Accuracy of Data

The accuracy of many of these data was not too good. The atomic balances and the overall material balances were poor. Therefore, when judging the cause of deviations from the correlations it must be remembered that much of the deviation may be due to experimental error rather than to the specific effect of some variable. In many instances the graphs presented cannot be considered correlations. They must be viewed simply as a graphical comparison of the data.

On the other hand, it must be remembered that many of the relationships developed in this report can actually be used to check the accuracy of certain measurements and, since all the same measurements are not involved in each relationship, a point may be off on one plot but in line on another.

Range of Variables Covered:

The range of operating variables used by the various laboratories is shown on the following Table II.

TABLE II

RANGE OF VARIABLES COVERED BY DATA

Lab.	Unit	H_2/CO	CO_2/CO	CH_4/CO	R/FF	% Contr.	Temp.°F.	Press.	V/Hr/W	V/Hr/V	Lin.Vel.fps
Beacon	#7	1.86-2.00	0-125	None	0-1.2	12-79	600-650	200	18-50		
Beacon	#8	1.99	None	None	1.0-1.2	64-81	650	200	59		
HRI	H	1.92-2.54	0-27	4.9-15.5	0.4-6.7	48-88	592-650	190-235	12-176	575-1780	
HRI	14	1.78-2.08	11-84	3.3-9.1	0.3-5.0	6-81	556-664	130-261	9-1950		0.63-1.24
HRI	15	1.94-2.01	18.2-19.6	3.2-12.3	0.6-3.2	48-92	645-664	200-240	9-49		1.19-1.61
A	-	0.99-1.98	0.1-13.5	2.0-9.6	1.0-14.5	28-81	495-640	132-390		209-1135	0.16-.37
B Runs 5 & 6	-	1.17-1.62	34.9-55.4	2.7-16.8	0.87-2.19	21.58	555-627	264-345	1.8-6		0.34-.51
B Runs 11 & 12		2.00-2.14	25.2-31.3	3.5-9.4	1.96-4.58	52-85	564-675	235-400	31-88		0.7-1.4
Stanolind		3.36-4.54	36.5-52.8	30.3-55.4	0.36-1.38	31-75	580-606	163-164.4			