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

RATE NO. 4

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 1.244 M^2cfd (L/H) $(F_rQ_m)^2$ 0.000041 P_{cr} 662 T_{cr} 457

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	4840		9680						
1	GH		0	4371		8741						
3	37.5GH		0	163895		327789						
4	P_c or P_n		2792.2	3502.2	3474.2	4155.2	4107.2					
5	P_r		4.22	5.29	5.25	6.28	6.20					
6	T		530	591	591	651	651					
7	T_r		1.16	1.29	1.29	1.42	1.42					
8	Z		0.608	0.740	0.737	0.854	0.848					
9	P/Z P/Z	$\overline{4} \div \overline{8}$	4595.46	4731.42	4713.98	4865.57	4841.11					
10	P/TZ	$\overline{9} \div \overline{6}$	8.6707	8.0126	7.9830	7.4740	7.4364					
11	$(P/TZ^2/1000$	$(10^2/1000$	0.075181	0.064201	0.063729	0.055861	0.055300					
12	$L/H(F_rQ_m)^2$		0.000041	0.000041	0.000041	0.000041	0.000041					
13		$\overline{11} + \overline{12}$	0.075221	0.064242	0.063769	0.055901	0.055341					
14	I_n	$\overline{10} \div \overline{13}$	115.269	124.725	125.186	133.700	134.374					
15	$M=P_n-P_{n-1}$			710	682	681	633	631				
16	$N=I_n + I_{n-1}$			239.994	240.455	258.886	259.560					
17	M x N	$\overline{15} \times \overline{16}$			170396		164301					
18	Σ (M x N)	Σ $\overline{17}$			170396		334697					

Delta P = $\frac{3[\ 327789\ ]}{115.269 + 4[\ 125.186\ ] + 134.374} = \frac{983367}{750.387} = 1310.5$ P = 2792.2 + 1310.5 = 4102.7