

WORK SHEET FOR STEPWISE CALCULATION

Form C-122-E

(SUBSURFACE)

(P_f & P_s)

PRESSURE

XSURFACEXX

(P_c & P_w)

RATE NO. 3

COMPANY MESA PETROLEUM COMPANY LEASE HONDO STATE TOWNSHIP RANGE

LOCATION: UNIT 11126 H 11126 L/H 1.00 G 0.688 & CO₂ 1.17 %N₂ 1.49 %H₂S 0.00

d 2.441 F_r 0.010763 Q_m 1.233 M² cfd (L/H) (F Q_r)² 0.000176 P_{cr} 670 T_{cr} 350

WELL NO. 1 DATE 5-2-77

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	5563		11126						
2	GH		0	3827		7655						
3	37.5GH		0	143525		287051						
4	P _c or P _n		2153.2	2530.2	2522.2	2891.2	2877.2					
5	P _r		3.21	3.78	3.76	4.32	4.29					
6	T		530	592	592	654	654					
7	T _r		1.51	1.69	1.69	1.87	1.87					
8	Z		0.778	0.851	0.852	0.913	0.913					
9	P/Z P/Z	4 ÷ 8	2768.32	2972.86	2960.33	3166.36	3151.02					
10	P/TZ	9 ÷ 6	5.2232	5.0217	5.0006	4.8415	4.8181					
11	(P/TZ ² /1000	(10 ² /1000	0.027282	0.025218	0.025006	0.023440	0.023214					
12	L/H(F Q _r) ²		0.000176	0.000176	0.000176	0.000176	0.000176					
13		11 + 12	0.027458	0.025394	0.025182	0.023616	0.023390					
14	I _n	10 ÷ 13	190.224	197.754	198.579	205.006	205.989					
15	M=P _n -P _{n-1}			377	369	369	355	354				
16	N=1 _n +1 _{n-1}			387.978	388.803	403.585	404.568					
17	M x N	15 x 16			146268		143622					
18	Σ (M x N)	Σ 17			146268		289889					

Delta P = 190.224 + 4[198.579] + 205.989 = 861152 = 723.3 P = 2153.2 + 723.3 = 2876.5