

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_t & P_s)
(SURFACE) (P_g & P_w)

Form C-122-E
Adopted 9-1-65

1st

COMPANY MESA PETROLEUM COMPANY LEASE RIO STATE WELL NO. # 1 DATE 5-24-79

LOCATION: Unit K Section 36 Township 18 Range 24

L 8701 H 8701 L/H 1.000 G .595 % CO₂ .53 % N₂ .39 % H₂S

d 1.995 $F_t \cdot 0.01823 Q_m$.946 $M^2 \text{ cfd}$ (L/H) ($F_t Q_m$)² .000297 P_{cr} 671 T_{cr} 358

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	4350.5		8701						
2	GH		0	2588.5		5177						
3	37.5GH		0	97071		194141						
4	P_c or P_n		2500.2	2796.9	2792.9	3085.2	3078.8		$P_s =$	3077.9		
5	P_r		3.73	4.17	4.16	4.60	4.59					
6	T		534	577.5	577.5	621	621					
7	T_r		1.49	1.61	1.61	1.73	1.73					
8	Z		.772	.821	.821	.857	.857					
9	P/Z P/Z	$\bar{4} \div \bar{8}$	3238.6	3406.7	3401.8	3600.0	3592.5					
10	P/TZ	$\bar{9} \div \bar{6}$	6.0648	5.8991	5.8906	5.7970	5.7850					
11	$(P/TZ)^2/1000$ ($100/2/1000$)		.036782	.034800	.034699	.033606	.033467					
12	$L/H(F_t Q_m)^2$		.000297	.000297	.000297	.000297	.000297					
13		$\bar{11} + \bar{12}$	.037079	.035097	.034997	.033903	.033764					
14	I_n	$\bar{10} \div \bar{13}$	163.563	168.080	168.319	170.988	171.337					
15	$M = P_n - P_{n-1}$		297	293	292	286						
16	$N = I_n + I_{n-1}$		331.643	331.882	339.307	339.656						
17	$M \times N$	$\bar{15} \times \bar{16}$	97141			97.100						
18	$\Sigma (M \times N)$	$\Sigma \bar{17}$	97000									