

WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE (P_c & P_w)
 (P_c & P_w)
 Rate # 2

PANY _____ LEASE _____ DATE _____
 SECTION _____ TOWNSHIP _____ RANGE _____
 13542 H 13542 L/H 1.0 G. 619 % CO₂ 14 % N₂ 2 % H₂S
 d F_r 0_m M² cfd (L/H) (F_r Q_m)² P_{cr} 671 T_{cr} 365

ITEM	SOURCE	1	2	3	4	5	6	7	8	9
H		13542	6771							
Gh		8382	4191							
37.5Gh		314344	157172							
P _c or P _n		4671.9	4094.3	4074.1	4053.3	3436.7	3406.9	3374.2		
P _r		6.96	6.10	6.07	6.04	5.12	5.08	5.03		
T		648	581	581	581	514	514	514		
L _r		1.78	1.59	1.59	1.59	1.41	1.41	1.41		
Z		.981	.894	.892	.891	.772	.769	.767		
O/L P/Z	4 ÷ 8	4762.3	4579.8	4567.4	4549.1	4451.7	4430.3	4399.3		
P/LZ	9 ÷ 6	7.3493	7.8826	7.8612	7.8298	8.6609	8.6193	8.5590		
(P/LZ) ² / 1000	(10 ² / 1000)									
L/n(F _r Q _m) ²										
I _n	11 ÷ 12									
P _n - P _{n-1}	10 ÷ 13	136.066	126.861	127.205	127.716	115.460	116.017	116.835		
P _{n-1} + I _n			578	598	619	617	646	679		
P _n × I _n			272.132	262.927	254.061	254.922	243.177	231.478		
Σ (P _n × I _n)	15 × 16				157.767			157.174		
	Σ 17				157.267			314.441		

Rate P_c = 136.066 + 4(127.716) + 116.835 = 943.031
 3(314.444) = 943.031
 943.031 / 763.765 = 1234.7 P_c = 4671.9 - 1234.8 = 3437