

WORK SHEET FOR STEPWISE CALCULATION

(SUBSURFACE) PRESSURE (P_f & P_s)
(SURFACE) (P_c & P_w)

COMPANY Williams-Sonnet Co. LEASE Williamson WELL NO. 3 DATE 6-27-84

LOCATION: Unit B Section 9 Township 20S Range 29E

L 11395 H 11395 LH 1.00 G 171X758 % CO₂ 16.36 % N₂ 3.03 % H₂S 408

d 1.995 F_r 0.1825 Q_m 1.327 M² cld (L/H) (F_r Q_m)² 1.000585 P_{cr} 667 T_{cr} 408

TABLE 18 & 2

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	5698		11395						
2	GH		0	4319		8637						
3	37.5CH		0	161951		323903						
4	P _c or P _n		1835.2	2286.9	2277.4	2717.9	2704.7		P _s = 2701.2			
5	P _f		2.75	3.43	3.41	4.07	4.05					
6	T		534	591	591	648	648					
7	T _i		1.31	1.45	1.45	1.59	1.59					
8	Z		628	739	739	1817	1819					
9	P/Z P/Z	4-8	2922.3	3094.7	3081.8	3326.6	3302.4					
10	P/TZ	5-6	5.472	5.236	5.215	5.634	5.096					
11	(P/TZ) 2/1000 (Q _m 2/1000)		1029947	1027420	1027191	1026355	1025972					
12	L/H (F _r Q _m) ²		1000585	1000585	1000585	1000585	1000585					
13		11 + 12	1030532	1028005	1027776	1026940	1026557					
14	I _n	10-13	179.232	186.982	187.734	190.562	191.899					
15	M = P _n - P _{n-1}			452	442	440	427					
16	N = I _n + I _{n-1}			366.2	366.9	378.2	375.6					
17	M x N	15 x 16			162283		162490					
18	Σ (M x N)	Σ 17			161619							