

FORM C-122E WORKSHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE ~~PS~~  $P_s$

COMPANY : PHILLIPS PETRO CO LEASE : RANGER 17 WELL NO. : 1 DATE : 5 19 92  
 UNIT : 0 SECTION : 34 TOWNSHIP : 12 RANGE : 34  
 L : 12675 H : 12675 L/H : 1.0 G/GMIX : 1.098  
 CO2 : 2.24 N2 : 3.36 H2S : 0  
 d : 2.441 Fr : 0.010763 Qm : 3.880 (L/H)(FrQm)0.001744

PCR : 656 TCR : 508

LINE	ITEM	SOURCE	1	2	3	4	5
1	H		0	6338		12675	
2	GH		0	6958.58		113917.15	DELTA P = 2278.0
3	37.5GH		0	260947		521893	$P_s = 4974.2$
4	Pc or Pn		2696.2	4028.6	3913.7	5122.4	5122.4
5	Pr		4.11	6.14	5.97	7.81	7.81
6	T		534	597.375	597.375	660.75	660.75
7	Tr		1.05	1.18	1.18	1.30	1.30
8	Z		0.503	0.805	0.787	0.960	0.960
9	P/ZP/Z	4/8	5360.3	5007.5	4972.6	5334.1	5334.1
10	P/TZ	9/6	10.0381	8.3826	8.3242	8.0729	8.0729
11	$\ln 10^2/1000$	(10)2/100	0.10076	0.07027	0.06929	0.06517	0.06517
12	$L/H(FrQm)^2$		0.001744	0.001744	0.001744	0.001744	0.001744
13		11+12	0.102507	0.072011	0.071036	0.066915	0.066915
14	In	10/13	97.926	116.406	117.183	120.644	120.644
15	$M=Pn-Pn-1$			1332	1217	1209	1093
16	$N=In+In-1$			214.332	215.109	237.827	237.827
17	$M \times N$	15x16			261892		260001
18	SUM(MxN)	SUM17			261892		521893