

WORK SHEET FOR STEPWISE CALCULATION

(SUBSURFACE)

PRESSURE (P_f & P_s)

XXXXXXXXXX

XXXXXXXXXX

RATE NO. 1

COMPANY Monsanto Company

LEASE

Coquina Federal

WELL NO. 1

DATE

5-27-75

LOCATION: UNIT J

SECTION

31

TOWNSHIP

20-S

RANGE

27-E

10690 H

10690

L/H

1.0

G

.64

% CO₂

% N₂

% H₂S

d 1.995

F

0.018231

Q_m

M²cfd

(L/H)

(F_rQ_m)²

2.000152

P_{cr}

670

T_{cr}

372

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0									
2	GH		0									
3	37.5GH		0									
4	P _c or P _n		2063.2	2409.2	2404.1	2398.8	2733.8					
5	P _r		3.08	3.59	3.59	3.58	4.08					
6	T		534	580	580	580	625					
7	T _r		1.44	1.56	1.56	1.56	1.68					
8	Z		.720	.798	.798	.798	.849					
9	O/Z P/Z		2865.5	3019.0	3012.7	3006.1	3220.0					
10	P/Z		5.3662	5.2097	5.1988	5.1874	5.1521					
11	(P/17) ² /1000		.028796	.027142	.027028	.026909	.026544					
12	L/H(F _r Q _m) ²		.000152	.000152	.000152	.000152	.000152					
13			.028948	.027294	.027180	.027061	.026696					
14	I _n		185.372	190.878	191.276	191.691	192.990					
15	M _n ² -P _n ²			346	341	336	335					
16	P _n ² +1			370.745	376.251	382.154	382.967					
17	M _n × H				128302		128294					
18	Σ(M _n × H)				128302		256596					

$$P = 2063.2 + 672.1 = 2735.3$$

$$769880 = 672.1$$

$$185.372 + 4(191.691) + 192.990$$

$$\text{delta } P = \frac{3(256560)}{185.372 + 4(191.691) + 192.990}$$