

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_f & P_s)
(SURFACE) ~~XXXXXXXX~~

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

Standard Oil Company

COMPANY of Texas LEASE Bogle Flats Unit '9' WELL NO. 3 DATE 6-7-66

LOCATION: Unit K Section 9 Township 22S Range ~~20N~~ 23S

L 6924 H 6924 L/H 1.000 G .649 %CO₂ .54 %N₂ .92 %H₂S .37

d 1.995 F_f .018231 Q_m 2.277 M² cfd (L/H) (F_f Q_m)² .001723 P_{ct} 673 T_{ct} 368
TABLE IX & X TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	3462		6924				Delta P = (37.5 GH)		
2	GH		0	2246.84		4493.68				I _t + 4I ₁ + I ₂		
3	37.5GH		0	84,257		168,513						
4	P _c or P _n		2294.2	2555.2	2553.2	2812.2	2809.2	2808.2	161.160 + 657.268 + 165.305			
5	P _r		3.41	3.80	3.79	4.18	4.17	4.17				
6	T		530	561	561	592	592	592	= 505,539	= 513.9		
7	T _r		1.44	1.53	1.53	1.61	1.61	1.61	983.733			
8	Z		.732	.786	.786	.826	.825	.825				
9	P/Z P/Z	4/8	3134.2	3250.9	3248.3	3405.1	3403.9		P _s = P _t + Delta P			
10	P/TZ	9/6	5.9136	5.7948	5.7902	5.7510	5.7519	5.7498				
11	(P/TZ) ² /1000	(10/2/1000)	.034971	.033580	.033074	.033084	.033060		= 2294.2 + 513.9			
12	L/H(F _f Q _m) ²		.001723	.001723	.001723	.001723	.001723					
13			.036694	.035303	.035249	.034797	.034807	.034783		= 2808.1		
14	I _n	I ₀ -I ₃	161.160	164.145	164.317	165.273	165.251	165.305				
15	M=P _n -P _{n-1}			261	259	259	256	255				
16	N=I _n +I _{n-1}			325.305	325.477	329.590	330.524	330.578				
17	M x N	I ₅ x I ₆			84,299			84,297				
18	Σ (M x N)	Σ I ₇			84,299			168,596				