

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

COMPANY PLAINS Petroleum LEASE Bevins 13 WELL NO. 15 DATE 12/10/93

LOCATION: Unit _____ Section _____ Township _____ Range _____

L 4486 H 4484 L/H 1 G 0.7364 %CO₂ _____ %N₂ _____ %H₂S 0.05

GH 3303 Per 668 T_{cr} 401
TABLE IX & X TABLE IX & X

LINE		Flow 1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	520		522		524		525	
2	$T_s(B.H. \cdot R)$	574		574		574		574	
3	$T = \frac{T_w + T_s}{2}$	547		548		549		549.5	
4	Z (Est.)	0.76	0.754	0.77	0.769	0.78	0.781	0.8	0.798
5	TZ	415.7	412.4	422.0	421.4	428.2	428.8	439.6	438.5
6	GH/TZ	7946	8009	7827	7838	7714	7703	7514	7532
7	e^S (Table XIV)	1.347	1.350	1.341	1.342	1.335	1.335	1.325	1.326
8	P_f or P_s	1331.2	1331.2	1250.2	1250.2	1181.2	1181.2	1085.2	1085.2
9	P_f^2 or P_s^2	1772.1	1772.1	1563.0	1563.0	1395.2	1395.2	1177.7	1177.7
10	$P_c^2 = P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	1315.6	1312.7	1165.5	1164.7	1045.1	1045.1	888.8	888.2
11	P_c or P_w	1147.0	1145.7	1079.6	1079.2	1022.3	1022.3	942.8	942.4
12	$P_c = \frac{P_w + P_s}{2}$ or $\frac{P_c + P_f}{2}$	1239.1	1238.5	1164.9	1164.7	1101.8	1101.8	1014.0	1013.8
13	$P_r = (P/P_{cr})$	1.855	1.854	1.744	1.744	1.649	1.649	1.518	1.518
14	$T_r = (T/T_{cr})$	1.364	1.364	1.367	1.367	1.369	1.369	1.370	1.370
15	Z (Table XI)	0.154	0.755	0.769	0.769	0.781	0.781	0.798	0.798

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Form C-122F
Adopted 9-1-65

COMPANY Petroleum Research LEASE Bevier 13 WELL NO. 15 DATE 12/10/93

LOCATION: Unit 4486 Section 4486 Township 13 Range 15
L 4486 H 4486 L/H 1 G 0.7364 %CO₂ 0.05 %N₂ 0.05 %H₂S 0.05
GH 3303 P_{cr} 668 T_{cr} 401
TABLE IX & X TABLE IX & X

LINE	1	2	3	4	5	6	7	8
1	T_w (W.H. °R)	520						
2	T_s (B.H. °R)	574						
3	$T = (\frac{T_w + T_s}{2})$	547						
4	Z (Est.)	0.7	0.746	0.745				
5	TZ	382.9	408.1	407.5				
6	GH/TZ	8.626	8.094	8.106				
7	e^S (Table XIV)	1.382	1.355	1.355				
8	P_f or P_s	1394.2	1394.2	1394.2				
9	P_f^2 or P_s^2	1943.8	1943.8	1943.8				
10	$P_c^2 = P_f^2 / e^S$ or $P_w^2 = P_s^2 / e^S$	1406.5	1434.5	1434.5				
11	P_c or P_w	1186.0	1197.7	1197.7				
12	$P_c (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	1290.1	1296.0	1296.0				
13	$P_r = (P/P_{cr})$	1.931	1.940	1.940				
14	$T_r = (T/T_{cr})$	1.364	1.364	1.364				
15	Z (Table XI)	0.746	0.745	0.745				

Plains Petroleum Operating Co.

Bluitt¹³ Federal # 15

Test Date 12/10/93

$p_r^2 - p_w^2$ (Thousands)

467402

1000

100

1000

10,000

Q (MCFD)

$n = 0.771$

