

WORK SHEET FOR STEPWISE CALCULATION (SUBSURFACE) PRESSURE (P_f & P_s)
 (SURFACE) (P_f & P_s) 3rd

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

COMPANY Liberty Oil & Gas LEASE Lee Federal Com WELL NO. 2 DATE 3/27/83

LOCATION: Unit H 11230 Section 25 Township 20S Range 28E

L 11230 H 11230 L/H 1.000 G mix .6355 % CO₂ .990 % N₂ .446 % H₂S

d 1.995 F_r .018231 Q_m 5.416 M²cid (L/H) (F_rQ_m)² .009749 P_{cr} 670 T_{cr} 372

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	5615		11230						
2	GH		0	3568.3		7136.7						
3	37.5GH		0	133,812		267,625						
4	P _c or P _n		3173.2	3771.8	3761.9	4349.9	4335.9		Ps = 4333.5			
5	P _r		4.74	5.63	5.61	6.49	6.47					
6	T		534	590	590	646	646					
7	T _r		1.44	1.59	1.59	1.74	1.74					
8	Z		.774	.873	.872	.940	.939					
9	P/Z P/Z	4.8	4099.7	4320.5	4314.1	4627.5	4617.6					
10	P/TZ	9.6	7.6774	7.3229	7.3120	7.1634	7.1480					
11	(P/TZ) ² /1000	(10.2/1000)	.058943	.053625	.053465	.051314	.051093					
12	L/H(F _r Q _m) ²		.009749	.009749	.009749	.009749	.009749					
13			.068692	.063374	.063214	.061063	.060842					
14	I _n	10 ÷ I ₃	111.766	115.551	115.670	117.312	117.484					
15	M = P _n - P _{n-1}			599	589	588	574					
16	N = I _n + I _{n-1}			227.317	227.436	232.982	233.154					
17	M × N	15 × 16			133882		133842					
18	Σ (M × N)	Σ 17			133743							