

WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE (P_f & P_s)
 RATE NO. 3 (P_c & P_w)
 Form C-122-E

COMPANY _____ LEASE _____ WELL NO. _____ DATE _____

LOCATION: UNIT _____ SECTION _____ TOWNSHIP _____ RANGE _____

9680 H 9680 L/H 1.00 G 0.903 % CO₂ 1.30 % N₂ 0.69 % H₂S 0.00
 d _____ F _____ Q_m _____ M² cfd (L/H) (F_r Q_m)² _____ P_{cr} _____ 662 T_{cr} _____ 457

INE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		9680	4840		0						
2	GH		8741	4371		0						
3	37.5GH		327769	163895		0						
4	P _c or P _n		4706.2	4058.8	4036.7	3368.1	3317.2					
5	P _r		7.11	6.13	6.10	5.09	5.01					
6	T _r		651	591	591	530	530					
7	T _r		1.42	1.29	1.29	1.16	1.16					
8	Z		0.915	0.813	0.811	0.694	0.686					
9	P/Z P/Z		4 ÷ 8	5143.39	4994.78	4979.87	4853.21	4834.10				
10	P/TPZ		9 ÷ 6	7.9007	8.4586	8.4333	9.1570	9.1209				
11	(P/TPZ ² /1000		(10 ² /1000									
12	L/H(F _r Q _m) ²											
13			11 + 12									
14	I _n		10 ÷ 13	126.570	118.224	118.577	109.206	109.638				
15	M=P _n -P _{n-1}			647	670	669	720	718				
16	N=1 _n +1 _{n-1}			244.794	245.146	227.784	228.215					
17	M x N		15 x 16			158382	164771					
18	Σ (M x N)		Σ 17			158382	323153					

$$\Delta P = \frac{3[32789]}{126.570 + 4[118.577] + 109.638} = \frac{983367}{710.516} = 1384.0 \quad P = 4706.2 - 1384.0 = 3322.2$$