

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adapted 9-1-65

COMPANY Amoco Prod. Co. LEASE Gilkey Fed. Gas Co. WELL NO. 7 DATE 10/21/75

LOCATION: Unit 0 Section 24 Township 20-S Range 36-E

L 2683 H 3549 L/H .756 G .6885 % CO₂ 2.74 % N₂ 2.17 % H₂S .68

d 1.995 F_r .018231 GH 2443.5 P_{cr} 677.75 T_{cr} 374

TABLE IN 8 X

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LINE	1st	2nd	1st	2nd	1st	2nd		
1 Q _m	.391	.391	.276	.276	.078	.078		
2 T _w (W.H. °R)	544	544	544	544	544	544		
3 T _s (B.H. °R)	562	562	562	562	562	562		
4 T = ($\frac{T_w + T_s}{2}$)	553	553	553	553	553	553		
5 Z (Est.)	.977		.977		.976			
6 TZ	540.3		540.3		539.7			
7 GH/TZ	4.522		4.522		4.528			
8 e ^s (Table XIV)	1.185		1.185		1.185			
9 1-e ^s (Table XIV)	.156		.156		.156			
10 P _t	280.2	280.2	285.7	285.7	297.2	297.2		
11 P _t ² /1000	78.51	78.51	81.62	81.62	88.33	88.33		
12 F _r (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231		
13 F _c = F _r TZ	9.85		9.85		9.84			
14 F _c Q _m	3.85		2.72		.77			
15 L/H (F _c Q _m) ²	11.21		5.59		.45			
16 F _w = L/H (F _c Q _m) ² (1-e ^{-s})	1.75		.87		.07			
17 P _w ² = P _t ² + F _w	80.26		82.49		88.40			
18 P _s ² = e ^s P _w ²	95.11		97.75		104.75			
19 P _s	9.75		9.89		10.23			
20 P = ($\frac{P_t + P_s}{2}$)	144.98		147.80		153.72			
21 P _r = (P/P _{cr})	.214		.218		.227			
22 T _r = (T/T _{cr})	1.48	1.48	1.48	1.48	1.48	1.48		
23 Z (Table XI)	.9772 = .977		.9768 = .977		.9756 = .976			