

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

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

Standard Oil Company

COMPANY of Texas LEASE Bogle Flats Unit WELL NO. 4 DATE 6-8-66

LOCATION: Unit F Section 10 Township 22S Range 23E
L 7074 H 7074 L/H 1.000 G .646 %CO₂ .54 %N₂ .90 %H₂S .36
d 1.995 F_i 018231 Q_m 4.208 M² cfd (L/H) (F_i Q_m)² .005885 P_{cr} 513 T_{cr} 368
TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	3537		7074		Delta P = 3 (37.5 GH)				
2	GH		0	2284.90		4569.80		I _c + 4 I ₁ + I ₂				
3	37.5GH		0	85,684		171,368						
4	P _c or P _n		2244.2	2532.2	2533.2	2822.2	2823.2		3 (171,368)			
5	P _r		3.33	3.76	3.76	4.19	4.20		148,717 + 591,480 + 147,216			
6	T		533	562.5	562.5	592	592		514,104			
7	T _r		1.45	1.53	1.53	1.61	1.61		887.413			
8	Z		.740	.785	.785	.826	.826					
9	P/2 P/2	48	3032.7	3225.7	3227.0	3416.7	3417.9		579.3			
10	P/12	9.6	5.6899	5.7346	5.7369	5.7715	5.7735					
11	(P/TZ) ² /1000	(10) ² /1000	.032375	.032886	.032912	.033310	.033333		P _s = P _c + Delta P			
12	1/(H(F _i Q _m) ²)		.005885	.005885	.005885	.005885	.005885					
13		I ₁ + I ₂	.038260	.038771	.038797	.039165	.039218		2244.2 + 579.3			
14	I _n	10+13	148,717	147,910	147,870	147,364	147,216					
15	M ² P _n - P _n - 1		288	289	289	289	290		2823.9			
16	M ² I _n + I _n - 1		296,627	296,587	295,234	295,036						
17	M ² x N	15x16			85,714		85,575					
18	> (M ² x N)	> 17			85,714		171,269					