

WORK SHEET FOR STEPWISE CALCULATION

(SUBSURFACE) PRESSURE (P_f & P_s)

(SURFACE) (P_c & P_w)

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

COMPANY Toporo Oil & Gas LEASE Cobana WELL NO. 1 DATE 9/29/77

LOCATION: Unit N Section 1 Township 22 Range 30

L 122.55 H 122.55 L/H 1.000 GPH 1110 % CO₂ 0 % N₂ 0 % H₂S 0

P_f 2441 P_s 010763 M_{std} (L/H) (P_f Q_m)² 0 P_c 652 T_{cr} 527

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		122.55	6122.2		0						
2	GH		13603	6801.5		0						
3	37.5GH		510114	255057		0						
4	P _c or P _n		5278.8	412373	4716.6	3634.5	3575.7	3576.4				
5	P _f		8.89	7.27	7.23	5.57	5.48	5.49				
6	T		656	595	595	534	534	534				
7	T _r		1.24	1.13	1.13	1.01	1.01	1.01				
8	Z		1.062	.920	.916	.735	.724	.726				
9	P/Z P/Z	4÷8	5460.3	5149.2	5149.2	4944.9	4938.8	4926.1				
10	P/TZ	9÷6	8.3235	8.6541	8.6540	8.2600	8.2486	8.2249				
11	(P/TZ) ² /1000	(10) ² /1000										
12	L/H(F _r Q _m) ²											
13		I ₁ + I ₂										
14	I _n	I ₀ ÷ I ₃	120.141	115.551	115.553	102.990	108.124	108.402				
15	M = P _n - P _{n-1}			1061	1082	1082	1141	1140				
16	N = I _n + I _{n-1}			235.662	235.694	223.543	223.677	223.955				
17	M x N	15 x 16			255059			255322				
18	Σ (M x N)	Σ I ₇			255055							