

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

COMPANY Jake L. Hamon LEASE Amerada Federal WELL NO. 1 DATE 8/27/66

LOCATION: Unit N Section 17 Township 20 S Range 36 E

L 10999 H 10999 I/H 1.000 G .870 % CO₂ 0.4 % N₂ 0.0 % H₂S 0.0

$$d = \frac{1.995 F}{1.076,526} = 0.18231 \quad Q_m = 3.966 \quad M^2 cfd (L/H) (F_1 Q_m)^2 = .005227 \quad P_{cr} = 663 \quad T_{cr} = 448$$

$$P = \frac{1.076,526}{634.770} = 1695.9 \quad P_w = 6383.2 - 1787.6 = 4687.3$$

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		10,999	5499		0						
2	GH		9569.13	4784.13		0						
3	37.5GH		358,842	179,405		0						
4	P _c or P _n		6383.2	5549.2	5542.2	4701.2	4687.2					
5	P _r		9.63	8.37	8.36	7.09	7.07					
6	T		618	581	581	544	544					
7	T _r		1.38	1.30	1.30	1.21	1.21					
8	Z		1.111	1.010	1.009	.899	.897					
9	P//Z, P//Z	4:8	5745.5	5494.3	5492.8	5229.3	5225.4					
10	P/TZ	9:6	9.2969	9.4566	9.4540	9.6127	9.6055					
11	(P/TZ) 2/1000	(10) 2/1000										
12	L/H(F ₁ Q _m) ²											
13		11 + 12										
14	I _n	10-13	107.563	105.746	105.775	104.029	104.107					
15	M=P _n -P _{n-1}			834	841	841	855					
16	N=I _n +I _{n-1}			213.309	213.338	209.804	209.882					
17	M x N	15 x 16			179,417							
18	Σ (M x N)	Σ 17	358,842		179,425							