

WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE (P_c & P_w)

Form G-122-B
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 F_r Q_m 0 M_{add} (1/H) (F_rQ_m)² 0 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		7074	3537		0			Delta P = 3 (37.5 GH)			
2	GH		4569.80	2284.90		0			I _s + 4 I ₁ + 12			
3	37.5GH		171,368	85,684					= 3 (171,368)			
4	P _c or P _n		2828.4	2580.4	2579.4	2330.4	2328.4		172,838 + 686,124 + 169,486			
5	P _r		4.20	3.83	3.83	3.46	3.46					
6	T		592	563	563	534	534		= 514,104			
7	T _r		1.61	1.53	1.53	1.45	1.45		1,028,598			
8	Z		.826	.786	.786	.739	.739					
9	P/Z P/Z	4:8	3424.2	3283.0	3281.7	3153.5	3150.7		= 499.8			
10	P/TZ	9:6	5,7841	5,8313	5,8290	5,9054	5,9002					
11	(P/TZ) ² /1000	(9:6) ² /1000							P _v = P _s - Delta P			
12	1/H(F _r Q _m) ²											
13		11 + 12							= 2323.4 - 499.8			
14	I _n	10:13	172,888	171,488	171,556	169,337	169,486					
15	M ^{P_n-1} P _n ⁻¹			248	249	249	251		= 2333.6			
16	M ^{I_n-1} I _n ⁻¹											
17	M x N	15 x 16										
18	> (M x N)	> 17	171,368									