

**WORK SHEET FOR STEPWISE CALCULATION**  
(SUBSURFACE) PRESSURE (P<sub>f</sub> & P<sub>s</sub>)  
(SURFACE) (P<sub>1</sub> & P<sub>2</sub>)  
3rd.

Form C-122-E  
Adopted 9-1-65

COMPANY MESA PETROLEUM CO. LEASE RIO STATE WELL NO. # 2 DATE 8-15-79

LOCATION: Unit J Section 36 Township 18 Range 24

L 8657 H 8657 L/H 1.000 G .586 % CO<sub>2</sub> .75 % N<sub>2</sub> .41 % H<sub>2</sub>S       

d 1.995 F<sub>r</sub> .018231 Q<sub>m</sub> 7.123 M<sub>2</sub> cld (L/H) (F<sub>r</sub> Q<sub>m</sub>)<sup>2</sup> .016863 P<sub>ci</sub> 672 T<sub>ci</sub> 354

TABLE IX & X      TABLE IX & X

| LINE | ITEM                                                   | SOURCE                          | 1       | 2       | 3       | 4       | 5       | 6 | 7                | 8      | 9 | 10 |
|------|--------------------------------------------------------|---------------------------------|---------|---------|---------|---------|---------|---|------------------|--------|---|----|
| 1    | H                                                      |                                 | 0       | 4328.5  |         | 8657    |         |   |                  |        |   |    |
| 2    | GH                                                     |                                 | 0       | 2536.5  |         | 5073    |         |   |                  |        |   |    |
| 3    | GH                                                     |                                 | 0       | 95119   |         | 190238  |         |   |                  |        |   |    |
| 4    | P <sub>1</sub> = P <sub>2</sub> = P <sub>m</sub>       |                                 | 2203.2  | 2612.7  | 2614.6  | 3021.0  | 3023.3  |   | P <sub>s</sub> = | 3023.9 |   |    |
| 5    | P <sub>1</sub>                                         |                                 | 3.29    | 3.89    | 3.89    | 4.50    | 4.50    |   |                  |        |   |    |
| 6    | P <sub>2</sub>                                         |                                 | 534     | 577     | 577     | 620     | 620     |   |                  |        |   |    |
| 7    | P <sub>1</sub>                                         |                                 | 1.51    | 1.63    | 1.63    | 1.75    | 1.75    |   |                  |        |   |    |
| 8    | P <sub>2</sub>                                         |                                 | .772    | .817    | .817    | .874    | .874    |   |                  |        |   |    |
| 9    | P <sub>1</sub> - P <sub>2</sub> / Z                    | 4.5                             | 2860.4  | 3197.9  | 3200.2  | 3456.6  | 3459.2  |   |                  |        |   |    |
| 10   | P <sub>1</sub> - P <sub>2</sub>                        | 9.6                             | 5.3565  | 5.5423  | 5.5463  | 5.5751  | 5.5793  |   |                  |        |   |    |
| 11   | (P <sub>1</sub> - P <sub>2</sub> ) <sup>2</sup> / 1000 | (10) <sup>2</sup> / 1000        | .028692 | .030717 | .030761 | .031082 | .031129 |   |                  |        |   |    |
| 12   | L/H (F <sub>r</sub> Q <sub>m</sub> ) <sup>2</sup>      |                                 | .016863 | .016863 | .016863 | .016863 | .016863 |   |                  |        |   |    |
| 13   |                                                        | I <sub>1</sub> + I <sub>2</sub> | .045555 | .047580 | .047624 | .047945 | .047992 |   |                  |        |   |    |
| 14   | I <sub>1</sub>                                         | I <sub>0</sub> - I <sub>3</sub> | 117.583 | 116.484 | 116.459 | 116.282 | 116.256 |   |                  |        |   |    |
| 15   | M = P <sub>n</sub> - P <sub>n-1</sub>                  |                                 | 404     | 406     | 406     | 409     |         |   |                  |        |   |    |
| 16   | N = I <sub>n</sub> + I <sub>n-1</sub>                  |                                 | 234.067 | 234.042 | 232.741 | 232.715 |         |   |                  |        |   |    |
| 17   | M x N                                                  | 15 x 16                         | 95109   |         |         | 95118   |         |   |                  |        |   |    |
| 18   | Σ (M x N)                                              | Σ I <sub>7</sub>                | 95129   |         |         |         |         |   |                  |        |   |    |