

WORK SHEET FOR STEPWISE CALCULATION
 (SUBSURFACE) PRESSURE (P_c & P_w)
 (SURFACE)

Form C-122E
 Adopted 9-1-65

COMPANY Atlantic Richfield LEASE W. G. Smith Fed. Gas Com WELL NO. 1 DATE 6-12-72

LOCATION: Unit G Section 13 Township 23S Range 24E

L 10350 H 10350 L/H 1.0 G 0.585 % CO₂ 0.64 % N₂ 0.22 % H₂S

d 1.995 F_r 0.018231 Q_m 0 M²cid (L/H) (F_rQ_m)² 0 P_{cr} 673.9 T_{cr} 349.1

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		10350	5175			0			$\Delta P = 3 (37.5)_{GH}$		
2	GH		6054.75	3027.38			0			$= 3(37.5)(0.585)(10350)$		
3	37.5GH		227,053	113,527			0			$236.698 + 4(240.194) + 243.558$		
4	P _c or P _n		2266.3	2033.2	2031.4	2031.6	1796.9	1793.2	1793.6	$= 3(227.053)$		
5	P _r		3.36	3.02	3.01	3.01	2.67	2.66	2.66	$= 472.7$		
6	T		623.0	577.5	377.5	577.5	532.0	532.0	532.0			
7	T _r		1.78	1.65	1.65	1.65	1.52	1.52	1.52			
8	Z		0.886	0.844	0.845	0.845	0.797	0.798	0.798	$P_w = 2266.3 - 472.7$		
9	P/Z		2557.9	2409.0	2404.0	2404.3	2254.6	2247.1	2247.6	$= 1793.6$		
	P/TZ		9.6	4.1714	4.1628	4.1633	4.2380	4.2239	4.2248			
11	(P/TZ) ² /1000		102/1000									
12	L/H(F _r Q _m) ²											
13												
14	I _n		10 ÷ 13	243.558	239.728	240.223	240.194	235.960	236.748	236.698		
15	M = P _n - P _{n-1}			233.1	234.9	234.7	234.7	238.4	238.0			
16	N = I _n + I _{n-1}			483.286	483.781	483.752	476.154	476.942	476.892			
17	M x N											
18	Σ (M x N)		Σ 17	227,053			113,516		113,500			