

WORK SHEET FOR STEPWISE CALCULATION

(SUBSURFACE) PRESSURE $(P_f \& P_s)$

(SURFACE) $(P_e \& P_w)$

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

COMPANY Cities Service Oil Co. LEASE State CP WELL NO. 41 DATE 8/22/74

LOCATION: Unit J Section 9 Township 21 S Range 47 E

L 13852 H 13852 L/H 1.000 G 1589 % CO₂ 0 % N₂ 0 % H₂S 0

d 2.441 $F_1 \frac{101000}{Q_m}$ 0 M_{std} (L/H) $(F_1 Q_m)^2$ 0 P_{cr} 6.22 T_{cr} 354

TABLE IX B X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		158.56	682.6		0						
2	GH		2152.83	4279.41		0						
3	37.5GH		305.956	152.978		0						
4	P_e or P_h		4192.8	3750.3	3720.2	3263.3	3199.2	3202.8	<u>$P_{01} = 3510.9$</u>			
5	P_f		6.25	5.58	5.55	4.86	4.71	4.77				
6	T		22.2	4.28	6.28	5.24	4.24	4.24				
7	T_f		3.04	1.77	1.77	1.51	1.51	1.51				
8	Z		, 995	.930	, 929	, 804	, 800	, 801				
	P/Z P/Z		4218.3	4632.6	4014.2	4052.2	3999.1	3998.5				
10	P/TZ		15.8425	6.4212	6.3821	7.6002	7.4882	7.4872				
11	$(P/TZ)^2/1000$											
12	$L/H(F_1 Q_m)^2$											
13			$\bar{I}_1 + \bar{I}_2$									
14	I_h		$\bar{I}_0 + \bar{I}_3$									
			174.59	155.731	156.402	126.545	133.522	123.549				
15	$M = P_h - P_n - 1$			447	468	466	530	596				
16	$N = I_h + I_n - 1$			326.890	327.602	388.002	389.925	388.992				
17	$M \times N$				153.212			153.426				
18	$\Sigma(M \times N)$		$\Sigma \bar{I}_7$		153.632							