

WORKSHEET FOR CALCULATION OF SIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-85

COMPANY

YPC

LEASE

Friendly Frenchman HB

WELL NO. 1

DATE

9-27-79

LOCATION: Unit

P

Section

22

Township

16S

Range

26E

% H₂S

Nil

L 1100 + 1860' H₂O

H 6100 + 1860' H₂O

G 1667

% CO₂

1.57

% N₂

1.48

% H₂S

Nil

S 7748' 298' 30837

d 2.0375

F_i

0.015789

GH

4068.7

0.3 M/L% H₂O

P_{CT}

731

T_{CT}

392

TABLE IX B X

LINE	S1	1	2	3	4	S1	1	2	3	4
1 Q _m		0.058	0.085	0.120	0.162		0.058	0.085	0.120	0.162
2 T _w (W.H. °H)	513	519	524	528	532					
3 T _s (B.H. °R)	596	595	594	593	592					
4 T = (T _w + T _s)	554.5	557	559	560.5	562		557	559	560.5	562
5 Z (Z _{SL})	1710	1738	1758	1785	1850					
6 TZ	399.24	411.07	423.72	439.99	477.70					
7 GH/TZ	10.1911	9.898	9.6023	9.2472	8.5172					
8 e ^s (Table XIV)	1.46546	1.4494	1.43346	1.4145	1.3763					
9 1-e ^s (Table XIV)		0.3101	0.3024	0.2930	0.2734					
10 P ₁	1959.7	1725.2	1559.2	1340.2	907.2					
11 P ₁ 2/1000	3830.6	2976.31	2431.1	1796.1	823.0					
12 F ₁ (Table XV)	0.38217	0.37117	0.36009	0.34677	0.31940					
F _c = F ₁ TZ		6.490	6.690	6.947	7.5124					
14 F _c Q _m		0.376	0.569	0.830	1.219					
15 L/H (F _c Q _m) ²		0.147	0.323	0.695	1.493					
16 F _w = L/H (F _c Q _m) ² (1-e ^s)		0.04	0.1	0.2	0.4					
17 P _w ² = (P ₁ ² + F _w) e ^s (H ₂ O)	5614	4313.9	3485.0	2540.7	1532.2					
18 P _w ² = e ^s P _w ²	10120	8819.9	7991.0	7046.9	5239.2					
19 P _s = 6100	2369.4	2077.0	1866.8	1594.0	1064.5					
20 P = (P ₁ + P _s)	2163.25	1901.1	1713.0	1467.1	985.9					
21 P ₁ = (P/P _{CT})	2.959	2.601	2.343	2.007	1.349					
22 T ₁ = (T/T _{CT})	1.4145	1.421	1.426	1.430	1.433					
23 Z (Table XI)	0.720	0.738	0.768	0.785	0.848					