

# WORK SHEET FOR STEPWISE CALCULATION

(SURFACE) PRESSURE (P<sub>f</sub> & P<sub>s</sub>)  
(SURFACE) (P<sub>c</sub> & P<sub>w</sub>)

Form C-122E  
Adopted 9-1-65

Rate 2

COMPANY Grace Petr. Corp. LEASE New Mexico Federal "G" WELL NO. 1 DATE 6-12-80

LOCATION: Unit I Section 6 Township 21-S Range 32 E

L 13983 H 13983 L/H 1.0 G .635 % CO<sub>2</sub> .49 % N<sub>2</sub> .29 % H<sub>2</sub>S 0

d F<sub>r</sub> Q<sub>m</sub> M<sup>2</sup>cfd (L/H) (F<sub>r</sub>Q<sub>m</sub>)<sup>2</sup> P<sub>cr</sub> 670 T<sub>cr</sub> 372

TABLE IX & X

| LINE | ITEM                                             | SOURCE                          | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8 | 9 |
|------|--------------------------------------------------|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---|---|
| 1    | H                                                |                                 | 13983   | 6992    |         |         | 0       |         |         |   |   |
| 2    | GH                                               |                                 | 8879    | 4439    |         |         | 0       |         |         |   |   |
| 3    | 37.5GH                                           |                                 | 332970  | 166485  |         |         | 0       |         |         |   |   |
| 4    | P <sub>c</sub> or P <sub>n</sub>                 |                                 | 4736.2  | 4113.4  | 4104.3  | 4095.3  | 3455.1  | 3440.7  | 3426.3  |   |   |
| 5    | P <sub>r</sub>                                   |                                 | 7.07    | 6.14    | 6.13    | 6.11    | 5.16    | 5.14    | 5.11    |   |   |
| 6    | T                                                |                                 | 648     | 594     | 594     | 594     | 540     | 540     | 540     |   |   |
| 7    | T <sub>r</sub>                                   |                                 | 1.74    | 1.60    | 1.60    | 1.60    | 1.45    | 1.45    | 1.45    |   |   |
| 8    | Z                                                |                                 | .977    | .899    | .898    | .897    | .795    | .794    | .793    |   |   |
| 9    | P/Z                                              | 4÷8                             | 4847.6  | 4575.5  | 4570.5  | 4565.5  | 4346.1  | 4333.4  | 4320.7  |   |   |
| 10   | P/TZ                                             | 9÷6                             | 7.4810  | 7.7030  | 7.6945  | 7.6861  | 8.0483  | 8.0249  | 8.0013  |   |   |
| 11   | (P/TZ) <sup>2</sup> /1000                        | (10) 2/1000                     |         |         |         |         |         |         |         |   |   |
| 12   | L/H(F <sub>r</sub> Q <sub>m</sub> ) <sup>2</sup> |                                 |         |         |         |         |         |         |         |   |   |
| 13   |                                                  | I <sub>1</sub> + I <sub>2</sub> |         |         |         |         |         |         |         |   |   |
| 14   | I <sub>n</sub>                                   | I <sub>0</sub> ÷ I <sub>3</sub> | 133.671 | 129.819 | 129.962 | 130.103 | 124.248 | 124.610 | 124.978 |   |   |
| 15   | M = P <sub>n</sub> - P <sub>n-1</sub>            |                                 |         | 623     | 632     | 641     | 640     | 655     | 669     |   |   |
| 16   | N = I <sub>n</sub> + I <sub>n-1</sub>            |                                 |         | 267.343 | 263.490 | 259.781 | 260.056 | 254.352 | 248.859 |   |   |
| 17   | M x N                                            | I <sub>5</sub> x I <sub>6</sub> |         |         |         | 166519  |         |         | 166487  |   |   |
| 18   | Σ (M x N)                                        | Σ I <sub>7</sub>                |         |         |         | 166519  |         |         | 335006  |   |   |

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One copy to be filed in District Office (Work copy acceptable)