

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_f & P_s) 4th

(SURFACE)

(P_f & P_s)

Form C-122-E
Adopted 9-1-65

COMPANY GULF OIL CORP. LEASE FEDERAL COM-4 WELL NO. # 1 DATE 05-14-80

LOCATION: Unit K Section 4 Township 19S Range 32E

L 12521 H 12521 L/H 1.000 G mix .715 % CO₂ .442 % N₂ .524 % H₂S

d 1.995 F_r .018231 3.728 M² cfd (L/H) (F_r Q_m)² .004619 P_{cr} 668 T_{cr} 398

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	6260.5		12521						
2	GH		0	4476.3		8952.5						
3	37.5GH		0	167859		335719						
4	P _c or P _n		3133.2	3863.0	3842.7	4550.4	4516.1		Ps =	4512.5		
5	P _r		4.69	5.78	5.75	6.81	6.76					
6	T		534	596.5	596.5	659	659					
7	T _r		1.34	1.50	1.50	1.66	1.66					
8	Z		.722	.850	.848	.955	.953					
9	P/Z P/Z	4.8	4339.6	4544.7	4531.5	4764.8	4738.8					
10	P/TZ	9.6	8.1266	7.6189	7.5968	7.2304	7.1909					
11	(P/TZ) ² /1000	(10) ² /1000	.066042	.058047	.057711	.052278	.051709					
12	L/H(F _r Q _m) ²		.004619	.004619	.004619	.004619	.004619					
13		I ₁ + I ₂	.070661	.062666	.062330	.056897	.056328					
14	I _n	I ₀ ÷ I ₃	115.008	121.579	121.579	127.078	127.662					
15	M = P _n - P _{n-1}			730	709	708	673					
16	N = I _n + I _{n-1}			236.588	236.889	248.959	249.542					
17	M x N	I ₅ x I ₆			168072		168039					
18	Σ (M x N)	Σ I ₇			167647							