

Table E-1  
**First-Stage Fischer-Tropsch Slurry-Reactor**  
**Operating Conditions and Material Balances**  
 (Second-Stage Not-operative)  
 (Run CT-256-4)

(Nitrogen-Free Basis)	4-18	4-19	4-20	4-21	4-22	4-23	4-24	4-25	4-26
M.B. No.	19.3	20.3	21.3	22.3	23.3	24.3	25.3	26.3	27.3
Days On-stream									
First-Stage Conditions:									
Charge H <sub>2</sub> /CO (Molar)	0.693	0.693	0.692	0.694	0.696	0.688	0.688	0.686	0.688
Temperature, °C	256	256	256	256	256	256	256	256	256
Pressure, MPa	2.508	2.508	2.508	2.515	2.508	2.515	2.515	2.515	2.521
Feed Sup. Vel., cm/s	2.172	2.152	2.182	2.177	2.165	2.183	2.206	2.192	2.186
Space Vel., NL/gFe-hr	2.835	2.817	2.907	2.903	2.888	2.919	2.936	2.922	2.920
N <sub>2</sub> in Feed, Mol %	8.3	8.1	8.3	8.6	8.2	8.5	9.3	9.3	9.3
Conversions, Mol % :									
H <sub>2</sub>	39.65	36.67	40.26	39.10	37.59	39.44	38.19	37.52	37.67
CO	45.72	41.86	46.13	44.15	40.39	40.18	42.18	42.73	41.97
H <sub>2</sub> +CO	43.24	39.74	43.73	42.08	39.24	39.88	40.55	40.61	40.22
Yields, Wt % of Products :									
Hydrocarbons (1)	12.77	12.90	13.11	12.31	11.28	11.29	11.97	11.68	11.75
CO <sub>2</sub>	32.29	29.73	32.76	31.72	29.73	29.10	29.06	29.05	28.50
H <sub>2</sub> O (1)	1.55	1.41	1.46	1.46	1.49	1.51	1.51	1.48	1.39
H <sub>2</sub>	2.81	2.89	2.76	2.82	2.87	2.78	2.89	2.96	2.95
CO	50.58	53.06	49.90	51.69	54.62	55.31	54.56	54.83	55.41
Total	100	100	100	100	100	100	100	100	100
Bal Recovery, Wt % of Charge:	102.14	104.30	102.76	102.84	103.86	102.98	100.90	99.47	99.73
gHC/Nm <sup>3</sup> (H <sub>2</sub> +CO) conv.:	233	261	238	232	230	226	230	222	225
(H/C) Atomic Ratio in HC :	2.13	2.13	2.14	2.14	2.14	2.14	2.13	2.13	2.13
Selectivities, Wt % of HC :									
Methane	2.50	2.72	2.91	2.90	2.78	2.76	2.58	2.67	2.56
Ethene	1.95	2.01	2.10	2.09	2.05	2.02	1.89	1.95	1.88
Ethane	0.58	0.58	0.63	0.61	0.61	0.59	0.56	0.57	0.56
Propene	3.20	3.23	3.32	3.24	3.11	3.04	2.81	2.88	2.76
Propane	0.71	0.75	0.79	0.80	0.77	0.76	0.71	0.74	0.72
Butenes	2.40	2.44	2.49	2.43	2.32	2.27	2.08	2.15	2.04
1-Butane	0.13	0.14	0.12	0.14	0.18	0.19	0.13	0.17	0.16
n-Butane	0.78	0.84	0.88	0.89	0.85	0.86	0.80	0.83	0.80
C <sub>5</sub> - C <sub>11</sub> (2)	5.72	6.14	6.22	6.23	6.13	6.00	5.59	5.84	5.52
Light Hydrocarbons (3)	18.47	16.79	15.95	15.98	15.77	15.56	17.75	16.70	17.38
Heavy Hydrocarbons (4)	17.48	18.26	18.50	18.56	19.34	19.74	19.04	19.44	19.47
Slurry Rx.-Wax	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00
Total	100	100	100	100	100	100	100	100	100

- (1) Including Oxygenates
- (2) In Gas Phase Only
- (3) Collected in Chilled and Ambient Condensers
- (4) Collected in Hot Condenser

**Table E-1 (cont'd)**  
**First-Stage Fischer-Tropsch Slurry-Reactor**  
**Operating Conditions and Material Balances**  
**(Second-Stage Not-operative)**  
**(Run CT-256-4)**

(Nitrogen-Free Basis)	4-27	4-28	4-29	4-30	4-31	4-32	4-33	4-35
M.B. No.	28.3	29.3	30.3	31.3	32.3	33.3	34.3	36.3
Days On-stream								
First-Stage Conditions:								
Charge H <sub>2</sub> /CO (Molar)	0.695	0.691	0.688	0.702	0.695	0.695	0.702	0.689
Temperature, °C	256	255	256	255	256	256	256	259
Pressure, MPa	2.521	2.515	2.516	2.521	2.521	2.521	2.521	2.473
Feed Sup. Vel., cm/s	2.163	2.162	2.168	2.179	2.138	2.147	2.166	2.473
Space Vel., NL/gFe-hr	2.919	2.916	1.948	1.971	1.951	1.963	1.980	1.166
N <sub>2</sub> in Feed, Mol %	8.3	8.3	8.3	9.4	8.5	8.3	8.4	18.5
Conversions, Mol % :								
H <sub>2</sub>	36.38	35.23	36.19	37.00	35.81	36.74	36.19	47.73
CO	40.16	39.09	44.76	43.40	40.75	41.96	40.74	53.82
H <sub>2</sub> +CO	38.61	37.51	41.27	40.76	38.72	39.82	38.86	51.34
Yields, Wt % of Products :								
Hydrocarbons (1)	11.20	10.88	13.17	12.67	12.62	13.03	12.46	16.41
CO <sub>2</sub>	28.27	27.78	31.81	29.73	29.00	28.29	28.79	37.19
H <sub>2</sub> O (1)	1.44	1.50	1.11	1.12	1.10	1.10	1.09	0.90
H <sub>2</sub>	2.99	3.01	2.92	3.01	2.95	2.98	2.98	2.42
CO	56.09	56.84	50.99	53.47	54.33	54.60	54.67	43.07
Total	100	100	100	100	100	100	100	100
Bal Recovery, Wt % of Charge:	101.52	102.02	103.15	100.69	103.78	101.16	103.10	102.07
gHC/Nm <sup>3</sup> (H <sub>2</sub> +CO) conv.:	227	228	255	240	261	255	254	253
(H/C) Atomic Ratio in HC :	2.14	2.14	2.13	2.13	2.13	2.13	2.13	2.13
Selectivities, Wt % of HC :								
Methane	2.71	2.72	2.34	2.16	2.23	2.16	2.36	2.59
Ethane	1.97	2.00	1.43	1.30	1.44	1.49	1.67	1.89
Ethene	0.58	0.59	0.44	0.40	0.43	0.43	0.49	0.48
Propene	2.90	2.90	2.01	1.92	2.11	2.18	2.42	2.84
Propane	0.77	0.77	0.67	0.64	0.68	0.68	0.76	0.67
Butenes	2.15	2.17	1.51	1.47	1.59	1.63	1.79	2.12
i-Butane	0.15	0.15	0.29	0.38	0.37	0.35	0.34	0.23
n-Butane	0.85	0.87	0.80	0.81	0.83	0.82	0.89	0.80
C <sub>5</sub> - C <sub>11</sub> (2)	5.98	6.05	5.00	5.07	5.21	5.22	5.54	5.85
Light Hydrocarbons (3)	16.50	16.22	16.69	18.63	17.93	17.89	18.89	16.87
Heavy Hydrocarbons (4)	19.37	19.52	20.77	19.22	19.18	19.16	18.85	19.37
Slurry Rx.-Max	46.00	46.00	48.00	48.00	48.00	48.00	46.00	46.00
Total	100	100	100	100	100	100	100	100

(1) Including Oxygenates  
(2) In Gas Phase Only  
(3) Collected in Chilled and Ambient Condensers  
(4) Collected in Hot Condenser

Table E-2  
Composition of Hydrocarbon Products from  
First-Stage Slurry F-I Reactor  
(Run CT-256-4)

M.B. No. Days On Stream	4-18 19.3	4-19 20.3	4-20 21.3	4-21 22.3	4-22 23.3	4-23 24.3	4-24 25.3	4-25 26.3	4-26 27.3
METHANE	2.50	2.72	2.91	2.90	2.78	2.76	2.58	2.67	2.56
ETHENE	1.95	2.01	2.10	2.09	2.05	2.02	1.89	1.95	1.88
ETHANE	0.58	0.58	0.63	0.61	0.61	0.59	0.56	0.57	0.56
PROPENE	3.20	3.23	3.32	3.24	3.11	3.04	2.81	2.88	2.76
PROPANE	0.71	0.75	0.79	0.80	0.77	0.76	0.71	0.74	0.72
I-BUTANE	0.13	0.14	0.12	0.14	0.18	0.19	0.13	0.17	0.16
1-BUTENE+2-METHYLPROPENE	2.34	2.38	2.43	2.37	2.26	2.23	2.05	2.12	2.01
N-BUTANE	0.78	0.84	0.88	0.89	0.85	0.86	0.80	0.83	0.80
TRANS-2-BUTENE	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00
CIS-2-BUTENE	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
3-METHYL-1-BUTENE	0.13	0.13	0.14	0.13	0.13	0.13	0.11	0.11	0.11
I-PENTANE	0.22	0.25	0.25	0.27	0.27	0.21	0.25	0.25	0.17
1-PENTENE	1.70	1.76	1.79	1.75	1.68	1.66	1.55	1.58	1.52
2-METHYL-1-BUTENE	0.08	0.08	0.08	0.08	0.07	0.06	0.06	0.07	0.05
N-PENTANE	0.59	0.64	0.67	0.67	0.66	0.65	0.62	0.64	0.63
CIS-2-PENTENE	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.02	0.02
HEXENES + ISO-HEXANES	0.27	0.30	0.29	0.29	0.28	0.28	0.26	0.27	0.24
1-HEXENE	1.16	1.24	1.25	1.22	1.20	1.20	1.11	1.14	1.09
N-HEXANE	0.41	0.46	0.47	0.48	0.48	0.47	0.45	0.47	0.44
HEPTENES + ISO-HEPTANES	0.11	0.08	0.09	0.10	0.09	0.07	0.05	0.06	0.05
1-HEPTENE	0.56	0.62	0.62	0.63	0.65	0.65	0.58	0.62	0.59
N-HEPTANE	0.21	0.23	0.24	0.25	0.26	0.26	0.23	0.25	0.25
1-OCTENE	0.17	0.21	0.21	0.22	0.23	0.23	0.21	0.22	0.22
N-OCTANE	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.08
C9-OLEFINS + ISO-P	0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.05
ACETONE	0.08	0.11	0.09	0.13	0.09	0.15	0.07	0.06	0.05
I-PROPANOL	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.08
UNKNOWN LITE HYDRO-CARB LIQ (1)	18.47	16.79	15.95	15.98	15.77	15.56	17.75	16.70	17.38
UNKNOWN Hvy HYDRO-CARB LIQ (2)	17.48	18.26	18.50	18.56	19.34	19.74	19.04	19.44	19.47
SLURRY REACTOR-WAX	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00

(1) Collected in Chilled and Ambient Condensers  
(2) Collected in Hot Condenser

Table E-2 (cont'd)  
Composition of Hydrocarbon Products from  
First-Stage Slurry F-T Reactor  
(Run CT-256-4)

M.B. No. Days On Stream	4-27 28.3	4-28 29.3	4-29 30.3	4-30 31.3	4-31 32.3	4-32 33.3	4-33 34.3	4-35 36.3
METHANE	2.71	2.72	2.34	2.16	2.23	2.16	2.36	2.59
ETHENE	1.97	2.00	1.43	1.30	1.44	1.49	1.67	1.89
ETHANE	0.58	0.59	0.44	0.40	0.43	0.43	0.49	0.48
PROPENE	2.90	2.90	2.01	1.92	2.11	2.18	2.42	2.84
PROPANE	0.77	0.77	0.67	0.64	0.68	0.68	0.76	0.67
I-BUTANE	0.15	0.15	0.29	0.38	0.37	0.35	0.34	0.23
1-BUTENE+2-METHYLPROPENE	2.12	2.13	1.49	1.45	1.57	1.61	1.77	2.12
N-BUTANE	0.85	0.87	0.80	0.81	0.83	0.82	0.89	0.80
TRANS-2-BUTENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIS-2-BUTENE	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.00
3-METHYL-1-BUTENE	0.12	0.11	0.07	0.08	0.09	0.10	0.11	0.15
I-PENTANE	0.27	0.29	0.33	0.35	0.36	0.37	0.38	0.10
1-PENTENE	1.61	1.62	1.20	1.18	1.21	1.23	1.32	1.66
2-METHYL-1-BUTENE	0.06	0.06	0.04	0.04	0.04	0.05	0.05	0.03
N-PENTANE	0.66	0.67	0.66	0.68	0.69	0.68	0.72	0.66
CIS-2-PENTENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEXENES + ISO-HEXANES	0.27	0.26	0.24	0.25	0.29	0.29	0.30	0.30
1-HEXENE	1.16	1.17	0.88	0.87	0.88	0.89	0.96	1.21
N-HEXANE	0.49	0.50	0.48	0.51	0.52	0.51	0.54	0.50
HEPTENES + ISO-HEPTANES	0.05	0.06	0.08	0.09	0.09	0.09	0.09	0.00
1-HEPTENE	0.63	0.65	0.48	0.46	0.46	0.46	0.49	0.65
N-HEPTANE	0.27	0.28	0.25	0.28	0.28	0.27	0.29	0.27
1-OCTENE	0.24	0.24	0.18	0.16	0.16	0.16	0.17	0.22
N-OCTANE	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09
C9-OLEFINS + ISO-P	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03
ACETONE	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00
I-PROPANOL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
UNKNOWN LITE HYDRO-CARB LIQ (1)	16.50	16.22	16.69	18.63	17.93	17.89	18.89	16.87
UNKNOWN HVY HYDRO-CARB LIQ (2)	19.37	19.52	20.77	19.22	19.18	19.16	18.85	19.37
SLURRY REACTOR-WAX	46.00	46.00	48.00	48.00	48.00	48.00	46.00	46.00

(1) Collected in Chilled and Ambient Condensers  
(2) Collected in Hot Condenser

Table E-3

Fischer-Tropsch Hydrocarbon Selectivities  
(Run CT-256-4; DOS = 26.3)

<u>Components</u>	<u>wt %</u>
Methane	2.7
Ethene	2.0
Ethane	0.6
Propene	2.9
Propane	0.7
Butenes	2.2
i-Butane	0.2
n-Butane	0.8
C5 - C11	21.7
C12+ (Excl. Rx.-Wax)	20.2
<u>Slurry Rx.-Wax</u>	<u>46.0</u>
Total	100.0

Table E-4  
Composition of Fischer-Tropsch Reactor Wax  
 (Run CT-256-4)

Days On Stream	1.70	6.80	17.30	29.50
Press., MPa	1.48	2.52	2.52	2.52
Temp., °C	257	257	257	257
<b>Carbon No.</b>	<b>Weight %</b>			
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13-20	6.70	3.77	10.00	9.30
21-25	10.62	13.16	17.57	18.65
26-30	21.82	21.98	20.92	22.47
31-35	28.06	22.67	17.74	18.26
36-40	13.66	16.85	13.57	13.50
41-45	10.72	12.47	8.46	8.99
46-50	4.71	5.41	5.24	5.34
51-55	1.52	1.88	2.84	2.15
56-60	0.95	1.02	1.82	0.87
61-65	0.79	0.69	1.25	0.47
66-70	0.44	0.10	0.59	0.00
Mole Avg C-No.	30.9	31.6	29.5	29.3
Peak C-No.	35	35	27	27
Viscosity, cSt				
at 194 °C	4.6	9.9	8.6	7.7
at 204 °C	2.6	4.9	4.6	4.3

Table F-1  
**First-Stage Fischer-Tropsch Slurry Reactor**  
**Operating Conditions and Material Balances**  
 (Second-Stage Not-operative)  
 (Run CT-256-5)

	5-3	5-4	5-5	5-8	5-9	5-10	5-11	5-12
(Nitrogen-Free Basis)								
M.B. No.	3.8	4.8	5.8	8.8	9.8	10.8	11.8	12.8
Days On-stream								
First-Stage Conditions:								
Charge H <sub>2</sub> /CO (Molar)	0.696	0.710	0.693	0.700	0.699	0.709	0.699	0.711
Temperature, °C	240	245	244	249	250	250	249	249
Pressure, MPa	1.473	1.473	1.473	1.487	1.487	1.487	1.487	1.487
Feed Sup. Vel., cm/s	3.466	3.538	3.484	3.335	3.326	3.050	3.019	3.000
Space Vel., NL/gFe-hr	2.168	2.258	2.268	2.324	2.343	2.382	2.373	2.378
N <sub>2</sub> in Feed, Mol %	8.4	9.2	9.0	9.6	9.5	1.0	0.9	0.9
Conversions, Mol % :								
H <sub>2</sub>	46.62	53.11	52.34	63.14	63.93	63.81	62.69	61.82
CO	50.60	59.51	57.21	72.93	73.17	73.55	71.14	74.23
H <sub>2</sub> +CO	48.96	56.85	55.22	68.90	69.37	69.51	67.67	69.07
Yields, Wt % of Products :								
Hydrocarbons (1)	12.78	14.83	16.06	15.54	14.92	15.52	14.31	15.46
CO <sub>2</sub>	35.52	42.10	39.10	55.25	55.45	55.86	54.47	56.31
H <sub>2</sub> O (1)	1.24	1.20	1.14	1.19	1.21	1.27	1.33	1.28
H <sub>2</sub>	2.60	2.34	2.31	1.80	1.80	1.79	1.83	1.90
CO	47.87	39.52	41.40	26.22	26.62	25.56	28.07	25.05
Total	100	100	100	100	100	100	100	100
Bal Recovery, Wt % of Charge:	98.21	97.40	98.37	98.22	95.89	98.38	97.82	97.78
gHC/m <sup>3</sup> (H <sub>2</sub> +CO) conv.:	197	194	221	170	159	168	159	167
(H/C) Atomic Ratio in HC :	2.10	2.10	2.10	2.12	2.12	2.12	2.13	2.13
Selectivities, Wt % of HC :								
Methane	1.12	1.12	1.14	2.09	2.23	2.25	2.46	2.80
Ethane	0.98	1.03	1.05	1.66	1.77	1.76	1.89	1.70
Ethene	0.17	0.18	0.20	0.42	0.44	0.47	0.51	0.50
Propene	1.47	1.55	1.60	2.76	2.94	2.95	3.16	2.87
Propane	0.27	0.27	0.28	0.44	0.48	0.49	0.54	0.49
Butenes	1.05	1.09	1.16	2.02	2.14	2.17	2.33	2.10
i-Butane	0.13	0.18	0.14	0.08	0.10	0.09	0.06	0.08
n-Butane	0.30	0.30	0.30	0.48	0.51	0.53	0.58	0.53
C <sub>5</sub> - C <sub>11</sub> (2)	3.39	3.44	3.53	5.21	5.58	5.32	5.56	5.04
Light Hydrocarbons (3)	5.99	6.46	11.00	8.09	7.43	7.43	9.38	11.91
Heavy Hydrocarbons (4)	7.13	7.39	8.53	14.68	15.37	16.53	14.40	14.84
Slurry Rx.-Max	78.00	77.00	71.00	62.00	61.00	60.00	59.00	57.00
Total	100	100	100	100	100	100	100	100

- (1) Including Oxygenates
- (2) In Gas Phase Only
- (3) Collected in Chilled and Ambient Condenser
- (4) Collected in Hot Condenser

Table F-2  
Composition of Hydrocarbon Products from  
First-Stage Slurry F-I Reactor  
(Run CI-256-5)

M.B. No. Days On Stream	5-3	5-4	5-5	5-8	5-9	5-10	5-11	5-12
METHANE	1.12	1.12	1.14	2.09	2.23	2.25	2.46	2.80
ETHENE	0.98	1.03	1.05	1.66	1.77	1.76	1.89	1.70
ETHANE	0.17	0.18	0.20	0.42	0.44	0.47	0.51	0.50
PROPENE	1.47	1.55	1.60	2.76	2.94	2.95	3.16	2.87
PROPANE	0.27	0.27	0.28	0.44	0.48	0.49	0.54	0.49
I-BUTANE	0.13	0.18	0.14	0.08	0.10	0.09	0.06	0.08
1-BUTENE+2-METHYLPROPENE	1.05	1.09	1.14	1.97	2.09	2.12	2.27	2.05
N-BUTANE	0.30	0.30	0.30	0.48	0.51	0.53	0.58	0.53
TRANS-2-BUTENE	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02
CIS-2-BUTENE	0.00	0.00	0.02	0.04	0.03	0.03	0.04	0.04
3-METHYL-1-BUTENE	0.06	0.08	0.08	0.27	0.27	0.26	0.14	0.12
I-PENTANE	0.16	0.18	0.15	0.11	0.17	0.17	0.18	0.14
1-PENTENE	0.78	0.82	0.85	1.46	1.55	1.56	1.66	1.51
2-METHYL-1-BUTENE	0.03	0.04	0.04	0.07	0.07	0.07	0.07	0.07
N-PENTANE	0.25	0.24	0.25	0.37	0.40	0.41	0.44	0.41
TRANS-2-PENTENE	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01
HEXENES + ISO-HEPTANES	0.22	0.22	0.20	0.26	0.29	0.26	0.28	0.25
1-HEXENE	0.63	0.64	0.67	1.08	1.17	1.13	1.18	1.11
N-HEXANE	0.14	0.21	0.20	0.29	0.30	0.30	0.32	0.31
HEPTENES + ISO-HEPTANES	0.10	0.12	0.13	0.12	0.13	0.11	0.12	0.12
1-HEPTENE	0.45	0.42	0.45	0.63	0.68	0.59	0.62	0.59
N-HEPTANE	0.16	0.14	0.14	0.17	0.18	0.16	0.17	0.16
C8-OLEFINS + ISO-P	0.00	0.00	0.02	0.02	0.02	0.00	0.02	0.00
1-OCTENE	0.24	0.20	0.22	0.24	0.25	0.18	0.23	0.18
N-OCTANE	0.08	0.06	0.06	0.06	0.06	0.05	0.06	0.05
C9-OLEFINS + ISO-P	0.07	0.07	0.06	0.04	0.05	0.04	0.04	0.03
ACETONE	0.00	0.00	0.06	0.00	0.00	0.00	0.13	0.12
I-PROPANOL	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.03
UNKNOWN LITE HYDRO-CARB LIQ (1)	5.99	6.46	11.00	8.09	7.43	7.43	9.38	11.91
UNKNOWN HVY HYDRO-CARB LIQ (2)	7.13	7.39	8.53	14.68	15.37	16.53	14.40	14.84
SLURRY REACTOR-WAX	78.00	77.00	71.00	62.00	61.00	60.00	59.00	57.00

(1) Collected in Chilled and Ambient Condensers

(2) Collected in Hot Condenser



**Table F-3**  
**Composition of Fischer-Tropsch Reactor Wax**  
**(Run CT-256-5)**

Days On Stream	12.30
Press., MPa	1.48
Temp., °C	250

Carbon No.	Weight %
13-20	11.20
21-25	18.59
26-30	17.68
31-35	15.40
36-40	12.51
41-45	9.11
46-50	6.38
51-55	3.76
56-60	2.54
61-65	1.80
66-70	1.02

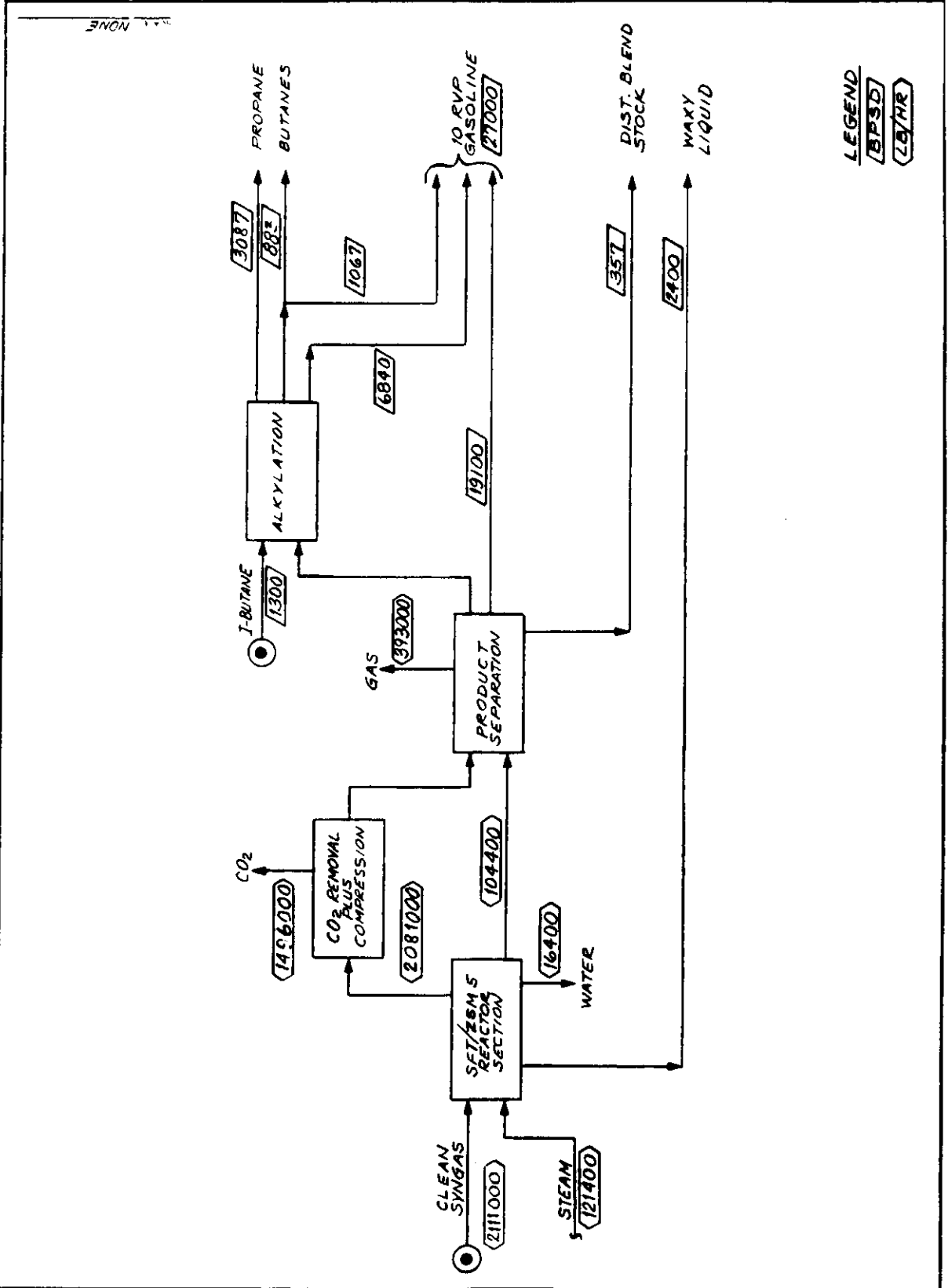
Mole Avg C-No.	29.6
Peak C-No.	28
Viscosity, cSt	
at 149 °C	20.6
at 204 °C	10.1

Table F-4

Fischer-Tropsch Hydrocarbon Selectivities  
(Run CT-256-5)

DOS	3.8	8.8
<u>Components</u>	<u>wt %</u>	<u>wt %</u>
Methane	1.1	2.1
Ethene	1.0	1.7
Ethane	0.2	0.4
Propene	1.5	2.8
Propane	0.3	0.4
Butenes	1.1	2.0
i-Butane	0.1	0.1
n-Butane	0.3	0.5
C5 - C11	8.0	13.9
C12+ (Excl. Rx.-Wax)	8.4	15.1
<u>Slurry Rx.-Wax</u>	<u>78.0</u>	<u>62.0</u>
Total	100.0	100.0

1	ISSUE DATE	APPROVED	DESCRIPTION	REV	DATE	BY
Mobil Research and Development Corporation			DWG NO B-00242-60-0107 ISSUE NO 1 MOBIL SLURRY FT/SM-5 PROCESS BLOCK DIAGRAM APPROVED			
ENGINEERING DEPARTMENT 100 FORT LINDSEY AVENUE PRINCETON, NEW JERSEY 08540			FIGURE G-1			



DATE	BY	DESCRIPTION	CHRG	APP	DWG NO	ISSUE NO
9/26/67	PJB	APPROVED			B-00242-60-0104	1
MOBIL SLURRY FT/ZSM-5 PROCESS						
MOBIL RESEARCH AND DEVELOPMENT CORPORATION ENGINEERING DEPARTMENT P O BOX 1026 PRINCETON NEW JERSEY 08540						

FIGURE G-2

**LEGEND**

°F (Temperature)

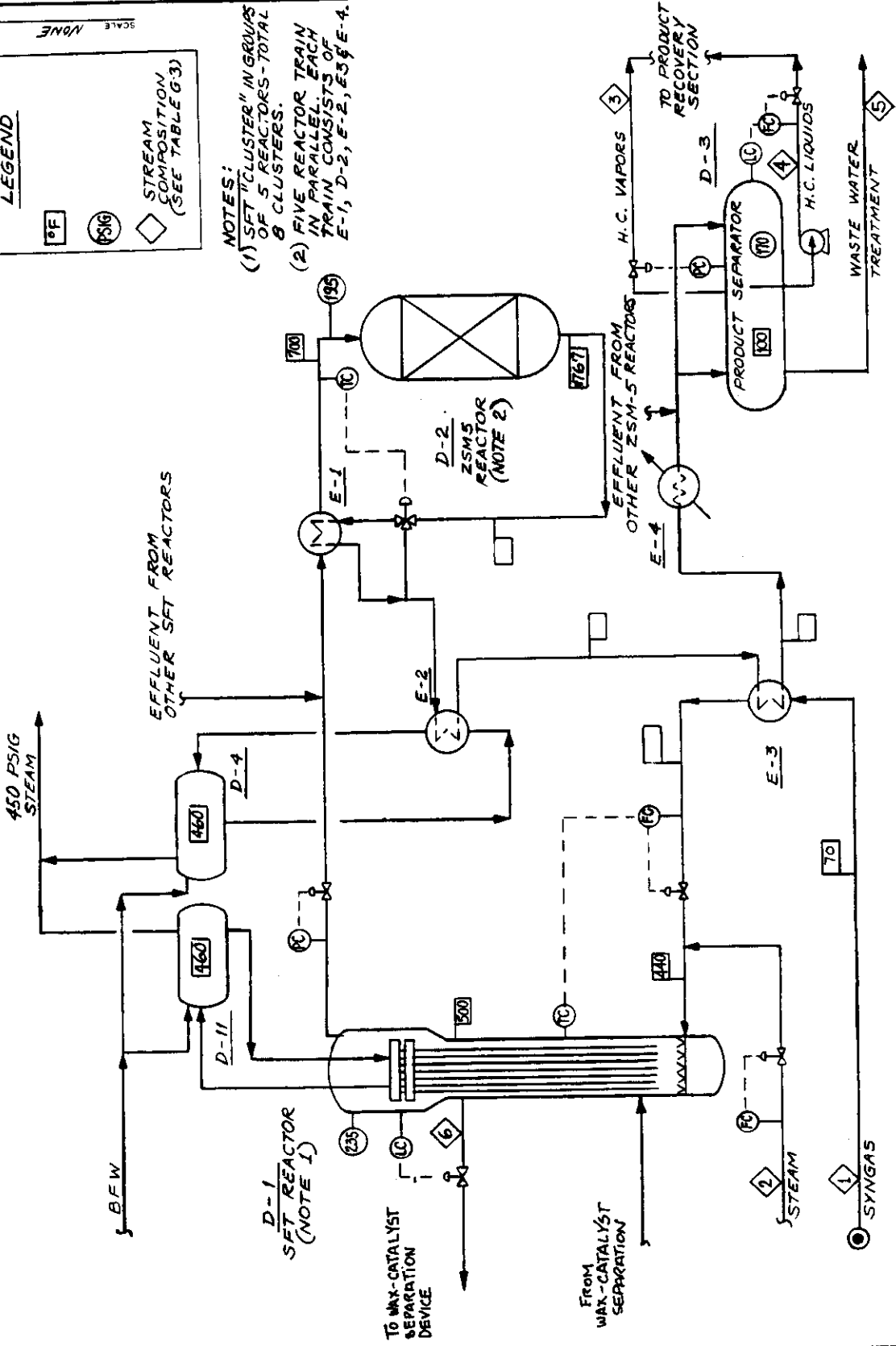
PSIG (Pressure)

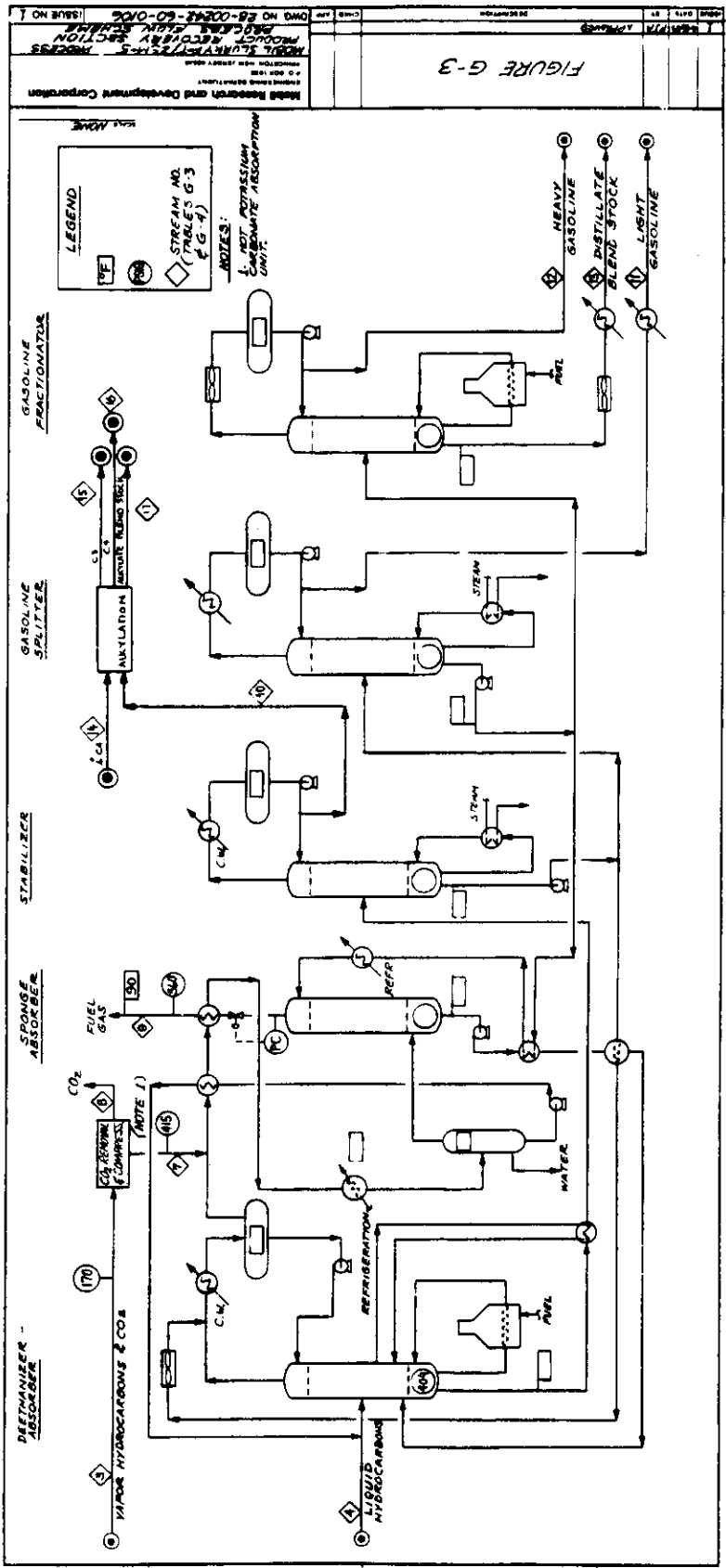
◇ (Stream Composition)

STREAM COMPOSITION COMPOSITION (SEE TABLE G.3)

SCALE NONE

- NOTES:**
- (1) SFT "CLUSTER" IN GROUPS OF 5 REACTORS - TOTAL 8 CLUSTERS.
  - (2) FIVE REACTOR TRAIN IN PARALLEL. EACH TRAIN CONSISTS OF E-1, D-2, E-2, E-3 & E-4.



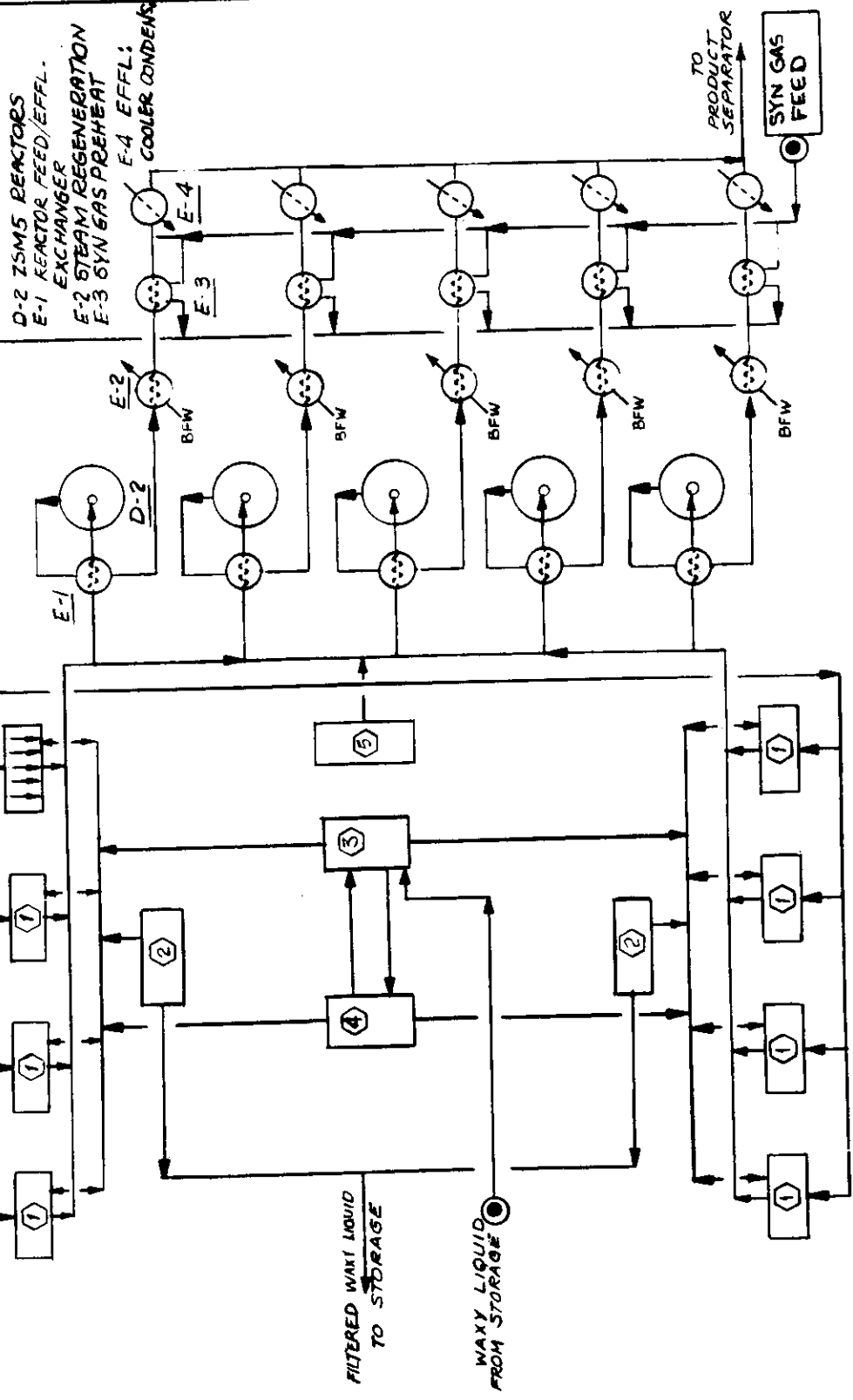


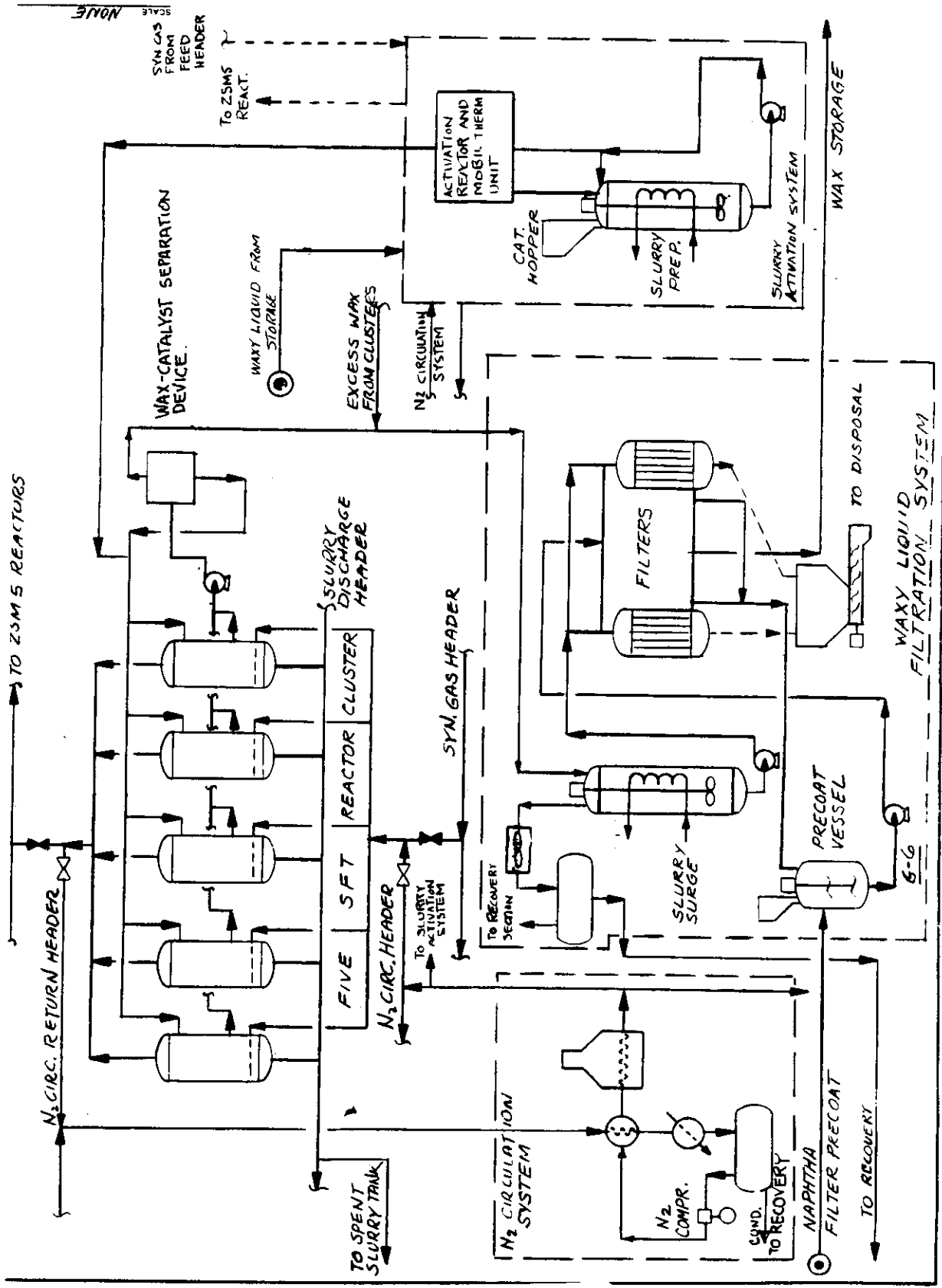
HALLS RESEARCH AND DEVELOPMENT CORPORATION  
 1000 BROADWAY  
 NEW YORK, N.Y. 10018  
 PROJECT NO. 62-0242-G-3  
 ISSUE NO. 1

1	DATE	BY	DESCRIPTION	CHKD	APP	DWG NO	ISSUE NO
			APPROVED			B-00292-60-0108	1
MOBIL SLURRY FT/ZSM-5 PROCESS ENGINEERING DEPARTMENT P O BOX 1028 PRINCETON NEW JERSEY 08540							
MOBIL Research and Development Corporation							

FIGURE G-4

- ① CLUSTER OF FIVE SFT REACTORS (2 TRAYS)
- ② WAXY LIQUID FILTRATION SYSTEM
- ③ SLURRY ACTIVATION SYSTEM (ALSO SEE FIG. G-5)
- ④ NO CIRCULATION SYSTEM
- ⑤ ZSM-5 REACTOR REGENERATION





SCALE NONE