OIL CONSERVATION DIV
811 S. 1st ST.
ARTESIA, NM 88210-2834

C 15 R

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

*SUBMIT IN TRIPLICATE*

1. Type of Well
   [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator
   YATES PETROLEUM CORPORATION (505) 748-1471)
3. Address and Telephone No.
   105 South 4th St., Artesia, NM 88210
4. Location of Well (Footage, Sec., T., R., M., of Survey Description)
   Surface: 1980' FNL & 910' FWL (Unit E, SWNW) SWNE
   Bottom Hole: 1980' FNL & 2405' FEL (Unit G, ~~SENW~~) SJS
   Section 27-T20S-R29E

5. Lease Designation and Serial No.
   NM-83068
6. If Indian, Allottee or Tribe Name
7. If Unit or CA, Agreement Designation
8. Well Name and No.
   Zinnia Federal Unit #1
9. API Well No.
   30-015-27939
10. Field and Pool, or Exploratory Area
    Und. Strawn and
    Undesignated Wolfcamp
11. County or Parish, State
    Eddy Co., NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | |
|---|---|---|
| [ ] Notice of Intent | [ ] Abandonment | [ ] Change of Plans |
| [X] Subsequent Report | [ ] Recompletion | [ ] New Construction |
| [ ] Final Abandonment Notice | [ ] Plugging Back | [ ] Non-Routine Fracturing |
| | [ ] Casing Repair | [ ] Water Shut-Off |
| | [ ] Altering Casing | [ ] Conversion to Injection |
| | [X] Other Allocations for commingling | [ ] Dispose Water |
| | | (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) |

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Please see attached letter for percentages for allocation of production between the Strawn and Wolfcamp formations.

RECEIVED
JAN 8 1996
OIL CON. DIV.
DIST. 2

1996
SJS

14. I hereby certify that the foregoing is true and correct
Signed Rusty Klein Title Production Clerk Date Dec. 8, 1995

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471



December 7, 1995

Tim Gum
New Mexico Energy, Minerals and Natural Resources Dep't.
Oil Conservation Division
P.O. Drawer DD
Artesia, NM 88210

Re: Order DHC-1143
Proposed Downhole Commingling Allocation
Zinnia Federal Unit Well No. 1
Unit E, Section 27, T20S, R29E
Eddy County, New Mexico

Dear Mr. Gum,

Yates Petroleum has recently implemented the downhole commingling of the Strawn (10965-10988' MD) and Wolfcamp (9902-9909', 10188-10216' MD) formations per Administrative Order DHC-1143. The commingled production rate is currently 37 bopd/104 bwpd/139 mcfd. The Strawn production rate before commingling was 5 bopd/4 bwpd/34 mcfd, therefore it is reasonable to say the Wolfcamp is currently contributing 32 bopd/100 bwpd/105 mcfd.

Yates Petroleum proposes allocating production between the Strawn and Wolfcamp as shown below.

*Strawn:* Best engineering estimate is that Strawn production will exhibit an exponential decline rate of 25%/year.

Oil: Q = 5 bopd
Qel = 1 bopd
d = 25%/yr

$$N = \frac{365\,(1-5)}{\ln\,(1-.25)} = 5075\ BO$$

Gas: Q = 34 mcfd
Qel = 10 mcfd
d = 25%/yr

$$N = \frac{365\,(10-34)}{\ln\,(1-.25)} = 30{,}450\ MCF$$

*Wolfcamp:* Best engineering estimate is that Wolfcamp production will exhibit an exponential decline rate of 90%/year.

Oil: Q = 32 bopd
Qel = 1 bopd
d = 90%

$$N = \frac{365\ (1-32)}{\ln\ (1-.9)} = 4914\ BO$$

Gas: Q = 105 mcfd
Qel = 10 mcfd
d = 90%

$$N = \frac{365\ (10-105)}{\ln\ (1-.9)} = 15{,}059\ MCF$$

*Allocation:* Strawn Oil $= \frac{5075}{5075 + 4914} = 50.81\%$, say 51%

Strawn Gas $= \frac{30{,}450}{30{,}450 + 15{,}059} = 66.91\%$, say 67%

Wolfcamp Oil = 49%
Wolfcamp Gas = 33%

If you have any questions, please call me at 505-748-4182.

Sincerely,

Brian Collins
Engineer

KBC/sj

xc: NMOCD Santa Fe
BLM Carlsbad