

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-122D
Adopted 9-1-65

COMPANY **Inexco Oil Company** LEASE **Inexco Federal 17** WELL NO. **1** DATE **9/6/74**

LOCATION: Unit **K** Section **17** Township **21 S** Range **26 E**

L. **10,650** H. **10,650** L/H **1.000** G. **0.623** % CO₂ **4.065** % N₂ **0.36** % H₂S **0**

d **1.867** F_r **.021138** GH **6635** P_{cl} **668** T_{cr} **358**
1st Date 2nd Date 3rd Date 4th Date
TABLE IX & X TABLE IX & X

LINE	1st Trial	2nd Trial	1st Trial	2nd Trial	1st Trial	2nd Trial	1st Trial	2nd Trial	1st Trial	2nd Trial
1 Q _m	1.812	1.812	1.388	1.388	0.986	0.986	0.522	0.522		
2 T _w (W.H. °R)	536	536	540	540	540	540	540	540		
3 T _s (B.H. °R)	630	630	630	630	630	630	630	630		
4 T = ($\frac{T_w + T_s}{2}$)	583	583	585	585	585	585	585	585		
5 Z (Est.)	.815	.833	.840	.839	.850	.836	.840	.854		
6 TZ	475.1	485.6	491.4	490.8	497.3	489.1	491.4	499.6		
7 GH/TZ	13.964	13.662	13.502	13.518	13.343	13.567	13.502	13.281		
8 e ^S (Table XIV)	1.688	1.669	1.658	1.659	1.649	1.663	1.658	1.645		
9 1-e ^S (Table XIV)	0.408	0.401	0.397	0.397	0.393	0.399	0.397	0.392		
10 P _t	2513.2	2513.2	2682.2	2682.2	2820.2	2820.2	2973.2	2973.2		
11 P _t ² /1000	6316.2	6316.2	7194.2	7194.2	7953.5	7953.5	8839.9	8839.9		
12 F _r (Table XV)	.021138	.021138	.021138	.021138	.021138	.021138	.021138	.021138		
13 F _c = F _r TZ	10.043	10.265	10.387	10.375	10.512	10.339	10.387	10.361		
14 F _c Q _m	18.20	18.60	14.42	14.40	10.365	10.194	5.422	5.513		
15 L/H (F _c Q _m) ²	331.2	346.0	207.9	207.4	107.4	103.9	28.4	30.4		
16 F _w = L/H (F _c Q _m) ² (1-e ^{-S})	135.15	138.75	82.55	82.32	42.22	41.46	11.67	11.91		
17 P _w ² = P _t ² + F _w	6451.4	6454.9	7276.8	7276.5	7995.7	7995.0	8851.6	8851.8		
18 P _S ² = e ^S P _w ²	10889.9	10773.3	12064.9	12071.7	13184.9	13295.6	14675.9	14561.2		
19 P _S	3300.0	3282.3	3473.5	3474.4	3631.1	3646.3	3830.9	3815.9		
20 P = ($\frac{P_t + P_s}{2}$)	2906.6	2897.7	3077.8	3078.3	3225.7	3233.3	3402.1	3394.6		
21 P _r = (P/P _{cr})	4.22	4.21	4.47	4.47	4.69	4.70	4.94	4.93		
22 T _r = (T/T _{cr})	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63		
23 Z (Table XI)	.833	.833	.839	.839	.836	.836	.854	.853		

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