

WORK SHEET FOR CALCULATING EQUIVALENT STATIC WELLHEAD PRESSURE

LEASE Holmes "A" WELL NO. 1-26 FIELD MIDWAY (TOPEKA "A") COUNTY BAL DATE 4-30-73

% CO₂ .03 G_m .750 P_{cr} 630 T_{cr} 354 FLOW STRING 2 7/8

% N₂ 25.08 H 3038 G_mH 2279 L/H 1.000 I.D. 2.441

RATE											
LINE	TRIAL										
1	Q _m , M ² cfd	.058									
2	T _w	520									
3	T _s	559									
4	T _e	540									
5	Z _e	.976									
6	T _e Z _e	526.9									
	G _m H/T _e Z _e	4.324									
	e ^s	1.176									
	(1 - e ^{-s})	.150									
	P _t or P _c	149.4									
	P _t ² or P _c ² (thous.)	22.3									
	F _c	5.667									
12	F ₁ = F _c T _e Z _e / 540	5.530									
13	F ₁ Q _m	.321									
14	Y = (F ₁ Q _m) ² L/H	.103									
15	R ² = Y (1 - e ^{-s})	.015									
16	P _w ² = P _t ² + R ²	22.3									
17	P _s ² = e ^s P _w ² (thous.)	26.3									
17a	P_f² = e ^s P _c ² (thous.)										
18	P _s or P _f	162.1									
19	P _e	155.7									
20	P _r	.25									
21	T _r	1.53									
22	Z _e	.976									

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