

PARAMETER	SYMBOL/EQUATION	UNITS	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4	TRIAL 5	TRIAL 6	TRIAL 7
1 Specific Gravity of Well Fluid	G	Air=1.000	0.621	0.621	0.621	0.621			
2 Percent Carbon Dioxide	%CO2	Decimal	0.66	0.66	0.66	0.66			
3 Percent Nitrogen	%N2	Decimal	0.20	0.20	0.20	0.20			
4 Percent Hydrogen Sulfide	%H2S	Decimal	0.00	0.00	0.00	0.00			
5 Critical Pressure	Pcr	PSIA	674	674	674	674			
6 Critical Temperature	Tcr	Degrees R	363	363	363	363			
7 Length of Flow Channel	L	Feet	8,844	8,844	8,844	8,844			
8 Vertical Depth Corresponding to L	H	Feet	8,844	8,844	8,844	8,844			
9 Inside Diameter	d	Inches	4.000	4.000	4.000	4.000			
10 Outside Diameter	do	Inches	2.375	2.375	2.375	2.375			
11 Flow Rate	Qm	MMGFD	1.013	1.013	1.013	1.013			
12 Wellhead Temperature	Tw	Degrees R	520	520	520	520			
13 Temperature at Vertical Depth H	Ts	Degrees R	626	626	626	626			
14 Average Temperature	T	Degrees R	573	573	573	573			
15 Compressibility Factor	Z est	Dimensionless	0.918	0.890	0.895	0.890			
16	T * Z		526	510	513	510			
17	(G * H) / (T * Z)		10.441	10.770	10.709	10.770			
18	s		0.392	0.404	0.402	0.404			
19 Weight of Column Factor	e^s	Dimensionless	1.479	1.498	1.494	1.498			
20 Shut-in or Flowing Wellhead Pressure	Pc or Pt	PSIA	846	846	846	846			
21	Pc^2 or Pt^2		715.7	715.7	715.7	715.7			
22	e^s * (Pc^2 or Pt^2)		1,058.7	1,071.8	1,069.4	1,071.8			
23 Friction Factor	Fr		0.007743	0.007743	0.007743	0.007743			
24 Combined Compressibility Factor	Fc = Fr * T * Z		4.073	3.949	3.971	3.949			
25	Fc * Qm		4.13	4.00	4.02	4.00			
26	(L / H) * (Fc * Qm)^2		17.0	16.0	16.2	16.0			
27 Pressure Loss Factor	Fs = (L / H) * (Fc * Qm)^2 * (e^s - 1)		8.2	8.0	8.0	8.0			
28	Ps^2 = (e^s * Pt^2) + Fs		1,067	1,080	1,077	1,080			
29 Shut-in or Flowing Reservoir Pressure	Pf or Ps	PSIA	1,033	1,039	1,038	1,039			
30 Average Pressure	P	PSIA	939	943	942	943			
31 Reduced Pressure	Pr	Dimensionless	1.39	1.40	1.40	1.40			
32 Reduced Temperature	Tr		1.58	1.58	1.58	1.58			
33 Compressibility Factor	Z calc	Dimensionless	0.890	0.895	0.890	0.890			