

IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

MICHAEL P. GRACE II and  
CORINNE GRACE,

Petitioners-Appellants,

vs.

OIL CONSERVATION COMMISSION  
OF NEW MEXICO,

No. 9821

Respondent-Appellee,

and

CITIES SERVICE OIL COMPANY and  
CITY OF CARLSBAD, NEW MEXICO,

Intervenors.

M O T I O N

COME NOW the appellants and move the Court for an order granting an extension for the filing of their Reply Brief herein, and in support of said motion state unto the Court that appellants did not receive the intervenor's Brief until February 19, 1974, and anticipated that the due date of the Reply Brief was March 1, 1974; that the extension heretofore requested was based on that date; and further, because a member of counsel's family is seriously ill and hospitalized, counsel requires additional time to prepare the Reply Brief and respectfully requests a further extension until March 18, 1974.

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By Mary C. Walters  
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*granted*  
*Enc. CF*

FILED  
MAR 6 - 1974

*Amended Brief*

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SUPREME COURT OF NEW MEXICO

FEB 26 1974

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M O T I O N

COME NOW the appellants and move the Court for an order granting an extension for the filing of their Reply Brief herein, and in support of said motion state unto the Court that appellants' counsel has been unable to give attention to this matter until February 26 because of other trial and brief work demanding the full time and efforts of counsel; that, additionally, a member of counsel's family has been hospitalized for the past four days with what has not yet been diagnosed and may well be a serious ailment, thereby interfering with the concentration of counsel to the extent that would be desirable within the remaining time for filing a brief herein; that a prior request for extension of time has not been made by this counsel in this matter.

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By

*Mary C. Walters*

Mary C. Walters

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APPELLANTS' BRIEF-IN-CHIEF

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SUPREME COURT OF NEW MEXICO

FILED

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*Rudolph A. Alarcon*  
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STATEMENT OF THE CASE

Appellants' petition for a review of the order entered by the Oil Conservation Commission on June 30, 1972 (Tr. 23; 62-63) was denied by the District Court of Eddy County (Tr. 380), after the trial court had reviewed the transcript before the Oil Conservation Commission (Tr. 54-345) and heard argument of counsel (Tr. 385-495). Petitioners appeal the decision of the court.

STATEMENT OF PROCEEDINGS

On April 19 and 20, 1972, Commissioners Porter and Armijo of the New Mexico Oil Conservation Commission conducted a hearing (Tr. 64-346) at Hobbs in consolidated cases 4693 and 4694 (Tr. 63, 64), upon which Order No. R-1670-L (Tr. 4-13) was entered June 30, 1972. A petition for review of the Order in

Cause No. 4693 was filed August 18, 1972 (Tr. 2-3), which petition was later amended on June 1, 1973 (Tr. 62-63). In the interim, petitioners-appellants requested a stay of the Order directing proration (Tr. 18-22), and stay was granted on August 31, 1972 (Tr. 23) by Judge Archer. The Oil Conservation Commission moved to quash the stay order on September 7, 1972 (Tr. 24-25), and on September 15, 1972, filed an affidavit of disqualification of Judge Archer (Tr. 34).

Petitions of the City of Carlsbad (Tr. 33) and Cities Service Oil Company (Tr. 40-41) to intervene were granted by Judge Snead (Tr. 52, 53) although appellants objected to Cities Service's petition on October 11, 1972 (Tr. 45) on grounds that Cities Service was not a party to the original hearing.

Thereafter, on April 11, 1973, Judge Archer's order of stay was dissolved by Judge Snead (Tr. 57-58), to which the petitioners-appellants took exception on April 16, 1973 (Tr. 59-60).

Subsequently, the matter came on for hearing of the petition for review on June 5, 1973 (Tr. 387-495). Petitioner and intervenor Cities Service filed Requested Findings and Conclusions (Tr. 354-366; 347-353), and respondent adopted by reference Requested Findings of Fact and Conclusions of Law filed by intervenor Cities Service Oil Company (Tr. 367).

The District Court adopted verbatim the Requested Findings and Conclusions submitted by intervenor Cities Service Oil Company (Tr. 347-353; 370-377), and denied all of Petitioners-Appellants' Requested Findings and Conclusions (Tr. 354-366).

The trial court made the following challenged Findings:

"The Oil Conservation Commission did not act fraudulently, arbitrarily, or capriciously in issuing Order No. R-1670-L." (Finding 12, Tr. 374 -- Challenged, Point One)

"The Transcript of Record and Proceedings in Case No. 4693 before the Oil Conservation Commission contains substantial evidence to support the Commission's findings in order No. R-1670-L." (Finding 13, Tr. 374-75 -- Challenged, Point One)

"The Oil Conservation Commission did not exceed its authority in issuing order No. R-1670-L." (Finding 14, Tr. 375 -- Challenged, Point One)

"Oil Conservation Commission order No. R-1670-L is not erroneous, invalid, improper or discriminatory." (Finding 15, Tr. 375 -- Challenged, Point One)

"The formula adopted by the Oil Conservation Commission for allocating allowable production among the gas wells in the South Carlsbad-Morrow Gas Pool allocates such production upon a reasonable basis, recognizing correlative rights, and, insofar as practicable, prevents drainage between producing tracts in the pool which is not offset by counter drainage." (Finding 16, Tr. 375 -- Challenged, Point One)

"The formula adopted by the Oil Conservation Commission for allocating allowable production among the gas wells in the South Carlsbad-Morrow Gas Pool allocates such production in a manner that affords to the owner of each property in the South Carlsbad-Morrow Gas Pool the opportunity to produce without waste his just and equitable share of the gas in the pool, insofar as it is practicable to do so, and for this purpose to use a just and equitable share of the reservoir energy." (Finding 17, Tr. 375 -- Challenged, Point One)

"Oil Conservation Commission order No. R-1670-L will prevent waste and will protect correlative rights." (Finding 18, Tr. 375 -- Challenged, Point One)

Requested Findings submitted by Petitioners-Appellants, and refused by the trial court, included the following:

(A) Petitioners' Requested Finding 6 (Tr. 355-64)

included requests to find:

(1) That purchasers in the South Carlsbad-Terrow Gas Pool had a line capacity sufficient at the time of hearing, or within a reasonable time thereafter, to purchase all available gas supplies in the field, which evidence contradicted the Commission's Findings 8 and 9 regarding the capacity of transportation with the evidence concerning the amount of gas produced each day. (Tr. 356 -- Challenged, Point One)

(2) That the Commission's Findings 14 and 15 (Tr. 5), that there was no substantial alteration in the manner of producing the wells after February 1972, and an inference that, therefore, the production was substantially the same as in February 1972, was contrary to the evidence that new wells were being drilled, additional transportation facilities contracted for, and that production had been restricted awaiting lifting of market restrictions by the Federal Power Commission. (Tr. 356 -- Challenged, Point One)

(3) Petitioners-Appellants objected to the incomplete and misleading nature of the Commission's Finding 16 (Tr. 5) regarding the amount of gas purchased per day by the Transwestern system, since it failed to include evidence that at the time of hearing Transwestern was ready and able to purchase all additional available gas, and the amount of its purchases of 41,000 MCF per day reflected only the total of all gas offered to Transwestern as of the date of hearing. (Tr. 356 -- Challenged, Point One)

(4) Petitioners objected to the Commission's Findings 19 and 22 (Tr. 6), as a part of Petitioners' Requested Finding 6, alleging that the evidence showed that both purchasers were capable of taking all gas that could be produced, and Llano's preparations to double capacity contradicted the Finding that the purchasers were incapable of taking the full amounts purchased in April 1972 from the South Carlsbad-Morrow Gas Pool alone. (Tr. 357 -- Challenged, Point One)

(5) Petitioners-Appellants requested the trial court to find that the Oil Commission's Finding 23 (Tr. 6) was erroneous because it was based on, and combined the results of, Findings 19 and 22 which, as stated above, were contrary to the evidence. (Tr. 357 -- Challenged, Point One)

(6) The Oil Commission's Findings 26, 27 and 28 (Tr. 6-7) were challenged, and the trial court was requested to find that those Findings were unsupported by any evidence whatever regarding production at less than full capacity, and that an averaging of productivity of all wells was erroneous and improper because of the evidence showing lack of uniformity in the production of the individual wells and because of the expert descriptions of the individual wells ranging from "excellent" to "stinky." (Tr. 357 -- Challenged, Point One)

(7) the trial court was asked to find that the Oil Commission's Finding 29 (Tr. 7) was an erroneous Conclusion of Law because it added up the unsupported estimates of production in the Commission's Finding 26, 27 and 28 which, as stated above, are estimates not supported by the evidence. (Tr. 358 -- Challenged, Point One)

(8) Petitioners-Appellants protested the Oil Commission's Findings 31 and 32 (Tr. 7) and asked the trial court to find that they were, in fact, erroneous Conclusions of Law because they were based on, and combined the results of, Findings 26, 27 and 28, challenged above as contrary to the evidence. (Tr. 358 -- Challenged, Point One)

(9) Petitioners-Appellants requested the trial court to find that Finding 33 (Tr. 7) of the Commission was an erroneous Conclusion of Law which stated the combined effect of erroneous Findings 31 and 32, described above. (Tr. 358 -- Challenged, Point One)

(10) The trial court was asked to find that the Commission's Findings 34 and 35 (Tr. 7), relating to "current" purchases of Transwestern and Llano as of June 1972, the date of entry of the challenged Order, were unsupported by the evidence. (Tr. 358 -- Challenged, Point One)

(11) The trial court was requested by Petitioners-Appellants to find that the Commission's Findings 40 and 41 (Tr. 8) regarding Transwestern's and Llano's "take" from the pools were unsupported by the evidence. (Tr. 359 -- Challenged, Point One)

(12) Appellants requested a Finding that the Commission's Finding 42 (Tr. 8) was, instead, a Conclusion of Law which combined the erroneous Findings 40 and 41 of the Commission; therefore, it likewise was unsupported in the evidence. (Tr. 359 -- Challenged, Point One)

(13) Appellants asked the trial court to find that the Commission's Findings 43 and 44 (Tr. 8) of market demand were contrary to the evidence and applied a definition of reasonable market demand which conflicted with the statutory definition thereof. (Tr. 359 -- Challenged, Point One)

(14) The trial court was requested to find that the Commission's Finding 45 (Tr. 8) was, in fact, a Conclusion of Law combining the effect of Commission's Findings 43 and 44 which, as stated above, were erroneous and contrary to the evidence, and thus Finding 45 was likewise erroneous and contrary to the evidence. (Tr. 359 -- Challenged, Point One)

(15) Petitioners requested the trial court to find that the Commission's Findings 46, 47 and 48 (Tr. 8-9) relating to production capabilities in excess of market demand were, in reality, Conclusions of Law arrived at from the erroneous facts found in the Commission's Findings 26, 27, 28, 29, 31, 32, 33, 43, 44 and 45, which latter Findings, as stated above, were challenged as contrary to the evidence and to the statutory definition of market demand. (Tr. 359 -- Challenged, Point One)

(16) Petitioners-Appellants asked the trial court to find that the Commission's Finding 48 (Tr. 9) was, in reality, a Conclusion of Law derived from Findings 46 and 47, and a combination of those two Findings [Conclusions], and, therefore, likewise erroneous. (Tr. 359 -- Challenged, Point One)

(17) Petitioners-Appellants requested the trial court to find that the Commission's Finding 54 (Tr.9) was a Conclusion concerning a well's fair share of the total pool monthly market, although there was no evidence at the hearing regarding the amount of recoverable gas in the pool or under the tracts so as to establish any well's fair share. (Tr. 360 -- Challenged, Point One)

(18) Petitioners-Appellants challenged the Commission's Findings 55, 56 and 57 (Tr. 9) concerning daily deliverability of the wells in excess of "take," as unsupported in the evidence, speculative, conjectural, and contrary to the evidence heard by the Commission. (Tr. 360 -- Challenged, Point One)

(19) Petitioners-Appellants requested the trial court to find that the Commission's Finding 59 (Tr. 10) of production in excess of market demand was contrary to the evidence and, furthermore, based upon an erroneous determination and definition of market demand. (Tr. 360 -- Challenged, Point One)

(20) Petitioners-Appellants requested the trial court to find that the Commission's Finding 60 (Tr. 10) of production in an amount less than market demand was

contrary to the evidence and, furthermore, based upon an erroneous determination and definition of market demand. (Tr. 359 -- Challenged, Point One)

(21) The trial court was requested by Petitioners-Appellants to find that the Commission's Finding 61 (Tr. 10) that gas was not being taken ratably from the producers was based solely upon a theoretical computation which assumed the ultimate facts which the Commission was required to determine and, furthermore, contrary to the evidence. (Tr. 360-361 -- Challenged, Point One)

(22) The trial court was requested by Petitioners-Appellants to find that the Commission's Findings 62 and 63 were, in reality, Conclusions of Law, that owners were producing more or less than their just share of gas, which were unsupported by any evidence, or by underlying Findings of Fact which were supported in the evidence. (Tr. 361 -- Challenged, Point One)

(23) Petitioners-Appellants requested the trial court to find that the Commission's Finding 64 (Tr. 10) regarding existence of drainage was without support in the evidence and based solely on surmise, conjecture, speculation and assumption. (Tr. 361 -- Challenged, Point One)

(24) The trial court was requested to find that the Commission's Findings 65 and 66 (Tr. 10) were, in reality, Conclusions of Law summarizing the erroneous and unsupported facts of the Commission's Findings 62, 63 and 64. (Tr. 361 -- Challenged, Point One)

(25) Petitioners-Appellants requested the trial court to find that the Commission's Finding 67 (Tr. 10) was, in fact, an erroneous Conclusion of Law that the pool should be prorated, and was contrary to the evidence and, in part, based upon an erroneous definition of market demand. (Tr. 361 -- Challenged, Point One)

(26) The trial court was requested to find that the Commission's Finding 68 (Tr. 10) of the necessity to prorate to insure equitable, proportionate production was without foundation and without consideration of the statutory definition of market demand. (Tr. 362 -- Challenged, Point One)

(27) Petitioners-Appellants asked the trial court to find that the Commission's Finding 71 (Tr. 10) of interconnection of stringers in the Morrow pool was based upon speculation, conjecture and surmise, and was otherwise unsupported in the evidence. (Tr. 362 -- Challenged, Point One)

(28) The Commission's Finding 72 (Tr. 11) regarding impracticability of obtaining necessary data was asked to be set aside by the trial court as unsupported in the evidence. (Tr. 362 -- Challenged, Point One)

(29) Petitioners-Appellants asked the trial court to find that the Commission's Finding 73 (Tr. 11) regarding reserves under each tract was unsupported in the evidence, but based wholly on speculation, conjecture and unfounded assumptions. (Tr. 362 -- Challenged, Point One)

(30) The trial court was asked to find that the Commission's Finding 74 (Tr. 11) regarding inability to apply a formula to determine reserves was contrary to the evidence. (Tr. 362 -- Challenged, Point One)

(31) Petitioners-Appellants asked the trial court to find that the Commission's Finding 76 (Tr. 11) concerning the best manner of determining production obtainable was contrary to the evidence. (Tr. 362-363 -- Challenged, Point One)

(32) Petitioners-Appellants requested the trial court to find that Commissioner's Finding 77 (Tr. 11) was, in reality, a Conclusion of Law that the just and equitable opportunity for each owner to produce would be afforded on a surface acreage formula, was unsupported by any evidence to permit proper Findings upon which to base such a Conclusion, and that the Conclusion was otherwise based solely on speculation, conjecture and assumption. (Tr. 363 -- Challenged, Point One)

(33) The trial court was asked to find that the Commission's Finding 81 (Tr. 12) establishing the reasonableness of a 100% surface acreage formula assumed the need for allocating allowable production in the absence of underlying facts necessary to determine such need, and was otherwise based upon no more than assumptions. (Tr. 363 -- Challenged, Point One)

(34) Petitioners-Appellants requested the trial court to find that the Commission's Finding 83 (Tr. 12) determining that an acreage formula would prevent

drainage was based upon assumptions not supported in the evidence. (Tr. 363 -- Challenged, Point One)

(35) Petitioners-Appellants asked the trial court to find that the Commission's Finding 85 (Tr. 12) was, in fact, a Conclusion of Law that a 100% surface acreage formula would allow ratable production, and was based upon speculation, conjecture and assumption rather than scientific and geologic evaluation available or readily obtainable. (Tr. 364 -- Challenged, Point One)

(36) Petitioners-Appellants requested the trial court to find that the Commission's Finding 86 (Tr. 12) was a Conclusion of Law that the Morrow Pool should be prorated according to the Order, and was unsupported by and contrary to the evidence. (Tr. 364 -- Challenged, Point One)

(B) The following Requested Findings were also refused, and are challenged by Appellants:

(1) Petitioners-Appellants requested the trial court to find that the Commission was unable to determine correlative rights in the absence of determining amounts of recoverable gas in the pool and under the tracts involved. (Finding 7, Tr. 364 -- Challenged, Point One)

(2) In Finding 8, the Petitioners-Appellants requested the trial court to find that there was a lack of evidence that it was impractical to determine the recoverable gas in the pool and under the tracts without waste. (Tr. 364 -- Challenged, Point One)

(3) Petitioners-Appellants requested the trial court to find that there was a failure of evidence of waste, as defined in §65-3-3 of the New Mexico statutes; and that the amounts of recoverable gas in the pool and under the tracts involved, and a determination of correlative rights, supported by the evidence, were necessary Findings to support a proration order. (Tr. 364, Finding 9 -- Challenged, Point One)

*Conclusion*  
This appeal being concerned with a review by the trial court of the findings contained in the Oil Conservation Commission's Order, it was not the purpose of the hearing to request proper findings by and for the Commission, but to have the trial court rule upon the propriety of the findings that were, in fact, made by the Oil Conservation Commission. Thus, the Requested Findings submitted by Petitioners-Appellants to the trial court were intended to reflect an appraisal of the Findings made by the Oil Conservation Commission in its Order, and thus support the Conclusions of Law requested by Petitioners-Appellants that the Commission's Order R-1670-L was void and unenforceable. (Tr. 365-366)

The trial court affirmed the Commission's Order on July 20, 1973 (Tr. 369), adopting the Intervenor's (and the Commission's) requested Findings and Conclusions. Judgment was entered August 14, 1973 (Tr. 380), along with denial of Appellants' request for Stay of Judgment (Tr. 381 -- Challenged, Point Two) and Notice of Appeal (Tr. 382). The time for appeal commenced running on August 14, 1973. Transcript was filed November 9, 1973.

ARGUMENT

POINT ONE

THE ORDER OF THE OIL CONSERVATION COMMISSION WAS ARBITRARY, UNREASONABLE, UNLAWFUL, AND CAPRICIOUS, AND SHOULD HAVE BEEN SET ASIDE BY THE TRIAL COURT.

The Supreme Court of this State has twice declared, with unmistakable authoritativeness, the obligation of the New Mexico Oil Conservation Commission in performing its statutory duty with respect to the conservation of oil and gas in New Mexico. In Continental Oil Company v. Oil Conservation Commission, 70 N.M. 310, 373 P.2d 809 (1962), the first definitive case on the matter of the Commission's obligation, Justice Carmody, writing for the Court, said:

"....The Commission has jurisdiction over matters related to the conservation of oil and gas in New Mexico, but the basis of its powers is founded on the duty to prevent waste and to protect correlative rights."

70 N.M. at 318.

And, just as in the case now before this Court, it was said in Continental:

"The Commission was here concerned with a formula for computing allowables, which is obviously directly related to correlative rights. In order to protect correlative rights, it is incumbent upon the Commission to determine, 'so far as it is practical to do so,' certain foundationary matters, without which the correlative rights of the various owners cannot be ascertained. Therefore, the Commission, by 'basic conclusions of fact' (or what might be termed 'findings'), must determine, insofar as practicable, (1) the amount of recoverable gas under each producer's tract; (2) the total amount of recoverable gas in the pool; (3) the proportion that (1) bears to (2); and (4) what portion of the arrived-at proportion can be recovered without waste. That the extent of the correlative rights must first be determined before the Commission can act to protect them is manifest." (Emphasis by the Court)

70 N.M. at 318-319

In the instant case, with respect to the requirements established by the Supreme Court in Continental, supra, and perhaps in justification of its failure to make any such findings of recoverable amounts and proportionate shares producible without waste, the Commission inserted the following findings in its Order of Proration:

(72) That due to the above-described variations in the stringers and the lack of continuity of the stringers, the effective feet of pay, porosity of the pay, and water saturation of the pay underlying each developed tract cannot be practically determined from the data obtained at the wellbore.

(73) That there are recoverable gas reserves underlying each of the developed 320-acre tracts within the horizontal limits of the subject pool; that there are 15 developed 320-acre tracts in the pool as defined by the Commission.

(74) That due to the nature of the reservoir the amount of recoverable gas under each producer's tract cannot be practically determined in the subject pool by a formula which considers effective feet of pay, porosity, and water saturation.

(75) That due to the nature of the reservoir the amount of recoverable gas under each producer's tract cannot be practically determined in the subject pool by a formula which considers only the deliverability of a well.

(76) That the amount of gas that can be practicably obtained without waste by the owner of each property in the subject pool substantially in the proportion that the recoverable gas under his tract bears to the total recoverable gas in the pool can be practically determined best by allocating the allowable production among the wells on the basis of developed tract acreage compared to total developed tract acreage in the pool.

(77) That considering the nature of the reservoir and the known extent of development, a proration formula based upon surface acreage will afford the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in the pool so far as such can be practicably obtained without waste substantially in the proportion that the recoverable gas under such property bears to the total recoverable gas in the pool.

(78) That in order to prevent waste the total allowable production from each gas well producing from the subject pool should be limited to the reasonable market demand for gas from that well.

(79) That in order to prevent waste the total allowable production from all gas wells producing from the subject pool should be limited to the reasonable market demand for gas from the pool.

(80) That in order to prevent waste the total allowable production from gas wells in the subject pool should be limited to the capacity of the gas transportation system for the subject pool's share of said transportation facility.

(Tr. 11)

(A) In the first instance, there was a lack of substantial evidence that the wells were producing from the same pool.

Section 65-3-13, N.M.Stat.Ann. (1953) is the threshold from which a prorationing order must spring, and its sole consideration must be the prevention of waste.. It is the duty of the Oil Conservation Commission to determine the limits of any natural gas pools (§65-3-11(12)), and thence to allocate production to each well in the pool "on a reasonable basis and recognizing correlative rights." (§65-3-13)

Only two Oil Commission experts testified at the hearing before the Commission on April 19th and 20th, 1972, one of them testifying that the horizontal limits of the Morrow Pool had not yet been determined, and that those limits would be "very difficult to tell." (Tr. 73-74)

Mr. Stamets's illustrations to suggest a common pool are incomprehensible: Using a chart he prepared (Ex. 3), he pointed out that the Texas Oil & Gas Pan American No. 1 well appeared to be producing from an isolated zone that did not extend to other wells (Tr. 76). He demonstrated by his chart that Pennzoil Federal No. 1, Grace No. 1, Grace-Humble No. 1, and Texas Oil & Gas American No. 1 all produced from different

zones (Tr. 76). Yet, he opined that there was no well producing from a wholly isolated pool (Tr. 79). "And further, the Commission has in general recognized the Morrow as a single producing zone" -- as if that settled the matter! *who said?*

Because the pay zones of the wells discussed were not shown to be "sufficiently continuous to be economically drilled and...not even economically feasible to make full completions out of" the Commission "generally treated" the Morrow as a single producing zone (Tr. 79). That witness (Richard Stamets, Technical Support Chief for the Commission) admitted, on cross-examination, that he had not checked the figures available on the Morrow formation to learn whether the zones constituted a separate, common source of supply (Tr. 86); and did not take shut-in pressures of the wells into consideration in reaching his determination that the wells were taking from a common source, even though such information would be significant in determining whether production came from a single pool (Tr. 94).

But, acknowledging that he hadn't considered pressures in forming his opinion, Stamets then conceded that whereas similar original pressures "certainly" should indicate communication between the wells, "after a period of time in production the zones that might represent limited reservoirs or noninter-connected reservoirs could note significant pressure differentials." (Tr. 95) But that information simply wasn't available at the time of the hearing (Tr. 95). He agreed that vertical communication could not "possibly" be identified without cores being taken from the Morrow, and unless that were known, again it could not be determined whether the wells were producing from

a common source of supply (Tr. 96). It was apparent, from the following questions and answers, that witness Stamets arbitrarily determined interconnection between the well sources:

"A. ....Normally fairly thick shale would be sufficient to present vertical migration, if vertical fracturing is insistent there can be communication even though you normally don't see it.

Q. Does this indicate there is no communication between the various zones within the formation?

A. In the absence of any concrete evidence that there are fractures, then you would have to say that the zones are isolated; conversely, in the absence of any definite evidence that there are not fractures, you can't say there aren't any.

Q. And you have no evidence that there are fractures in these zones?

A. That's right."

(Tr. 99-100)

The Commission's other witness, Elvin Utz, a Commission engineer for sixteen or seventeen years (Tr. 104), admitted on cross-examination that no geological information had been used to determine a common source of supply for new wells drilled in the area (Tr. 124), even though he recognized that the bottom-hole pressure readings for each well would be a "significant" factor in determining whether there was communication between the wells (Tr. 126). For his testimony, he had a reading of the bottom-hole pressure on only one well (Tr. 126). Instead, he "assumed" there was a single source of supply for all of the wells because -- again -- "the Commission has so designated that." (Tr. 131)

It is obvious that both employees of the Oil Conservation Commission had the cart before the horse: "We pro-rate because this is a pool," said they; not, "We shall first

determine whether there is a pool before we get to the question of prorating," as the statute instructs.

Mr. Taylor, Regional Development Geologist for Cities Service Oil Company, the intervenor, who "arbitrarily broke down the Morrow into four zones for correlation purposes" (Tr. 160), testified on cross-examination that one couldn't determine exactly that all of the wells in the Morrow formation were producing from the same reservoir (Tr. 171). And E. F. Motter, Cities Service's Regional Engineer, gave no opinion whatever concerning the existence of a single reservoir, but felt there should be prorationing any time there was more than one purchaser "in a field" (Tr. 191). On the other hand, J. C. Raney, Pennzoil-United's petroleum engineer, was "not prepared to say" that all of the Morrow wells were producing from a single source (Tr. 246), but he assumed there was communication between the wells (Tr. 247-248).

Upon objection by the Intervenor Cities Service, appellant was prohibited from inquiring further into the actual existence of a common pool (Tr. 248-250). Subsequently, however, Pennzoil's petroleum engineer also denied that communication between wells had been established in the Morrow field (Tr. 274); Charles Miller, a consulting geologist from Hobbs, seriously doubted there was vertical communication in the Morrow formation (Tr. 292), and no evidence to prove horizontal communication (Tr. 216, 293). He felt the entire question of communication, on the data available, was purely speculative (Tr. 294).

Thereafter, Richard Steinholz, a consulting petroleum engineer who had worked in both the Strawn and Morrow

fields (Tr. 295-296), upon the collation of information obtained from log data on the various wells (Tr. 296-298), was of the opinion that there was not enough evidence to show communication and interference between wells (i.e., the existence of a pool) to justify proration (Tr. 299). He was adamant that the Humble Grace and Humble Grace No. 1 definitely were not related to the other wells in the field (Tr. 303, 310).

And, finally, R. W. Decker, a consulting geologist engaged in southeastern New Mexico geology for the preceding eleven years (Tr. 307), found, from data contained in electric logs, scout information, stem tests and proration information (Tr. 309), that there was very poor connection between wells throughout the Morrow, and none whatever west of the main field (Tr. 309). A 20-foot shale separation prevented vertical migration from the Humble Grace eastward to Gulf Federal No. 1 well (Tr. 310).

And so it is apparent from all of the testimony presented to the Commission that there was no geological data -- merely assumption -- that the wells for which proration was ordered all drew from a single source. Thus the pyramid of facts upon which the pinnacle of control by the Commission must rest was rendered wobbly because it lacked the very cornerstone of its strength. There was no evidence of a common pool for the triggering of allocating allowables.

- (B) The Commission failed to determine the amount of recoverable gas under each producer's tract or in the pool.

Not a single witness before the Commission during two days of testimony in April 1972 testified that a determination had been made of gas in place under the tracts of

the various owners, and only two -- not Commission employees -- testified as to how such a determination could have been reached.

Mr. Stamets, the Commission's chief geologist, candidly stated that he did not feel the Commission could comply with the requirements of the Supreme Court's directive (Continental Oil Co. v. Oil Cons. Comm., 70 N.M. 310, 373 P.2d 809 (1962), and El Paso Natural Gas Co. v. Oil Cons. Comm., 76 N.M. 268, 414 P.2d 496 (1966)), to consider the amount of recoverable gas under each producer's tract with respect to the total amount of recoverable gas in the pool in a proportion that would determine how much could be recovered without waste (Tr. 86), at the same time admitting that although it would be difficult to determine the amount of recoverable gas under each tract, "in this modern day a man would be a fool to say anything is impossible." (Tr. 86)

In explaining why no reserves had been fixed by the Commission, Stamets said:

"We are dealing with something that is really going to be tricky, we are going to have to look at each zone and try to figure out what it does exactly, where it goes, how far it extends from the well bore, and then we can get started on attempting to figure out the reserve. I have pointed out that even though we may see reserves there they may not be contributing to the well because they may be blocked off at the Morrow formation to a point where you might have a well cased off and cemented."

(Tr. 87)

The Cities Service attorney then again asked witness Stamets if the Commission could determine the amounts substantially in proportion to the continued recovery of oil and gas to the total recoverable gas in the pool, as a practicable matter, and Stamets replied:

"Considering the practicability, I am going to have to answer at this time, no. After the presentation of the Exhibits and the testimony by the other people who are interested I may be forced to change my answer, but from my own investigation and my own observations at this time, because of the lack of cores, and with all of the problems that exist in this reservoir, I am going to have to answer no right now."

(Tr. 88)

But there were logs on every well in the pool (Tr. 88); geological information was obtainable at Hobbs (Tr. 88); and if the logs indicated that the interval being produced from well to well was dissimilar, Stamets felt it quite possible he could come up with a figure he would consider reasonable (Tr. 89). No reason was ever given why the obviously necessary tests and analyses hadn't been made.

Mr. Utz, the Commission's other expert employee, agreed that there was an insufficient productive history of the wells in the Morrow pool upon which to make reserve computations (Tr. 123), thus tacitly implying, at least, that reserves could be calculated if the wells were allowed to produce for a longer period.

But the petroleum engineer for Pennzoil-United, another producer in both the Strawn and Morrow fields, had no difficulties in determining a formula for reaching the estimated reserves under each tract and in the pool. He relied on sonic logs (Tr. 231), which constituted the best information available on all of the wells in both pools (Tr. 233), to establish a prime factor of hydrocarbon core volume of the formations subject to proration underlying each proration unit. Cores or an adequate set of logs would be required by which the hydrocarbon core volume could be determined (Tr. 234). That factor would be the measured "production after porosity, water saturation,

effective feet of pay, and the area of standard proration units as determined from completed wells" were applied (Tr. 234). *5/11/61*

Although the formula includes technical terms, its method of application is understandable. Mr. Raney explained the steps:

"The proration unit allowable in each pool would be based on the following formula: Hydrocarbon core volume would be equal to the effective feet of pay underlying each proration unit as determined from the appropriate logs or cores times the porosity in the effective feet of pay, times one minus the water saturation in the effective feet of pay times the area of standard proration units.

"The proration unit allowable factor would be equal to the hydrocarbon core volume as determined above, times the proration unit acreage divided by 320 times the penalty or rateable take factor.

"Then the proration unit allowable would be equal to the proration unit allocation factor divided by the total pool allocation factor times the total pool nominations.

"The total pool nominations would be the total pool nominations by all purchasers."

(Tr. 236)

The adoption of this formula, in his opinion, would prevent waste (Tr. 238), and would comply with the Supreme Court's interpretation of the statutes (Tr. 238); the reserves in place under each tract would be accurate, and the reserves of the entire pool could be obtained simply by adding together the reserves from each tract (Tr. 239). If, on the basis of the net feet of pay shown in a six-inch well bore specimen, an error were made and thus applied throughout a well's 320-acre surface allocation, Raney believed no detriment would attach because all of the producers would have their six-inch bores treated in the same manner. Likewise, any water saturation factor taken at one given point and

applied throughout its 320 acres if done accordingly for each well, would result in equally even treatment to all producers (Tr. 243).

Mr. Raney testified that he could determine the porosity underlying each well (Tr. 262); that logs were available on all completed wells (Tr. 266), and he was aware of the approximate total of the pay area in the Morrow (Tr. 263); thus, he could apply his formula successfully to both the Morrow and Strawn fields (Tr. 263).

Mr. Motter had another view. He was the Intervenor's expert (and it was the Intervenor's Findings which were adopted); yet, he agreed that net productivity feet can be predicted from a log, and net feet is usually an indicator of the well's reserves (Tr. 187). But he did not indicate he had made any predictions or calculations of reserves, either.

No one had made any efforts to find "the amounts of recoverable gas in the pool or under the various tracts, or how much gas could be practicably obtained without waste."<sup>1/</sup> Nor, in view of the evidence received, was there any reasonable explanation made why it would have been impracticable to have done so. As a consequence, no findings of well or pool reserves were made by the Commission.

The Court, in Continental, asked the question of vital significance here:

"The commission made no finding, even 'insofar as can be practically determined,' as to the amounts of recoverable gas in the pool or under the tracts. How, then, can the commission protect correlative rights in the absence of such a finding?" [Italics by the Court]

70 N.M. at 319

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<sup>1/</sup> Continental Oil Co. v. Oil Conservation Comm., supra,  
70 N.M. at 319

The "basic jurisdictional findings, supported by evidence, required [by law and insisted upon by the Supreme Court] to show that the Commission has heeded the mandate and the standards set out by statute,"<sup>2/</sup> were lacking here, and thus the Commission had no jurisdiction to issue Order No. R-1670-L.

The trial court should have set aside the order.

(C) The Order entered by the Commission deprives each producer of the opportunity to produce his fair share of the reserves in a quantity proportionate to any reserves in a pool.

It is apparent from the testimony of almost all the witnesses that, with additional data, the pool reserves could have been determined (Tr. 89-90; 94-97; 99-100; 123-126; 167, \* 170; 189; 234-237; 252; 285). Each agreed that additional work and expenditures probably would be necessary in order to provide additional information.

But, notwithstanding such evidence of insufficient data upon which to calculate the proportion of reserves under each tract with relation to the total reserves in the pool, there was evidence of a wide disparity in deliverability among the wells in the field (Tr. 175-177), the Cities Service geologist describing that difference in these words:

"Some of the wells are excellent wells and others could be referred to as what are commonly called stinkers." (Tr. 109)

The inference, therefore, of greater reserves under some wells than others was buttressed by the testimony of Mr. Raney, the Pennzoil petroleum engineer who unequivocally said:

"I do know the reservoir quality under the Humble-Grace is much greater than the surrounding wells." (Tr. 209)

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<sup>2/</sup> Id., at 321.

Too, although there was evidence from the Commission's experts that the Commission considered all wells to be producing from the same pool, it is clear that the Commission's experts relied upon past treatment of the field as having a common pool (Tr. 79, 97, 110), as well as upon a decision establishing the area as a pool five or six years previously (which apparently had never been protested by any of the producers) (Tr. 97-99). But, as against the Commission's assumption that all wells were being produced from the same pool, there was an abundance of testimony that the Commission had no evidence of fractures and, in the absence of such evidence, one would have to say that the zones are isolated (Tr. 100); that considering the reality of 600 feet of Morrow it would be difficult, if not impossible, to determine the Morrow members and predict what part of the Morrow formation would be productive, or what the productive interval would be (Tr. 167); that communication, or lack of it, between the wells had not been established in that particular pool (Tr. 212); that there was, at one point, a 20-foot deposit of shale adequate to prevent vertical migration eastward from the Humble Grace well to the No. 1 Gulf Federal (Tr. 310), all tending to show separate reservoirs (Tr. 311).

To protect correlative rights, of course, it was necessary to know whether one well might drain another (Tr. 251) and, accordingly, one well could not drain another if they were not both producing from the same pool. Therefore, in the absence of any evidence other than surmise that the wells affected by the proration order were, in fact, draining the same pool, and in the face of positive evidence that some of the wells were not

producing from a common pool (Tr. 240), only one conclusion is possible: Those wells producing from apparently healthy reservoirs are penalized by an order which limits their production to that which represents the production of one of the "stinkers." Such a result strips the owner of the productive properties of his statutory opportunity to produce "his just and equitable share of the gas in the pool underlying his tract of land" (§65-3-29). Mobil Oil, a year earlier, had recommended a formula by which a fair allocation could be reached (Tr. 329-331).

The Order entered by the Commission violated the rights of Appellants which the Legislature has granted to them. The Commission's Findings 66, 67, 68, 74, 76, 77, 78, 81, 83, 85 and 86 are all without substantial support in the evidence, and many have no support whatever. Appellants submit that the Commission's Finding 81, that a 100% surface acreage formula was the most reasonable basis for allocating allowable production among the wells, will not reflect the "most reasonable basis" at all --- it only describes the most convenient, and least cerebral, basis for exercising undisciplined authority by the Commission.

Order No. R-1670-L, because unsupported by the evidence, was an arbitrary, capricious, unreasonable and unlawful act of the Oil Conservation Commission, and it should be set aside and held for naught.

#### POINT TWO

##### APPELLANTS WERE ENTITLED TO A STAY OF JUDGMENT.

The trial court's judgment in this matter was entered on August 14, 1973 (Tr. 380), and on the same day, Appellants filed a Motion for Stay of Judgment (Tr. 379).

Rule 62(d) of the New Mexico Rules of Civil Procedure (§21-1-1) (62) (d), N.M.Stat.Ann. (1953), provides that:

"When an appeal is taken, the appellant by giving a supersedeas bond may obtain a stay subject to the exceptions contained in subdivisions (a) and (c) of this rule. The bond may be given at any time within thirty [30] days after taking the appeal...."

Subdivision (a) of the rule provides for execution on a judgment unless a stay be granted, and subsection (c) refers to a stay granted on an appeal from a judgment granting, dissolving, or denying an injunction.

The operating portion of New Mexico Rule 62(d) was derived from, and is exactly the same as the federal rule, with the exception of the time granted by the New Mexico statute for filing a supersedeas bond.

The language of the statute appears to say that the appellant shall be granted a stay, in the sense that "may" is to be interpreted to mean "have permission to: have liberty to," Webster's Third New International Dictionary (1968).

3 Barron & Holtzoff, Federal Practice & Procedure 466, at §1374, states:

"The stay issues as a matter of right in cases within the rule, and is effective when the supersedeas is approved by the court, which may be at or after the time of filing the notice of appeal.

At 11 Wright & Miller, Federal Practice & Procedure 325-26, §2905, the same interpretation of the Rule is made, the authors there saying:

"Rule 62(d) permits an appellant to obtain a stay by giving a supersedeas bond....This kind of stay may not be obtained in injunction cases, receivership cases, or in patent infringement cases in which an accounting has been ordered. In those three classes of cases it is discretionary with the court whether to allow a stay....

"The stay issues as a matter of right in cases within the rules, and is effective when the supersedeas is approved by the court."

The rule appears to leave no room for discretion once an appeal is taken, if the matter being appealed does not involve an injunction, §21-1-1(62)(c), or if the application for stay is made immediately after final judgment, §21-1-1(62)(a). It only remains for the Court to determine the amount and conditions of the bond to supersede the judgment.

If, as the rule and the authorities indicate, Appellants were entitled to a stay as a matter of right, and Appellants' motion for stay of judgment was timely filed (Tr. 379), it was error for the trial court to deny a stay of judgment; and if this case be remanded for further proceedings, this Court should direct that a stay of judgment be entered.

#### CONCLUSION

The trial court erred in two respects in the hearing below: (1) a stay of judgment should have been granted pending the decision of this Court, and (2) the Order of the Oil Conservation Commission should have been set aside because of the Commission's failure to find the basic facts upon which a proration order could rest and the Commission's jurisdiction be exercised.

For the foregoing reasons, Appellants respectfully request a reversal of the judgment entered by the trial court and a decision setting aside the Order of the Oil Conservation Commission.

Respectfully submitted,

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IN THE SUPREME COURT OF THE  
STATE OF NEW MEXICO

MICHAEL P. GRACE II and  
CORINNE GRACE,

Petitioners-Appellants,

vs.

OIL CONSERVATION COMMISSION  
OF NEW MEXICO,

No. <sup>9821</sup>~~9806~~

Respondent-Appellee,

and

CITIES SERVICE OIL COMPANY and  
CITY OF CARLSBAD, NEW MEXICO,

Intervenors.

APPELLANTS' BRIEF-IN-CHIEF

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SUPREME COURT OF NEW MEXICO

FILED

DEC 7 - 1973

*Rudolph Calabrese*  
CLERK

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vs.

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OF NEW MEXICO,

NO. 9866

Respondent-Appellee,

and

CITIES SERVICE OIL COMPANY and  
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Intervenors.

APPELLANTS' BRIEF-IN-CHIEF

STATEMENT OF THE CASE

Appellants' petition for a review of the order entered by the Oil Conservation Commission on June 30, 1972 (Tr. 23; 62-63) was denied by the District Court of Eddy County (Tr. 380), after the trial court had reviewed the transcript before the Oil Conservation Commission (Tr. 54-345) and heard argument of counsel (Tr. 385-495). Petitioners appeal the decision of the court.

STATEMENT OF PROCEEDINGS

On April 19 and 20, 1972, Commissioners Porter and Armijo of the New Mexico Oil Conservation Commission conducted a hearing (Tr. 64-346) at Hobbs in consolidated cases 4693 and 4694 (Tr. 63, 64), upon which Order No. R-1670-L (Tr. 4-13) was entered June 30, 1972. A petition for review of the Order in

Cause No. 4693 was filed August 18, 1972 (Tr. 2-3), which petition was later amended on June 1, 1973 (Tr. 62-63). In the interim, petitioners-appellants requested a stay of the Order directing proration (Tr. 18-22), and stay was granted on August 31, 1972 (Tr. 23) by Judge Archer. The Oil Conservation Commission moved to quash the stay order on September 7, 1972 (Tr. 24-25), and on September 15, 1972, filed an affidavit of disqualification of Judge Archer (Tr. 34).

Petitions of the City of Carlsbad (Tr. 33) and Cities Service Oil Company (Tr. 40-41) to intervene were granted by Judge Snead (Tr. 52, 53) although appellants objected to Cities Service's petition on October 11, 1972 (Tr. 45) on grounds that Cities Service was not a party to the original hearing.

Thereafter, on April 11, 1973, Judge Archer's order of stay was dissolved by Judge Snead (Tr. 57-58), to which the petitioners-appellants took exception on April 16, 1973 (Tr. 59-60).

Subsequently, the matter came on for hearing of the petition for review on June 5, 1973 (Tr. 387-495). Petitioner and intervenor Cities Service filed Requested Findings and Conclusions (Tr. 354-366; 347-353), and respondent adopted by reference Requested Findings of Fact and Conclusions of Law filed by intervenor Cities Service Oil Company (Tr. 367).

The District Court adopted verbatim the Requested Findings and Conclusions submitted by intervenor Cities Service Oil Company (Tr. 347-353; 370-377), and denied all of Petitioners-Appellants' Requested Findings and Conclusions (Tr. 354-366).

The trial court made the following challenged Findings:

"The Oil Conservation Commission did not act fraudulently, arbitrarily, or capriciously in issuing Order No. R-1670-L." (Finding 12, Tr. 374 -- Challenged, Point One)

"The Transcript of Record and Proceedings in Case No. 4693 before the Oil Conservation Commission contains substantial evidence to support the Commission's findings in order No. R-1670-L." (Finding 13, Tr. 374-75 -- Challenged, Point One)

"The Oil Conservation Commission did not exceed its authority in issuing order No. R-1670-L." (Finding 14, Tr. 375 -- Challenged, Point One)

"Oil Conservation Commission order No. R-1670-L is not erroneous, invalid, improper or discriminatory." (Finding 15, Tr. 375 -- Challenged, Point One)

"The formula adopted by the Oil Conservation Commission for allocating allowable production among the gas wells in the South Carlsbad-Morrow Gas Pool allocates such production upon a reasonable basis, recognizing correlative rights, and, insofar as practicable, prevents drainage between producing tracts in the pool which is not offset by counter drainage." (Finding 16, Tr. 375 -- Challenged, Point One)

"The formula adopted by the Oil Conservation Commission for allocating allowable production among the gas wells in the South Carlsbad-Morrow Gas Pool allocates such production in a manner that affords to the owner of each property in the South Carlsbad-Morrow Gas Pool the opportunity to produce without waste his just and equitable share of the gas in the pool, insofar as it is practicable to do so, and for this purpose to use a just and equitable share of the reservoir energy." (Finding 17, Tr. 375 -- Challenged, Point One)

"Oil Conservation Commission order No. R-1670-L will prevent waste and will protect correlative rights." (Finding 18, Tr. 375 -- Challenged, Point One)

Requested Findings submitted by Petitioners-Appellants, and refused by the trial court, included the following:

(A) Petitioners' Requested Finding 6 (Tr. 355-64)

included requests to find:

(1) That purchasers in the South Carlsbad-Morrow Gas Pool had a line capacity sufficient at the time of hearing, or within a very short time thereafter, to purchase all available gas supplies in the field, which evidence contradicted the Commission's Findings 8 and 9 equating the capacity of transportation with the evidence concerning the amount of gas produced each day. (Tr. 356 -- Challenged, Point One)

(2) That the Commission's Findings 14 and 15 (Tr. 5), that there was no substantial alteration in the manner of producing the wells after February 1972, and an inference that, therefore, the production was substantially the same as in February 1972, was contrary to the evidence that new wells were being drilled, additional transportation facilities contracted for, and that production had been restricted awaiting lifting of market restrictions by the Federal Power Commission. (Tr. 356 -- Challenged, Point One)

(3) Petitioners-Appellants objected to the incomplete and misleading facts of the Commission's Finding 16 (Tr. 5) regarding the amount of gas purchased per day by the Transwestern system, since it failed to include evidence that at the time of hearing Transwestern was ready and able to purchase all additional available gas, and the amount of its purchases of 41,000 MCF per day reflected only the total of all gas offered to Transwestern as of the date of hearing. (Tr. 356 -- Challenged, Point One)

(4) Petitioners objected to the Commission's Findings 19 and 22 (Tr. 6), as a part of Petitioners' Requested Finding 6, alleging that the evidence showed that both purchasers were capable of taking all gas that could be produced, and Llano's preparations to double capacity contradicted the Finding that the purchasers were incapable of taking the full amounts purchased in April 1972 from the South Carlsbad-Morrow Gas Pool alone. (Tr. 357 -- Challenged, Point One)

(5) Petitioners-Appellants requested the trial court to find that the Oil Commission's Finding 23 (Tr. 6) was erroneous because it was based on, and combined the results of, Findings 19 and 22 which, as stated above, were contrary to the evidence. (Tr. 357 -- Challenged, Point One)

(6) The Oil Commission's Findings 26, 27 and 28 (Tr. 6-7) were challenged, and the trial court was requested to find that those Findings were unsupported by any evidence whatever regarding production at less than full capacity, and that an averaging of productivity of all wells was erroneous and improper because of the evidence showing lack of uniformity in the production of the individual wells and because of the expert descriptions of the individual wells ranging from "excellent" to "stinky." (Tr. 357 -- Challenged, Point One)

(7) the trial court was asked to find that the Oil Commission's Finding 29 (Tr. 7) was an erroneous Conclusion of Law because it added up the unsupported estimates of production in the Commission's Finding 26, 27 and 28 which, as stated above, are estimates not supported by the evidence. (Tr. 358 -- Challenged, Point One)

(8) Petitioners-Appellants protested the Oil Commission's Findings 31 and 32 (Tr. 7) and asked the trial court to find that they were, in fact, erroneous Conclusions of Law because they were based on, and combined the results of, Findings 26, 27 and 28, challenged above as contrary to the evidence. (Tr. 358 -- Challenged, Point One)

(9) Petitioners-Appellants requested the trial court to find that Finding 33 (Tr. 7) of the Commission was an erroneous Conclusion of Law which stated the combined effect of erroneous Findings 31 and 32, described above. (Tr. 358 -- Challenged, Point One)

(10) The trial court was asked to find that the Commission's Findings 34 and 35 (Tr. 7), relating to "current" purchases of Transwestern and Llano as of June 1972, the date of entry of the challenged Order, were unsupported by the evidence. (Tr. 358 -- Challenged, Point One)

(11) The trial court was requested by Petitioners-Appellants to find that the Commission's Findings 40 and 41 (Tr. 8) regarding Transwestern's and Llano's "take" from the pools were unsupported by the evidence. (Tr. 359 -- Challenged, Point One)

(12) Appellants requested a Finding that the Commission's Finding 42 (Tr. 8) was, instead, a Conclusion of Law which combined the erroneous Findings 40 and 41 of the Commission; therefore, it likewise was unsupported in the evidence. (Tr. 359 -- Challenged, Point One)

(13) Appellants asked the trial court to find that the Commission's Findings 43 and 44 (Tr. 8) of market demand were contrary to the evidence and applied a definition of reasonable market demand which conflicted with the statutory definition thereof. (Tr. 359 -- Challenged, Point One)

(14) The trial court was requested to find that the Commission's Finding 45 (Tr. 8) was, in fact, a Conclusion of Law combining the effect of Commission's Findings 43 and 44 which, as stated above, were erroneous and contrary to the evidence, and thus Finding 45 was likewise erroneous and contrary to the evidence. (Tr. 359 -- Challenged, Point One)

(15) Petitioners requested the trial court to find that the Commission's Findings 46, 47 and 48 (Tr. 8-9) relating to production capabilities in excess of market demand were, in reality, Conclusions of Law arrived at from the erroneous facts found in the Commission's Findings 26, 27, 28, 29, 31, 32, 33, 43, 44 and 45, which latter Findings, as stated above, were challenged as contrary to the evidence and to the statutory definition of market demand. (Tr. 359 -- Challenged, Point One)

(16) Petitioners-Appellants asked the trial court to find that the Commission's Finding 48 (Tr. 9) was, in reality, a Conclusion of Law derived from Findings 46 and 47, and a combination of those two Findings [Conclusions], and, therefore, likewise erroneous. (Tr. 359 -- Challenged, Point One)

(17) Petitioners-Appellants requested the trial court to find that the Commission's Finding 54 (Tr.9) was a Conclusion concerning a well's fair share of the total pool monthly market, although there was no evidence at the hearing regarding the amount of recoverable gas in the pool or under the tracts so as to establish any well's fair share. (Tr. 360 -- Challenged, Point One)

(18) Petitioners-Appellants challenged the Commission's Findings 55, 56 and 57 (Tr. 9) concerning daily deliverability of the wells in excess of "take," as unsupported in the evidence, speculative, conjectural, and contrary to the evidence heard by the Commission. (Tr. 360 -- Challenged, Point One)

(19) Petitioners-Appellants requested the trial court to find that the Commission's Finding 59 (Tr. 10) of production in excess of market demand was contrary to the evidence and, furthermore, based upon an erroneous determination and definition of market demand. (Tr. 360 -- Challenged, Point One)

(20) Petitioners-Appellants requested the trial court to find that the Commission's Finding 60 (Tr. 10) of production in an amount less than market demand was

contrary to the evidence and, furthermore, based upon an erroneous determination and definition of market demand. (Tr. 359 -- Challenged, Point One)

(21) The trial court was requested by Petitioners-Appellants to find that the Commission's Finding 61 (Tr. 10) that gas was not being taken ratably from the producers was based solely upon a theoretical computation which assumed the ultimate facts which the Commission was required to determine and, furthermore, contrary to the evidence. (Tr. 360-361 -- Challenged, Point One)

(22) The trial court was requested by Petitioners-Appellants to find that the Commission's Findings 62 and 63 were, in reality, Conclusions of Law, that owners were producing more or less than their just share of gas, which were unsupported by any evidence, or by underlying Findings of Fact which were supported in the evidence. (Tr. 361 -- Challenged, Point One)

(23) Petitioners-Appellants requested the trial court to find that the Commission's Finding 64 (Tr. 10) regarding existence of drainage was without support in the evidence and based solely on surmise, conjecture, speculation and assumption. (Tr. 361 -- Challenged, Point One)

(24) The trial court was requested to find that the Commission's Findings 65 and 66 (Tr. 10) were, in reality, Conclusions of Law summarizing the erroneous and unsupported facts of the Commission's Findings 62, 63 and 64. (Tr. 361 -- Challenged, Point One)

(25) Petitioners-Appellants requested the trial court to find that the Commission's Finding 67 (Tr. 10) was, in fact, an erroneous Conclusion of Law that the pool should be prorated, and was contrary to the evidence and, in part, based upon an erroneous definition of market demand. (Tr. 361 -- Challenged, Point One)

(26) The trial court was requested to find that the Commission's Finding 68 (Tr. 10) of the necessity to prorate to insure equitable, proportionate production was without foundation and without consideration of the statutory definition of market demand. (Tr. 362 -- Challenged, Point One)

(27) Petitioners-Appellants asked the trial court to find that the Commission's Finding 71 (Tr. 10) of interconnection of stringers in the Morrow pool was based upon speculation, conjecture and surmise, and was otherwise unsupported in the evidence. (Tr. 362 -- Challenged, Point One)

(28) The Commission's Finding 72 (Tr. 11) regarding impracticability of obtaining necessary data was asked to be set aside by the trial court as unsupported in the evidence. (Tr. 362 -- Challenged, Point One)

(29) Petitioners-Appellants asked the trial court to find that the Commission's Finding 73 (Tr. 11) regarding reserves under each tract was unsupported in the evidence, but based wholly on speculation, conjecture and unfounded assumptions. (Tr. 362 -- Challenged, Point One)

(30) The trial court was asked to find that the Commission's Finding 74 (Tr. 11) regarding inability to apply a formula to determine reserves was contrary to the evidence. (Tr. 362 -- Challenged, Point One)

(31) Petitioners-Appellants asked the trial court to find that the Commission's Finding 76 (Tr. 11) concerning the best manner of determining production obtainable was contrary to the evidence. (Tr. 362-363 -- Challenged, Point One)

(32) Petitioners-Appellants requested the trial court to find that Commissioner's Finding 77 (Tr. 11) was, in reality, a Conclusion of Law that the just and equitable opportunity for each owner to produce would be afforded on a surface acreage formula, was unsupported by any evidence to permit proper Findings upon which to base such a Conclusion, and that the Conclusion was otherwise based solely on speculation, conjecture and assumption. (Tr. 363 -- Challenged, Point One)

(33) The trial court was asked to find that the Commission's Finding 81 (Tr. 12) establishing the reasonableness of a 100% surface acreage formula assumed the need for allocating allowable production in the absence of underlying facts necessary to determine such need, and was otherwise based upon no more than assumptions. (Tr. 363 -- Challenged, Point One)

(34) Petitioners-Appellants requested the trial court to find that the Commission's Finding 83 (Tr. 12) determining that an acreage formula would prevent

drainage was based upon assumptions not supported in the evidence. (Tr. 363 -- Challenged, Point One)

(35) Petitioners-Appellants asked the trial court to find that the Commission's Finding 85 (Tr. 12) was, in fact, a Conclusion of Law that a 100% surface acreage formula would allow ratable production, and was based upon speculation, conjecture and assumption rather than scientific and geologic evaluation available or readily obtainable. (Tr. 364 -- Challenged, Point One)

(36) Petitioners-Appellants requested the trial court to find that the Commission's Finding 86 (Tr. 12) was a Conclusion of Law that the Morrow Pool should be prorated according to the Order, and was unsupported by and contrary to the evidence. (Tr. 364 -- Challenged, Point One)

(B) The following Requested Findings were also refused, and are challenged by Appellants:

(1) Petitioners-Appellants requested the trial court to find that the Commission was unable to determine correlative rights in the absence of determining amounts of recoverable gas in the pool and under the tracts involved. (Finding 7, Tr. 364 -- Challenged, Point One)

(2) In Finding 8, the Petitioners-Appellants requested the trial court to find that there was a lack of evidence that it was impractical to determine the recoverable gas in the pool and under the tracts without waste. (Tr. 364 -- Challenged, Point One)

(3) Petitioners-Appellants requested the trial court to find that there was a failure of evidence of waste, as defined in §65-3-3 of the New Mexico statutes; and that the amounts of recoverable gas in the pool and under the tracts involved, and a determination of correlative rights, supported by the evidence, were necessary Findings to support a proration order. (Tr. 364, Finding 9 -- Challenged, Point One)

This appeal being concerned with a review by the trial court of the findings contained in the Oil Conservation Commission's Order, it was not the purpose of the hearing to request proper findings by and for the Commission, but to have the trial court rule upon the propriety of the findings that were, in fact, made by the Oil Conservation Commission. Thus, the Requested Findings submitted by Petitioners-Appellants to the trial court were intended to reflect an appraisal of the Findings made by the Oil Conservation Commission in its Order, and thus support the Conclusions of Law requested by Petitioners-Appellants that the Commission's Order R-1670-L was void and unenforceable. (Tr. 365-366)

The trial court affirmed the Commission's Order on July 20, 1973 (Tr. 369), adopting the Intervenor's (and the Commission's) requested Findings and Conclusions. Judgment was entered August 14, 1973 (Tr. 380), along with denial of Appellants' request for Stay of Judgment (Tr. 381 -- Challenged, Point Two) and Notice of Appeal (Tr. 382). The time for appeal commenced running on August 14, 1973. Transcript was filed November 9, 1973.

ARGUMENT

POINT ONE

THE ORDER OF THE OIL CONSERVATION COMMISSION WAS ARBITRARY, UNREASONABLE, UNLAWFUL, AND CAPRICIOUS, AND SHOULD HAVE BEEN SET ASIDE BY THE TRIAL COURT.

The Supreme Court of this State has twice declared, with unmistakable authoritativeness, the obligation of the New Mexico Oil Conservation Commission in performing its statutory duty with respect to the conservation of oil and gas in New Mexico. In Continental Oil Company v. Oil Conservation Commission, 70 N.M. 310, 373 P.2d 809 (1962), the first definitive case on the matter of the Commission's obligation, Justice Carmody, writing for the Court, said:

"....The Commission has jurisdiction over matters related to the conservation of oil and gas in New Mexico, but the basis of its powers is founded on the duty to prevent waste and to protect correlative rights."

70 N.M. at 318.

And, just as in the case now before this Court, it was said in Continental:

"The Commission was here concerned with a formula for computing allowables, which is obviously directly related to correlative rights. In order to protect correlative rights, it is incumbent upon the Commission to determine, 'so far as it is practical to do so,' certain foundationary matters, without which the correlative rights of the various owners cannot be ascertained. Therefore, the Commission, by 'basic conclusions of fact' (or what might be termed 'findings'), must determine, insofar as practicable, (1) the amount of recoverable gas under each producer's tract; (2) the total amount of recoverable gas in the pool; (3) the proportion that (1) bears to (2); and (4) what portion of the arrived-at proportion can be recovered without waste. That the extent of the correlative rights must first be determined before the Commission can act to protect them is manifest." (Emphasis by the Court)

70 N.M. at 318-319

In the instant case, with respect to the requirements established by the Supreme Court in Continental, supra, and perhaps in justification of its failure to make any such findings of recoverable amounts and proportionate shares producible without waste, the Commission inserted the following findings in its Order of Proration:

(72) That due to the above-described variations in the stringers and the lack of continuity of the stringers, the effective feet of pay, porosity of the pay, and water saturation of the pay underlying each developed tract cannot be practically determined from the data obtained at the wellbore.

(73) That there are recoverable gas reserves underlying each of the developed 320-acre tracts within the horizontal limits of the subject pool; that there are 15 developed 320-acre tracts in the pool as defined by the Commission.

(74) That due to the nature of the reservoir the amount of recoverable gas under each producer's tract cannot be practically determined in the subject pool by a formula which considers effective feet of pay, porosity, and water saturation.

(75) That due to the nature of the reservoir the amount of recoverable gas under each producer's tract cannot be practically determined in the subject pool by a formula which considers only the deliverability of a well.

(76) That the amount of gas that can be practicably obtained without waste by the owner of each property in the subject pool substantially in the proportion that the recoverable gas under his tract bears to the total recoverable gas in the pool can be practically determined best by allocating the allowable production among the wells on the basis of developed tract acreage compared to total developed tract acreage in the pool.

(77) That considering the nature of the reservoir and the known extent of development, a proration formula based upon surface acreage will afford the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in the pool so far as such can be practicably obtained without waste substantially in the proportion that the recoverable gas under such property bears to the total recoverable gas in the pool.

(78) That in order to prevent waste the total allowable production from each gas well producing from the subject pool should be limited to the reasonable market demand for gas from that well.

(79) That in order to prevent waste the total allowable production from all gas wells producing from the subject pool should be limited to the reasonable market demand for gas from the pool.

(80) That in order to prevent waste the total allowable production from gas wells in the subject pool should be limited to the capacity of the gas transportation system for the subject pool's share of said transportation facility.

(Tr. 11)

(A) In the first instance, there was a lack of substantial evidence that the wells were producing from the same pool.

Section 65-3-13, N.M.Stat.Ann. (1953) is the threshold from which a prorationing order must spring, and its sole consideration must be the prevention of waste. It is the duty of the Oil Conservation Commission to determine the limits of any natural gas pools (§65-3-11(12)), and thence to allocate production to each well in the pool "on a reasonable basis and recognizing correlative rights." (§65-3-13)

Only two Oil Commission experts testified at the hearing before the Commission on April 19th and 20th, 1972, one of them testifying that the horizontal limits of the Morrow Pool had not yet been determined, and that those limits would be "very difficult to tell." (Tr. 73-74)

Mr. Stamets's illustrations to suggest a common pool are incomprehensible: Using a chart he prepared (Ex. 3), he pointed out that the Texas Oil & Gas Pan American No. 1 well appeared to be producing from an isolated zone that did not extend to other wells (Tr. 76). He demonstrated by his chart that Pennzoil Federal No. 1, Grace No. 1, Grace-Humble No. 1, and Texas Oil & Gas American No. 1 all produced from different

zones (Tr. 76). Yet, he opined that there was no well producing from a wholly isolated pool (Tr. 79). "And further, the Commission has in general recognized the Morrow as a single producing zone" -- as if that settled the matter!

Because the pay zones of the wells discussed were not shown to be "sufficiently continuous to be economically drilled and...not even economically feasible to make full completions out of" the Commission "generally treated" the Morrow as a single producing zone (Tr. 79). That witness (Richard Stamets, Technical Support Chief for the Commission) admitted, on cross-examination, that he had not checked the figures available on the Morrow formation to learn whether the zones constituted a separate, common source of supply (Tr. 86); and did not take shut-in pressures of the wells into consideration in reaching his determination that the wells were taking from a common source, even though such information would be significant in determining whether production came from a single pool (Tr. 94).

But, acknowledging that he hadn't considered pressures in forming his opinion, Stamets then conceded that whereas similar original pressures "certainly" should indicate communication between the wells, "after a period of time in production the zones that might represent limited reservoirs or noninter-connected reservoirs could note significant pressure differentials." (Tr. 95) But that information simply wasn't available at the time of the hearing (Tr. 95). He agreed that vertical communication could not "possibly" be identified without cores being taken from the Morrow, and unless that were known, again it could not be determined whether the wells were producing from

a common source of supply (Tr. 96). It was apparent, from the following questions and answers, that witness Stamets arbitrarily determined interconnection between the well sources:

"A. ....Normally fairly thick shale would be sufficient to present vertical migration, if vertical fracturing is insistent there can be communication even though you normally don't see it.

Q. Does this indicate there is no communication between the various zones within the formation?

A. In the absence of any concrete evidence that there are fractures, then you would have to say that the zones are isolated; conversely, in the absence of any definite evidence that there are not fractures, you can't say there aren't any.

Q. And you have no evidence that there are fractures in these zones?

A. That's right."

(Tr. 99-100)

The Commission's other witness, Elvin Utz, a Commission engineer for sixteen or seventeen years (Tr. 104), admitted on cross-examination that no geological information had been used to determine a common source of supply for new wells drilled in the area (Tr. 124), even though he recognized that the bottom-hole pressure readings for each well would be a "significant" factor in determining whether there was communication between the wells (Tr. 126). For his testimony, he had a reading of the bottom-hole pressure on only one well (Tr. 126). Instead, he "assumed" there was a single source of supply for all of the wells because -- again -- "the Commission has so designated that." (Tr. 131)

It is obvious that both employees of the Oil Conservation Commission had the cart before the horse: "We pro-rate because this is a pool," said they; not, "We shall first

determine whether there is a pool before we get to the question of prorating," as the statute instructs.

Mr. Taylor, Regional Development Geologist for Cities Service Oil Company, the intervenor, who "arbitrarily broke down the Morrow into four zones for correlation purposes" (Tr. 160), testified on cross-examination that one couldn't determine exactly that all of the wells in the Morrow formation were producing from the same reservoir (Tr. 171). And E. F. Motter, Cities Service's Regional Engineer, gave no opinion whatever concerning the existence of a single reservoir, but felt there should be prorationing any time there was more than one purchaser "in a field" (Tr. 191). On the other hand, J. C. Raney, Pennzoil-United's petroleum engineer, was "not prepared to say" that all of the Morrow wells were producing from a single source (Tr. 246), but he assumed there was communication between the wells (Tr. 247-248).

Upon objection by the Intervenor Cities Service, appellant was prohibited from inquiring further into the actual existence of a common pool (Tr. 248-250). Subsequently, however, Pennzoil's petroleum engineer also denied that communication between wells had been established in the Morrow field (Tr. 274); Charles Miller, a consulting geologist from Hobbs, seriously doubted there was vertical communication in the Morrow formation (Tr. 292), and no evidence to prove horizontal communication (Tr. 216, 293). He felt the entire question of communication, on the data available, was purely speculative (Tr. 294).

Thereafter, Richard Steinholz, a consulting petroleum engineer who had worked in both the Strawn and Morrow

fields (Tr. 295-296), upon the collation of information obtained from log data on the various wells (Tr. 296-298), was of the opinion that there was not enough evidence to show communication and interference between wells (i.e., the existence of a pool) to justify proration (Tr. 299). He was adamant that the Humble Grace and Humble Grace No. 1 definitely were not related to the other wells in the field (Tr. 303, 310).

And, finally, R. W. Decker, a consulting geologist engaged in southeastern New Mexico geology for the preceding eleven years (Tr. 307), found, from data contained in electric logs, scout information, stem tests and proration information (Tr. 309), that there was very poor connection between wells throughout the Morrow, and none whatever west of the main field (Tr. 309). A 20-foot shale separation prevented vertical migration from the Humble Grace eastward to Gulf Federal No. 1 well (Tr. 310).

And so it is apparent from all of the testimony presented to the Commission that there was no geological data -- merely assumption -- that the wells for which proration was ordered all drew from a single source. Thus the pyramid of facts upon which the pinnacle of control by the Commission must rest was rendered wobbly because it lacked the very cornerstone of its strength. There was no evidence of a common pool for the triggering of allocating allowables.

- (B) The Commission failed to determine the amount of recoverable gas under each producer's tract or in the pool.

Not a single witness before the Commission during two days of testimony in April 1972 testified that a determination had been made of gas in place under the tracts of

the various owners, and only two -- not Commission employees -- testified as to how such a determination could have been reached.

Mr. Stamets, the Commission's chief geologist, candidly stated that he did not feel the Commission could comply with the requirements of the Supreme Court's directive (Continental Oil Co. v. Oil Cons. Comm., 70 N.M. 310, 373 P.2d 809 (1962), and El Paso Natural Gas Co. v. Oil Cons. Comm., 76 N.M. 268, 414 P.2d 496 (1966)), to consider the amount of recoverable gas under each producer's tract with respect to the total amount of recoverable gas in the pool in a proportion that would determine how much could be recovered without waste (Tr. 86), at the same time admitting that although it would be difficult to determine the amount of recoverable gas under each tract, "in this modern day a man would be a fool to say anything is impossible." (Tr. 86)

In explaining why no reserves had been fixed by the Commission, Stamets said:

"We are dealing with something that is really going to be tricky, we are going to have to look at each zone and try to figure out what it does exactly, where it goes, how far it extends from the well bore, and then we can get started on attempting to figure out the reserve. I have pointed out that even though we may see reserves there they may not be contributing to the well because they may be blocked off at the Morrow formation to a point where you might have a well cased off and cemented."  
(Tr. 87)

The Cities Service attorney then again asked witness Stamets if the Commission could determine the amounts substantially in proportion to the continued recovery of oil and gas to the total recoverable gas in the pool, as a practicable matter, and Stamets replied:

"Considering the practicability, I am going to have to answer at this time, no. After the presentation of the Exhibits and the testimony by the other people who are interested I may be forced to change my answer, but from my own investigation and my own observations at this time, because of the lack of cores, and with all of the problems that exist in this reservoir, I am going to have to answer no right now."

(Tr. 88)

But there were logs on every well in the pool (Tr. 88); geological information was obtainable at Hobbs (Tr. 88); and if the logs indicated that the interval being produced from well to well was dissimilar, Stamets felt it quite possible he could come up with a figure he would consider reasonable (Tr. 89). No reason was ever given why the obviously necessary tests and analyses hadn't been made.

Mr. Utz, the Commission's other expert employee, agreed that there was an insufficient productive history of the wells in the Morrow pool upon which to make reserve computations (Tr. 123), thus tacitly implying, at least, that reserves could be calculated if the wells were allowed to produce for a longer period.

But the petroleum engineer for Pennzoil-United, another producer in both the Strawn and Morrow fields, had no difficulties in determining a formula for reaching the estimated reserves under each tract and in the pool. He relied on sonic logs (Tr. 231), which constituted the best information available on all of the wells in both pools (Tr. 233), to establish a prime factor of hydrocarbon core volume of the formations subject to proration underlying each proration unit. Cores or an adequate set of logs would be required by which the hydrocarbon core volume could be determined (Tr. 234). That factor would be the measured "production after porosity, water saturation,

effective feet of pay, and the area of standard proration units as determined from completed wells" were applied (Tr. 234).

Although the formula includes technical terms, its method of application is understandable. Mr. Raney explained the steps:

"The proration unit allowable in each pool would be based on the following formula: Hydrocarbon core volume would be equal to the effective feet of pay underlying each proration unit as determined from the appropriate logs or cores times the porosity in the effective feet of pay, times one minus the water saturation in the effective feet of pay times the area of standard proration units.

"The proration unit allowable factor would be equal to the hydrocarbon core volume as determined above, times the proration unit acreage divided by 320 times the penalty or rateable take factor.

"Then the proration unit allowable would be equal to the proration unit allocation factor divided by the total pool allocation factor times the total pool nominations.

"The total pool nominations would be the total pool nominations by all purchasers."

(Tr. 236)

The adoption of this formula, in his opinion, would prevent waste (Tr. 238), and would comply with the Supreme Court's interpretation of the statutes (Tr. 238); the reserves in place under each tract would be accurate, and the reserves of the entire pool could be obtained simply by adding together the reserves from each tract (Tr. 239). If, on the basis of the net feet of pay shown in a six-inch well bore specimen, an error were made and thus applied throughout a well's 320-acre surface allocation, Raney believed no detriment would attach because all of the producers would have their six-inch bores treated in the same manner. Likewise, any water saturation factor taken at one given point and

applied throughout its 320 acres if done accordingly for each well, would result in equally even treatment to all producers (Tr. 243).

Mr. Raney testified that he could determine the porosity underlying each well (Tr. 262); that logs were available on all completed wells (Tr. 266), and he was aware of the approximate total of the pay area in the Morrow (Tr. 263); thus, he could apply his formula successfully to both the Morrow and Strawn fields (Tr. 263).

Mr. Motter had another view. He was the Intervenor's expert (and it was the Intervenor's Findings which were adopted); yet, he agreed that net productivity feet can be predicted from a log, and net feet is usually an indicator of the well's reserves (Tr. 187). But he did not indicate he had made any predictions or calculations of reserves, either.

No one had made any efforts to find "the amounts of recoverable gas in the pool or under the various tracts, or how much gas could be practicably obtained without waste."<sup>1/</sup> Nor, in view of the evidence received, was there any reasonable explanation made why it would have been impracticable to have done so. As a consequence, no findings of well or pool reserves were made by the Commission.

The Court, in Continental, asked the question of vital significance here:

"The commission made no finding, even 'insofar as can be practically determined,' as to the amounts of recoverable gas in the pool or under the tracts. How, then, can the commission protect correlative rights in the absence of such a finding?" [Italics by the Court]  
70 N.M. at 319

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<sup>1/</sup> Continental Oil Co. v. Oil Conservation Comm., supra,  
70 N.M. at 319

The "basic jurisdictional findings, supported by evidence, required [by law and insisted upon by the Supreme Court] to show that the Commission has heeded the mandate and the standards set out by statute,"<sup>2/</sup> were lacking here, and thus the Commission had no jurisdiction to issue Order No. R-1670-L.

The trial court should have set aside the order.

(C) The Order entered by the Commission deprives each producer of the opportunity to produce his fair share of the reserves in a quantity proportionate to any reserves in a pool.

It is apparent from the testimony of almost all the witnesses that, with additional data, the pool reserves could have been determined (Tr. 89-90; 94-97; 99-100; 123-126; 167, \* 170; 189; 234-237; 252; 285). Each agreed that additional work and expenditures probably would be necessary in order to provide additional information.

But, notwithstanding such evidence of insufficient data upon which to calculate the proportion of reserves under each tract with relation to the total reserves in the pool, there was evidence of a wide disparity in deliverability among the wells in the field (Tr. 175-177), the Cities Service geologist describing that difference in these words:

"Some of the wells are excellent wells and others could be referred to as what are commonly called stinkers." (Tr. 109)

The inference, therefore, of greater reserves under some wells than others was buttressed by the testimony of Mr. Raney, the Pennzoil petroleum engineer who unequivocally said:

"I do know the reservoir quality under the Humble-Grace is much greater than the surrounding wells." (Tr. 209)

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<sup>2/</sup> Id., at 321.

Too, although there was evidence from the Commission's experts that the Commission considered all wells to be producing from the same pool, it is clear that the Commission's experts relied upon past treatment of the field as having a common pool (Tr. 79, 97, 110), as well as upon a decision establishing the area as a pool five or six years previously (which apparently had never been protested by any of the producers) (Tr. 97-99). But, as against the Commission's assumption that all wells were being produced from the same pool, there was an abundance of testimony that the Commission had no evidence of fractures and, in the absence of such evidence, one would have to say that the zones are isolated (Tr. 100); that considering the reality of 600 feet of Morrow it would be difficult, if not impossible, to determine the Morrow members and predict what part of the Morrow formation would be productive, or what the productive interval would be (Tr. 167); that communication, or lack of it, between the wells had not been established in that particular pool (Tr. 212); that there was, at one point, a 20-foot deposit of shale adequate to prevent vertical migration eastward from the Humble Grace well to the No. 1 Gulf Federal (Tr. 310), all tending to show separate reservoirs (Tr. 311).

To protect correlative rights, of course, it was necessary to know whether one well might drain another (Tr. 251) and, accordingly, one well could not drain another if they were not both producing from the same pool. Therefore, in the absence of any evidence other than surmise that the wells affected by the proration order were, in fact, draining the same pool, and in the face of positive evidence that some of the wells were not

producing from a common pool (Tr. 240), only one conclusion is possible: Those wells producing from apparently healthy reservoirs are penalized by an order which limits their production to that which represents the production of one of the "stinkers." Such a result strips the owner of the productive properties of his statutory opportunity to produce "his just and equitable share of the gas in the pool underlying his tract of land" (§65-3-29). Mobil Oil, a year earlier, had recommended a formula by which a fair allocation could be reached (Tr. 329-331).

The Order entered by the Commission violated the rights of Appellants which the Legislature has granted to them. The Commission's Findings 66, 67, 68, 74, 76, 77, 78, 81, 83, 85 and 86 are all without substantial support in the evidence, and many have no support whatever. Appellants submit that the Commission's Finding 81, that a 100% surface acreage formula was the most reasonable basis for allocating allowable production among the wells, will not reflect the "most reasonable basis" at all -- it only describes the most convenient, and least cerebral, basis for exercising undisciplined authority by the Commission.

Order No. R-1670-L, because unsupported by the evidence, was an arbitrary, capricious, unreasonable and unlawful act of the Oil Conservation Commission, and it should be set aside and held for naught.

#### POINT TWO

APPELLANTS WERE ENTITLED TO  
A STAY OF JUDGMENT.

The trial court's judgment in this matter was entered on August 14, 1973 (Tr. 380), and on the same day, Appellants filed a Motion for Stay of Judgment (Tr. 379).

Rule 62(d) of the New Mexico Rules of Civil Procedure (§21-1-1) (62) (d), N.M.Stat.Ann. (1953), provides that:

"When an appeal is taken, the appellant by giving a supersedeas bond may obtain a stay subject to the exceptions contained in subdivisions (a) and (c) of this rule. The bond may be given at any time within thirty [30] days after taking the appeal...."

Subdivision (a) of the rule provides for execution on a judgment unless a stay be granted, and subsection (c) refers to a stay granted on an appeal from a judgment granting, dissolving, or denying an injunction.

The operating portion of New Mexico Rule 62(d) was derived from, and is exactly the same as the federal rule, with the exception of the time granted by the New Mexico statute for filing a supersedeas bond.

The language of the statute appears to say that the appellant shall be granted a stay, in the sense that "may" is to be interpreted to mean "have permission to: have liberty to," Webster's Third New International Dictionary (1968). 3 Barron & Holtzoff, Federal Practice & Procedure 466, at §1374, states:

"The stay issues as a matter of right in cases within the rule, and is effective when the supersedeas is approved by the court, which may be at or after the time of filing the notice of appeal.

At 11 Wright & Miller, Federal Practice & Procedure 325-26, §2905, the same interpretation of the Rule is made, the authors there saying:

"Rule 62(d) permits an appellant to obtain a stay by giving a supersedeas bond....This kind of stay may not be obtained in injunction cases, receivership cases, or in patent infringement cases in which an accounting has been ordered. In those three classes of cases it is discretionary with the court whether to allow a stay...."

"The stay issues as a matter of right in cases within the rules, and is effective when the supersedeas is approved by the court."

The rule appears to leave no room for discretion once an appeal is taken, if the matter being appealed does not involve an injunction, §21-1-1(62)(c), or if the application for stay is made immediately after final judgment, §21-1-1(62)(a). It only remains for the Court to determine the amount and conditions of the bond to supersede the judgment.

If, as the rule and the authorities indicate, Appellants were entitled to a stay as a matter of right, and Appellants' motion for stay of judgment was timely filed (Tr. 379), it was error for the trial court to deny a stay of judgment; and if this case be remanded for further proceedings, this Court should direct that a stay of judgment be entered.

#### CONCLUSION

The trial court erred in two respects in the hearing below: (1) a stay of judgment should have been granted pending the decision of this Court, and (2) the Order of the Oil Conservation Commission should have been set aside because of the Commission's failure to find the basic facts upon which a proration order could rest and the Commission's jurisdiction be exercised.

For the foregoing reasons, Appellants respectfully request a reversal of the judgment entered by the trial court and a decision setting aside the Order of the Oil Conservation Commission.

Respectfully submitted,

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IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

MICHAEL P. GRACE II and  
CORINNE GRACE,

Petitioners-Appellants,

vs.

OIL CONSERVATION COMMISSION  
OF NEW MEXICO,

NO. 9821

Respondent-Appellee,

and  
CITIES SERVICE OIL COMPANY  
and the CITY OF CARLSBAD,

Intervenors.

CERTIFICATE OF SERVICE

This will certify that on this date I served a true  
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by first class mail with postage thereon fully prepaid.

Dated at Santa Fe, New Mexico, this 18th day of  
December 1973.

ROSE MARIE ALDERETE  
Clerk of the Supreme Court  
of the State of New Mexico

By: Laura R. Medley  
Deputy Clerk

IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

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CORRINE GRACE,

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-vs-

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Respondent-Appelle,

and

CITIES SERVICE OIL COMPANY and  
CITY OF CARLSBAD, NEW MEXICO,

Intervenors,

and

THE ALBUQUERQUE CONSUMER FEDERATION and  
THE NEW MEXICO GASOLINE RETAILERS ASSOCIATION,

Amicus Curiae.

No. 9 8 2 1  
(District Court  
File No. 28181)

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## STATEMENT OF THE CASE

Amicus Curiae, by order of this Court, were allowed to enter these proceedings and file a brief on behalf of the Albuquerque Consumer Federation and the New Mexico Gasoline Retailers Association. The order was filed December 7, 1973. Amicus Curiae were given Seven (7) days in which to file their brief.

## STATEMENT OF THE PROCEEDINGS

From the date of entry of Amicus Curiae into this appeal the proceedings have consisted of the hearing by this Court of Petitioner-Appellant's Petition for a Stay of Judgment. Said Petition was denied by this Court on Wednesday, December 12, 1973.

## POINT I

Under the circumstances of this case, the Oil Conservation Commission in fact created waste by issuance of its proration order in this matter.

Although the petitioners-appellants now before this Court are interested in their direct pecuniary gain in this appeal, it is the position of Amici that this appeal presents an issue of tremendous public interest not addressed by the parties. Amici view their position in this appeal as informing the court of the public interest in the issues presently before this court. See, *Amicus Curiae*, §2, Am Jur 2nd Vol. 4.

At the present time, there is a recognized energy crisis in the United States, as well as other parts of the world. There is demand for oil and gas that presently exceeds the ability to produce those items, and this situation is predicted to have an extended duration. The Oil Conservation Commission, in ordering the South Carlsbad-Morrow natural gas pool prorated on a pure acreage basis, significantly contributed to the crisis in the availability of natural gas that is presently facing this nation, as well as contributed to the avoidable waste that it is mandated to prevent, §65-3-1 et seq. N.M.S.A. 1953 Comp. (1971 supp.). As a result of this pure acreage proration order, the Grace-Atlantic Well No. 1 was ordered shut-in. After court proceedings, not presently before this court, the Oil Conservation Commission and the owners of Grace-Atlantic No. 1 agreed to compromise the issue, and reduce the daily output of the well to 6.7 million cubic feet of gas per day. This figure of production was arrived at by the parties as a figure calculated to bring the well in line

with Commission rules on over produce wells. The over-production figure was arrived at by using the proration order formula to determine the production of gas from each well. Thus, as a direct result of the Oil Conservation Commission order, the production of a large natural gas well was reduced by more than fifty percent (50%).

According to testimony before the Oil Conservation Commission, this particular well would produce 67 million cubic feet of gas per day at its absolute open flow. Open flow capacity is defined by Williams and Meyers, Manual of Oil and Gas terms, (1957) p. 168, as "The maximum output of an oil or gas well as a result of natural reservoir energy in the absence of artificial restriction on the rate of flow." Assuming a safe production of 25% of open flow capacity, a figure the Texas Railroad Commission uses, the daily production of that well would be 16.7 million cubic feet of gas; 10 million cubic feet above its present production. The well was reduced to 6.7 million thirtynine days ago, as of December 12, 1973. That puts loss as of December 12, 1973, at 390 million cubic feet of gas, which would sell for fifty-five cents (55) per thousand cubic feet, totalling Two Hundred Fourteen Thousand Five Hundred Dollars (\$214,500.00) in lost income. The State of New Mexico lost Thirteen Thousand Nine Hundred Forty Two Dollars and Fifty Cents (\$13,942.50) tax revenue at a rate of 6.5%.

From these figures from one well it becomes obvious that the ramifications of this matter before this court is of tremendous public interest and directly effects the public welfare of the citizens of the State of New Mexico.

It needs not citation that the purpose of the act for the regulation of oil and gas wells, §65-3-1 et seq, supra., is the conservation of natural resources. But, under the cir-

cumstances of this case, the Oil Conservation Commission in fact did create waste by causing the restriction of production by those wells with a high natural gas production capacity. The waste created by this proration order is the waste inherent in the lack of availability of natural gas to the public where there is the capacity to produce that gas in such a manner that §65-3-3 (a) (b) (c) (d) (e) (f), is not violated.

The result of the Oil Conservation Commission's proration order is set out succinctly by Alfred E. Kahn, in testimony presented to the Senate Judiciary Committee, Subcommittee on Anti-trust and Monopoly, where he stated:

"...[I]n almost universal practise...the greater burden of restraint is made to fall on the big, comparatively efficient producers. The numerous small, comparatively inefficient ones are kept in business by giving them quotas that would not be justified if the intention were to produce the total output decided on at minimum cost.

Kahn, Alfred E., "The Combined Effects Of Prorating, The Depletion Allowance And Import Quotas On the Cost Of Producing Crude Oil In the United States," Natural Resources Journal, 10:53 (1970),

The above quoted statement is the effect of correlative rights on production of resources.

As defined in §65-3-29 (H) N.M.S.A. 1953 Comp.,

"'Correlative rights' means the opportunity afforded, so far as it is practicable to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the oil or gas, or both, in the pool, being an amount so far as can be practicably determined, and so far as can be practicably obtained without waste, substantially in the proportion that the quantity of recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas or both, in the pool, and for such purposes to use his just and equitable share of the reservoir energy."

In §65-3-10, N.M.S.A., 1953 Comp., the Oil Conservation Commission is empowered to prevent waste as defined by the act, and to protect correlative rights. In Continental Oil Company v. The Oil Conservation Commission, 70 N.M. 310, 373 P.2d 809, as explained in El Paso Natural Gas Company v. Oil Conservation Commission, 76 N.M. 388, 414 P.2d 496, this court, in referring to production allowables exceeding market demand, states that such a situation would be waste if the allowables were produced.

In the case at bar there is argument of counsel (TR 14, 15, of the transcript of the appeal before Judge Paul Snead) paraphrasing and quoting the Oil Conservation Commission transcript, saying there is nothing to indicate that production of gas in the field will exceed market demand. Assuming this to be true, there is no waste due to exceeding market demand, and the Oil Conservation Commission's decision could not be based on a violation of §65-3-3 (C), supra.

The trial court's findings, challenged by Appellants, as set out in Page 3 of Appellant's brief in chief, when read In Toto, would indicate that the Oil Conservation Commission properly protected the pool from waste and properly protected correlative rights. However, under scrutiny, the findings and results are contra to the purposes behind regulation of oil and gas wells.

The regulation of oil and gas wells is a recognized exercise of the state's police powers. The United States Supreme Court stated in Champlin Refining Co. v. Corporation Commission, 286 U.S. 210, 76 L. ed. 1002, 52 S. Ct. 559, 86 A.L.R. 403, that:

"...This Court has upheld numerous kinds of state legislation designed to curb waste of

natural resources and to protect the correlative rights of owners through ratable taking.

Also, the Supreme Court has upheld legislation that controlled production, even though the uses to which property may profitably be put are restricted, see Walls v. Midland Carbon Co, 254 U.S. 300, 65 L. ed. 276, 41 S. Ct. 118 (1920).

It was the public interest in preserving and extending the useful life of our resources that conservation, i.e., proration, was instituted. In El Paso Natural Gas Company, supra, p. 270, this court set out the priority of public interest vis a vis waste and correlative rights, when it stated:

"recognizing the need and right of the state in the interest of the public welfare, to prevent waste of an irreplaceable natural resource, the legislature enacted those laws authorizing the commission to exercise control over oil and gas wells by limiting the total production in the pool, and making it the duty of the Commission to protect the correlative rights of all producers so far as it can be accomplished without waste to the pool.  
[Emphasis added.]

It is Amici's position that if the protection of correlative rights constitutes waste, i.e., the result contra to the public interest, then those correlative rights are not to be protected, as is strongly stated in El Paso Natural Gas Co, supra. It should be remembered throughout, that the paramount interest being protected is that of the public interest.

When prorationing was instituted it stopped practices such as over intensive drilling, lack of drilling units and other practices that depleted oil and gas pools at a rate that did not assure the greatest practicable recovery from the pool. That basis for regulation is still public interest being protected to this date.

The question can be formulated this way: did public interest dictate that correlative rights be protected by allowing each producer to get his fair share, and therefore conserve resources or did protection of correlative rights, i.e. a fair share to a few owners no matter what their well could produce dictate the public interest? Although the question may be somewhat difficult, the point is, public interest, and not the interest of the few, dictates use of our natural resources now, as it did when the regulations were first introduced.

When prorationing was introduced, the rights of some individuals who were producing in a wasteful manner, as defined by the various statutes, were infringed upon in that they were forced to reduce production of the resources, all to the benefit of other owners, i.e. correlative rights, and this was held to be valid exercises of the state's police power. 1A Summers, Oil and Gas §106 n. 43, in referring to Ohio Oil Company v. Indiana, 177 U.S. 190, 44 L. ed. 729, 20 S.Ct. 576 (1900), stated there was language indicating sufficient basis in the public interest protection to uphold exercise of police power action to conserve natural gas. In that decision, Chief Justice White, also held that it was not taking of private property to prevent waste, but as a protection thereof, and no compensation would be paid.

Now the public interest, everchanging as it is, dictates that more gas be made available to the public, If correlative rights are infringed upon, as a result of police power functioning, then so be it. But, this is not necessarily the result of allowing production to increase to a maximum efficient rate for a particular well or pool. Maximum efficient rate is defined by Williams and Meyers, Manual of Oil and Gas terms,

The rate of production under the MER system would be determined without using factors such as market demand, transportation facilities, or the special interest of a group of producers. MER should be used not only as an engineering concept, i.e. maximizing the number of barrels recoverable from the given reservoir, but it should also be used as an economic concept, i.e. including consideration of present and future prices and costs as well as engineering factors. Employing these later factors does not entail recovery of every drop of oil regardless of the cost, but it does permit recovery of a significantly greater amount than market demand prorationing, and hence, a greater conservation of petroleum resources. If there were this same kind of consistency between market demand prorationing and conservation of petroleum, it would follow that any

reduction in rate of flow [would result] in smaller consumption of reservoir energy and that, if a producer were content to take his oil less rapidly, he would conserve formational energy and thereby ultimately produce more oil. However, such a conclusion rests on the assumptions that we are dealing with a product of uniform physical characteristics and that it is feasible to apply reservoir energy with equal efficiency in all rates of flow.

Neither of these assumptions is correct. As noted earlier, the [gas] in a given reservoir may be found in different kinds of formations. The proper production rate depends on factors such as well spacing the driving mechanisms of the reservoir, the physical characteristics of the rocks and formation fluids, and the type of reservoir energy drive.... Since market demand prorationing does not give priority to these factors it cannot possibly function as an effective conservation policy, and the wisdom of its use as production scheme is highly questionable.

The MER production mechanism, on the other hand, is consistent with conservation principals, no matter what the basic physical characteristics of the reservoir are.... Furthermore, the productive life of the reservoir under the scientific MER production mechanism is longer than under the law of capture, or under market demand prorationing.

Though this particular article deals with crude oil, not natural gas, the underlying principles are the same.

p. 142, (1957), as:

"The maximum rate at which oil can be produced without excessive decline or loss of reservoir energy. For example, in a water drive field the rate of withdrawals of oil may be limited to about 3 to 5 percent per year of the ultimate yield so as to coincide with the rate of movement of water into the structure. If this were not done, pressure would drop, gas would come out of solution in the oil rendering it more viscous and in part non-recoverable, and water would "finger" through the producing structure segregating pockets of uncoverable oil.

The following is a lengthy quotation from Ecology Law Quarterly, supra. pp. 132-134 advocating a maximum efficient rate method of regulating production.

"The most effective way to maintain the driving pressures of a reservoir and thus to conserve petroleum resources, is to employ a scientific system of production, such as the 'maximum efficient rate' (MER). Under this method, production is scheduled in such a way that the efficiency of the driving pressures in the reservoir will be maximized, thus increasing the percentage of oil recovery. In most reserves the rate at which [gas] moves toward the well is proportional to the pressure differential between the reservoir and the well. This rate of movement is also proportional to the thickness and permeability of the reservoir of rock. Production under the MER system takes into consideration such physical characteristics and regulates the production rate so as to conserve the natural energy drivers within the reservoir. For example, in a reservoir having a dissolved gas drive, the MER system prevents the dissipation of free gas and water, and consequently avoids the early exhaustion of the reservoir. In a reserve having a gas-cap drive, the system maintains a continuous segregation between the enlarging gas zone and the diminishing oil zone. In both these types of energy drives, the rate of production is controlled so that specific gravity becomes a significant factor in production. In a reservoir having a natural water drive, the MER system maintains the balance between the rate of water influx and the rate of oil withdrawal.

Thus, according to Vafai, a production schedule under a maximum efficient rate formula would satisfy the requirements of conservation as they are set out in the New Mexico Statutes, and would increase the amount of natural gas available to the public. Thus, satisfying the basic public interest that is expressed through the police powers of the State of New Mexico by its legislatively created Oil Conservation Commission.

Public interest is still in the prevention of waste of its natural resources, but the time is here when those resources should be produced at their maximum efficient rate and made available to the public. This is the public interest.

It is the conclusion of Amici that the Oil Conservation Commission is incorrect in prorating production in this pool solely on an acreage unit basis. This method, while protecting correlative rights, does not assure the public a maximum efficient rate of production, when there is acknowledged pipeline capacity. Since the public interest is paramount, it must prevail, to do otherwise would be waste.

## POINT II

CORRELATIVE RIGHTS OF THE OWNERS IN THE POOL SHOULD NOT BE CONSIDERED WHEN SETTING PRODUCTION AT ITS MAXIMUM EFFICIENT RATE.

"Under this method, production is scheduled in such a way that the efficiency of the driving pressures in the reservoir will be maximized, thus increasing the percentage of (gas) recoverable."

John Vafai, "Market Demand Prorationing and Waste - A Statutory Confusion," 2, Ecology Law Quarterly, P. 118 (Winter 1972).

As I have stated in Point I of this brief, the regulations issued by the Oil Conservation Commission are based on authority of the state derived from its police powers. This power is not a grant from or under any written constitution. See, "Constitutional Law" §260, Am Jur 2nd n. 20, p. 152. The view is expressed that the police power is a grant from the people to their governmental agents. See, Cavelier Vending Corporation v. State Board of Pharmacy, 195 VA. 626, 29 Southeast 2nd 636, app. dismd. 347 U.S. 995, 98 Law Ed. 1127, 74 S.Ct. 871. Any exercise of the police powers is then, by definition, an exercise of the public's interest.

The public interest in conserving resources dictated the institution of prorationing and the adoption of the concept of correlative rights. And it has been this public interest being protected through prorationing and the protection of correlative rights as stated in, El Paso Natural Gas v. Oil Conservation Commission, supra., that the Oil Conservation Commission has been charged with. Thus, the protection of correlative rights is based upon the state's exercise of police power pursuant to the public interest in protecting those rights to conserve our resources.

Now that the public interest has taken a different posture,

i.e., market demand for natural gas that cannot be met, and correlative rights are an impediment to the supply of that resource, then it would be a valid exercise of police power to disregard correlative rights altogether, Ecology Law Quarterly, supra., n. 7 p. 119.

Thus, Amici respectfully suggests to this court that the Oil Conservation Commission should, disregard correlative rights in computing a rate of production that is the maximum efficient rate of any particular well or pool within the state, when such correlative rights interfere with the maximum, non-waste creating, efficient rate of production.

### POINT III

Information to the Court.

By way of information to the court, there are two (2) pools, Blackriver pool and Cat Claw pool, adjacent to the Morrow field that have not been the subject of a prorationing order.

Further, with reference to the prorationing status of other states: California does not prorate natural gas production. Louisiana does not prorate gas production unless there is a conflict in the field. Wyoming prorates solely on an oil to gas ratio. Colorado, uses market demand for purposes of prorationing. Kansas and Texas use absolute open flow, with production limited to a percentage of the absolute open flow.

Finally, the Oil Conservation Commission bases each well's monthly production allowable quota on past production from that particular well. These past production records on which the commission bases its allowable for the current allowable period are not the month immediately preceeding the allowable period being set, but are in fact two (2) months old. Allowables are defined by Williams and Meyers, supra., p. 7 as:

the amount of oil (or gas) which a well, leasehold, field, or state is permitted to produce under proration orders of a state regulatory commission.

Of the wells in this particular field, three (3) of them produce approximately twenty percent (20%) of the total field production. Numerous other wells in the pool are incapable of meeting the monthly allowables as set by the Oil Conservation Commission. These unused and unmet allowable allocations are wasted for a period of up to six (6) months, at which time the

Oil Conservation Commission reallocates allowable production. This has the effect of decreasing the amount of natural gas available to meet the ever increasing market demand. Whereas, if the Oil Conservation Commission would institute a formula based on a maximum efficient rate recovery, the public interest would be more nearly served by the use of that formula in that an increased amount of natural gas would become available without concomitant waste.

CONCLUSION

In conclusion, Amici would suggest to this Court that the Oil Conservation Commission has improperly carried out its mandate of protecting the public interests by its action that is the subject matter of this appeal. Amici would respectfully request of this Court an order reversing the finding of the District Court and enter an order directing that this cause be remanded to the Oil Conservation Commission for the implementation of a production schedule utilizing the maximum efficient rate formula, as being in the best interest of the public and being consistent with the New Mexico Statutory mandate calling for the prevention of waste.

Respectfully submitted,

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I hereby certify that a  
true copy of the foregoing  
was mailed to opposing counsel  
of record this \_\_\_\_\_ day of  
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Robert H. Borkehagen