

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_f & P_s) 4th
(SURFACE) #P₂ & P₃

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
	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	$\frac{4}{8}$	4339.6	4544.7	4531.5	4764.8	4738.8					
10	P/TZ	$\frac{9}{6}$	8.1266	7.6189	7.5968	7.2304	7.1909					
11	(P/TZ) ² /1000	$(\frac{10}{9})^2/1000$	.066042	.058047	.057711	.052278	.051709					
12	L/H(F _r Q _m) ²		.004619	.004619	.004619	.004619	.004619					
13		$\frac{11}{1} + \frac{12}{2}$	.070661	.062666	.062330	.056897	.056328					
14	I _n	$\frac{10}{1} + \frac{13}{3}$	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	$\frac{15}{1} \times \frac{16}{6}$			168072		168039					
18	$\Sigma(M \times N)$	$\Sigma \frac{17}{7}$			167647							