

WORK SHEET FOR STEPWISE CALCULATION
(SUBSURFACE) PRESSURE (P_f & P_s)
(SURFACE) (P_{eff} & P_{eff})

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 ~~23S~~ 23S
L 6924 H 6924 L/H 1.000 G .649 % CO₂ .54 % N₂ .92 % H₂S .37
d 1.995 $F_1 \cdot 01823 Q_m$ 4.577 $M^2 \text{ cfd}$ (L/H) ($F_1 Q_m$)² .006963 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				$I_t + 4 I_1 + I_2$		
3	37.5GH		0	84,257		168,513			= 3 (168,513)			
4	$P_c \text{ or } P_n$		2195.2	2482.2	2483.2	2770.2	2773.2		146,997 + 583,260 + 144,723			
5	P_r		3.26	3.69	3.69	4.12	4.12					
6	I		534	563	563	592	592		= 505,539			
7	I_r		1.45	1.53	1.53	1.61	1.61		874.980			
8	Z		.741	.785	.785	.824	.824					
9	$P/Z \text{ P/Z}$		2962.5	3162.0	3163.3	3361.9	3365.5		= 577.8			
10	P/TZ		9.6	5.5478	5.6187	5.6789	5.6850					
11	$(P/TZ)^2 / 1000$		.030778	.031543	.031570	.032250	.032319		$P_s = P_c + \text{Delta } P$			
12	$L/H(F_1 Q_m)^2$		.006963	.006963	.006963	.006963	.006963					
13			.037741	.038506	.038533	.039213	.039282		= 195.2 + 577.8			
14	I_n		146.997	145.855	145.815	144.822	144.723					
15	$M = P_n - P_{n-1}$		287	288	287	290			= 2773.0			
16	$N = I_n + I_{n-1}$		292.852	292.812	290.637	290.538						
17	$M \times N$		84,330			84,256						
18	$\Sigma (M \times N)$		84,330			168,586						