

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION COMMISSION

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

CASES NOS. 7980, 8946,  
9113, AND 9114  
ORDER NO. R-7407-E

CASE NO. 8950  
ORDER NO. R-6469-D

CASE NO. 7980

IN THE MATTER OF CASE 7980 BEING REOPENED PURSUANT TO THE PROVISIONS OF COMMISSION ORDER NO. R-7407, WHICH ORDER PROMULGATED TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE GAVILAN-MANCOS OIL POOL IN RIO ARriba COUNTY, INCLUDING A PROVISION FOR 320-ACRE SPACING UNITS.

CASE NO. 8946

IN THE MATTER OF CASE 8946 BEING REOPENED PURSUANT TO THE PROVISIONS OF COMMISSION ORDER NO. R-7407-D, WHICH ORDER PROMULGATED A TEMPORARY LIMITING GAS-OIL RATIO AND DEPTH BRACKET ALLOWABLE FOR THE GAVILAN-MANCOS OIL POOL IN RIO ARriba COUNTY.

CASE NO. 9113

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION, JEROME P. McHUGH & ASSOCIATES, AND SUN EXPLORATION AND PRODUCTION COMPANY TO ABOLISH THE GAVILAN-MANCOS OIL POOL, TO EXTEND THE WEST PUERTO CHIQUITO-MANCOS OIL POOL, AND TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE WEST PUERTO CHIQUITO-MANCOS OIL POOL, RIO ARriba COUNTY, NEW MEXICO.

CASE NO. 9114

APPLICATION OF MESA GRANDE RESOURCES, INC. FOR THE EXTENSION OF THE GAVILAN-MANCOS OIL POOL AND THE CONTRACTION OF THE WEST PUERTO CHIQUITO-MANCOS OIL POOL, RIO ARriba COUNTY, NEW MEXICO.

CASE NO. 8950

IN THE MATTER OF CASE 8950 BEING REOPENED PURSUANT TO THE PROVISIONS OF COMMISSION ORDERS NOS. R-6469-C AND R-3401-A, AS AMENDED, WHICH ORDER PROMULGATED A TEMPORARY ALLOWABLE AND

LIMITING GAS-OIL RATIO FOR THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY.

APPLICATION FOR REHEARING

Mesa Grande Resources, Inc. and Mallon Oil Company,  
(Applicants) file this Application for Rehearing, and state:

1. Applicants are pleased the Commission has confirmed that the Gavilan-Mancos Oil Pool ("Gavilan") is a separate pool from the West Puerto Chiquito-Mancos Pool ("West Puerto"), and as such should continue to be operated under separate rules. Because the two pools do have "different geologic and operating conditions," the Commission should direct its attention to protecting each pools' separate conservation aspects and the separate correlative rights of the owners in each pool.

The only remaining issues for the Commission to decide should be:

- a. The appropriate boundary between the Gavilan and West Puerto;
- b. Whether the Gavilan owners' correlative rights should be further impinged upon by the unnecessary restriction of the Gavilan allowable production from 702 bopd with a 2000/1 GOR to the temporary 400 bopd with a 600/1 GOR rule for a 320-acre proration unit. For example, a top allowable well on a 320-acre proration unit with a 2000/1 GOR in the Gavilan suffers an 83% allowable cut from 702 bopd to only 120 bopd. This cut in allowable is not necessary to prevent waste or to protect

correlative rights. In fact, the only result of this arbitrary allowable cut is to redistribute reserves away from the top allowable wells, in violation of the owners' correlative rights.

The effect of this cut will continue to be devastating on Gavilan development by the Applicants and others similarly situated. The Commission should note that 15 wells have been drilled in the Gavilan and West Puerto Pools since the Commission's original imposition of drastic and unwarranted allowable cuts in September 1, 1986. Of these 15 wells, 12 have been drilled by the proponents of allowable reduction, who also sought increased spacing allegedly to prevent the drilling of unnecessary wells.

The Commission needs to be aware that drilling \$800,000 wells in this area can become uneconomic in today's oil depression when the additional risk imposed by this Commission of drastically limiting production is added to the already high risks of obtaining a good producing well.

2. Although not accepting the allowable constraints of the above orders, the Applicants do recognize the Commission's intent to obtain additional engineering data to confirm applicant's and the Commission's positions that Gavilan and West Puerto should remain separate. Applicants also recognize this Commission's concern of future waste in the Gavilan. Applicants share the same concern. That is why Applicants commissioned an independent engineering study to review in depth the possibility of waste. This complete study, based on actual Gavilan data, has been

presented to the Commission and Applicants submit such study clearly shows that statewide producing practices will not injure this pool, just as such practices have not injured hundreds of other New Mexico pools with similar solution gas drive characteristics. However, Applicants request that if the Commission and its staff truly seek meaningful engineering data during the next six months that the following be ordered or required:

a. "C" zone pressure testing in the oil column of the West Puerto should be required to comply with the spirit of the Commissions June 8th orders.

The Commission should note that at an operators' meeting held at the Division's request on June 23, 1987, for the purpose of attempting to satisfy the requirement of ordering paragraphs (3) in order no. r-6469-d and (4) in order no. R-7407-E, Benson-Montin-Greer Drilling Corporation (BMG), through Mr. Al Greer, refused to permit "C" zone pressure tests in the oil column of the West Puerto<sup>1</sup> -- specifically the Canada Ojitos Unit (COU) Well E-10 (Section 10, Township 25 North, Range 1 West). The Applicants believe the Commission is extremely interested in whether the "C" zone is affected by "A & B" zone

---

<sup>1</sup> The Commission staff has professed they did not want this testing to cause any expense to the operators. However, none of the pressure tests sought by the commission can be accomplished without the operators incurring additional expenses and this should be executed by all operators.

production rates from the Gavilan-Mancos Pool wells. No recent "C" zone pressure in the oil column has been provided to the Applicants or the Commission. It is urged the Commission order "C" zone pressure tests in the E-10 well. A copy of Mallon Oil Company's letter of June 24, 1987, setting forth this problem is attached. Only with meaningful pressure data of this type can Mr. Greer's factually unsupported allegations of harm to his "C" zone project be refuted or proved.

b. Isolation tests should be required on key BMG wells F-30, B-29 and B-32.

The key wells in the BMG case were F-30, B-29 and B-32. These wells are completed in the "A & B" and "C" zones. BMG presented so-called interference tests on these three wells. As these wells are presently completed, however, there is no way to determine the individual productivity or the pressure contribution of the "A & B" zones and "C" zone in these three wells. The Commission should order isolation tests for these key wells of the same type run by Mallon on its Fisher Federal 2-1 and by Mobil on its B-73. The Commission ordered bottomhole pressure surveys. These should be run separately on the "A & B" zone and on the "C" zone in the F-30 and B-29 wells in conjunction with the isolation tests. The B-32 is already on the bottomhole pressure survey schedule and its bottomhole pressure should be measured separately on the "A & B" zones and the "C" zone at the same time as the isolation tests. Again, this type of meaningful pressure and production data will be significant to determine:

(1) if the "A & B" zones are cross-flowing and charging the "C" zone in the West Puerto, especially at the curtailed "A & B" zones rate, and

(2) the extent of the production between the "A & B" zones in the Gavilan versus the West Puerto.

c. Isolation and pressure tests should be required for the BMG-COU Well No. L-27.

Mr. Greer testified that the L-27 had produced approximately 1.5 million barrels from the "A & B" zones. No separate tests have been run on the "A & B" zones and the "C" zone in the L-27 well. Isolation tests and bottomhole pressure measurements on the L-27 will verify whether the "A & B" zones are the producing zones and the relationship of the "A & B" zone production, if any, in this area of the West Puerto to the separate "A & B" zones production from Gavilan.

d. This case should be reopened in February 1988 rather than May 1988.

Gavilan has already suffered reduced allowables from September 1, 1986 to July 1, 1987 and will suffer another 83% allowable cut from October 1, 1987 until the Commission restores the allowable after the hearing now scheduled for May 1988.<sup>2</sup> Applicants respectfully request that the May 1988 hearing be

---

<sup>2</sup> For example, the Applicants' monthly production rate will have been drastically reduced for all but three months in a two-year period if the Commission's current hearing schedule is followed. Applicants are losing approximately 49,000 barrels per month due to the Commission's allowable limit orders. To date, more than 440,000 barrels of production has been lost with the working and royalty interest owners and the State of New Mexico suffering severe financial losses.

advanced to February 1988 so that the Commission may review the latest data in a timely manner. The pressure and production data at normal statewide rates will be available in the first week of October 1987 and there will be four (4) months to analyze this data before a February 1988 hearing. The additional reduced production data and January 1988 pressure data will be available in January 1988, or at least 30 days before a February 1988 hearing date. The issues before the Commission need to be determined as soon as possible in order to protect the correlative rights of owners in Gavilan. Gavilan will be suffering severe allowable cuts from October 1987 to the subsequent hearing decision date. Moving the hearing date to February 1988 will provide all parties adequate time to prepare and will reduce the time for imposing unnecessary allowable restraints on Gavilan.

3. Applicants would further state they are parties of record adversely affected by the issuance of Orders Nos. R-7407-E and R-6469-D.

4. The Commission should reconsider its decision in this matter and should grant a rehearing because:

a. The decisions of the Commission to reduce allowable production and its failure to extend the Gavilan boundaries ("Decisions") are arbitrary and capricious;

b. The Decisions of the Commission are not based upon substantial evidence;

c. The Decisions of the Commission ignore and do not recognize the correlative rights of the applicants; and

d. The Decisions of the Commission are contrary to law;

all as more specifically described below.

5. Benson-Montin-Greer Drilling Corporation, Jerome P. McHugh & Associates, and Sun Exploration and Production Company proposed changes to the special pool rules and statewide rules governing the Gavilan Pool. Therefore, they have the burden of proving by a preponderance of evidence that such rule changes were justified. International Minerals & Chemicals Corp. v. New Mexico Public Service Com'n, 81 N.M. 280, 466 P.2d 557 (1970). Such parties failed in their burden and the Commission did not address this failure.

6. Applicants submit that certain findings and orderings are not supported by the evidence presented at the hearing. In particular, and without limitation, the following findings are incorrect for the reasons stated below:

As to Order R-7407-E:

a. Finding (9): Applicants proved that most of the recoverable oil in Gavilan is stored in the micro fractures and intergranular porosity. The BMG group presented no facts which refuted this proof. Finding (9) is incorrect and fails to recognize this proof.

b. Findings (12) and (13): While testimony regarding rate-sensitivity was conflicting, the only model which matched Gavilan field performance was the model presented by Applicants. The model presented by Sun Exploration and Production Company was not based upon realistic parameters or actual field conditions as to Gavilan. As a result, the only reliable evidence establishes that Gavilan is not rate sensitive.

c. Finding (14): The parties are not in agreement that any type of pressure maintenance project is proper at this time. Applicants believe that a high pressure-pressure maintenance project which is suggested by BMG would adversely affect Gavilan pool performance at this time and cause waste. In addition, the formation of a unit is beyond the scope of the hearing and no evidence regarding unitization was presented at the hearing.

d. Finding (15): The pool depletion period estimated by Applicants is nine years. There is no evidence to support the five-year estimate.

e. Finding (16): The issue of pipeline connections is beyond the scope of the hearing. In addition, a pool cannot be produced without drainage, and the conservation system is designed to give each owner the opportunity to produce his fair share. As set forth below it is an illegal act to reduce production from non-wasteful (connected) well to protect the correlative rights of the owners of a wasteful (unconnected) well.

f. Finding (20): This finding proposes to further reduce allowables for some wells connected to pipelines beyond the 83% reduction to protect the correlative rights of wells that do not have a casinghead gas connection. New Mexico law does not permit this Commission to reduce the allowable on a connected well in order to protect a non-connected well that flares and wastes its casinghead gas. It is believed that approximately 55 wells in the Gavilan have casinghead gas connections while approximately 15 wells have no connection. Under the Commission's order, these 50 connected wells have their top allowable potential reduced by 83%. The Commission's order permits the Director to further reduce production from Applicants' wells, below 17% of top allowable, without any legal justification. This part of the Commission's order should be stricken. If any action is needed in this area, the Commission or affected operators should institute separate hearings.

g. Ordering (2): This extension application of Mesa Grande Resources, Inc., should be granted. BMG admits its extension area wells are in good communication in the "A & B" zones with the Gavilan wells.

h. Ordering (4): The Gavilan allowable for a 640 acre proration unit should be 1404 bopd and 2000/1 GOR. Testing requirements should be modified as set forth in paragraphs 2(a)(b) and (c) above.

i. Ordering (5): There is no basis in law or fact to arbitrarily reduce the Gavilan allowable for an indefinite period of time.

j. Ordering (6): As previously outlined, the unconnected well matter was not an issue at this hearing, and the Commission has no authority to reduce the allowable of a non-wasteful (connected) well to protect the correlative rights of a wasteful (unconnected) well.

k. Ordering (8): As already requested, the reopened hearing should be advanced to February 1988.

As to Order R-6469-D (and only as to their effect on Gavilan):

l. Finding (11): There is no similar finding in R-7407-E. The top allowable in Gavilan for a 640-acre proration unit should be 1404 bopd (twice the current 702 bopd for a 320-acre proration unit). The top allowable for Gavilan should be 1404 bopd with a 2000/1 GOR. This will cause no penalty to wells already drilled on 320-acre proration units which originally had the Gavilan top allowable of 702 bopd with a 2000/1 GOR. Applicants have no objection to the West Puerto having the same top allowable treatment.

m. Findings (12) & (13): There are no findings with these provisions in the findings of Order R-7407-E. The Gavilan top allowable producing rate of 702 bopd and 2000/1 for a 320-acre spacing unit are no wasteful. If the Commission and Mr. Greer are interested in determining whether waste will occur at normal allowable rates or drainage occur "via the highly transmissive fracture system," then the testing requests in paragraphs 2(a), (b) and (c) above should be granted. There is no factual or legal basis to apply these two findings to Gavilan.

n. Finding (15): This finding does not appear in R-7407-E. There is no evidence to support a finding that "the pressure differential favors" Gavilan." In fact, the limited data showed the exact opposite: if there is a "weak" connection between Gavilan and West Puerto the pressure differential still favors West Puerto. In addition, the testing requested in paragraphs 2(a), (b) and (c) above will relate directly to these erroneous findings.

o. Finding (16): This finding does not appear in R-7407-E. If this finding is correct then the westernmost tier of sections referred to therein should be deleted from the West Puerto and included in the extension of Gavilan in accordance with the application of Mesa Grande Resources, Inc., in Case No. 9114.

p. Ordering (2): As discussed above, this application should be granted.

q. Ordering (3): This paragraph should be amended to include the tests requested in paragraphs 2(a),(b) and (c) above.

r. Ordering (4): This ordering paragraph should be stricken as to the allowable limitation of 800 bopd and 600/1 GOR.

s. Ordering (5): The reopened hearing should be advanced to February 1988.

7. Rules issued by the Commission should be fair and equal in effect. The subject order is discriminatory as described below:

a. The order allows production at 1280 barrels of oil per day and a GOR of 2000:1 for a three (3) month period, but requires production at 800 barrels of oil per day and a GOR of 600:1 for eight (8) months and is therefore inherently unfair and biased as to the periods of production (3 months v. 8 months) toward the interests of Jerome P. McHugh & Associates and Sun Exploration and Production Company.

b. The Commission's production limitations have resulted in certain wells operated by Mallon Oil Company being shut-in for over 25 days per month. This discriminates against Mallon Oil Company and causes economic waste and violates correlative rights due to production from offsetting wells.

c. Substantial investments were made by Applicants herein and others in Gavilan based upon then-existing pool rules. A change of the rules in mid-stream has and will work a financial hardship on those interest owners by restricting production. This has resulted in limiting return on investment to an amount insufficient to recover the millions of dollars invested, resulting in severe economic hardship. In addition, this has a chilling effect on further oil and gas investment in this state.

8. The Commission's production limitations constitute a taking of property without just compensation in violation of the federal and state constitutions.

9. Order R-7407-E fails to comply with applicable statutory and judicial mandates. In Continental Oil Co. v. Oil Conservation Commission, 70 N.M. 310, 373 P.2d 809 (1962), the

New Mexico Supreme Court, in a case dealing with a natural gas pool, discussed the basic conclusions of fact that the Commission is required to find prior to changing a proration formula. The requirements are that the Commission find, as far as it is practical to do so:

1. the amount of recoverable reserves under each producer's tract;
2. the total amount of recoverable reserves in the pool;
3. the proportionate relationship of (1) and (2); and
4. what portion of the reserves can be recovered without waste.

A review of Order R-7407-E shows that the Commission failed to make any of these required findings and did not discuss any of these necessary elements. The record in this matter is clear that the changes adopted by the Commission constitute a change in the proration formula since these changes alter the relative proportion of production between operators in Gavilan and deviate from statewide rules. Order R-7407-E is therefore contrary to law and arbitrary and capricious.

WHEREFORE, applicants request the Commission to set these matters for rehearing.

Respectfully submitted,  
MONTGOMERY & ANDREWS, P.A.

By \_\_\_\_\_  
W. Perry Pearce  
Post Office Box 2307  
Santa Fe, New Mexico 87504-2307  
(505) 982-3873

Attorneys for Mallon Oil Company

HINKLE, COX, EATON, COFFIELD &  
HENSLEY

Owen M. Lopez  
Post Office Box 2068  
Santa Fe, New Mexico 87504-2068  
(505) 982-4554

Attorneys for Mesa Grande  
Resources, Inc.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Application  
for Rehearing were mailed to the following persons this \_\_\_\_ day  
of June, 1987.

W. Thomas Kellahin  
Kellahin, Kellahin & Aubrey  
Post Office Box 2265  
Santa Fe, New Mexico 87501

William F. Carr  
Campbell & Black, P.A.  
Post Office Box 2208  
Santa Fe, New Mexico 87501

Robert G. Stovall  
Dugan Production Company  
Post Office Box 208  
Farmington, New Mexico 87499

Kent Lund  
Amoco Production Company  
Post Office Box 800  
Denver, Colorado 80201

Ernest L. Padilla  
Padilla & Snyder  
Post Office Box 2523  
Santa Fe, New Mexico 87501

Robert D. Buettner  
Koch Exploration Company  
Post Office Box 2256  
Wichita, Kansas 67201

Paul Cooter  
Rodey, Dickason, Sloan,  
Akin & Robb, P.A.  
Post Office Box 1357  
Santa Fe, New Mexico 87504

---

W. Perry Pearce

[WPP:106]