WORK SHEET FOR STEPWISE CALCULATION PRESSURE XXXXXXXXXX (P_c & P_w) Form C-122-E

RATE NO. 3

COMPANY _____ LEASE _____ WELL NO. _____ DATE _____

LOCATION: UNIT _____ SECTION _____ TOWNSHIP _____ RANGE _____

L 9680 H 9680 L/H 1.00 G 0.903 % CO_2 1.30 %N_2 0.69 %H_2S 0.00

d 4.778 F_r 0.005128 Q_m 0.615 M^2cfd (L/H) $(F_rQ_m)^2$ 0.000010 P_{cr} 662 T_{cr} 457

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	4840		9680						
2	GH		0	4371		8741						
3	37.5GH		0	163895		327789						
4	P_c or P_n		3321.2	4068.2	4040.2	4758.2	4710.2					
5	P_r		5.02	6.15	6.10	7.19	7.12					
6	T		530	591	591	651	651					
7	T_r		1.16	1.29	1.29	1.42	1.42					
8	Z		0.687	0.815	0.811	0.921	0.916					
9	P/Z P/Z	$\overline{4} \div \overline{8}$	4832.95	4994.11	4984.21	5168.59	5144.39					
10	P/TZ	$\overline{9} \div \overline{6}$	9.1188	8.4574	8.4407	7.9395	7.9023					
11	$(P/TZ^2/1000$	$(10^2/1000$	0.083152	0.071528	0.071245	0.063035	0.062446					
12	$L/H(F_rQ_m)^2$		0.000010	0.000010	0.000010	0.000010	0.000010					
13		$\overline{11} + \overline{12}$	0.083162	0.071538	0.071255	0.063045	0.062456					
14	I_n	$\overline{10} \div \overline{13}$	109.651	118.223	118.458	125.933	126.526					
15	$M=P_n-P_{n-1}$			747	719	718	670	669				
16	$N=1_n + 1_{n-1}$			227.874	228.108	244.391	244.983					
17	M x N	$\overline{15} \times \overline{16}$			170222		164139					
18	Σ (M x N)	Σ $\overline{17}$			170222		334360					

$$\text{Delta P} = \frac{3[\ 327789\ ]}{109.651 + 4[\ 118.458\ ] + 126.526} = \frac{983367}{710.009} = 1385.0$$

P = 3321.2 + 1385.0 = 4706.2