

WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE (P_c & P_w)

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

Standard Oil Company

COMPANY of Texas LEASE Bogle Flats Unit "4" WELL NO. 2 DATE 6-6-66

LOCATION: Unit J Section 4 Township 22S Range 23E

L 7039 H 7039 L/H 1.000 G .639 %CO₂ .58 %N₂ .91 %H₂S .21
d F_r Q_m 0 M²cfd (L/H) (F_rQ_m)² 0 P_{cr} 673 T_{cr} 364
TABLE IX & X TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		7039	3519.5		0			Delta P = 3 (37.5 GH)			
2	GH		4497.92	2248.96		0			I _w + 4I ₁ + 1 I ₂			
3	37.5GH		168,672	84,336		0			= 3 (168,672)			
4	P _c or P _n		2805.9	2565.9	2563.9	2321.9	2318.9		175,537 + 692,676 + 170,596			
5	P _r		4,17	3,81	3,81	3,45	3,45					
6	T		592	562	562	531	531		506,016 =	487.1		
7	T _r		1.63	1.54	1.54	1.46	1.46		1,038.809			
8	Z		.832	.790	.790	.745	.745					
9	P/Z P/Z	4.8	3372.5	3248.0	3245.4	3116.6	3112.6	P _w = P _s - Delta P				
10	P/TZ	9.6	5,6968	5,7794	5,7747	5,8693	5,8618					
11	(P/TZ) ² /1000	(10) ² /1000						=	2805.9 - 487.1			
12	L/H(F _r Q _m) ²											
13		11 + 12										
14	I _n	10 ÷ I ₃	175,537	173,028	173,169	170,378	170,596					
15	M = P _n - P _{n-1}			240	242	242	245					
16	N = I _n + I _{n-1}			348,565	348,706	343,547	343,765					
17	M x N	15 x 16			84,387		84,222					
18	Σ (M x N)	Σ 17	168,672		84,285							

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JUN 27 1966

O. C. C.
ARTS & DEPT.