

FORM C-122E WORKSHEET FOR STEPWISE CALCULATION (SURFACE) PRESSURE ($P_e \rightarrow P_w$)

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 : 0.000 (L/H)(FrQm)0.000000

PCR : 656 TCR : 508

LINE	ITEM	SOURCE	1	2	3	4	5	6	
1	H		12675	6338		0			
2	GH		13917.15	6958.58		0			DELTA P = 2214.7
3	37.5GH		521893	260947		0			
4	Pc or Pn		4918.0	3868.2	3851.9	2786.8	2653.0	2674.5	
5	Pr		7.72	5.90	5.87	4.25	4.04	4.08	
6	T		660.75	597.375	597.375	534	534	534	
7	Tr		1.30	1.18	1.18	1.05	1.05	1.05	
8	Z		0.953	0.780	0.778	0.506	0.501	0.502	
9	P/ZP/Z	4/8	5316.5	4958.4	4953.2	5508.2	5291.7	5325.7	
10	P/TZ	9/6	8.0462	8.3003	8.2917	10.3150	9.9095	9.9731	
11	Ln10*2/1000:(10)2/100								
12	L/H(FrQm)2								
13		11+12							
14	In	10/13	124.282	120.477	120.603	96.946	100.913	100.269	
15	M=Pn-Pn-1			1050	1066	1065	1199	1177	
16	N=In+In-1			244.759	244.885	217.549	221.516	220.872	
17	M x N	15x16			261081			260055	
18	SUM(MxN)	SUM17	521893		260813				