

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-1
Effective 1-1-65

RECEIVED

OCT 27 1975

O. C. C.

ARTESIA, OFFICE

| | |
|------------------|-----|
| DISTRIBUTION | 3 |
| SALE | |
| FILE | |
| G.S. | |
| ID OFFICE | |
| TRANSPORTER | OIL |
| | GAS |
| OPERATOR | |
| PRORATION OFFICE | |

Operator
Yates Petroleum Corporation

Address
207 South 4th Street - Artesia, NM 88210

Reason(s) for filing (Check proper box)
New Well ☒ Change in Transporter of:
Recompletion ☐ Oil ☐ Dry Gas ☐
Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐

Other (Please explain) **ARTESIA, OFFICE**

If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|---|---------------|--|--|------------------|
| Lease Name Hnulik "EJ" Com | Well No. 1 | Pool Name, including Formation Kennedy-Farms Morrow | Kind of Lease State, Federal or Fee | Lease No. Fee |
| Location Unit Letter D ; 1315 Feet From The North Line and 660 Feet From The West | | | | |
| Line of Section 26 Township 17S Range 26E , NMPM, Eddy County | | | | |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | | | | | |
|--|--|------------|-------------|-------------|------------------------------------|
| Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> Navajo Crude Purchasing Company | Address (Give address to which approved copy of this form is to be sent) No. Freeman Avenue-Artesia, NM 88210 | | | | |
| Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> Transwestern Pipe Line Company | Address (Give address to which approved copy of this form is to be sent) P. O. Box 2512-Houston, TX 77001 | | | | |
| If well produces oil or liquids, give location of tanks. | Unit D | Sec. 26 | Twp. 17S | Rge. 26E | Is gas actually connected? When |

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

| | | | | | | | | |
|---|---------------------------------------|--------------------------|----------------------------|----------|--------|-----------|--------------|---------------|
| Designate Type of Completion - (X) | Oil Well | Gas Well | New Well | Workover | Deepen | Plug Back | Same Res'tv. | Diff. Res'tv. |
| | | X | X | | | | | |
| Date Spudded 6-11-75 | Date Compl. Ready to Prod. 7-12-75 | Total Depth 8850' | P.D.T.D. 8700' | | | | | |
| Elevations (DF, RKB, RT, GR, etc.) 3315.7 GR | Name of Producing Formation Morrow | Top Oil/Gas Pay 8584' | Tubing Depth 8549' | | | | | |
| Perforations 8584-90' | | | Depth Casing Shoe 8700' | | | | | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | DEPTH SET | SACKS CEMENT | | | | | |
| 17 1/2" | 13-3/8" | 462' | 300 sacks | | | | | |
| 12 1/4" | 8-5/8" | 1415' | 700 sacks | | | | | |
| 7-7/8" | 4 1/2" | 8700' | 295 sacks | | | | | |
| | 2-3/8" | 8549' | | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)


| | | | |
|---------------------------------|-----------------|---|------------|
| Date First New Oil Run To Tanks | Date of Test | Producing Method (Flow, pump, gas lift, etc.) | |
| Length of Test | Tubing Pressure | Casing Pressure | Choke Size |
| Actual Prod. During Test | Oil-Bbls. | Water-Bbls. | Gas-MCF |

GAS WELL

| | | | |
|---|-----------------------------------|-------------------------------------|-------------------------------|
| Actual Prod. Test-MCF/D 910 | Length of Test 24 | Bbls. Condensate/MMCF 8.12 | Gravity of Condensate 51.5 |
| Testing Method (pitot, back pr.) Back Pressure | Tubing Pressure (shut-in) 130# | Casing Pressure (shut-in) Packer | Choke Size 1/2" |

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


Eddie M. Mahfood - Engineer
(Title)
10-24-75
(Date)

OIL CONSERVATION COMMISSION

APPROVED **NOV 13 1975**
BY **W. A. Gressett**
TITLE **SUPERVISOR, DISTRICT II**

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT A ONE POINT BACK PRESSURE TEST FOR GAS WELL

copy 6-51
Form 1220-122
Revised 9-1-65
-21548

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| | | | | | | | | | |
|---|--------------|---------------------------|-------------------|---|--------------------|---|-----------|---------------------------------------|--|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special | | | | | | Test Date 12-8-75 | | DEC 12 1975 | |
| Company Yates Petroleum Corp. | | | | Connection Transwestern Pipeline Co. | | | | O. C. C. | |
| Pool Kennedy Farms | | | | Formation Morrow | | | | Unit ARTESIA, OFFICE | |
| Completion Date 7-12-75 | | Total Depth 8850' | | Plug Back TD 8656' | | Elevation 3316' GR | | Farm or Lease Name Hnulik "EJ" Com | |
| Csg. Size 4 1/2" | Wt. 11.6# | d 4.000 | Set At 8700' | Perforations: From 8584 To 8590' | | Well No. 1 | | | |
| Thg. Size 2-3/8" | Wt. 4.6# | d 1.995 | Set At 8549' | Perforations: From To | | Unit Sec. Twp. Rge. D 26 17S 26E | | | |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single | | | | | | Packer Set At 8549 | | County Eddy | |
| Producing Thru Tubing | | Reservoir Temp. °F 138 | | Mean Annual Temp. °F 62 | | Baro. Press. - P _a 13.2 | | State New Mexico | |
| L | H | G _g | % CO ₂ | % N ₂ | % H ₂ S | Prover | Meter Run | Taps Flanged | |
| | 8587 | 0.625 | 0.72 | 0.35 | - | | | | |

| FLOW DATA | | | | | | TUBING DATA | | CASING DATA | | Duration of Flow | |
|-----------|------------------------|---|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|------------------------|-------------|
| NO. | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. h _w | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | | Temp. °F |
| SI | | | | | | | 2395 | | | | 24hrs. |
| 1. | 2 | | 1.000 | 470 | 4 | 48 | 2304 | 57 | | | 1 hr. |
| 2. | | | | 470 | 12 | 64 | 2200 | 63 | | | 1 hr. |
| 3. | | | | 470 | 28 | 77 | 2066 | 68 | | | 1 hr. |
| 4. | | | | 470 | 55 | 84 | 1851 | 71 | | | 1 hr. |
| 5. | | | | | | | | | | | |

| RATE OF FLOW CALCULATIONS | | | | | | | |
|---------------------------|--------------------------|------------------|----------------------------|--|-------------------------------------|---|-------------------------|
| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp. Factor F _t | Gravity Factor F _g | Super Compress. Factor, F _{pv} | Rate of Flow Q, Mcfd |
| 1 | 4.946 | 43.964 | 483.2 | 1.012 | 1.265 | 1.0506 | 292 |
| 2 | 4.946 | 76.147 | 483.2 | .9962 | 1.265 | 1.0454 | 496 |
| 3 | 4.946 | 116.317 | 483.2 | .9840 | 1.265 | 1.0409 | 745 |
| 4 | 4.946 | 163.021 | 483.2 | .9777 | 1.265 | 1.0392 | 1036 |
| 5 | | | | | | | |

| NO. | P _t | Temp. °R | T _t | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|------|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1 | 0.72 | 508 | 1.39 | .906 | 112 | 51.5 | 0.625 | XXXXXX | 675 | 366 |
| 2 | 0.72 | 524 | 1.43 | .915 | | | | XXXXX | | |
| 3 | 0.72 | 537 | 1.47 | .923 | | | | | | |
| 4 | 0.72 | 544 | 1.49 | .926 | | | | | | |
| 5 | | | | | | | | | | |

| P _c 3083.2 P _c ² 9506 | | | | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.974$ | | (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.271$ | |
|---|-----------------------------|----------------|-----------------------------|---|--|--|--|
| NO. | P _t ² | P _w | P _w ² | P _c ² - P _w ² | | | |
| 1 | | 2949.2 | 8698 | 808 | | | |
| 2 | | 2834.2 | 8033 | 1473 | | | |
| 3 | | 2667.2 | 7114 | 2392 | | | |
| 4 | | 2392.2 | 5723 | 3783 | | | |
| 5 | | | | | | | |

| | | | | | | | |
|--|--|-----------------------------|--|---------------------------------|--|----------------|--|
| Absolute Open Flow 2437 Mcfd @ 15.025 | | | | Angle of Slope θ | | Slope, n 0.859 | |
| Remarks: DHP by Bennett Wireline Co. Test Witnessed by Transwestern PL Co. | | | | | | | |
| Approved By Commission: | | Conducted By: Don Weaver | | Calculated By: Eddie Mahfood | | Checked By: | |