

WORK SHEET FOR STEPWISE CALCULATION (SURFACE) PRESSURE (P_c & P_w)

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

COMPANY Cortina Grace LEASE Humble-Grace WELL NO. 1 DATE 7/28/71

LOCATION: Unit P Section 2 Township 23 S Range 26 E

L 10.616 H 10.616 L/H 1.000 G .580 % CO₂ - % N₂ - % H₂S -

$$P = \frac{692.694}{812.790} = 852.2 \quad P_w = 4229.2 - 852.2 = 3377.0$$

$$d = \frac{1.995}{P} = \frac{1.995}{4229.2} = 4.718 \times 10^{-4} \quad M^2 c_{fd} (L/H) (F_r Q_m)^2 = .007398 \quad P_{ct} = 672 \quad T_{ct} = 350$$

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		10616	5308		0						
2	GH		6157.28	3078.64		0						
3	37.5GH		230,898	115,449		0						
4	P _c or P _n		4229.2	3821.5	3812.8	3396.8	3374.3	3375.4				
5	P _r		6.29	3.69	3.67	3.05	3.02	3.02				
6	T		627	380.5	380.5	330	330	330				
7	T _r		1.79	1.66	1.66	1.81	1.51	1.51				
8	Z		.953	.893	.892	.816	.813	.813				
9	P/Z P/Z		4428.5	4279.4	4274.4	4162.7	4140.2	4141.6				
10	P/TZ		7.0630	7.3719	7.3633	7.8542	7.8117	7.8143				
11	(P/TZ) ² /1000	(10) ² /1000										
12	L/H(F _r Q _m) ²											
13		I ₁ + I ₂										
14	I _n	I ₀ ÷ I ₃	141.583	135.650	133.809	127.320	128.013	127.971				
15	M = P _n - P _{n-1}			407.7	416.4	416.0	438.5	437.4				
16	N = I _n + I _{n-1}			277.233	277.392	263.129	263.822	263.780				
17	M x N	15 x 16			115,306			115,377				
18	Σ (M x N)	Σ I ₇	230,898		115,392							