# NEW MEXICO OIL CONSERVATION COMMISSION

## WELL DELIVERABILITY TEST REPORT FOR 19 75

Form C122-A
Revised 1-1-66

| POOL NAME | POOL SLOPE | FORMATION | COUNTY |
|---|---|---|---|
| West Kutz | n= 0.85 | Pictured Cliffs | San Juan |

| COMPANY | | | WELL NAME AND NUMBER | | |
|---|---|---|---|---|---|
| Gulf Oil Corporation | | | Scott "E" Federal #3 | | |
| UNIT LETTER | SECTION | TOWNSHIP | RANGE | PURCHASING PIPELINE | |
| O | 23 | 27N | 11W | Southern Union Gas Co. | |
| CASING O.D. – INCHES | CASING I.D. – INCHES | SET AT DEPTH – FEET | TUBING O.D. – INCHES | TUBING I.D. – INCHES | TOP – TUBING PERF. – FEET |
| 5.500 | 5.012 | 2070 | 1.315 | 1.049 | 2132 |
| GAS PAY ZONE | | WELL PRODUCING THRU | | GAS GRAVITY | GRAVITY X LENGTH |
| FROM 2070 TO 2148 | | CASING X TUBING | | .660 | |
| DATE OF FLOW TEST | | | DATE SHUT-IN PRESSURE MEASURED | | |
| FROM 7-17-75 TO 7-25-75 | | | 7-25-75 to 8-1-75 | | |

### PRESSURE DATA – ALL PRESSURES IN PSIA

| (a) Flowing Casing Pressure (DWt) | (b) Flowing Tubing Pressure (DWt) | (c) Flowing Meter Pressure (DWt) | (d) Flow Chart Static Reading | (e) Meter Error (Item c – Item d) | (f) Friction Loss (a – c) or (b – c) | (g) Average Meter Pressure (Integr.) |
|---|---|---|---|---|---|---|
| 134 | 139 | 134 | 134 | 0 | 0 | 134 |
| **(h) Corrected Meter Pressure (g + e)** | **(i) Avg. Wellhead Press. $P_t$ = (h + f)** | **(j) Shut-in Casing Pressure (DWt)** | **(k) Shut-in Tubing Pressure (DWt)** | **(l) $P_c$ = higher value of (j) or (k)** | **(m) Del. Pressure $P_d = \frac{80}{174}\%P_c$** | **(n) Separator or Dehydrator Pr. (DWt) for critical flow only** |
| 134 | 134 | 217 | 211 | 217 | | |

### FLOW RATE CORRECTION (METER ERROR)

| Integrated Volume – MCF/D | Quotient of $\frac{\text{Item c}}{\text{Item d}}$ | $\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ | Corrected Volume |
|---|---|---|---|
| 27 | $\frac{134}{134}$ = 1.000 | 1.000 | Q = 27 MCF/D |

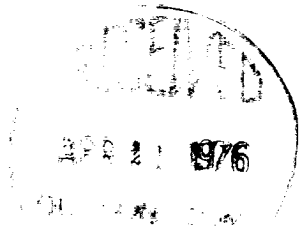
### WORKING PRESSURE CALCULATION

| $(1-e^{-s})$ | $(F_c Q_m)^2 (1000)$ | $R^2 = \frac{(F_c Q_m)^2 (1000)}{(1-e^{-s})}$ | $P_t^2$ | $P_w^2 = P_t^2 + R^2$ | $P_w = \sqrt{P_w^2}$ |
|---|---|---|---|---|---|
| | Friction Negligible | | 17956 | Use $P_t^2$ | |

### DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 27\left[\left(\frac{16813}{29133}\right)^{.5771}\right]^{.6267} = 16.9 \text{ MCF/D}$$

REMARKS:



### SUMMARY

| | | |
|---|---|---|
| Item h | / | Psia |
| $P_c$ | 217 | Psia |
| Q | 27.0 | MCF/D |
| $P_w$ | 134 | Psia |
| $P_d$ | 174 | Psia |
| D | 16.9 | MCF/D |

Company Gulf Oil Corporation
By D.T. Berlin
Title Area Engineer
Witnessed By
Company