

WORK SHEET FOR STEPWISE CALCULATION (SURFACE) PRESSURE (P<sub>c</sub> & P<sub>w</sub>)

COMPANY Cities Service Co LEASE Brantley 'A' WELL NO. 1 DATE 8-20-81

LOCATION: Unit 12,063 H 12,063 L/H 1,000 G 5891 % CO<sub>2</sub> 1.436 % N<sub>2</sub> 1.750 % H<sub>2</sub>S 0  
 Section 1 Township 1 Range 350  
 d 2.441 F<sub>r</sub> 0.0763 O<sub>m</sub> 1.710 M<sup>2</sup> cfd (L/H) (F<sub>r</sub>O<sub>m</sub>)<sup>2</sup> 0.00058 P<sub>cr</sub> 617 T<sub>cr</sub> 350

ZND RATE

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	F		0	6032				12,063				
2	GH		0	3553.5				7106.3				
3	STEAM		0	133,254				266,487				
4	F <sub>r</sub> O <sub>m</sub>		30232	35226	3499,166	3482,937	3480,784	3439,378	3899,961	3883,17	3891,557	
5	F <sub>r</sub>		4.47	5.20	5.17	5.15	5.14	5.92	5.76	5.74	5.73	
6	F <sub>w</sub>		519	588	588	588	588	657	657	657	657	
7	F <sub>w</sub>		1.48	1.68	1.68	1.68	1.68	1.88	1.88	1.88	1.88	
8	F <sub>w</sub>		.718	.879	.854	.877	.877	.956	.953	.953	.953	3425.189
9	F <sub>w</sub>		3885.86	4007.47	4099.11	3969.66	3968.97	4120.50	4092.99	4075.31	4072.94	
10	F <sub>w</sub>		7.48728	6.815476	6.97127	6.75113	6.74995	6.27169	6.287686	6.269106	6.199372	
11	F <sub>w</sub>		0.560582	0.414500	0.48898	0.45577	0.45561	0.39334	0.38717	0.384700	0.384322	
12	F <sub>w</sub>		0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	
13	F <sub>w</sub>		0.561162	0.46808	0.48656	0.45635	0.45618	0.393921	0.388555	0.385340	0.385340	
14	F <sub>w</sub>		133,423	146,54	143,274	147,934	147,9608				161,06	
15	M <sub>w</sub> F <sub>w</sub> F <sub>w</sub>		0	499,367	475,9166	459,787	457,589	457,589	419,172	402,981	400,768	
16	M <sub>w</sub> F <sub>w</sub> F <sub>w</sub>		0	279,966	276,70	281,358	281,383	307,172	319,52	321,517	322,035	
17	M <sub>w</sub> F <sub>w</sub> F <sub>w</sub>		0				178,158				173,847	
18	Σ (M <sub>w</sub> F <sub>w</sub> F <sub>w</sub> )											