

TABLE VI

MONTEBELLO RUN 66 REDUCTION
BETHLEHEM MILL SCALE

Loaded 2883#

Hours above 600°F.	Water Production					Temperature - °F.			Recycle		Bleed		Total Feed		Hydrogen Conv. %	Carry-over lbs.	
	Spot	Total	% of Total	lbs./hr.	m/hr.	Heater	Bed	Meter Run	Yh	Press. psig.	Rate SCFH	Yh	Rate SCFH	SCFH		m/hr.	Spot
4	27	27	4.75	6.75		800	633	54	6.0	226		8.5					
6	12	39	6.86	6.0		790	649	50	5.9	238		7.9				75	75
8	20	59	10.38	10.0		795	654	50	5.9	245		7.05				61	136
10	29	88	15.5	14.5		790	657	46	5.9	232		6.7				58½	194½
12	35½	121½	21.4	16.65		788	657	45	5.95	235		6.8				34	228½
14	34	155½	27.4	17.0		782	653	45	5.98	235		6.95				26	254½
16	38½	194	34.1	19.25		786	656	46	6.0	235		7.2				24	278½
18	31½	225½	39.7	15.75		780	652	52	6.0	232		7.25				18½	297
19	28	253½	44.6	28.0		780	653	65	6.0	230		7.2				16½	313½
21	33	286½	50.4	16.5		780	653	72	6.0	232		7.3				12½	326
23	43½	330	58.0	21.75		785	652	73	6.0	222		6.7				11½	337½
25	36	366	64.4	18.0		751	650	64	5.95	232		6.7				10	347½
27	31	397	69.8	15.5		750	630	60	5.95	240		6.9				6½	354
29	30	427	75.1	15.0		761	647	53	5.98	235		6.5				5½	359½
31	29	456	80.2	14.5		760	649	49	5.98	230		6.8				5	364½
33	27	483	85.0	18.5		760	652	48	5.98	235		6.8				6	370½
35	25	508	89.4	12.5		760	654	45	5.9	225		6.7				5½	376
37	21	529	93.0	10.5		760	657	45	6.0	235		6.5				6	382
39	15	544	95.7	7.5		755	659	42	5.95	227		6.0				4	386
41	11½	555½	97.7	5.75		750	655	45	6.05	235		6.5				5½	391½
43	7	562½	98.9	3.5		752	657	56	6.08	231		6.7				4½	396
45	4	566½	99.6	2.0		752	663	69	6.02	225		6.7				4	400
47	2	568½		1.0		740	653	72	6.05	225		6.5				3	403
Average 8-33 25 hours	424			16.96	0.9413		651	55	5.97	233	28472	6.9	2080	30555	80.51	1.17	

Recycle Flow = (79.31)(3.7854)(5.97)(1.0048) = 28472

Bleed Flow = (5.02)(3.7854)(6.9)(15.81)(1.0048) = 2083

$\frac{30555}{3600} \left(\frac{14.7}{250}\right) \left(\frac{1111}{520}\right) = 1.066 \text{ Cu. Ft./sec.} = 1.61 \text{ ft./sec.}$

Average Inventory = 2420# @160#/CF = 15.13 Cu. Ft. @67% Void = 10.14 CF Void

$t = 10.14/1.066 = 9.51 \text{ sec.}$

Exp. No. 2001-2-P-17