

WORK SHEET FOR STEPWISE CALCULATION

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

Form C-122-E

RATE NO. 2

ANY Monsanto Company LEASE Cert Federal WELL NO. 2 DATE 10-20-76

FROM: UNIT F SECTION 10 TOWNSHIP 21S RANGE 27E

10232 H 10239 L/H 1.00 G 0.793 % CO₂ 0.00 % N₂ 0.00 % H₂S 0.00
 d 1.995 F 0.018231 Q_m 1.046 M_{cfcd} (L/H) (P_f Q_m)² 0.000364 P_{cr} 666 T_{cr} 421

TIME	SOURCE	1	2	3	4	5	6	7	8	9	10
H		0	5120		10239						
GH		0	4060		8120						
37.5GH		0	152241		304482						
P _c or P _n		2105.2	2639.2	2632.2	3158.2	3144.2					
P _r		3.16	3.96	3.95	4.74	4.72					
P _r		523	569	569	614	614					
P _r		1.24	1.35	1.35	1.46	1.46					
2		0.578	0.685	0.685	0.779	0.778					
P/2 P/2		3644.74	3052.05	3842.63	4053.13	4040.35					
P/P _w		6.9689	6.7772	6.7592	6.6012	6.5804					
(P/P _w) ² /1000		0.048566	0.045931	0.045687	0.043576	0.043301					
(P/P _w) ² /1000		0.000364	0.000364	0.000364	0.000364	0.000364					
(P/P _w) ² /1000		0.000364	0.000364	0.000364	0.000364	0.000364					
P _n		142.428	146.394	146.777	150.234	150.701					
P _n		534	527	526	512	511					
P _n		288.822	289.205	297.011	297.479						
P _n		152411	152411	152411	152309						
P _n		152411	152411	152411	152411						

$$\Delta P = \frac{3[304482]}{142.428 + 4[146.777] + 150.701} = \frac{913447}{880.237} = 1037.7 \quad P = 2105.2 + 1037.7 = 3142.9$$