

WORK SHEET FOR STEPWISE CALCULATION
(SUBSURFACE) PRESSURE (P_f & P_s)
(SURFACE) (P_c & P_w)

Form C-1122-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 23E

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

d 1.995 $F_r \frac{0.01823 Q_m}{Q_m}$ 3.434 $M^2 c_{id}$ (L/H) ($F_r Q_m$)² .003919 P_{cr} 673 T_{cr} 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 = 3 (37.5 GH)			
2	GH		0	2246.84	4493.68				$I_b + 4I_1 + I_2$			
3	37.5GH		0	84,257	168,513				= 3 (168,513)			
4	P_c or P_h		2248.2	2517.2	2787.2				$156.325 + 625.728 + 156.406$			
5	P_r		3.34	3.74	4.14							
6	T		532	562	592				= 505,539 = 538.7			
7	T_r		1.45	1.53	1.61				938.459			
8	Z		.740	.785	.825							
9	P/Z P/Z	$\frac{4}{8}$	3038.1	3206.6	3378.4				$P_s = P_t + \text{Delta P}$			
10	P/TZ	$\frac{9}{6}$	5.7107	5.7057	5.7068							
11	(P/TZ) ² /1000	$(\frac{10}{10})^2/1000$	.032612	.032555	.032568				= 2248.2 + 538.7			
12	L/H($F_r Q_m$) ²		.003919	.003919	.003919							
13		$I_1 + I_2$	.036531	.036474	.036487				= 2786.9			
14	I_h	$I_0 + I_3$	156.325	156.432	156.406							
15	$M = P_n - P_{n-1}$			269	270							
16	$N = I_n + I_{n-1}$			312.757	312.838							
17	M x N	$I_5 \times I_6$		84,132	84,466							
18	$\Sigma (M \times N)$	ΣI_7		84,132	168,598							