

1st

PRESSURE (P₁ & P₂)
~~XXXXXX~~(SUBSURFACE)
~~XXXXXXXX~~

WORK SHEET FOR STEPWISE CALCULATION

COMPANY AMINOIL USA, INC. LEASE FEDERAL 19-1 WELL NO. 1 DATE 2/24/83LOCATION: Unit Section 19 Township 19S Range 33EL 13089 H 13089 L/H 1.000 G .7319 % CO₂ 5.002 % N₂ .607 % H₂S d 2.441 F_r .0107 Q_m .124 M²cfd (L/H) (F_rQ_m)² .000002 P_{CT} 689 T_{CT} 392

TABLE 12.5

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	6545		13089						
2	GH		0	4789.9		9580						
3	37.5GH		0	179622		359244						
4	P _c or P _n		2873.2	3567.5	3546.0	4216.3	4178.0		P _g = 4174.4			
5	P _r		4.17	5.18	5.15	6.12	6.06					
6	T		534	599.5	599.5	665	665					
7	T _r		1.36	1.53	1.53	1.70	1.70					
8	Z		.696	.819	.817	.923	.920					
9	P/Z P/Z	4-8	4128.2	4355.9	4340.3	4568.1	4541.3					
10	P/TZ	9-6	7.7306	7.2660	7.2398	6.8693	6.8290					
11	(P/TZ) ² /1000	(10) ² /1000	.059763	.052794	.052415	.047187	.046636					
12	L/H(F _r Q _m) ²		.000002	.000002	.000002	.000002	.000002					
13		11 + 12	.059765	.052796	.052417	.047187	.046636					
14	I _n	10 + 13	129.351	137.623	138.120	145.569	146.426					
15	M = P _n · P _n ⁻¹			694	673	670	632					
16	N = I _n + I _n - 1			266.974	267.470	283.689	284.546					
17	M × N	15 × 16			179956		179830					
18	Σ (M × N)	Σ 17			179288							