

(SUBSURFACE) PRESSURE (P_c & P_w)
(SURFACE)

WORK SHEET FOR STEP WISE CALCULATION

FLOW NO. 4

COMPANY SKELLY OIL COMPANY LEASE FORTY NINE RIDGE UNIT WELL NO. 2 DATE 12-1-65

LOCATION: Unit G Section G Township Range

L H L/H G % CO₂ 1.31 % N₂ 0.59 % H₂S -

2 1/2" d Fr = 0.0001/Q_m 0 M² cfd (L/H) (F₁Q_m)² 0 P_{ci} 675 T_{ci} 342
4 1/2" d Fr = 0.001233 Q_m 0

TABLE IX & X

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		13981	13500	12510	6250			0			
2	GH		8039.08	7187.50	7187.50	3593.75			0			
3	37.5GH		301466	269531	269531	134766			0			
	E _{st. m}		0	-81.1	0	-3095	-311.5	-311.3	-311.8	-316.3	-315.7	-315.8
	P _c or P _n		2713	2631.9	2631.9	2322.4	2320.4	2320.6	2001.8	2004.3	2004.9	2004.8
5	P _i		4.02	3.90	3.90	3.44	3.44	3.44	2.98	2.97	2.97	2.9
6	T ^{°K}		645	633	633	581			530			531
7	T _i		1.87	1.85	1.85	1.70	1.70	1.70	1.55	1.55	1.55	1.5
8	Z		.824	.904	.904	.858	.858	.858	.801	.802	.802	.80
9	P/Z	4÷8	3292.5	2911.4	2911.4	2706.8	2704.4	2704.4	2507.9	2499.1	2499.7	2499.8
10	P/TZ	9÷6	5.10470	4.59940	4.59940	4.65890	4.65470	4.65520	4.73190	4.71530	4.71620	4.71620
11	(P/TZ) ² /1000	(10÷2)/1000	.026058	.021154	.021154	.021705	.021666	.021671	.022391	.022234	.022248	.022248
12	L/H(F ₁ Q _m) ²		0	0	0	0			0			
13	I ₁ + I ₂		.026058	.021154	.021154	.021705	.021666	.021671	.022391	.022234	.022248	.022248
14	I _n	I ₀ ÷13	195.898	217.425	217.425	214.646	214.839	214.812	211.330	212.076	212.010	212.020
15	M=P _n -P _{n-1}		0	-76.2	0	-311.5	-311.3	-311.3	-316.3	-315.7	-315.8	-315.8
16	N=I _n +I _{n-1}		195.898	413.323	217.425	432.071	432.264	432.237	426.142	426.888	426.822	426.832
17	M x N	I ₅ x I ₆	0					-134554.8				-124793.0
18	Σ(M x N)	Σ I ₇	301466		269531			124996.2				125000

Flowing Bottom Pressure was measured with the manometer