

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

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 ~~23E~~ **23E**

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

d $\frac{d}{F_r} \frac{Q_m}{0} M^2_{ctd} (L/H) (F_r Q_m)^2$ 0 $P_{cr} \frac{673}{T_{cr}} T_{cr}$ 368
TABLE IX & X TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		6924	3462		0			Delta P = 3 (37.5 GH)			
2	GH		4493.68	2246.84		0			1s + 411 + 12			
3	37.5GH		168,513	84,257		0						
4	P _c or P _n		2786.9	2546.9	2544.9	2303.9	2300.9		175,245 + 695,300 + 170,870			
5	P _r		4.14	3.78	3.78	3.42	3.42					
6	T		592	562	562	532	532		= 505,539 = 485.9			
7	T _r		1.61	1.53	1.58	1.45	1.45		1,070.415			
8	Z		.825	.786	.786	.739	.739					
9	P/Z P/Z	$\frac{4}{8}$	3378.1	3240.3	3237.8	3117.6	3113.5		P _w = P _s - Delta P			
10	P/TZ	$\frac{9}{6}$	5.7063	5.7657	5.7612	5.8602	5.8524					
11	(P/TZ) $\frac{2}{1000}$	$\frac{10}{100}$ $\frac{2}{1000}$							= 2786.9 - 485.9			
12	L/H (F _r Q _m) ²											
13		$\frac{11}{1} + \frac{12}{2}$							= 2301.0			
14	I _n	$\frac{10}{1} + \frac{13}{3}$	175.245	173.439	173.575	170.643	170.870					
15	M = P _n - P _{n-1}			240	242	241	244					
16	N = I _n + I _{n-1}			348.684	348.820	344.218	344.445					
17	M x N	$\frac{15}{1} \times \frac{16}{6}$			84,414		84,043					
18	$\Sigma (M \times N)$	$\Sigma \frac{17}{1}$	168,513		84,099							