

COMPANY : PHILLIPS PETRO. CO. LEASE : GRAY, D. UNIT : WELL NO. : 15  
 UNIT : SECTION : 30 TOWNSHIP : 17  
 L : 11103 H : 11 L/H : 1 G/GMIX : 0.683  
 %CO2 : 0.476 %N2 : 0.811 H2S : DATE : 12 3 98  
 d : 2.441 Fr : 0.010763 GH : 7583.3 RANGE : 30

Pc = 487.2 Pc2 = 237.4 \*  
 Pt2 = 209.0 Pw = 457.4 \*  
 181.6 426.9 \*  
 152.3 391.6 \*  
 117.8 346.1 \*

VOL 1 : 121 PSIA 1 : 457.2 RESV.TEMP 173.9 Pc2-Pw2= 28.1 Pw2 = 209.2 \*  
 VOL 2 : 207 PSIA 2 : 426.2 55.1 182.2 \*  
 VOL 3 : 286 PSIA 3 : 390.2 SHUT-IN PR= 487.2 84.0 153.4 \*  
 VOL 4 : 378 PSIA 4 : 343.2 117.6 119.8 \*  
 PCR : 669 n = 0.794 ✓  
 TCR : 385

Pc2/(Pc2-Pw2) = 8.436  
 4.305  
 2.826  
 2.018 ✓

LINE	RATE 1		RATE 2		RATE 3		RATE 4		
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	
1	QM	0.121	0.121	0.207	0.207	0.286	0.286	0.378	0.378
2	TW	534	534	534	534	534	534	534	534
3	Ts	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
4	T	584.0	584.0	584.0	584.0	584.0	584.0	584.0	584.0
	PR (est)	0.68		0.64		0.58		0.51	
5	Z(est)	0.912	0.903	0.916	0.908	0.921	0.913	0.928	0.920
6	TZ	532.7	527.2	535.2	530.0	538.0	533.3	541.8	537.5
7	GH/TZ	14.235	14.383	14.170	14.308	14.095	14.220	13.997	14.108
8	eS	1.705	1.715	1.701	1.710	1.696	1.704	1.690	1.697
9	l-e-S	0.414	0.417	0.412	0.415	0.411	0.413	0.408	0.411
10	Pt	457.2	457.2	426.2	426.2	390.2	390.2	343.2	343.2
11	Pt2 /1000	209.0	209.0	181.6	181.6	152.3	152.3	117.8	117.8
12	Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763
13	Fc=FrTZ	5.734	5.675	5.760	5.705	5.791	5.740	5.831	5.785
14	FcQm	0.69	0.69	1.19	1.18	1.66	1.64	2.20	2.19
15	L/H(FcQm)	0.5	0.5	1.4	1.4	2.7	2.7	4.9	4.8
16	Fw	0.199098	0.196546	0.586023	0.579023	1.126104	1.113763	1.984143	1.9648182
17	Pw2	209.2	209.2	182.2	182.2	153.4	153.4	119.8	119.8
18	Ps2	356.8	358.8	310.0	311.6	260.2	261.4	202.4	203.3
19	Ps	597.4	599.0	556.8	558.2	510.1	511.3	449.9	450.8
20	P	527.3	528.1	491.5	492.2	450.2	450.7	396.6	397.0
21	Pr	0.79	0.79	0.73	0.74	0.67	0.67	0.59	0.59
22	Tr	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
23	Z	0.903	0.903	0.908	0.908	0.913	0.913	0.920	0.920

[Pc2/Pc2-Pw2]n = 5.441  
 3.188  
 2.282  
 1.747 ✓  
 AOF= Q 0.658  
 0.660  
 0.653  
 0.660 ✓