

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 '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 0 M²-cf/d (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 + I ₂			
3	37.5GH		168,672	84,336		0			= 3 (168,672)			
4	P _c or P _n		2769.9	2532.9	2531.9	2293.9	2292.9		177,607 + 707,476 + 175,790			
5	P _r		4.12	3.76	3.76	3.41	3.41					
6	T		592	564	564	536	536		= 506,016 = 477.0			
7	T _r		1.63	1.55	1.55	1.47	1.47		1,060.873			
8	Z		.831	.794	.794	.752	.752					
9	P/Z P/Z	4/8	3333.2	3190.1	3188.8	3050.4	3049.1		P _w = P _s - Delta P			
10	P/TZ	9/6	5.6304	5.6562	5.6539	5.6910	5.6886		= 2769.9 - 477.0			
11	(P/TZ) ² /1000	(10/2)/1000							= 2292.9			
12	L/H(F _r Q _m) ²											
13		11 + 12										
14	I _n	10/13	177,607	176,797	176,869	175,716	175,790					
15	M=P _n -P _{n-1}			237	238	238	239					
16	N=I _n +I _{n-1}			354,404	354,476	352,585	352,659					
17	M x N	15 x 16			84,365		84,286					
18	Σ (M x N)	Σ 17	168,672		84,307							

RECEIVED
JUN 27 1966

D. C. C. OFFICE
ARTESIAN OFFICE