

MONTEBELLO SYNTHESIS UNIT
SUMMARY OF PRELIMINARY DATA

RUN NUMBER	12A	12B	12C	12D	12E
Start	8:00	8:00	8:00	8:00	8:00
	2/21	2/22	2/23	2/24	2/25
End	8:00	8:00	8:00	8:00	8:00
	2/22	2/23	2/24	2/25	2/26
Duration	24	24	24	24	24

GENERATOR DATA

Pressure-psig	220	230	227	221	221
Gas Rate-scfh	2830	2880	2890	2930	2930
Oxygen Rate-scfh	2210	2260	2120	2120	2120
Product Rate-scfh	8880	9000	9000	8970	8970
Product Composition by Corrected Orsat- mol %					
CO	35.1	34.2	34.7	33.9	33.9
H ₂	58.9	59.2	59.0	60.0	60.0
CO ₂	2.3	2.6	2.0	2.0	2.0
N ₂	1.8	2.7	2.6	3.3	3.3
CH ₄	1.9	1.3	1.7	0.8	0.8

SYNTHESIS DATA

Pressure-psig	200	200	200	200	200
Recycle Rate-scfh	13130	13480	12865	12660	13370
Fresh Feed Rate-scfh	8880	9000	9000	8970	8970
Wet Gas Rate-scfh	3370	3050	2940	2830	3650
Catalyst Temperature- F.	617	619	616	622	650
Catalyst Density-#/cu.ft.	71	52	46	42	85
Cat. Fluidized-#	495	505	411	268	220
Depth of Bed-ft.	16	22	21	15	9
Fresh Feed-cfh/# cat.	18	18	22	33	41
Inlet Velocity-ft./sec/	2.0	2.0	2.0	2.0	2.0
Recycle Ratio	1.5	1.5	1.4	1.4	1.5
Contraction- %	60.5	66.1	67.5	68.5	55
Measured Oil-gph	3.3	3.3	2.4	3.7	3.0
Measured Water-gph	5.3	10.4	8.2	8.8	4.5
Steam Pressure-psig	1100	1100	1100	1100	1100
Steam Rate-#/hr.	376	452	435	435	
CO ₂ in Wet Gas-%	24.5	28.0	27.9	27.2	21*
CO Converted to CO ₂ -%	21	20	20	19	
Yields Estimated From Gaucher Correlation and Observed Contraction					
Conversion of CO	95	98	98	98	
Conversion of H ₂	66	72	74	75	
CO Converted to:					
CO ₂	26	23	22	21	
C ₁ & C ₂	13	13	13	13	
C ₃ & Heavier	61	64	65	66	

* During the period immediately following the charging of fresh catalyst the CO₂ content of the wet gas fell to about 10%

STRATFORD ENGINEERING CORPORATION

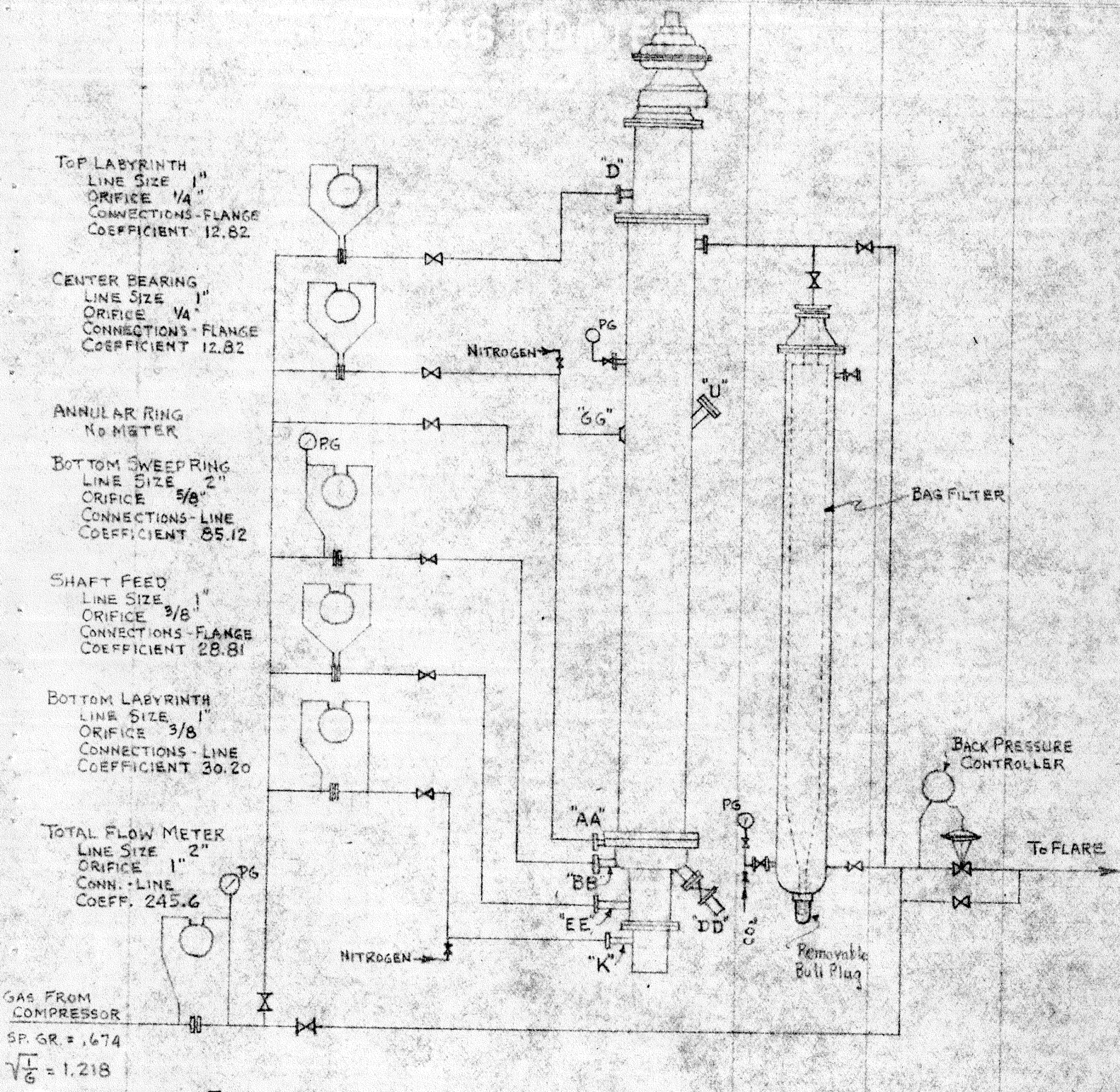
COMPANY _____

JOB NO. J-1814

SUBJECT ENTRAINMENT CARRYOVER TESTS AT MONTEBELLO, CAL

SHEET NO. 1 BY _____

DATE _____



FLOW DIAGRAM AND METER ARRANGEMENT