

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

RECEIVED

APR 11 1996

Oil Conservation Division

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 11525
Order No. R-4691-E**

**APPLICATION OF YATES PETROLEUM CORPORATION
FOR AMENDMENT OF THE SPECIAL RULES
AND REGULATIONS FOR THE NORTH DAGGER
DRAW-UPPER PENNSYLVANIAN POOL, AND FOR
THE CANCELLATION OF OVERPRODUCTION,
EDDY COUNTY, NEW MEXICO**

**CASE NO. 11526
Order No. R-5353-L-2**

**APPLICATION OF YATES PETROLEUM CORPORATION
FOR AMENDMENT OF THE SPECIAL RULES
AND REGULATIONS FOR THE SOUTH DAGGER
DRAW-UPPER PENNSYLVANIAN ASSOCIATED POOL,
AND FOR THE CANCELLATION OF OVERPRODUCTION,
EDDY COUNTY, NEW MEXICO.**

**CONOCO, INC.'S RESPONSE TO
YATES PETROLEUM CORPORATION'S MOTION
FOR A STAY OF DIVISION ORDERS**

CONOCO, INC., ("Conoco") by its attorneys, Kellahin & Kellahin, for its Response to the Motion of Yates Petroleum Corporation ("Yates") for a Stay of Division Orders R-4691-E and R-5353-L-2, states:

(1) that if such a stay is granted, Conoco will suffer irreparable harm;

(2) Yates' Motion is solely for delay with intent to circumvent the Rules and Regulations of the Division as evidenced by the proceedings on file herein, and should be denied; and

(3) THE DIVISION SHOULD ORDER THAT Yates' wells should be immediately shut in so that the status quo is maintained pending a final decision in this case.

YATES' OVERPRODUCTION WITHIN ALLOWABLE VIOLATION AREA

1. From February 23, 1995 to March 22, 1995, Yates proposed 39 North Dagger Draw wells to Nearburg Exploration Company ("Nearburg") and commenced a "drilling and production war" against Nearburg (See NMOCD Case 11311, Nearburg Exhibit 5) during which Yates consistently exceeded the oil allowables in order to gain an unfair advantage over Nearburg within the "Allowable Violation Area" and resulted in Yates producing 988,917 barrels of illegal oil by February 2, 1996.

2. As part of its strategy against Nearburg in the Allowable Violation Area, Yates drilled and produced wells (up to a maximum of 4 wells in a 160-acre unit) and sequenced their production so that each well was allowed to produce at its total capacity without regard to the oil allowable. See Conoco Exhibits 6-19.

3. The production of illegal oil is a flagrant and willful disregard of the Division rules which is of significance to the ability of the Division to exercise its duties to prevent waste and protect correlative rights. Accordingly, the Division should direct the Supervisor of the Artesia office of the Oil Conservation Division to determine which proration unit and which operators have "overproduced either the oil and/or gas allowables in this pool and to impose a penalty of One Thousand Dollars per day per proration unit for each and every day said proration unit has been overproduced.

ILLEGAL OIL and GAS

4. Pursuant to Section 70-2-21 and 70-2-22 NMSA (1978), and its authority to adopt rules and regulations to effectuate prohibitions against the purchase or handling of "illegal gas and oil products", the Division has adopted rules and regulations which provide that:

(a) Illegal gas is defined by Division Rules to mean "natural gas produced from a gas well in excess of the allowable determined by the Division and the sale, purchase, acquisition, or the transporting refining processing or handling, in any way of said gas is prohibited. See Rule 0.1. and Rule 901

(b) Illegal oil is defined by Division Rules to mean "crude petroleum oil produced from an oil well in excess of the allowable fixed by the Division and the sale, purchase, acquisition, or the transporting refining processing or handling, in any way of said oil is prohibited. See Rule 0.1 and Rules 801 and 502.

(c) Illegal oil cannot be transported from the lease tanks or sold. See Rule 502.C.

5. The Division has adopted oil allowables for this pool in order to manage and regulate production in a very competitive reservoir and to assure that all operators are "playing by the same rules" so that correlative rights are protected.

6. The Division has fixed and determined that any oil/and or gas produced from the North Dagger Draw Pool in excess of 700 BOPD and/or 7 MMCFPD per 160-acre spacing and proration unit is illegal oil and illegal gas products.

7. Yates has ignored those rules and regulations and has created a greater pressure differential to their spacing units than would have occurred if it had complied with the regulated production rates which have given

Yates an unfair competitive advantage over those operators who are complying with these rules.

8. As a result of Yates' excessive pressure depletion of the reservoir which cannot not be restored, Yates has caused permanent damage to the correlative rights of those operators who have complied with these rules.

9. Yates testified that in the summer of 1995, Yates was notified of its overproduction in the North Dagger Draw Pool by the Supervisor of the Artesia Office of the Division.

10. Despite notification and with knowledge that it was producing illegal oil and gas products from North Dagger Draw Pool, Yates continued to do so until March 1996 when the Supervisor of the Artesia Office of the Division imposed restrictions upon Yates which limited Yates to maintaining current production with the allowable but did not then require that Yates to shut-in its well production or otherwise commence to "make-up" its overproduction.

11. Division Order R-4691-E and R-5353-L-2 imposed no penalties against Yates for its willful violation of the Division rules and regulations.

**CONOCO'S ANALYSIS OF YATES'
PETROLEUM ENGINEERING PRESENTATION**

12. In support of its request, Yates:

(a) plotted swabbing oil cut versus second month producing oil cut for some 58 wells in North and South Dagger Draw Pools and from its plot of the oil cuts of this "early-time well performance data" , hypothesized that a positive slope "confirmed" that at high rates, a well would produce less water per barrel of oil produced. (See Transcript page 32-34) (Yates Exhibit 6);

(b) presented 17 examples for newly completed wells in North Dagger Draw Pool of plots of oil cut versus oil rate during the early time performance of these wells and hypothesized that this confirmed that at higher rates of withdrawal, more oil and less water were being produced. Yates Exhibit 5, Transcript pages 28-32; and

(c) that the Aparejo APA Well No. 5 in North Dagger Draw had been produced for approximately 2 weeks and at different rates which showed that at higher rates each produced "higher oil cuts". See Transcript page 35-39

13. Yates also presented the following additional information:

(a) that there is minimum pressure data available for either pool, however when Yates completed its State K Well No.2 in Unit J of Section 28, T19S, R25E, NMPM its initial pressure was approximately 2100 psi compared to an original reservoir pressure of 2900 to 3100 psi confirming that the reservoir had already been partially drained and depleted at this location by offsetting production; See Transcript pages 81-82.

(b) that within approximately six section area within North Dagger Draw, including the Allowable Violation Area", consisting of portions of Sections 8, 9, 21, 29 and 28 T19S, R35E, NMPM, there are 11 wells interfering with each other production; Yates Exhibit 9 Transcript page 42-45.

(c) Yates has not conducted any reservoir studies concerning pressure depletion and its affect upon correlative rights; See Transcript page 83

(d) Yates admitted that as the pressure in the reservoir is depleted, production rates declined, the differential pressure between the reservoir and the wellbore goes down, fluid rates go down so that the earliest wells drilled in an area which are produced at the maximum possible rate will have a significant advantage over the ultimate recoveries for wells drilled later; See Transcript page 85

(e) While Yates is unable to calculate drainage areas for wells in either pool, Yates believes the wells studied in North Dagger Draw are not draining more than 40-acres and could **therefore** be shut-in to make up for "overproduction" without being subject to offset drainage; See Transcript page 107.

(f) Contrary to its testimony in paragraph (e) above, Yates also testified that there is interference among and between overproduced wells in the "allowable Violation Area" of North Dagger Draw; See Transcript page 43.

(g) that a well's producing rate will be affected by changes in producing rates by offset wells which can be attributed to interference; See Transcript page 110

**CONOCO'S CONCERNS ABOUT
YATES' TECHNICAL EVIDENCE**

14. There is a significant risk of offset drainage among wells in and within the Allowable Violation Area because the oil productive dolomite is relatively thin and any excessive pressure depletion occurring due to overproduction will have a detrimental effect on wells such as the Conoco operated wells in the N/2 of Section 32, T19S, R35E which are located on the flank of the reservoir.

15. Contrary to Yates' contention that "positive slope" plots of oil cut versus oil rate during the early time performance of these wells indicates at higher rates of withdrawal, more oil and less water were being produced, analysis of Yates Exhibit 6 shows at least five wells with "negative slope" in the Allowable Violation Area.

16. Yates failed to demonstrate with substantial evidence whether this early time performance was nothing more than accelerating the rate of recovery of the same amount of ultimate oil or whether in fact such higher early time rates would result in increasing the amount of oil ultimately recovered from either of these pools.

17. Yates failed to demonstrate with substantial evidence that its "early-time" analysis of these wells represents (a) "pseudosteady-state production" during which the entire drainage area starts to contribute production and accurate reservoir recoveries can be calculated or (b) is simply attributable to well performance under transient production during which a well's inflow performance is unstable and producing oil versus water rates may not correctly reflect performance during these unstabilized conditions.

18. Yates failed to submit engineering calculations showing estimated ultimate recovery for any well in either pool and failed to submit any production decline curves for any of the 17 wells shown on Yates Exhibit 5 so that any other engineer could calculate those ultimate recoveries; See Transcript page 85

19. Yates' failed to demonstrate with substantial evidence that increasing the oil rate was not being accomplished by simply "taking" oil from adjoining wells and spacing units.

20. That the short term step rates tests conducted on the Aparejo APA Well No. 5 in North Dagger Draw were conducted for too short a period and under conditions not verified by the Division and therefore cannot be considered typical or characteristic of the performances of all wells in the pool.

21. Even if Yates is correct about higher rate meaning higher oil cut, Yates failed to present substantial evidence to show that such an oil allowable of 4000 BOPD per spacing unit was necessary.

22. Even if Yates is correct about higher rate meaning higher oil cut, that does not excuse Yates from liability for "overproducing" either pool's allowables.

23. Yates' request is simply the result of Yates having drilled too many wells and produced them at too high a rate in an effort to drain offsetting spacing units.

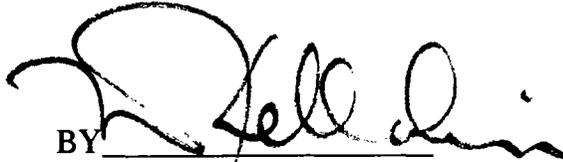
CONCLUSION

24. Conoco has concluded that Yates' illegal oil production from North Dagger Draw has irreparably damaged the corrective rights of Conoco. Yates' has depleted the reservoir energy in the pool to such an extent that it is not now possible for Conoco to offset the drainage that Yates has caused.

25. Conoco contends that the Yates' wells must be shut-in. The Division order allows Yates to continue to produce its spacing unit at 350 BOPD which continues to allow Yates to enjoy a competitive advantage in this pool. The granting of a Stay of this order will only exacerbate the damage Yates' has caused.

WHEREFORE, Conoco requests that Yates' Motion for a Stay **be denied.**

Respectfully submitted



BY
W. Thomas Kellahin
KELLAHIN & KELLAHIN
P. O.; Box 2265
Santa Fe, New Mexico 87504-2265
(505) 982-4285

CERTIFICATE OF SERVICE

I hereby certified that a true and correct copy of the foregoing was hand delivered to counsel of record this 15 day of August, 1996.



W. Thomas Kellahin

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 11525
Order No. R-4691-E**

**APPLICATION OF YATES PETROLEUM CORPORATION
FOR AMENDMENT OF THE SPECIAL RULES
AND REGULATIONS FOR THE NORTH DAGGER
DRAW-UPPER PENNSYLVANIAN POOL, AND FOR
THE CANCELLATION OF OVERPRODUCTION,
EDDY COUNTY, NEW MEXICO**

**CASE NO. 11526
Order No. R-5353-L-2**

**APPLICATION OF YATES PETROLEUM CORPORATION
FOR AMENDMENT OF THE SPECIAL RULES
AND REGULATIONS FOR THE SOUTH DAGGER
DRAW-UPPER PENNSYLVANIAN ASSOCIATED POOL,
AND FOR THE CANCELLATION OF OVERPRODUCTION,
EDDY COUNTY, NEW MEXICO.**

**STATE OF TEXAS)
) SS.
COUNTY OF MIDLAND)**

AFFIDAVIT OF ROBERT E. BEAMER

1. I am a Petroleum Engineer employed by Conoco Inc. in Midland, Texas.

2. I am the petroleum engineer for Conoco who is primary responsible for the reservoir engineering aspects of Conoco's production in North Dagger Draw.

3. I was Conoco's petroleum engineering witness at the Oil Conservation Division hearing held on May 2, 1996 and testified in opposition to Yates.

4. I have formed the following opinions based upon my expertise and upon the record in this case:

(a) There are no proration units in North Dagger Draw which had or may have the capacity to produce 4,000 BOPD;

(b) Yates' application in this case for these pool-wide changes, if approved, would increase the oil allowable limitation from 700 barrels of oil per day to a new maximum 4,000 barrels of oil per day per 160-acre proration unit which will have a dramatic impact on the prevention of waste, ultimate recovery of oil and correlative rights in the North Dagger Draw Pool.

(c) excessive production above current oil allowable rates accelerate pressure decline and adversely affect correlative rights by interfering with offsetting operators ability to produce their share of recoverable oil underlying their spacing units.

(d) approval of the Yates' application and its request for a stay will substantially increase interference among wells and cause rapid decline in the producing rates of existing wells

(e) based upon current production and engineering and geological reservoir evaluations, the current maximum oil allowable of 700 BOPD for a spacing unit in the North Dagger Draw Pool is appropriate;

(f) the current gas allowable of 7 MMCFPD for all wells in a spacing unit in the North Dagger Draw Pool is appropriate;

(g) denial of Yates' requests is necessary in order to prevent excessive premature drainage of offsetting spacing units;

(h) denial of Yates' requests and the continuance of the current rules will afford the opportunity to adequately recover both oil and gas reserves without causing undue waste;

(i) the evidence presented by Conoco demonstrates that the current rules and regulations for North Dagger Draw Pool have and will continue to provide for the orderly and efficient development and proper depletion of the North Dagger Draw Pool thereby preventing waste and protecting correlative rights;

(j) continuance of the current regulatory conservation methods imposed to minimize excessive production in the Pool provide appropriate limitations necessary to protect the conservation of reservoir energy;

(k) Yates failed to sustain its burden of proving that the changes it seeks will result in increased ultimate oil recovery while doing so in a manner to protect correlative rights;

(l) Yates' request is simply an attempt to avoid the consequences of producing illegal oil and gas products from this pool and its request for a stay should be **denied**;

(m) Conoco has concluded that Yates' illegal oil production from North Dagger Draw has irreparably damaged the corrective rights of Conoco. Yates' has depleted the reservoir energy in the pool to such an extent that it is not now possible for Conoco to offset the drainage that Yates has caused;

(n) Conoco contends that the Yates' wells must be shut-in. The Division order allows Yates to continue to produce its spacing unit at 350 BOPD which continues to allow Yates to enjoy a competitive advantage in this pool. The granting of a Stay of this Order will only exacerbate the damage Yates' has caused.

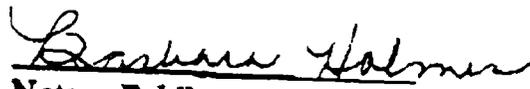
(c) Even at the restricted rate of 350 BOPD per spacing unit set forth in the Order, Yates can still produce a single well on a spacing unit and at that rate continue to adversely drain Conoco offsetting spacing unit.

FURTHER AFFIANT SAYETH NAUGHT:

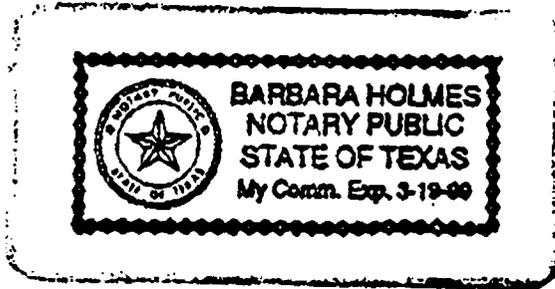

Robert E. Beamer

State of Texas)
)
County of Midland)

Subscribed and sworn to before me this 15th day of August, 1996 by
Robert E. Beamer.


Notary Public

My Commission Expires:
3-19-99



KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

August 15, 1996

RECEIVED

AUG 15 1996

Oil Conservation Division

VIA FACSIMILE
(505) 827-8177

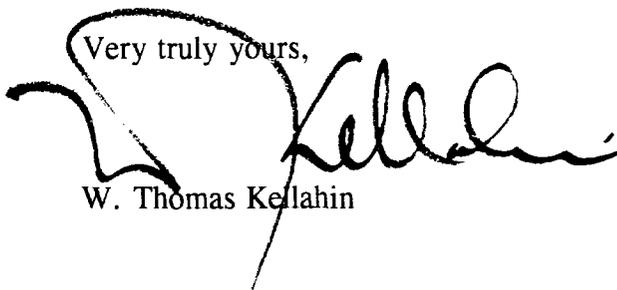
Mr. William J. LeMay, Director
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: CONOCO'S RESPONSE TO YATES' MOTION FOR A STAY
NMOCD Cases 11525 and 11526
North and South Dagger Draw

Dear Mr. LeMay:

This morning on behalf of Conoco, Inc., I received a copy of Yates' Motion for a Stay of Orders R-4691-E and R-5353-L-2 for the referenced cases. We request that you not act upon this Motion until we have filed our response in opposition.

Very truly yours,



W. Thomas Kellahin

cc: Rand Carroll, Esq. OCD
Michael E. Stogner, Hearing Examiner
Conoco Inc.
Attn: Jerry Hoover
Attn: Bill Hardie
William F. Carr, Esq.
Attorney for Yates Petroleum Corporation
Edmund H. Kendrick, Esq.
Attorney for Marathon Oil Company
James G. Bruce, Esq.
Attorney for Mewbourne Oil Company
Earnest L. Padilla, Esq.
Attorney for James T. Chavez