

WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE
(SURFACE) (P_c & P_w)

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

LOCATION: Unit P Section 2 Township 23 S Range 16 E

L 10,616 H 10,616 L/H 1.000 G .380 % CO₂ - % N₂ - % H₂S -

$P = \frac{692.694}{603.613} - 862.0$ $P_g = 4294.0 - 862.0 = 3432.0$
 $d = \frac{1.995}{P_1} \frac{Q_m}{Q_m} = \frac{3.158}{M^2 \text{ cfd}} (L/H) (F_1 Q_m)^2 = \frac{.003314}{P_{CT}} T_{CT}$
TABLE IX & X TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		10616	5308		0						
2	GH		6137.28	3078.44		0						
3	37.5GH		230.898	115.449		0						
4	P _c or P _n		4294.0	3881.8	3872.9	3452.3	3429.5	3438.4				
5	P _r		6.39	5.78	5.76	5.14	5.10	5.10				
6	T		627	580.5	580.5	530	530	530				
7	T _r		1.79	1.66	1.66	1.51	1.51	1.51				
8	Z		.930	.897	.896	.820	.818	.818				
9	P/Z P/Z		4477.6	4327.5	4322.4	4210.1	4192.5	4193.6				
10	P/TZ		7.1413	7.4348	7.4460	7.9436	7.9104	7.9125				
11	(P/TZ) ² /1000	(10) 2/1000										
12	L/H(F ₁ Q _m) ²											
13		I ₁ + I ₂										
14	I _n	I ₀ - I ₃	140.031	134.142	134.300	125.808	126.416	126.382				
15	M=P _n -P _{n-1}			412.2	421.1	430.6	443.4	442.5				
16	N=I _n +I _{n-1}			274.173	274.331	260.188	260.716	260.682				
17	M x N	I ₅ x I ₆			115.521			115.352				
18	Σ (M x N)	Σ I ₇	230.898		115.377							