX	2.2858	2.2946	2.5917	2.6516	2.6103
USAGE H2/CO PRODT	2.0099	2.0432	1.7249	2.0373	2.1968
FEED H2/CO FRH EFFLNT	1.0552	1.0531	1.4977	1.6547	1.6604
RESIDUAL H2/CO RATIO	0.7281	0.7390	0.9913	0.9925	1.0411
RATIO CO2/(H2O+CO2)	0.0352	0.0315	0.1981	0.0924	0.0485
X SHIFT IN EFFLNT	0.0265	0.0241	0.2449	0.1010	0.0530
SPEC ACTVTY SA,CO/XL1	0.6101	0.5957	0.4282	0.4037	0.3505
CONVERSION					
ON CO %	25.51	24.08	69.04	63.38	53.59
ON H2 %	48.60	46.73	79.51	78.03	70.90
ON CO+H2 %	37.37	35.70	75.31	72.51	64.39
PRDT SELECTIVITY, WT %					
CH4	7.77	8.07	20.26	26.00	23.96
C2 HC'S	1.28	2.01	4.84	3.06	2.77
C3H8	1.96	1.89	8.01	5.55	5.41
C3H6=	1.65	1.51	0.52	0.51	0.61
C4H10	1.98	1.95	5.12	3.59	3.42
C4H8=	2.87	2.89	1.60	1.56	1.76
C5H12	3.87	3.78	6.26	4.61	4.50
C5H10=	1.82	1.78	0.79	0.78	0.81
C6H14	4.07	4.01	4.79	3.80	3.77
C6H12= & CYCLO'S	0.17	0.22	0.08	0.11	0.09
C7+ IN GAS	5.89	5.68	5.06	4.53	4.80
LIQ HC'S	66.66	66.22	42.66	45.89	48.09
TOTAL	100.00	100.00	100.00	100.00	100.00
SUB-GROUPING					
C1 -C4	17.51	18.32	40.36	40.26	37.94
C5 -420 F	32.16	31.68	31.70	35.69	29.69
420-700 F	31.76	31.55	17.89	20.07	22.35
700-END PT	18.57	18.45	10.05	3.98	10.03