

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P<sub>w</sub>)

COMPANY AMOCO PROD. CO. LEASE ST. MS GAS COM. WELL NO. 1 DATE 10-18-89

LOCATION: Unit C Section 12 Township 24S Range 27E  
1 1308 H 1308 L/H 1,000 G .576 % CO<sub>2</sub> .38 % N<sub>2</sub> .78 % H<sub>2</sub>S —

d 1.595 F<sub>i</sub> .018231 GH 6573.41 (2) RATE (3) RATE P<sub>ci</sub> 672 T<sub>ci</sub> 346  
TABLE IX B X TABLE IX B X

LINE	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 Q <sub>m</sub>	.115	.115	.166	.166	.218	.218	.272	.272	.272	.272
2 T <sub>w</sub> (W.H. 9R)	534	534	534	534	534	534	534	534	534	534
3 T <sub>s</sub> (B.H. 9R)	646	646	646	646	646	646	646	646	646	646
4 T = (L <sub>w</sub> + T <sub>s</sub> ) <sup>2</sup>	590	590	590	590	590	590	590	590	590	590
5 Z (Est.)	.886	.877	.894	.884	.904	.895	.924	.915	.915	.915
6 T <sub>z</sub>	522.7	517.2	527.4	521.5	533.3	528.0	545.1	532.8	532.8	532.8
7 GH/T <sub>z</sub>	12.460	12.588	12.348	12.488	12.212	12.334	11.951	12.065	12.065	12.065
8 e <sup>s</sup> (Table XIV)	1.595	1.643	1.588	1.597	1.580	1.585	1.575	1.572	1.572	1.572
9 1-e <sup>s</sup> (Table XIV)	.393	.376	.370	.373	.347	.370	.377	.368	.368	.368
10 P <sub>1</sub>	1468.2	1468.2	1336.2	1336.2	1168.2	1168.2	900.2	900.2	900.2	900.2
11 P <sub>1</sub> 2/1000	2155.6	2155.6	1785.4	1785.4	1364.7	1364.7	810.4	810.4	810.4	810.4
12 F <sub>1</sub> (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13 F <sub>1</sub> = F <sub>1</sub> T <sub>z</sub>	9.530	9.233	9.266	9.508	9.723	9.622	9.508	9.233	9.233	9.233
14 F <sub>1</sub> Q <sub>m</sub>	1.095	1.084	1.156	1.152	2.119	2.058	2.053	2.053	2.053	2.053
15 L/H (F <sub>1</sub> Q <sub>m</sub> ) <sup>2</sup>	1.201	1.176	2.548	2.491	2.043	2.008	1.978	1.978	1.978	1.978
16 F <sub>w</sub> = L/H (F <sub>1</sub> Q <sub>m</sub> ) <sup>2</sup> (1-e <sup>-s</sup> )	.948	.942	1.944	.931	1.650	1.631	2.654	2.638	2.638	2.638
17 P <sub>w</sub> <sup>2</sup> = P <sub>1</sub> <sup>2</sup> + F <sub>w</sub>	2156.0	2156.1	1786.3	1786.3	1366.3	1366.3	812.9	812.9	812.9	812.9
18 P <sub>w</sub> <sup>2</sup> = e <sup>s</sup> P <sub>w</sub> <sup>2</sup>	3440.2	3456.7	2138.4	2853.3	2159.9	2165.8	1242.8	1249.1	1249.1	1249.1
19 P <sub>s</sub>	1854.9	1859.2	1684.7	1689.1	1469.6	1472.0	1128.0	1128.0	1128.0	1128.0
20 P = (P <sub>1</sub> + P <sub>s</sub> ) <sup>2</sup>	1945.4	1663.7	1514.4	1512.0	1218.9	1220.6	810.1	810.1	810.1	810.1
21 P <sub>1</sub> = (P <sub>1</sub> P <sub>ci</sub> )	2.47	2.47	2.25	2.25	1.96	1.96	1.51	1.51	1.51	1.51
22 T <sub>1</sub> = (T/T <sub>ci</sub> )	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
23 Z (Table XI)	.877	.877	.884	.884	.895	.895	.915	.915	.915	.915