IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

1327

CONTINENTAL OIL COMPANY
AMERADA PETROLEUM CORPORATION
PAN AMERICAN PETROLEUM CORPORATION
SHELL OIL COMPANY
THE ATLANTIC REFINING COMPANY
STANDARD OIL COMPANY OF TEXAS
HUMBLE OIL & REFINING COMPANY,

Petitioners-Appellants

vs. No. 6830

OIL CONSERVATION COMMISSION OF NEW MEXICO, Composed of John Burroughs, Member and Chairman, Murray Morgan, Member, and A. L. Porter, Secretary;
TEXAS PACIFIC COAL & OIL COMPANY,
A Foreign Corporation;
EL PASO NATURAL GAS COMPANY,
A Foreign Corporation;
PERMIAN BASIN PIPELINE COMPANY,
A Foreign Corporation;
SOUTHERN UNION GAS COMPANY,
A Foreign Corporation,

Respondents-Appellees

OIL CONSERVATION COMMISSION OF NEW MEXICO,

Cross-Appellant

APPELLANTS' BRIEF-IN-CHIEF

ATWOOD & MALONE
Roswell, New Mexico

HERVEY, DOW & HINKLE
Roswell, New Mexico

KELLAHIN AND FOX
Santa Fe, New Mexico

Attorneys for Appellants

IN THE SUPREME COURT OF THE STATE OF NEW MEXICO

CONTINENTAL OIL COMPANY
AMERADA PETROLEUM CORPORATION
PAN AMERICAN PETROLEUM CORPORATION
SHELL OIL COMPANY
THE ATLANTIC REFINING COMPANY
STANDARD OIL COMPANY OF TEXAS
HUMBLE OIL & REFINING COMPANY,

Petitioners-Appellants

vs. No. 6830

OIL CONSERVATION COMMISSION OF
NEW MEXICO, Composed of John
Burroughs, Member and Chairman,
Murray Morgan, Member, and A. L.
Porter, Secretary;
TEXAS PACIFIC COAL & OIL COMPANY,
A Foreign corporation;
EL PASO NATURAL GAS COMPANY,
A Foreign Corporation;
PERMIAN BASIN PIPELINE COMPANY,
A Foreign Corporation;
SOUTHERN UNION GAS COMPANY,
A Foreign Corporation,

Respondents-Appellees

OIL CONSERVATION COMMISSION OF
NEW MEXICO,

Cross-Appellant

APPELLANTS' BRIEF-IN-CHIEF

INDEX

TABLE OF AUTHORITIES

Page

Statement of the Case

This is an appeal from the judgment of the District Court of Lea County in an appeal to that Court to review the orders of the New Mexico Oil Conservation Commission entered in Case No. 1327 on the docket of the Commission. The Appellants are Continental Oil Company, Amerada Petroleum Corporation, Shell Oil Company, The Atlantic Refining Company, Humble Oil & Refining Company, Standard Oil Company of Texas, and Pan American Petroleum Corporation. The Appellees are the Oil Conservation Commission of New Mexico and the individual members thereof, Texas Pacific Coal & Oil Company, El Paso Natural Gas Company, Permian Basin Pipeline Company, and Southern Union Gas Company. The Petitions for Review were filed in the District Court under the provisions of Section 65-3-22, et seq., New Mexico Statutes Annotated, 1953 Compilation, to review those certain orders entered by said Commission as its Order No. R-1092-A, entered on January 29, 1958, and Order No. R-1092-C, entered on rehearing on April 25, 1958. (I Ct. 1-40, 138-157, 166-184, 194-212, 222-241, 251-269, 279-296).* By these orders, the Commission changed the gas proration formula which had been in effect in the Jalmat Gas Pool in Lea County, New Mexico, since the inception of gas prorationing in 1954. (I Ct. 21 and 39).

---

*Note: In Appellants' briefs references to the record before the Oil Conservation Commission will be stated: (1 OCC), etc., and references to the transcript prepared by the District Court will be stated: (I Ct.) and (II Ct.) representing Volumes I and II of the District Court transcript, respectively. Volume numbers on the Oil Conservation Commission record were placed thereon in longhand for convenience of the trial court.

In the trial court, the appeals were consolidated, including the appeal filed by Cities Service Oil Company, which is not an appellant before this Court. (I Ct. 53). At the conclusion of the hearing in the District Court, the Court entered its findings of fact and conclusions of law and judgment ordering that Appellants' Petitions for Review be dismissed and that the orders of the Commission be affirmed. (I Ct. 115-120).

From this judgment of the trial court, Appellants prosecute this appeal (I Ct. 121, 164, 192, 220, 249, 277, 304).

Following allowance of this appeal by the trial court, extension of time to August 16, 1960, in which to docket this cause in the Supreme Court was granted. (I Ct. 308).

The appeals, by order of the District Court, were consolidated for all purposes, and permission granted to submit them on a single transcript and record on appeal, with further permission to submit the original transcript only of the hearing before the Oil Conservation Commission of New Mexico, exhibits and attachments thereto, and originals only of exhibits received by the District Court at the trial of the consolidated causes (I Ct. 133-134). This order was affirmed by the Supreme Court upon docketing of the case here (Order entered August 16, 1960).

STATEMENT OF THE FACTS

Case No. 1327 on the Commission docket, in which the orders here under review were entered, was originated by the filing of an application by Appellee, Texas Pacific Coal & Oil Company, seeking to have the prorationing of gas in the Jalmat

Pool terminated. In the alternative, Texas Pacific prayed revision of the regulations governing allocation of allowables and that deliverability be included as a factor in the proration formula. (I Ct. 16). In the course of the hearing before the Commission, Appellee, Texas Pacific, proposed the formula which the Commission adopted and promulgated. (1 OCC 60). It provides for the allocation of allowable as between wells twenty-five percent (25%) on the basis of the acreage assigned to the well and seventy-five percent (75%) on the basis of the "calculated deliverability" of the well multiplied by the acreage assigned to it. (I Ct. 25).

The term deliverability as applied to a gas well is substantially equivalent to "potential" as applied to an oil well. It refers to the amount of gas the well would produce if permitted to produce without restriction against a specified back pressure. See Sullivan, Handbook of Oil and Gas Law 334.

The anticipated effect of such a change in formula upon operators in the pool, as envisaged by one expert witness, is indicated by operators' (Appellants') Exhibit 10 before the Commission (4 OCC 253) and the testimony in support of it. The exhibit indicates that Appellant, Continental Oil Company, would experience a loss of 150,000 MCF of gas per month, which at ten cents (10¢) per MCF amounts to a loss of $15,000.00 per month. (4 OCC 255). At the same time, it was testified that two other companies, Gulf and Cities Service, would experience a gain of approximately $25,000.00 each per month.

As of December 31, 1956, the Jalmat Gas Pool, containing 367 producing gas units (1 OCC 9), eighty-five percent (85%) of which were connected to the gas transmission lines of El Paso Natural Gas Company (II Ct. 6, 141) and fifteen percent (15%) to the Permian Basin Pipeline Company system.

The allocation of allowables in the area now encompassed in the Jalmat Gas Pool was begun on January 1, 1954 and continued under a succession of orders by the Commission, the last of which, prior to the orders which are the subject of this appeal, was Order R-520 issued in Case 673, on August 12, 1954 (I Ct. 15). All of these orders provided for allocation 100% on the basis of acreage assigned to each well.

The application of Appellee, Texas Pacific Coal & Oil Company, in Case No. 1327 came on for hearing at the regular monthly hearing of the Oil Conservation Commission in October 1957. The hearing was continued on November 14 and thereafter on December 9, 1957.

In the course of the hearing before the Commission, when it appeared that all operators in the Jalmat Pool other than Appellee, Texas Pacific Coal & Oil Company, and the pipeline companies, opposed the inclusion of deliverability in the proration formula, the Commission suggested that the opponents unify their effort under the direction of a single counsel to avoid duplication of cross examination. The companies did so (4 OCC 194) and the seven companies who are now Appellants were joined by five additional operators all of whom vigorously opposed the amendment in the proration formula proposed by Appellee, Texas Pacific. (4 OCC 195). Two additional operators joined in opposing deliverability independently, making a total

of fourteen operators who opposed, as against one who advocated, the change in formula which the Commission ultimately promulgated. (6 OCC 3, 138).

The expert engineering testimony offered by Appellee, Texas Pacific Coal & Oil Company, in support of its proposed formula was presented substantially entirely through a single witness--W. O. Keller of Fort Worth, Texas, a consulting petroleum engineer who testified four times before the Commission and once before the Trial Court.

Appellants presented their case principally through two consulting petroleum engineers, Robert M. Leibrock of Midland, Texas, and Henry J. Gruy of Dallas, Texas.

Early in the hearing the basic conflict developed which is at the core of this appeal. It resulted from the fact that Appellee, Texas Pacific, while it contended that the correlative rights of operators would be better protected under the proposed formula, did not present any evidence as to the volume or quantity of the recoverable gas in place under the tracts in the pool or the effect of the proposed formula on it. Neither did it present any testimony as to drainage between tracts which might be expected to occur under the proposed formula. Appellants contended before the Commission, (6 OCC 4, I Ct. 33, 34), before the trial court (II Ct. 19, et seq., 27 et seq.) and here contend that such testimony and findings based thereon are essential to the validity of the order under the New Mexico statute.

Texas Pacific, instead, presented extended testimony as to the "reserves" of the wells in the pool (II Ct. 34, et seq.) and as to gas migration other than between tracts in the pool (II Ct. 212-213). It predicated its recommendation of the

proposed deliverability formula on the correlation of well deliverabilities with the so-called "reserves" as projected by Mr. Keller based upon the past performance of the well (II Ct. 36). He contended that there was insufficient geological and engineering information available to make a meaningful study of the volume of recoverable gas in place under the tracts and the drainage between tracts (3 OCC 133). Appellants' two expert witnesses testified that the information available was adequate, that they had made such a volumetric study of a portion of the reservoir and testified both to the recoverable gas in place under the tracts as disclosed by the study and as to drainage between tracts which could be expected under the proposed formula (4 OCC 232, 237, 239-40, 270).

Texas Pacific's witness Keller tested the proposed deliverability formula against the well "reserves" found by him and found it to be more desirable than the existing acreage formula (II Ct. 35). Keller admitted that his basis for determining "reserves" assumed that the performance of the well in the future would continue just as in the past (II Ct. 36) and hence assumed that drainage either to or from the well which had occurred in the past, would continue unchanged in the future, regardless of changes in condition (II Ct. 45). Appellants pointed out, and Keller admitted, that this had the effect of including in the reserves of a well which had been draining adjoining leases before prorationing and the drilling of offset wells, the amount of gas which it had drained from adjoining owners, (II Ct. 42) even though in the future such drainage might not continue. Appellants asserted that well "reserves" as computed by Mr. Keller were

not the equivalent of recoverable gas in place, which the statute makes the measure of the correlative rights of operators; (II Ct. 44) hence that Texas Pacific proof did not meet the requirements of the statute and would not support a change of formula.

Texas Pacific did not attempt to correlate the deliverabilities of individual wells with the volume of recoverable gas in place. It did attempt to correlate the deliverability of individual wells with "reserves" which had been allocated to the acreage assigned to the wells (5 OCC 435-436). It was on the basis of this testimony that the Commission found that "the applicant has proved that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the (recoverable) gas in place under the tracts dedicated to said wells". (I Ct. 23, 40). The Commission treated the "reserves" computed by Keller as the equivalent of recoverable gas in place. Keller had admitted that the two were not the same (3 OCC 128, 7 OCC 208).

Appellants' expert witnesses compared deliverabilities to recoverable gas in place under the tracts in the area of Appellants' study and found a total absence of any correlation of any character (4 OCC 253, I Ct. 36).

As to the drainage which would result from the proposed formula, Appellants' witnesses testified on the basis of a tract by tract study of drainage, giving effect to counter drainage, and found that a tremendous redistribution of ownership would result under the proposed formula (Operators' Exhibit 10, 4 OCC 253). Texas Pacific's witness testified only as to changes in magnitude of migration and did not make a study as

to drainage between tracts (II Ct. 213), contending that insufficient information was available for that purpose.

On January 29, 1958, the Commission entered its Order R-1092-A in Case 1327 adopting the formula which had been proposed by Texas Pacific and terminating allocation on an acreage basis in the Jalmat Gas Pool. (I Ct. 21). It denied the request of Texas Pacific that prorationing in the Jalmat Gas Pool be terminated and for other relief.

Order R-1092-A provided for the use of the "calculated deliverability" of each well, expressed in MCF per day, in computing its allowable. It provided that annual deliverability tests to determine a well's "calculated deliverability" should be taken (I Ct. 25-26), but did not specify the pressure to which such tests should be corrected or in any way define "deliverability" as it would be applied in the new proration formula.

Under date of January 30, 1958, a memorandum was issued by the Commission, which read in part:

> "A deliverability testing procedure will be furnished to all operators in the Jalmat Pool and other interested parties prior to March 1, 1958." (OCC Record certified to District Court)

Fourteen operators in the Jalmat Pool filed motions for rehearing within the twenty (20) days provided by the statute (I Ct. 28, 152, 234, etc.). Rehearing was granted by Order R-1092-B in Case 1327 dated February 19, 1958. The rehearing was held on March 25, 26, and 27, 1958. Extended testimony was heard by the Commission (OCC Vols. 6 and 7). Thereafter on April 25, 1958, the Commission issued its Order R-1092-C in Case 1327 (I Ct. 39), reaffirming its former decision. The order repeated the paragraph which appeared as finding (5)

of Order R-1092-C, making one material change in it. It inserted the word "recoverable" before the words "gas in place under the tracts dedicated to said wells". The paragraph then read as follows (insertions underlined):

> "(2) That after considering all the evidence presented at the original hearings and the rehearing in this case, the Commission re-affirms its finding that Texas Pacific Coal and Oil Company has proved by a preponderance of the evidence that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said wells, and that the inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool would, therefore, result in a more equitable allocation of the gas production in said pool than under the present gas proration formula." (Emphasis supplied).

In addition the order included the following finding:

> "(3) That the provisions of Order No. R-1092-A should remain in full force and effect." (I Ct. 40)

Petitions for Review were subsequently filed by Appellants in the District Court of Lea County to review the orders of the Commission R-1092-A and R-1092-C (I Ct. 1, 138, 166, 194, 222, 251, 279).

The deliverability testing procedure promised by the Commission's Memorandum of January 30, 1958, was supplied by another memorandum dated February 24, 1958. (II Ct. 130) Its contents were not the subject of notice and public hearing by the Commission.

The trial court conducted two pre-trial conferences, the first August 4, 1958 (I Ct. 50) and the second which resulted in an unsuccessful attempt to prohibit the District Court from hearing testimony as it had announced that it proposed to do. State ex rel Oil Conservation Commission v. Brand, 65 N.M. 384, 338 P.2d 113 (1959).

At the outset of the trial before the court, Appellants objected to the participation of the Oil Conservation Commission in the trial as an adversary party. The objection was based on the fact that it had been agreed that the case involved only the correlative rights of the operators and hence that the Commission had no place as an adversary party in the appeal seeking to uphold its own decisions. The court sustained the objection (I Ct. 5). The Oil Conservation Commission has taken a cross-appeal from the ruling (I Ct. 126).

At the trial of the consolidated appeals, the record of proceedings before the Oil Conservation Commission, with exhibits, was stipulated into evidence (I Ct. 12). Thereupon the parties, referring to the record, presented arguments pro and con on the question of whether or not the orders of the Commission were supported by substantial evidence. The court reserved his ruling (I Ct. 75) and thereafter both sides presented testimony to the court. Appellants offered two witnesses by whom it sought to show that application of the Commission's order had resulted in increased drainage across lease lines and had been destructive of correlative rights (II Ct. 80-89) and that the standard fixed by the Commission orders was so vague and indefinite in their definition and their application as to result in a denial of due process of law (II Ct. 93-119).

Appellees offered three witnesses in rebuttal (II Ct. 138-212).

The Court took the case under advisement and subsequently notified counsel of his decision upholding the orders of the Commission. (II Ct. 272). Requested findings of fact and conclusions of law were filed by the parties (I Ct. 89, 100), the trial court filed his decision (I Ct. 117), and a judgment was entered on February 16, 1960, sustaining and affirming the orders of the Oil Conservation Commission appealed from (I Ct. 120).

POINTS RELIED UPON FOR REVERSAL

I. The decision of the trial court is erroneous in that it confirms orders of the Oil Conservation Commission of New Mexico, which are unreasonable, and unlawful and which deprive Appellants of their property without due process of law in that:

A. The Commission did not make findings which are required by the Statutes of New Mexico for a valid exercise of the power to allocate allowable production between wells.

B. The finding of the Commission that there is a general correlation between the deliverabilities of gas wells in the Jalmat Pool and the recoverable gas in place under the tracts dedicated to said wells, and that the inclusion of a deliverability factor in the proration formula would therefore result in a more equitable allocation of the production in said pool, provides no basis authorized by the statutes of New Mexico for the change of a proration formula and fails to afford protection to the correlative rights of the operators in said pool, as defined by the New Mexico Legislature.

C. There is no substantial evidence to support the finding of the Commission that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said well.

D. There is no substantial evidence that the formula promulgated thereby will prevent drainage

between producing tracts in the pool, not equalized by counter-drainage, and afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in said pool, which, as defined by the Legislature of New Mexico, is "an amount, so far as can be practically determined, and so far as can be practically obtained without waste, substantially in the proportion that the quantity of the recoverable gas under such property bears to the total recoverable gas in the pool." Section 65-3-14, New Mexico Statutes Annotated, 1953 Compilation.

II. The orders of the Commission deprive Appellants of their property without due process of law, are confiscatory and impair vested rights of Appellants in that:

A. The orders are so incomplete, vague and indefinite as to deprive Appellants of their property without due process of law.

B. The deliverability test specified by the Commission deprives Appellants of their property without due process of law.

ARGUMENTS AND AUTHORITIES

POINT I-PARTS A AND B

I. The decision of the trial court is erroneous in that it conforms orders of the Oil Conservation Commission of New Mexico, which are unreasonable, and unlawful and which deprive Appellants of their property without due process of law in that:

A. The Commission did not make findings which are required by the Statutes of New Mexico for a valid exercise of the power to allocate allowable production between wells.

B. The finding of the Commission that there is a general correlation between the deliverabilities of gas wells in the Jalmat Pool and the recoverable gas in place under the tracts dedicated to said wells, and that the inclusion of a deliverability factor in the proration formula would therefore result in a more equitable allocation of the production in said pool, provides no basis authorized by the statutes of New Mexico for the change of a proration formula and fails to afford protection to the correlative rights of the operators in said pool, as defined by the New Mexico Legislature.

It is a significant fact that during the twenty-five years that the Oil Conservation Commission of New Mexico has had statutory authority to regulate and allocate the production of oil and gas in New Mexico, no appeal from a decision of the Commission has reached this Court. While this undoubtedly is

a tribute to the ability of the industry and the Commission to resolve their problems without litigation, it has resulted in a complete lack of case law which might guide the Commission in the performance of its duties, and particularly in the interpretation of the provisions of the Oil and Gas Conservation Act as it affects the functioning of the Commission.

It is also true that the statute under which this appeal was taken from the order of the Oil Conservation Commission has not been considered by the Supreme Court. Appellees sought to have this Court consider the statute, but were unsuccessful, in the prohibition proceeding brought wherein they sought to prohibit the District Court from proceeding herein in the manner announced by it during a pretrial conference. State ex rel Oil Conservation Commission v. Brand, 65 N.M. 384, 338 P.2d 113. The question posed, and undecided, in the prohibition proceeding was the authority of the trial court to consider evidence other than that heard by the Commission at the trial of this case; nonetheless, new testimony and exhibits were offered by both sides during the hearing in the trial court.

The appeal under consideration arises out of the performance by the Commission of one of its fundamental and most important functions-the allocation of allowable production between producers in a prorated pool. The aggrieved parties are eight of the major oil and gas producing companies operating in New Mexico. The Appellees, in addition to the Commission, consist of a single producer in the Jalmat Pool and the three major gas pipe line companies operating in New Mexico.

The issue is whether, on the record before the Commission, the Commission could legally change the formula for the allocation of gas production in the Jalmat Gas Pool from the acreage formula which had been in effect since the inception of gas prorationing (I Ct. 15) in such a manner as to reduce the income of one group of operators from the sale of gas by approximately $40,000.00 per month (4 OCC 255, et seq.) and at the same time to increase the revenue of other operators in the pool by an even greater amount (4 OCC 257). A study by one of Appellants' expert witnesses indicated that a redistribution of income totaling $5,375,000.00 would occur in 20% of the wells during the remainder of the life of the pool. (6 OCC 60-61).

Appellants submit that there were no findings by the Commission in this proceeding which would support such an order and further that there was no substantial evidence before the Commission on which the findings essential to the validity of such an order could have been based.

From the original discovery of oil in the United States to the present time, the nature of the interest of the owner of the property in oil and gas beneath the surface of his land has occasioned difficulty. The fugacious character of oil and gas was recognized from the outset and had a marked effect upon the development of the law. The so-called "rule of capture" or "law of capture" which resulted has been the subject of consideration by courts and writers and has been both criticized and commended. (For an excellent discussion of the early development of the law as it resulted from the unusual problems incident to the migration of oil and gas see Hardwick, The Rule of Capture and Its Implications as Applied to Oil and Gas, 13 Texas L. Rev. 577 (1935), and

Summers, Legal Rights Against Drainage of Oil and Gas, 17 Texas L. Rev. 683 (1939).

Probably the greatest impact of this characteristic of oil and gas upon the law has been in three closely related areas: (1) Where the rights incident to ownership of such minerals are in question; (2) Where the validity of regulatory orders governing the drilling and spacing of wells to a common source of supply is involved; and, (3) Where the allocation of allowable production is being made as between the owners of wells producing from a common reservoir.

The New Mexico conservation statute enacted in 1935 largely ignored natural gas. It made no specific provision for proration of gas production. Almost all of its provisions were limited to oil alone. This undoubtedly resulted from the fact that gas at that time was of practically no value and its market was extremely limited. It was primarily as a result of the increase in value and demand for gas and the need for express authority to prorate the production of gas that the 1949 Legislature revised and re-enacted the entire Oil Conservation Act as Chapter 161, Laws of New Mexico, 1949.

The original act made no reference to correlative rights, as such. The grant of power to the Commission was predicated entirely upon the prevention of waste. Thus Section 9, Chap. 72, Laws of New Mexico, 1935, provided:

> "Section 9. The Commission is hereby empowered, and it is its duty, to prevent the waste prohibited by this act. To that end, the Commission is empowered to make and enforce rules, regulations and orders, and to do whatever may be reasonably necessary to carry out the purposes of this act, whether or not indicated or specified in any section hereof."

Nonetheless, the Legislature specifically required the Commission to protect the correlative rights of owners when it exercised its powers to limit and prorate the production of oil, even though it did not use the term "correlative rights". Section 12, Cap. 72, Laws of New Mexico 1935, provided:

> "Section 12. Whenever, to prevent waste, the total allowable production for any field or pool in the state is fixed by the Commission in an amount less than that which the field or pool could produce if no restriction were imposed, the Commission shall prorate or distribute the allowable production among the producers in the field or pool. Such proration or distribution shall be made on a reasonable basis. The rules, regulations or orders of the Commission shall, so far as it is practicable to do so, afford to the owner of each property in a pool the opportunity to produce his just and equitable share of the oil and gas in the pool, being an amount, so far as can be practically determined, and so far as such can be practically obtained without waste, substantially in the proportion that the quantity of the recoverable oil and gas under such property bears to the total recoverable oil and gas in the pool, and for this purpose to use his just and equitable share of the reservoir energy."(Emphasis supplied).

The underlined portion of Section 12 constituted an affirmative requirement that correlative rights be protected when the production from a pool is prorated. It was a mandatory requirement for valid action by the Commission.

It is significant that when the Legislature revised the Act in 1949 to provide for the proration of natural gas it also made express provision for the protection of correlative rights as such. Thus Section 9 quoted above, after the 1949 revision, provided as follows (underlining indicates amendment):

> "Section 9. The Commission is hereby empowered, and it is its duty, to prevent the waste prohibited by this Act and to protect correlative rights, as in this Act provided. To that end, the Commission is empowered to make and enforce rules, regulations and orders, and to do whatever may be reasonably necessary to carry out the purpose of this Act, whether or not indicated or specified in any section hereof."

The 1949 revision also added to the Act a definition of the term "correlative rights". For this definition, the Legislature used the exact wording of the portion of Section 12 of the Laws of 1935, supra, which described the protection to be afforded to owners by any order prorating oil production. Thus Section 26, paragraph (h) now provides:

> "(h) "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 practically 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 purpose to use his just and equitable share of the reservoir energy."

It also is significant that the 1949 Legislature added to Section 12 the requirement that, in addition to being upon a reasonable basis, an oil proration order also must be on a basis "recognizing correlative rights."

Section 12(c) of the 1949 Act (Section 65-3-13, NMSA, 1953) was a new provision applicable to gas. It likewise required the Commission, in the allocation of allowable production of gas to do so "upon a reasonable basis and recognizing correlative rights."

The underlined portion of Section 12 of the 1935 Act quoted above, which required the protection of correlative

rights without so designating them, was retained in the 1949 Act where it appeared as Section 13(a), again clearly stating the requirement for valid Commission action where correlative rights are involved.

The New Mexico statute was widely recognized from the outset as being advanced in many of its concepts. In 1935, only months after the statute was enacted, a recognized authority on oil and gas law said:

> "Where, however, in exercising control, there is a limit put upon the total production in the pool, as distinguished from prohibition against any production, the administrative body must then, as recognized in both New Mexico and Texas laws, distribute the allowable production on a reasonable basis. This necessarily requires recognition of property rights, so that, as commonly if not entirely accurately expressed, the property of one may not be avoidably given to another by the operation of the distribution order." Hardwick, The Rule of Capture and Its Implications as Applied to Oil and Gas, 13 Texas L. Rev. 391, 412 (1935).

The same author continued at page 416:

> "It seems clear that, whether the control of drilling and production be exercised under the public rights doctrine or the private rights doctrine or a combination of the two, whether to protect ownership in place or the right to secure (by virtue of title to land) a part of the common supply, there is an obligation to give each landowner an opportunity to produce or otherwise secure his fair and equitable share of the recoverable oil in the pool, subject, of course, to such modifications as may follow from the necessities in preventing waste. Curiously enough, the courts in the percolating water cases talk about "reasonable use" and "fair share" without giving any formula for determining what is a fair share."

Whether the omission in the water cases referred to may have influenced the Legislature of New Mexico in 1935 is unknown, but the Legislature carefully spelled out the formula so far as oil and gas in New Mexico is concerned by saying that an Owner's "just and equitable share of the oil or gas" in a pool is:

> "***an amount, so far as can be practically determined, and so far as such can be practicably obtained without waste, substantially in the proportion that the quantity of the recoverable oil and gas under such property bears to the total recoverable oil and gas in the pool, and for this purpose to use his just and equitable share of the reservoir energy." (Section 12, Chap. 72, Laws of New Mexico, 1935).

In the landmark case of Brown, et al. v. Humble Oil & Refining Company, 83 S.W.2d 935, 99 A.L.R. 1107, the Supreme Court of Texas considered for the first time the grant of power to the Texas Railroad Commission by the Legislature and the well spacing rules promulgated by the Commission under it. The impact of the decision on the industry in Texas undoubtedly was great. The original opinion of the Court, holding Rule 37 and the exception which it provided to be valid, included these two statements:

> "It is now, however, recognized that when an oil field has been fairly tested and developed, experts can determine approximately the amount of oil and gas in place in a common pool, and can also equitably determine the amount of oil and gas recoverable by the owner of each tract of land under certain operating conditions...
>
> "Conditions may arise where it would be proper, right, and just to grant exceptions to the rule so as to permit wells to be drilled on smaller tracts than prescribed therein. Also, conditions may arise where it would be proper, right, and just to permit tracts to be subdivided and such subdivisions drilled after the adoption of the rule; but in all such instances it is the duty of the commission to adjust the allowable, based upon the potential production, so as to give to the owner of such smaller tract only his just proportion of the oil and gas. By this method each person will be entitled to recover a quantity of oil and gas substantially equivalent in amount to the recoverable oil and gas under his land."

In its opinion on rehearing in the case, 87 S.W.2d 1069, 101 ALR 393, the Court referred to the above language and said that it had been construed by some to mean "that this court has undertaken to prescribe* * *rules and standards by which to determine property rights and as standards to control the Railroad Commission in promulgating conservation rules and orders relating to oil and gas."(Emphasis supplied). The court disclaimed any power or intention so to do, pointing out that the Legislature and the Commission, by delegation of power, had that authority.

The case is important here because the New Mexico Legislature, by the provisions of the 1935 Act actually did what the Texas Court here had been accused of doing. The difference is that the Legislature had the power to do so, the Court did not. Our Legislature actually defined the property right, or the so-called "correlative rights", of an owner in words almost identical with those used by the Texas Court in its opinion. In the words of the Texas Court it was the right to recover an amount of oil and gas "substantially equivalent in amount to the recoverable oil and gas under his land". In the words of the New Mexico Legislature, it was the right to recover "an amount * * *substantially in the proportion that the quantity of recoverable oil and gas under his land bears to the total recoverable oil or gas or both in the pool". (Sec. 12, Chap. 72, Laws of New Mexico, 1935).

In both cases, the extent and description of the property right is substantially the same. But in the case of New Mexico the provision actually became a rule "by which to determine property rights and * * *a standard to control the Railroad Commission (Oil Conservation Commission) in promulgating

conservation rules and orders relating to oil and gas", because it was the legislature which had promulgated the standard.

The 1949 Session of the New Mexico Legislature officially denominated the owner's property interest and the rights appurtenant to it as "correlative rights", but both before and after the 1949 amendment the protection of those rights constituted a standard by which all action of the Oil Conservation Commission affecting the production of oil or gas was to be judged.

The orders of the Commission under attack in this appeal changed the proration formula in the Jalmat Gas Pool from allocation one hundred percent on the basis of the acreage attributed to each well, to a formula in which the deliverability of the well became the principal factor with acreage a secondary factor. As has been stated, the new formula allocated allowable 25 percent on the basis of the number of acres attributable to the well, and 75 percent on the basis of acreage multiplied by deliverability of the well.

The existing formula under which allowable was allocated on the basis of acreage had been in effect in the Jalmat Gas Pool and all other Southeastern New Mexico Gas Pools since the beginning of gas prorationing in 1954 (I Ct. 15).

Jalmat is an old pool. It has been producing gas since 1929 (6 OCC 65). From its discovery until the commencement of gas prorationing in 1954, the production of its wells was unrestricted. Witnesses testified that at the time of the Commission hearing it was 40 percent depleted (4 OCC 253); thus the change in the basis of allocating allowable proposed

in this proceeding came relatively late in the life of the pool and long after most of its wells were completed.

Inasmuch as the new deliverability formula proposed by Appellee, Texas Pacific Coal and Oil Company constituted a radical change in the basis of allocating production, with inevitably a major impact upon the correlative rights of the operators in the pool, it would have been supposed that the proponent of the formula would have come to the Commission prepared to present testimony to meet the requirements of the New Mexico statute in the following respects:

(1) That the proposed formula would protect the correlative rights of the operators in the pool as required by Section 65-3-13(a), NMSA, 1953.

(2) That in so far as practicable it would "prevent drainage between producing tracts in (the) pool which is not equalized by counter drainage" as required by Section 65-3-13(c), NMSA, 1953.

(3) That as required by Section 65-3-14(a) and by the statutory definition of correlative rights, it would "afford to the owner of each property in a pool the opportunity to produce his just and equitable share of the***gas***in the pool, being an amount, so far as can be*** practically obtained without waste, substantially in the proportion that the quantity of the recoverable***gas***under (his) property bears to the total recoverable*** gas*** in the pool..."

It does not appear, however, that the proponents of deliverability met any of these requirements. Examination of the Commission's findings (I Ct. 21, 39) establishes that it did not find that the new formula would afford each owner the opportunity to produce his fair share of the gas in the pool as defined by the statute; it did not find that the correlative rights of the owners would be protected by the new formula, nor did it find the proposed formula would prevent drainage

between producing tracts not equalized by counter drainage. And there was no evidence in the record which would have supported such findings.

It is the position of Appellants that such findings and substantial evidence to support them were essential to a valid exercise of the Commission's power in this case; that absent such findings and evidence the Commission's order is invalid and the judgment of the trial court confirming it is erroneous and should be reversed.

The findings of the Commission on which Order R-1092-A and R-1092-C are based are set out in the orders and appear at I Ct. 21 and I Ct. 39. After making jurisdictional and other preliminary findings the Commission made the following findings on which its order is based, to the extent that it changes the proration formula:

> "(5) That the applicant has proved that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the gas in place under the tracts dedicated to said wells, and that the inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool would, therefore, result in a more equitable allocation of the gas production in said pool than under the present gas proration formula.
>
> (6) That the inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool will result in the production of a greater percentage of the pool allowable, and that it will more nearly enable the various gas purchasers in the Jalmat Gas Pool to meet the market demand for gas from said pool."

Testing the foregoing findings by the statutory grant of power to the Commission, it is apparent immediately that finding No. (6) had no relation whatever to the purpose for which the Commission is authorized to limit and prorate the production of natural gas; i.e. to prevent waste. Sec. 65-3-13, N.M. Stats. 1953. In preventing waste the Commission is required to "afford

to the owner of each property the opportunity to produce his just and equitable share" of the gas in the pool as that is defined by the statute.

"Production of a greater percentage of the pool allowable" has no relationship to the prevention of waste or the protection of correlative rights. If the pool allowable is too high, so that it is not being produced by wells in the pool, it is the duty of the Commission to adjust the allowable downward. There is no grant of power to the Commission to fix the allowable of wells so as to produce a greater percentage of the pool allowable.

Neither did the legislature grant the Commission authority to limit production or allocate allowable for the purpose of helping the gas pipeline companies (gas purchasers) "to meet the market demand for gas from said pool." The fact that pipeline companies purchasing gas from a pool do not meet their market demand is not a basis on which the Commission is authorized to take action of any character whatever.

The Commission is authorized to curtail and allocate production to prevent waste and for no other purpose. When it acts to do so, it is affirmatively required by the statute to recognize and protect correlative rights. Sec. 65-3-13, NMSA, 1953. Finding No. 6 of Order R-1092-A has no relation to either objective.

The Commission's finding No.(5) likewise fails when tested by the statutory standard. Read as a whole, and indulging all of the presumptions which support findings of the Commission, the finding is that the applicant, Texas Pacific, has proved that there is a "general correlation" between the

deliverabilities of gas wells in the Jalmat Pool and the gas in place under the tracts dedicated to the wells, and that the proposed change in formula therefore would result in a "more equitable" allocation of allowable between wells. There is no finding that the correlative rights of the operators would be better protected, or would be protected at all. Neither does it find that the requested change will prevent drainage between producing tracts in the pool not equalized by counter drainage, or that such drainage would be reduced.

There is a total absence of the findings on which the Legislature predicated the Commission's power to act, and the findings which were made were of facts irrelevant to Commission action so far as the statutory grant of power is concerned.

The Legislature did not grant to the Commission the power to limit and prorate production in order to "equitably" allocate the production from the pool. The statute does not so provide, and such a grant of power would have been unconstitutional as a delegation of Legislative authority since there are no standards provided by the word "equitably". State ex rel Sofeico v. Heffernan, 41 N.M. 219, 67 P.2d 240. The Commission's opinion as to "equitable" could be at the opposite pole from that of the Legislature. Thus the Commission might well conclude that it is "equitable" to give more allowable to well "A" producing from a given source than to well "B", producing from the same source, because it cost more to drill well "A" as the result of a fishing job. Indeed such a basis of allocation might be "equitable", but it would have no conceivable relationship to the operators' just and equitable

share of the gas which is the requirement of Section 26(h) of the Laws of New Mexico, 1949.

What the statute <u>does</u> provide is that such allocation <u>must</u>:

(1) Be upon a reasonable basis, (Sec. 65-3-13(c), NMSA, 1953);

(2) Afford to the owner of each well the opportunity to produce an amount of gas substantially equal to the quantity of recoverable gas under the property as defined by the statute. (Sec. 65-3-14(a), NMSA, 1953).

(3) So far as practicable prevent drainage between producing tracts which is not equalized by counter drainage. (Sec. 65-3-13(c), NMSA, 1953.)

The Commission's finding No. (5) conceivably might meet the first requirement stated above, though that is doubtful. It does not meet requirements No. 2 and No. 3. The finding that there is a general "correlation" between the deliverabilities of wells and the gas in place under the tracts dedicated to said wells, so that a more "equitable allocation" of production will result, does not protect correlative right as defined by the statute. Nor is it a finding that an owner thereby will be afforded an opportunity to produce his share of the gas in the pool which the statute defines as:

> "***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 the recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas or both in the pool."

That is the standard, and the only standard, to be applied by the Commission, whether the Commission considers it to be "equitable" or not.

The most that can be said for the Commission's findings of a "more equitable allocation" is that applying standards of equity which the Commission feels are appropriate--but which are unknown to the record, to Appellants, and to this Court--the Commission feels that the proposed formula is more equitable than the existing formula. Whether by that the Commission means that the allowable assigned each well will more closely conform to the cost of the well, to the depth of the well, to the original flow of gas from the well or to the recoverable gas in place under the tract assigned to the well is left unanswered by the Commission.

The "general correlation" on which the Commission bases the finding of a "more equitable allocation" is equally vague and uncertain--and as far removed from the statutory requirement. It is not believed that the definition of "correlation" included in the Webster's New International Dictionary (Unabridged) will contribute much to an understanding of what the Commission had in mind, at least it did not for the authors of this brief. When the adjective "general" is added, the definition of which includes "not precise or definite; approximate," etc., the standard which has been applied by the Commission and the purport of its finding becomes even less definite or certain. Perhaps Texas Pacific's counsel correctly described it when he referred to "a relationship of sorts" (3 OCC 148).

It is the general rule that when the power to exercise authority granted by a statute is conditioned upon a requirement as to the existence of certain facts, a finding of those basic

facts is essential to the validity of the exercise of the power. The requirements of the New Mexico statute with reference to orders prorating gas production fall within that category and are not met by the findings of the Commission in the order here under attack.

The Court of Appeals of Louisiana recently considered a case involving remarkably similar questions. The case is Hunter v. Hussey, 90 So.2d 429, 6 Oil and Gas Reporter, 1172 (1956). The action challenged had been taken by the Commissioner of Conservation, who performs the function in Louisiana which is performed by the Oil Conservation Commission of New Mexico. In connection with approval of a waterflood project in an oil pool, the Commissioner issued an order transferring the allowable from certain down-dip wells into which water was to be injected , to up-dip wells, which as a result would be permitted to produce two allowables. The language and requirements of the Louisiana statute were remarkably similar to the New Mexico statute. It provided that the Commissioner should:

> "...prorate or distribute the allowable production among the producers in the pool on a reasonable basis so as to prevent or minimize avoidable drainage from each developed area which is not equalized by counter drainage, and so that each producer will have the opportunity to produce or receive his just and equitable share, subject to the reasonable necessities for the prevention of waste."

The Louisiana statute also defined the correlative right of the producer, which it refers to as the producers "just and equitable share" as New Mexico does, being an amount substantially in the proportion that,

> "The quantity of recoverable oil and gas in the developed area of his tract or tracts in the pool bears to the recoverable oil and gas in the total developed area of the pool, insofar as these amounts can be practically ascertained."

The finding made by the Commissioner, on the basis of which he undertood to transfer the allowables, was that,

> "A more efficient operation of the pressure maintenance program* * * can be accomplished with less reservoir voidage and better conservation of reservoir energy by producing from the more efficient wells the amount of oil allowed and allotted to wells having high gas/oil ratios or producing excessive amounts of water, or which are otherwise less efficient."

The objective obviously was a commendable one, just as in the case at bar an "equitable allocation" is commendable, but general benefit is not the test of the validity of an order under these circumstances.

In holding the Commissioner's order void for want of the essential findings, the court said:

> "The order is bare of a finding that the reallocation of allowables would not cause the up-dip wells of the petitioners, who appeared to object to such reallocation on such account, drainage "not equalized by counter-drainage" or a loss of their just and equitable share of the production. <u>These are the conditions which must be found to exist before the Commissioner's power to prorate allowables arises, as over the protest of parties who allege that such proration will occasion them net drainage or a loss of their just and equitable share of the production of the field</u>. In the absence of this basic jurisdictional finding, the Commissioner's order is not valid."(Emphasis supplied).

The opinion of the court cites and quotes many cases in support of the doctrine it is applying. The following excerpts are particularly pertinent to the orders under review:

> "<u>It is impossible to say that the statutory standards...were applied to the facts in the record</u>. Hence...the deficit is not merely one of the absence of a 'suitably complete statement' of the reasons for the decision; it is the 'lack of the basic or essential findings <u>required</u> to support the Commission's order.' " 315 U.S. 488-9, 62 S.Ct. 729. (Emphasis supplied).

In a statement which almost might be transposed verbatim to this case the Louisiana Court said at page 1183 of the O & G Report citation:

> "In the absence of a finding by the Commissioner, we are unable to determine whether in adopting limitations upon the transfer of allowables (to be made subsequently upon ex parte order, without notice and hearing), the Commissioner applied the standard provided by the legislature, which was: that in pro-rating allowable production, the Commissioner must not deprive any producer of his just and equitable share of production, nor cause net drainage to any developed tract. It is not within the province of the courts to review the specialized evidence and to make such finding in the failure of the administrator's order to include a finding of the basic facts conditioning the power of the administrator to issue the order." (Emphasis supplied)

It is recognized that the presumptions which support the decision of an agency or trial court, under some circumstances support an order even if necessary findings are absent. The rule provides no support for the validity of orders R-1092-A and R-1092-C, for a number of reasons.

First, it is applicable only when there is a total absence of findings on the issue. It has no application where affirmative findings establish that the agency has based its action on other conclusions. As said by the Supreme Court of Texas in Gulf Land Company v. Atlantic Refining Company, 134 Tex. 59, 131 S.W.2d 73, 84:

> "In the case at bar, if the Commission had merely made a general finding of fact, or if it had made no express finding of fact at all, we could and would presume all controverted fact issues as found in favor of the order entered. This we cannot do in the face of a specific finding in regard to the issue of confiscation, and no fact finding on the issue of waste.

> "It may be argued that the statement in this order that this well 'should be granted to prevent confiscation of property' is not a fact finding, but merely a conclusion of law. The best that can be said in favor of the validity of the order is that it is a mixed finding of both law and fact. To say the very least, it, in effect, states that the Commission granted this permit on both a law and a fact finding of confiscation. Under such a record we cannot indulge the presumption that the Commission also found that this well was necessary to prevent waste; neither can we say that the district court can make such finding in order to uphold this permit."

In an effort to escape this rule Appellees may attempt to rely upon Ferguson-Steere Motor Co. v. State Corporation Comm., 60 N.M. 114, 288 P.2d 440. It has no application here. In an appeal from the State Corporation Commission, which had adopted the Rules of Procedure of the District Courts of New Mexico, it was held that the party complaining about the absence of a specific finding must have directed the commission's attention to it by requesting a finding. While in the case at bar, the Oil Conservation Commission has not adopted the Rules of the District Court, Appellants substantially complied with this requirement by their Motion for Rehearing which preceded the issuance of Order R-1092-C (I Ct. 31-32). Paragraphs (d) and (e) of the Motion specifically directed the Commission's attention to the inadequacy of the findings and the absence of those required by statute. Appellants had no further responsibility under any circumstances.

It is further submitted that in this case the doctrine applied in Mosley v. Magnolia Petroleum Co., 45 N.M. 230, 114 P.2d 740 is applicable and is fatal to the orders under consideration. It was there held that when special findings of fact are silent on a material point, such findings will be deemed to have

been found against the party having the burden of proof. The doctrine was followed more recently by this court in Farrar v. Hood, 56 N.M. 724, 249 P.2d 759. Before the Commission, Appellee, Texas Pacific, had the burden of proof. It sought to change the existing proration formula for the Jalmat Pool. The Commission, having failed to make findings on the vital questions of whether or not drainage would result between tracts and whether correlative rights as defined by the statute would be protected, must be regarded as having found against the proponent of the new formula on these issues. This, of course, is fatal to the orders appealed from.

POINT I-PARTS C AND D

I. The Decision of the trial court is erroneous in that it confirms orders of the Oil Conservation Commission of New Mexico, which are unreasonable, and unlawful and which deprive Appellants of their property without due process of law in that:

C. There is no substantial evidence to support the finding of the Commission that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said well.

D. There is no substantial evidence that the formula promulgated thereby, will prevent drainage between producing tracts in the pool not equalized by counter-drainage and afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in said pool, which, as defined by the Legislature of New Mexico, is "an amount, so far as can be practically deter-

mined, and so far as can be practically obtained without waste, substantially in the proportion that the quantity of the recoverable gas under such property bears to the total recoverable gas in the pool." Section 65-3-14, New Mexico Statutes Annotated, 1953 Compilation.

Appellants have pointed out in the preceding portion of this brief the respects in which it is believed that the findings of the Commission on which Orders R-1092-A and R-1092-C are based are fatally defective. This portion of the brief will be devoted to the question of whether there is substantial evidence in the record before the Commission to support the finding actually made that "Texas Pacific Coal and Oil Company has proved by a preponderance of the evidence that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said wells". As a companion proposition, the question will be considered whether there is substantial evidence that the deliverability formula adopted by the Commission will protect against drainage and afford operators in the pool the opportunity to produce the portion of the gas to which the New Mexico statute entitles them.

An order affecting established property rights of Appellants, which is not based on substantial evidence in the respects stated, and which deprives them of a portion of their property, fails to meet either the requirement of substantial evidence or of due process of law. Appellants submit that Orders R-1092-A and R-1092-C fall in that category.

The proposition that there is no substantial evidence to support the Commission's finding as to the relationship between the deliverability of wells and recoverable gas in place was

presented and argued to the lower court at length at the outset of the trial before it. The record before the Commission having been voluminous each side read to the trial court, or called to the court's attention, the portions of the record before the Commission which it felt supported its position. This portion of the record appears at II Ct. 14 to 75. There therefore occurred before the trial court, and there appears in the record, the summarizing and sifting of the evidence required by Rule 15, Par. 6 of the Rules of this Court, which provides:

> "A contention that a verdict, judgment or finding of fact is not supported by substantial evidence will not ordinarily be entertained, unless the party so contending shall have stated in his brief the substance of all evidence bearing upon the proposition, with proper references to the transcript. Such a statement will be taken as complete unless the opposite party shall call attention in like manner to other evidence bearing upon the proposition."

In attacking the findings of the Commission on the grounds that it is not supported by substantial evidence, Appellants normally would have the obligation of summarizing in detail the testimony of Texas Pacific as to "reserves" and their relationship to recoverable gas in place since the finding as to a correlation between deliverabilities and the latter is based thereon. However, there is no substantial disagreement between the parties as to the existence of the evidence relied on by Appellees as supporting the Commission's finding "that Texas Pacific Coal and Oil Company has proved by a preponderance of the evidence that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said wells" (I Ct. 40), supports the conclusion which the Commission has drawn from it in this finding.

This disagreement which has been referred to earlier as the core of this controversy, results from the single fact that Texas Pacific presented no evidence whatever as to the amount of recoverable gas in place underlying the tracts in the Jalmat Pool. Its expert, Mr. Keller, testified that there was not sufficient data available to him to make a study which would disclose that information (5 OCC 437-8). On that basis, he made a study, not of the recoverable gas underlying the tracts in the pool, as required by the statute, but as to the individual wells and what they might be expected to produce in the future based upon a study of their past production and the pressure decline incident to it (5 OCC 462). On that basis, by assuming a continuation in the future of the pressure decline in the past he estimated the amount of gas the well could be expected to produce until its pressure is exhausted which would be the end of its production. This is referred to in the testimony as the extrapolation of past production pressure performance (II Ct. 37).

Mr. Keller then took that volume of gas as determined for each well, divided it among the acres assigned to each well and treated the total so assigned to each well as being the "quantity of recoverable gas in place" under each property. (7 OCC 206). He admitted that this process did not determine the volume of recoverable gas under each tract, however, because it gives effect to all drainage which has occurred during the life of the well and assumes that it will continue unchanged throughout the remainder of the life of the well. (II Ct. 43-44). He, at no time testified that the figures produced by his study were the recoverable gas in place under the tracts in the pool or bore any fixed relationship to recoverable gas in place. Instead he referred to them throughout as "reserves" (II Ct. 34, et seq.). Mr. Keller defined "reserves" as used by him as follows (II Ct. 36):

"Q. Would you define for the Commission, 'reserves' in your opinion?

A. The reserves of a well, of a gas well, is that volume of gas which will be produced in the future from such well.

Q. Under what conditions in the future?

A. Whatever conditions exist in the future.

Q. Can you expect the Commission to know what conditions would exist in the future?

A. Well, as an engineer, in estimating gas reserves, it's common practice to anticipate the future on the basis of the past."

A further summary of the testimony presented by Texas Pacific on this issue would extend this brief unduly and be repetitious. In the light of the purpose of the rule and the following statements of counsel at the trial it is believed that the summary need not be further extended. At II Ct. 71, Mr. Malone, for Appellants, said:

> "As I understand it, there is no question as between the parties but that all Mr. Keller's exhibits and all of his testimony with reference to any relationship between deliverability and recoverable gas in place is based upon a determination of the recoverable gas in place, which gives effect to all of the drainage which has occurred during the life of the well and hence gives it a future reserve which is not the gas in place under the tract, but gives it a future reserve which includes all of the gas which has been drained in the past from other tracts* * *."

Further, at page 74:

> "I think there is nothing to be gained by further extending this argument. I believe the court sees clearly the position of the parties. I think that it has been agreed and is not disputed that all of the evidence presented by the applicant Texas and Pacific (was) with reference to reallocated well reserves and not with reference to the gas in place under the tract. It is our position that that is not substantial evidence and does not meet the standard which the legislature laid down."

Mr. Campbell, for Appellees, said at page 57:

> "So the controversy on this has been, your Honor, the method of calculating the recoverable gas in place and, second, the relationship of the deliverability of the wells to that relationship."

And, at page 59:

> "Mr. Malone is quite correct that in no place in this transcript did Mr. Keller * * * state (d) that the deliverability and recoverable gas in place under each tract are in direct proportion."

The failure of Texas Pacific and its expert to present any testimony as to recoverable gas in place under the tracts in the Jalmat Pool is of far greater significance in this case than merely a disagreement between experts as to procedures to be followed in studying a gas pool for the following reasons:

> (1) The statute predicates the rights of producers in the pool upon the relationship between the recoverable gas in place under their tracts and the total recoverable gas in the pool--not on the relative amounts of gas which the wells have been able to drain from the surrounding tracts throughout their existence. Thus, by treating Keller's "reserves" as the equivalent of recoverable gas in place, the Commission has, in effect, amended the statute and the definition of Appellants' property right in the pool.
>
> (2) By using reallocated "reserves" as the basis of his testimony, Texas Pacific's witness has given effect to past drainage between tracts and has made it impossible to determine, from his testimony, whether the proposed formula prevents "drainage between producing tracts in (the) pool not equalized by counter-drainage". The existence and extent of drainage and compensating counter drainage can only be determined by comparing the gas which an owner will produce under a given formula with the recoverable gas in place which he is entitled to produce under the statute. When an attempt is made to compute recoverable gas in place on a basis which includes in the computation drainage equal to that which has occurred in the past, there results no standard to which production under a proposed formula can be compared to determine future drainage.
>
> (3) The use of reallocated well "reserves" as indicative of, or a measure of, recoverable gas in place, when that is to be compared to deliverability results in wholly illusory and absolutely unreliable conclusions. This is because it is always the well with high deliverability which drains the most gas from surrounding leases. Hence such a well will always show high "reserves" as computed by Keller because it gets the benefit of all the gas which has been drained from other tracts throughout the life of the well (5 OCC 467).
>
> (4) When the Commission finds that there is general correlation between well deliverabilities and recoverable gas in place, as determined by

> Keller's reallocated "reserves", it is stating a truism: the bigger the deliverability, the more the drainage and hence the bigger the reallocated "reserves" computed by Keller. That, however, is a truism which has no relationship of any character to the recoverable gas in place which the statute makes the standard on which drainage is to be prevented and correlative rights protected.

The conclusion to be drawn from the foregoing appears obvious. It is that the Commission's finding "that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the recoverable gas in place under the tracts dedicated to said wells, and that inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool would, therefore, result in a more equitable allocation of the gas production in said pool" is not supported by substantial evidence because it is based entirely on testimony as to reallocated well "reserves" and there is no evidence as to the recoverable gas in place under the tracts in said pool as required by the statute.

If the Commission's finding had correctly stated the conclusion it reached, it would have found "that there is a general correlation between the deliverabilities of the gas wells in the Jalmat Gas Pool and the 'reserves' of those wells as computed on the basis of past pressure-production data, and hence the inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool would result in a more 'equitable' allocation of the gas production in said pool."

That is what the Commission actually found in this case. It is the only finding on this subject for which there is any support in the evidence. Had that been the finding made by the Commission, Orders R-1092-A and R-1092-C would have been void on their face as it would have appeared from the order itself that it would result in uncompensated drainage and the destruction of the correlative rights of owners in the pool.

The only testimony presented to the Commission as to the recoverable gas in place under the tracts in the Jalmat Pool was presented by Appellants (4 OCC 202, 231, 237). It was the product of a conventional pore volume study of a portion of the reservoir which all experts agreed is the normal engineering means of determining recoverable gas in place under the tracts of various owners (4 OCC 201-3, 231). Keller contended the information available on the pool was insufficient to make such a study (5 OCC 437-8), in the face of the fact that there were 367 wells that had been drilled in the pool and it had been producing since 1929 (1 OCC 9). Appellants' expert witnesses, Leibrock and Gruy, the latter of whom was the author of published articles on the subject (6 OCC 115), testified that the available information was quite adequate for the study. (4 OCC 269-70, 6 OCC 127-8).

The study testified to by Mr. Leibrock embraced a 58-well area which he found to be typical. It was so limited because the time made available by the Commission was insufficient for a study of the entire pool (4 OCC 232-3). Mr. Leibrock testified that 1700 hours of petroleum engineers' time had gone into preparation of the testimony presented (4 OCC 200). At the trial in the District Court, he testified that the study had been completed for the entire Jalmat Pool after the Commission hearing (II Ct. 82).

Mr. Leibrock compared the deliverabilities of each of the 58 wells in the area studied with the recoverable gas in place under the tracts assigned to the pool as disclosed by the pore volume study. The result of the comparison was portrayed in an

exhibit (II Ct. 36) which was introduced by Appellants on rehearing before the Commission. This is the only evidence in the record comparing deliverabilities of gas wells to recoverable gas in place under the tracts assigned to the wells as defined by the statute. For that reason a copy of this exhibit is being inserted in this brief following this page. The conclusion to be drawn from it requires no comment. The testimony concerning the exhibit appears at 6 OCC 52, et seq.

Appellants will not here repeat all of the testimony of Keller which was quoted to the trial court in the argument as to the existence of substantial evidence (II Ct. 24-75). The following excerpts are believed to be typical:

At 2 OCC 69:

"A. By 'relative gas reserves' on Page 62, I meant the gas reserves of one well relative to another.

Q. You are not talking about recoverable gas in place?

A. No, sir, I'm talking about the reserves to be recovered from those wells."

At 2 OCC 132, Keller admitted that he was using his "reserves" as a standard and not the statutory standard:

"Q. What else are you basing it on?

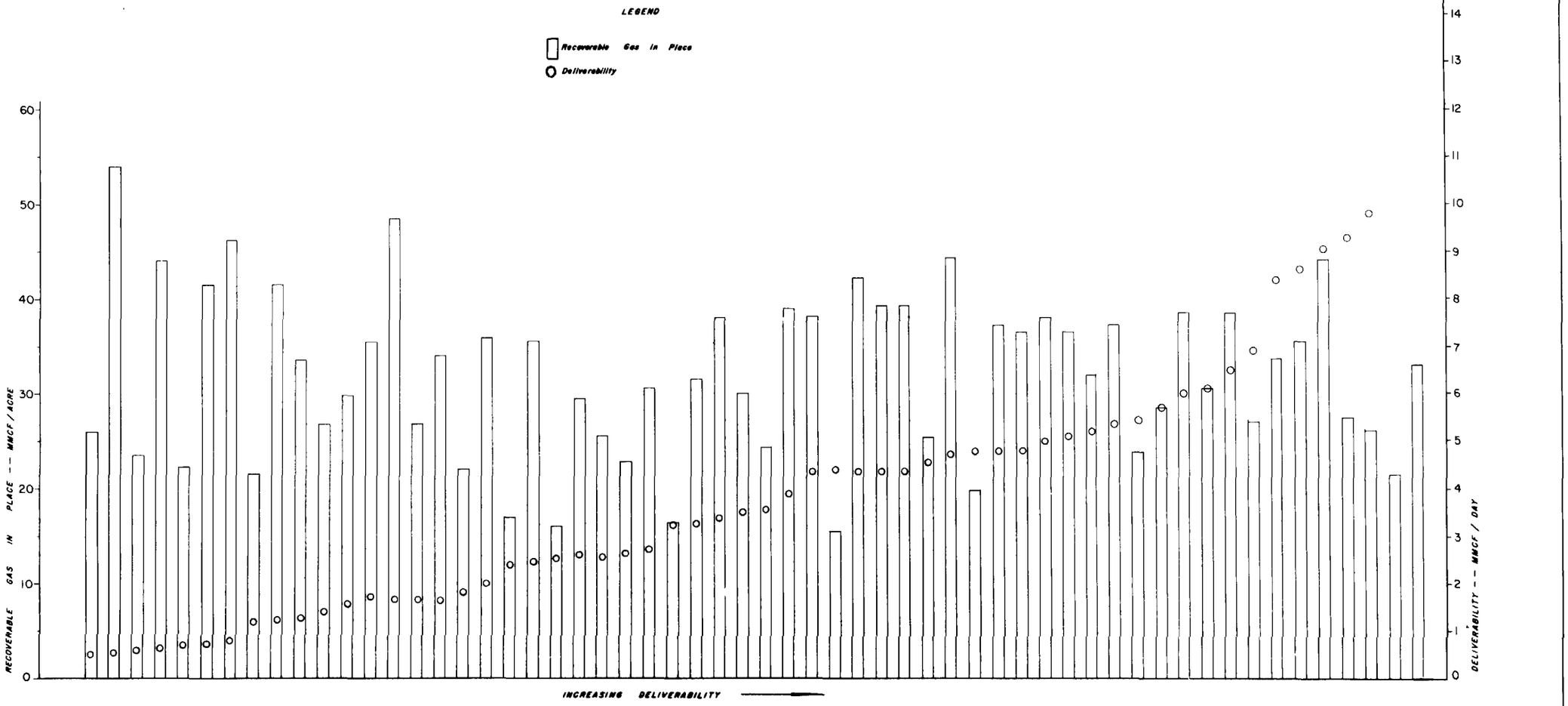
A. Let me say this, that as an engineer, given the problem of determining an allocation method which will serve to protect correlative rights, it's necessary that that engineer first of all set up some basis, or standard which he can quantitatively measure one formula against the other. For that reason, it was necessary to adopt some standard in my thinking of what 'fair share' was.

It was my conclusion, after considering that problem, that the reserves of the wells, and of the acreage assigned to them, was not only the best, but in actuality was the only real standard with any meaning that you could use in this particular situation."(Emphasis supplied.)

EXHIBIT SHOWING ABSENCE OF CORRELATION BETWEEN DELIVERABILITY & RECOVERABLE GAS IN PLACE

FOR 58 WELL AREA

JALMAT FIELD, LEA COUNTY NEW MEXICO



At 5 OCC 456, Keller admitted he was testing the proposed formula against "reserves", not against recoverable gas in place:

"Q. Do you conclude from that that the deliverability formula, despite the fact that it is not perfect, comes closer to recognizing the reserves than the straight acreage formula on the base of that exhibit?

A. Well, that is certainly true on the basis of that exhibit, and all the studies I have done."

(Emphasis supplied.)

At 5 OCC 476:

"Q. The estimate assumes that that same drainage will continue for the life of the well?

A. Well, it varies.

Q. It does assume that it will continue for the life of the well, does it not?

MR. CAMPBELL: He is attempting to answer the question.

A. It assumes that the same degree of drainage will continue to exist or that the same area or volume of gas will continue to be depleted by that well. If the migration towards that well increases in the future, then the curve should flatten in the future. If it decreases, then the curve should assume a sharper slope, yes, sir, that is correct." (Emphasis supplied).

Finally, at 7 OCC 222:

"Q. Now, you have agreed with me, I believe, that the figure that you so compute is not the equivalent of recoverable gas in place?

A. If there was no migration between the tracts, it would be exactly the recoverable gas in place between the tracts.

Q. I believe we established early in the hearing that migration does exist between the tracts?

A. You want me to assume migration in this example?

Q. Yes.

A. Then the difference in the reserves per acre and the actual recoverable gas in place that you get under your hypothesis would be dependent upon how much migration took place under those circumstances." (Emphasis supplied.)

The foregoing summary of the evidence and excerpts from the testimony establish not only that there was no substantial evidence to support the "general correlation" which the Commission found between deliverabilities of wells and recoverable gas in place, but also that there is no evidence from which the Commission could have found that the requirements of the statute as to the prevention of uncompensated drainage and protection of correlative rights would be met by the proposed formula.

As pointed out in an earlier portion of this brief, the Commission made no such findings, yet they were vital. Perhaps now the reason for their absence is disclosed--there was no evidence presented by Texas Pacific on which they might have been made. All of the testimony of Appellants' experts was to the contrary. They testified that tremendous uncompensated drainage would result from the proposed formula (4 OCC 244-267). They likewise testified that a serious abuse of correlative rights would result (4 OCC 266-7). And their testimony was based upon the recoverable gas in place under the tracts in the pool as required by the statute.

In concluding the presentation of this proposition, it should be pointed out that the requirement of the New Mexico statute that the effect of a proration order on the prevention of waste and protection of correlative rights be measured against the property right defined by the statute is not novel or unusual. In thus requiring a study of the reservoir to determine the recoverable gas in place it was conforming to

established practice - even in 1935 when the statute was passed. In 1935 the Supreme Court of Texas said in Brown v. Humble Oil & Refining Co., 83 S.W.2d 935, 99 A.L.R. 1107, 1113:

> "It is now, however, recognized that when an oil field has been fairly tested and developed, experts can determine approximately the amount of oil and gas in place in a common pool, and can also equitably determine the amount of oil and gas recoverable by the owner of each tract of land under certain operating conditions."
>
> " * * The power of the Railroad Commission to act on this matter is limited to the authority granted by the Legislature. The fundamental standards prescribed in the statutes will control."(Emphasis supplied.)

See also Hardwick, The Rule of Capture and Its Implications as Applied to Oil and Gas, 13 Texas L. Rev. 391, at 394 and 405 (1935); Andrews, The Correlative Rights Doctrine in the Law of Oil and Gas, 13 So.Cal. L.Rev. 185, 197 (1940); 1 Summers, The Law of Oil and Gas, 189, et seq. The case of Anderson-Prichard Oil Corporation v. Corporation Commission, 207 Okla. 686, 252 P.2d 450 (1953) is pertinent also as the court there recognized the availability and value of the reservoir information used in a pore volume study, and approved its use by the Commission under a statute specifying potentials as a standard for allocation.

Where the statute requires the volume of recoverable gas in place to be determined and used as the measure of the property right of producers in a gas pool, the requirement cannot be nullified by the testimony of one expert witness who testifies that in his opinion the available information is not adequate to make the necessary study. Such testimony is no basis for substituting a new standard, i.e., well "reserves", for the standard specified by the statute. That is particularly true when two equally competent experts find the information available

to be adequate and demonstrate its adequacy by completing a study which produces the data required by the statute.

The action of the Commission in basing its orders on evidence which admittedly does not conform to the requirements of the statute, results in findings having no substantial evidence to support them. Accordingly, the orders should have been held invalid by the trial court. In failing to do so the trial court erred and its judgment should be reversed.

POINT II

THE ORDERS OF THE COMMISSION DEPRIVE APPELLANTS OF THEIR PROPERTY WITHOUT DUE PROCESS OF LAW, ARE CONFISCATORY AND IMPAIR VESTED RIGHTS OF APPELLANTS.

(A). Introduction

It is the contention of Appellants that the orders complained of deprive them of their property without due process of law, result in confiscation, and impair their vested rights. Under this point, Appellants assert (1) that the orders of the Commission are so vague and indefinite in their terms as to amount to a denial of due process of law; and, (2) assuming the orders of the Commission to be sufficiently definite and certain on their face, in their application to the wells in the Jalmat Gas Pool, under the Commission's ex parte memorandum, erratic, unpredictable, and inconsistent results have been obtained resulting in reallocation of the ownership of gas in place on an illegal, arbitrary and capricious basis amounting to a deprivation of property of Appellants without due process of law contrary to the State and Federal Constitutions.

These propositions were urged upon the Commission (I Ct. 34) and the trial court (I Ct. 106), both of which ruled contrary to the position of Appellants (I Ct. 115).

In order that the Court may appraise the effect of the orders upon the property rights of Appellants and to demonstrate the invalidity of the orders the following

summary of the pertinent testimony is included:

Appellants presented as their second witness V. T. Lyon, engineer employed by Continental Oil Company as District Engineer, Eunice, New Mexico (II Ct. 93). Mr. Lyon related his educational qualifications and experience in the field of petroleum engineering and stated the Jalmat Gas Pool is located in the Eunice Division (II Ct. 93-95); that he is familiar with well testing procedure in the Jalmat Gas Pool and was familiar with the provisions of Commission Orders No. R-1092-A and R-1092-C (II Ct. 95). The witness testified these orders are not specific as to the manner in which wells are to be tested, and one couldn't be assured two people reading the order would make the tests or calculate the deliverability in the same manner (II Ct. 95). He stated he was familiar with the Commission's directive of February 24, 1958, and outlined procedure for making well tests and calculating deliverability (II Ct. 96-98). He testified as to initial tests and retests made in 1959 on Continental Oil Company wells resulting in increases in deliverability calculations of 145.5 per cent (II Ct. 98-99), and that tests of all Continental wells in 1959 compared with tests made in 1958 showed an average percent change of 38.5 per cent under the same testing procedure (II Ct. 100) and that after the 1959 tests had been made, 21 wells were retested, showing an average change in results of 110 per cent (II Ct. 101). The witness then identified and discussed a series of exhibits showing the results on all individual wells of the various tests and retests made in 1958 and 1959, many of the retests having been taken within three months or less after the original tests (II Ct. 101-102), which exhibits were received in evidence

(II Ct. 104). Mr. Lyon then presented an exhibit (Petitioners' Exhibit No. 3) showing the results of 1958 and 1959 deliverability tests for all wells in the pool as shown by the Commission's records and the percentage change from one test to another for each well (II Ct. 105-106). The witness testified it was impossible to get an accurate deliverability test because of the substantial changes in results from one test to another (II Ct. 107), and that this situation prevails throughout the pool (II Ct. 107). He then presented another series of exhibits (Petitioners' Exhibits 4-A to 4-G inclusive) to show comparative results between 1958 and 1959 deliverability tests for all of the wells in the pool (II Ct. 108-114). He testified that by shutting in three wells on Continental Lynn B-26 lease and attributing all of the acreage in one full section to one well of high deliverability an increase of 88 percent in the allowable was achieved (II Ct. 110-111). Only six wells in the pool showed identical results for two successive deliverability tests and the average deviation from one test to the next for the entire pool was 40.32 percent (II Ct. 113). Two additional exhibits were presented comparing results for the pool as a whole (II Ct. 116-118). On the basis of this analysis Mr. Lyon concluded it is not possible to obtain accurate deliverability tests in the Jalmat Gas Pool, and there can be no general correlation between the results of these tests and recoverable gas in place under the tracts dedicated to the wells in the pool (II Ct. 118).

On the cross examination Mr. Lyon identified a deliverability testing procedure dated March 15, 1954, and a manual for back pressure testing dated February 1, 1956, and stated

Continental Oil Company had participated in committee work on the testing procedure (II Ct. 121-122). He said that liquid accumulation in a gas well affects its ability to provide a satisfactory deliverability test (II Ct. 124), that some wells operated by Continental do not have tubing, but that the absence of tubing does not necessarily result in liquid accumulation (II Ct. 124). He said Continental had installed tubing in four wells between the 1958 and 1959 tests (II Ct. 125) and that some of these wells showed an increase in deliverability, but one of these wells was water fraced and showed an increase without tubing (II Ct. 126-127). For about two years Continental has sought lower line pressures from El Paso Natural Gas Co., and line pressures too high for a particular well affect ability to test properly for deliverability (II Ct. 127), and some of the wells involved were transferred to a low pressure line (II Ct. 128). He said that a large number of factors can affect the results of deliverability tests (II Ct. 128-129). Respondents' Exhibit No. 1, a memorandum covering procedure for taking tests and calculating deliverability was discussed and introduced (II Ct. 131-133). On redirect examination the witness testified he knew of no order entered after notice and hearing pertaining to well testing procedure (II Ct. 134) and any test which in its application was subject to such wide variation does not give an accurate measure of deliverability (II Ct. 135).

Appellees presented F. Norman Woodruff, petroleum engineer for El Paso Natural Gas Co., who testified as to his educational qualifications and experience (II Ct. 139-140).

He testified El Paso purchases gas from 85 to 90 percent of the wells in the pool and is also an operator. (II Ct. 141). He testified El Paso makes gas well tests under provisions of their purchase contracts, after notice to the operators (II Ct. 142). The witness reviewed testing procedure (II Ct. 146) and stated it is the operators' obligation to get their wells in condition for the tests, and El Paso has no authority to do anything other than produce the wells through its metering facilities (II Ct. 146). Mr. Woodruff stated if wells were in proper condition the results of two successive tests would be approximately the same but that workovers, addition of tubing, and cleaning out jobs would lead to different results. He testified the procedure for taking tests as provided in the memorandum was clear and if an operator put his well in condition as called for by the directive, results would be more indicative of the well's deliverability (II Ct. 147-148), and proper maintenance of a well increases its deliverability (II Ct. 149). He stated where operators had complied with the Commission's directives there was very little, if any, change in successive tests (II Ct. 150). The witness stated he had made an analysis of deliverability test information shown on 63 wells on Petitioners' Exhibit 3, and then explained the conditions he found as possibly influencing results on these 63 wells (II Ct. 152-161) explaining tubing is normally needed to unload liquids in the well bore (II Ct. 156). He concluded that the operators can follow the directive as shown in Respondents' Exhibit No. 1 (II Ct. 161).

On cross examination Mr. Woodruff stated conditions affecting well tests would change recoverable gas in place under the tracts attributed to the wells (II Ct. 162-164) but said his answer was based upon whether the gas was recover-

able through a particular well and not as to whether it was recoverable at all (II Ct. 164). Mr. Woodruff testified that a change in deliverability of a well is not directly in proportion to a change in the recoverable gas in place under a tract dedicated to the well (II Ct. 165). He said the testing procedure is contained in a memorandum, and tests taken in accordance therewith would result in accurate figures (II Ct. 168, 170) but admitted El Paso could have achieved better results on its own wells, and there was a wide range in variations of deliverability tests on their wells although they attempted to comply with the memorandum (II Ct. 170-171). He stated a change in line pressures will affect deliverability tests because lower pressures enable a well to better unload liquids (II Ct. 171-173), and line pressures are solely under the control of El Paso Natural Gas Co. (II Ct. 174). Results similar to lowered line pressures can be achieved by use of blow-down lines (II Ct. 175). He testified his direct testimony as to factors influencing deliverabilities on the individual wells was not an expression of opinion as to the cause of the variation, but could have been the cause (II Ct. 176). He was unable to identify the form used by his company for reporting tests to the operators (II Ct. 177-178. Petitioners Exhibit No. 7 and 8), and El Paso was unable to make tests in accordance with the Commission's memorandum on two wells because of high line pressure (II Ct. 179-180).

Appellants do not contend the Commission has no right to prorate the production of gas in order to prevent waste of the natural resources of the state. That question was long ago settled. Champlin Refining Company v. Corporation Commission, 286 U. S. 210, 76 L.Ed. 1062, 52 S.Ct. 559,

86 A.L.R. 403 (1932). A comparable result was reached in New Mexico in the field of water appropriation and use when this Court held in Eccles v. Ditto, 23 N.M. 235, 167 Pac. 726, L.R.A. 1918 B 126, that the public at large has an interest in the preservation of the natural resources of the state sufficient to justify appropriate legislation to prevent waste of such resources.

The statutory authority of the Commission in this connection is found in Sec. 65-3-13(c), NMSA, 1953:

> "(c) Whenever, to prevent waste, the total allowable natural gas production from gas wells producing from any pool in this state is fixed by the commission in an amount less than that which the pool could produce if no restrictions were imposed, the commission shall allocate the allowable production among the gas wells in the pool delivering to a gas transportation facility upon a reasonable basis and recognizing correlative rights.* * *. In protecting correlative rights the commission may give equitable consideration to acreage, pressure, open flow, porosity, permeability, deliverability and quality of the gas and to such other pertinent factors as may from time to time exist, and in so far as is practicable, shall prevent drainage between producing tracts in a pool which is not equalized by counter-drainage."

Pursuant to this statute prorationing had been instituted in the Jalmat Gas Pool in 1954, but not until entry of orders appealed from was deliverability included as a factor in the proration and allocation of gas to the individual wells in the pool. While the power of the Commission to prorate gas under the statute would appear to be based solely upon waste prevention, in entering its orders, the Commission is required to make its allocation "upon a reasonable basis and recognizing correlative rights."

By statute an operator has the right to produce the oil and gas underlying the tract of land dedicated to his well, Sec. 65-3-29(h), NMSA, 1953, supra; and this right constitutes an interest in real property, Terry v. Humphreys, 27 N.M. 564, 203 Pac. 539; Duvall v. Stone, 54 N.M. 27, 213 P.2d 212.

Inasmuch as the correlative rights of a well owner constitute a property interest and hence are protected by the federal and state constitutions, Appellants cannot be deprived of these rights without due process of law.

The orders of the Commission are so vague and indefinite as to amount to a denial of due process of law. In their application to the wells in the Jalmat Gas Pool, inconsistent, erratic, unpredictable results have been obtained, resulting in a reallocation of the right to produce, and therefore the ownership of the gas in place in the Jalmat pool on an illegal, arbitrary and capricious basis, depriving Appellants of their property without due process of law.

(B). The Orders Are So Incomplete, Vague and Indefinite As to Deprive Appellants of Their Property Without Due Process of Law.

The order of the Commission, No. R-1092-A, as reaffirmed by Order No. R-1092-C, after providing that the allowable production of gas from the Jalmat Gas Pool should be allocated to the individual wells on the basis of twenty-five percent (25%) acreage plus seventy-five percent (75%) acreage times deliverability, further provides:

> "RULE 6(c) - Annual deliverability tests shall be taken on all gas wells in the Jalmat Gas Pool in a manner and at such time as the Commission may prescribe. (I Ct. 26). (Emphasis supplied)

The term "deliverability" or "calculated deliverability" as used in the orders is not otherwise defined.

The order complained of thus shows on its face that something additional is needed in order to make its provisions definite and certain. This uncertainty was recognized by the Oil Conservation Commission when it transmitted with Order No. R-1092-A, dated January 29, 1958, a memorandum dated January 30, 1958, reading in part: "A deliverability testing procedure will be furnished to all operators in the Jalmat Gas Pool and other interested parties prior to March 1, 1958." This memorandum is a part of the record before the Commission certified to the District Court and brought before this Court as a part of the Bill of Exceptions (I Ct. 135-136).

This additional data needed to complete the order was supplied in the form of another memorandum dated February 24, 1958, which was not an order of the Commission, and did not result from any hearing after Notice (Respondents' Trial Exhibit No. 1).

Numerous tests of various types have been developed to ascertain the potential, or "deliverability" of gas wells, but the term "deliverability" in and of itself describes no measurement, no quantity and no testing procedure. Deliverability is expressed as a daily rate of production. It varies with the back pressure against which it is taken. As one authority on the subject has said:

> "Therefore deliverability has no significance unless the flowing back pressure conditions are specified." Sullivan, Handbook of Oil and Gas Law, 1955 Edition, p. 334, and note 99, p. 334.

The order is further shown to be vague and indefinite by the testimony of V. T. Lyon, witness for Appellants:

> "Q. Could you, on the face of the information contained in the order, conduct a well test which would give you a deliverability figure?
>
> A. Yes, sir, but I don't believe that one could be assured that two people reading the order would conduct the test and calculate the deliverability in the same manner.
>
> Q. Well, is the deliverability, in engineering concept, a certain definite term?
>
> A. Well, it is a term which is used to describe a figure which is a theoretical flow of gas at a given back pressure condition."

(II Ct. 95-96)

While at the time Orders R-1092-A and R-1092-C were issued there was a testing procedure that had been in use in the Southeastern New Mexico gas pools under a manual issued by the Commission, there was no reference to this procedure or manual in the orders. (II Ct. 122).

Any order, rule, or regulation of a commission or administrative body must be sufficiently definite and certain as to advise those subject to it of their rights. The rule is stated in 73 C.J.S. 418, Public Administrative Bodies and Procedure, Sec. 100:

> "A rule or regulation of a public administrative body or officer should be definite and, likewise, such rule or regulation should be certain. It should not be subject to the objection that it fails to lay down adequate legislative standards, since it must contain a guide or standard applicable alike to all individuals similarly situated so that anyone interested may be able to determine his own rights or exemptions thereunder."

This requirement is in accord with the established rule in New Mexico, where it has been held that to be enforceable, an order must be definite and certain. Seward v. D. & R. G. R. Co., 17 N.M. 557, 131 Pac. 980.

Generally, the same rules of construction and interpretation which apply to statutes govern the construction and interpretation of rules and regulations of administrative agencies. California Drive-In Restaurant Asso. v. Clark, 22 Cal.2d 287, 140 P.2d 657.

Some courts hold an even higher degree of certainty is required in an administrative order, and any deficiency in the order cannot be supplied by interpretation. In Tobin v. Edward S. Wagner Co., 187 F.2d 977 (C.A. 2d), a wage-hour case where it was held the record did not show, and the face of the regulation would not indicate that certain activities came under the provisions, it was stated:

> "Were we interpreting a statute to ascertain what power it conferred on an administrative officer, much could be said for such an argument (that the regulation should not be construed too literally). Beginning at least with Aristotle, it has often been recognized that as a legislature cannot forsee all possible particular instances to which legislation is to apply, it must therefore be reasonably so interpreted to fill in gaps. But when the legislature delegates to an administrative official the authority by "sublegislation", to issue regulations, in order to fill in those gaps, then the regulations, precisely because they particularize, ought not be as generously interpreted as the statutes. In fairness to the regulated, the provisions of the regulations should not be deemed to include what the administrator, exercising his delegated power, might have covered but did not cover."

In Miller v. Harmon Construction Co., 205 Okla. 280, 237 P.2d 439 (1951), there was no finding by a state industrial commission as to the degree of disability in a workmen's compensation case. Holding the order of the commission unenforceable, the court held:

> "We are not advised as to the method of calculation used by the commission in arriving at this conclusion. We fail to see how the commission could properly calculate the amount to be awarded against the fund without first finding the disability sustained by petitioner as the result of his combined injuries. The finding of the commission is too indefinite upon which to base a proper award against the fund."

See also, Railroad Yardmasters v. Indiana Harbor Belt R. Co., 166 F.2d 326 (CCA, Indiana).

In Lone Star Gas Co. v. Kelly, 140 Texas 15, 165 S.W.2d 446, a case involving a Texas Railroad Commission order requiring the addition of an odorant to gas that would give it a distinctive odor, the court, in overturning the order, held:

> "When the state, whether by statute or by order of some governmental agency, promulgates a rule of conduct for the citizen, it must speak in specific and definite terms so that he may clearly understand what is required of him.* * *
>
> A statute which either forbids or requires the doing of an act in terms so vague that men of common intelligence must necessarily guess at its meaning and differ as to its application violates the first essential of due process of law."

The same standards of precision should apply with even greater force to the orders of an administrative agency functioning as it does under delegated powers. Tobin v. Edward S. Wagner Co., supra.

Since the Order R-1092-A provides that no allowable shall be assigned to a well until an "approved" deliverability test has been filed with the Commission, and it makes no provision for, nor gives any indication of what the operator must do in order to provide the Commission with a test that will be approved, leaving that to some future action to be taken by the Commission, an operator subject to the provisions of the order is not advised as to what he must do to comply (II Ct. 26). The order is vague, indefinite, and incomplete. The operator is left to conjecture as to the meaning of the order, and his rights thereunder. It is impossible for him to determine the effect of the order upon his correlative rights as a producer in the pool. He cannot tell whether his allowable will be increased or decreased because the order fails to include information essential to a determination of its effect.

The fact that the operator will be deprived of the right to produce his wells unless he files with the Commission an "approved" deliverability test subjects the operator to a penalty of a serious nature. Yet, as we have shown, within the framework of the order he cannot possibly determine what he must do in order to get an approved test, nor what steps he must take in order to be allowed to produce the gas that is rightfully his.

The Commission recognized this fact in its order when it provided that tests shall be taken "in a manner and at such times as the Commission may prescribe."

In order to supply this deficiency, the Commission issued its memorandum of February 24, 1958 (Respondents' Trial Exhibit No. 1). The memorandum does not purport to be an

order of the Commission, yet it is the instrument that gives force and effect to the Commission order (II Ct. 96). It does not show adoption by the Commission, and is nothing more than a memorandum.

Some formal approval and adoption by the Commission itself is essential before the memorandum can become a part of, and enforceable under, the provisions of its Order No. R-1092-A.

Section 65-3-20, NMSA, 1953, provides:

> "Except as provided for herein, before any rule, regulation or order, including revocation, change, renewal or extension thereof, shall be made under the provisions of this act, a public hearing shall be held at such time, place and manner as may be prescribed by the Commission. The Commission shall first give reasonable notice of such hearing in no case less than ten (10) days, except in an emergency and at any such hearing any person having an interest in the subject matter of the hearing shall be entitled to be heard.* * *"

The statutes further provide:

> "Two members of the commission shall constitute a quorum for all purposes. The commission shall adopt a seal and such seal affixed to any paper signed by the secretary of the commission shall be prima facie evidence of the due execution thereof." (Sec. 65-3-4 NMSA, 1953.)

There is no claim that the memorandum involved here was thus adopted. Production of gas is subject to control of the Commission only under a rule, regulation or order of the Commission issued after notice and hearing. Sec. 65-3-14, NMSA, 1953. In State v. Kelly, 27 N.M. 412, 202 Pac. 524, it was held (at page 434):

> "It is argued, and correctly, that where a duty is intrusted to a board composed of different individuals, that board can act officially only as such, in convened session, with the members, or a quorum thereof present."

The memorandum, and all proceedings designed to set up a procedure for testing wells was a result of the work of the Commission staff and committees of engineers (II Ct. 120, 121) yet these procedures are an essential part of calculating deliverability tests (II Ct. 122). No public hearing was held, no order, rule or regulation was adopted or issued by the Commission to give these procedures validity as provided in the statutes. Instead the Commission attempted to adopt prospectively in Order R-1092-A a procedure that was to be worked out at a later date by the Commission staff and a committee of engineers. This does not constitute due process of law. Hillman v. Northern Wasco County People's Utility District, 213 Ore. 264, 323 P.2d 664 (1957).

Where a statute reposing power in an administrative officer requires an order to be made on notice and opportunity to be heard, as does the New Mexico Oil Conservation Commission statute supra, the requirement is applicable to all essential parts of the order. This power cannot be delegated. 73 C.J.S., Public Administrative Bodies and Procedure, Sec. 57. No deficiency in the order can be supplied by Commission action of less formality. Absent notice and hearing in the supplying of the deficiency the order is void and may be set aside. Morgan v. United States, 298 U.S. 468, 80 L.Ed. 1288, 56 S.Ct. 906.

In the above cited case of Hillman v. Northern Wasco County People's Utility District, 213 Ore. 264, 323 P.2d 664 (1957), a comparable fact situation to that found here was under consideration by the court. After pointing out that

an electrical code under attack was the work of a committee composed of representatives of industrial, commercial, professional and governmental groups, the court stated:

> "But neither the Public Service Commission nor its successor, the Public Utility Commissioner, had the right to adopt prospectively without hearing or further consideration subsequent changes, modifications or alterations in such code (national electrical safety code) issued or adopted by the Bureau of Standard or such other national agency as might take over the work of providing electrical standards."
>
> * * *
>
> "The prohibition against delegation of power imposed on the legislature by the constitution applies with equal, if not greater force to an administrative agency created by the legislature."

Summarizing Appellants' position on this point:

1. The order in question makes "deliverability" the major factor in determining the allowable which will be allocated to producers in the Jalmat Pool.

2. The term "deliverability" in and of itself means nothing. Only as the testing procedure and back pressure conditions are specified can the effect on an operator of the inclusion of this factor in the formula be determined.

3. The order contains no standards or back pressure conditions which would give meaning to "deliverability". It merely provides that deliverability tests shall be taken "in a manner and at such time as the Commission may prescribe".

4. When the Commission later undertook to "prescribe" it did so by a memorandum issued without notice or public hearing. Yet it was providing an essential portion of the original order when it did so.

From the foregoing, it is submitted:

(a) That the original order R-1092-A was so vague, indefinite and uncertain in its impact on the correlative rights of operators that it took their property without due process of law.

(b) That if the deficiency in the original order might have been supplied by a later order it could only have been done on notice and hearing conforming to the requirements for the original order.

(c) The memorandum issued by the Commission on February 24, 1958 (Respondents' Trial Exhibit No. 1, II Ct. 130, 133) does not meet that requirement.

Orders R-1092-A and R-1092-C are therefore void and unenforceable through failure to meet the constitutional requirement of due process.

(C). <u>The Deliverability Test Specified By The Commission Deprives Appellants of Their Property Without Due Process of Law</u>.

If it be assumed, for purposes of argument, that the orders of the Commission could be properly implemented by the memorandum of February 24, 1958, (Respondents' Trial Exhibit No. 1), the orders in their application have produced such erratic, unpredictable, inconsistent results as to amount to a reallocation of the ownership of the gas in place on an illegal, arbitrary and capricious basis, depriving Appellants of their property without due process of law.

As shown by the testimony presented at the trial before the District Court, only inconsistent, unpredictable and erratic results have been obtained from deliverability tests made under the memorandum. Variations resulted averaging 40.32 percent between the 1958 tests and the 1959 tests of all of the wells in the pool, although the same testing procedure was applied in all tests. (II Ct. 117) Some 21 of Continental Oil Company's wells were re-tested in 1959 after the original test had been made. An average change in the calculated deliverability of 110 percent resulted (II Ct. 101). The wide variation in results of tests and re-tests on Continental Oil Company operated wells in the Jalmat Pool is shown by Petitioners' Trial Exhibits 2-A, 2-B and 2-C.

A list of all of the wells in the Jalmat Gas Pool showing the results of deliverability tests in 1958 and 1959 with the percentage of change, either up or down, taken from official records of the Oil Conservation Commission, was presented as Petitioners' Trial Exhibit No. 3 (II Ct. 105).

The results obtained as to all of the wells in the pool were graphically portrayed by Petitioners' Exhibits 4-A, 4-B, 4-C, 4-D, 4-E, 4-F, and 4-G (II Ct. 107-114). The percentage of change occurring between 1958 and 1959 deliverability tests ranged from no change for only six wells in the pool, up to a change of 2880 percent in one well.

Experience in testing Continental Oil Company wells, caused an expert witness of Appellants to conclude that no accurate deliverability tests could be achieved under the

procedures specified by the Commission. He testified as follows (II Ct. 106-107):

> "Q. Now, Mr. Lyon, on the basis of your study of Continental wells, were you able to draw any conclusions?
>
> A. Yes, sir. Based on our experience with testing our wells, it appeared that it was impossible to get a deliverability which appeared to be of any significance as far as accuracy is concerned.
>
> Q. On what do you base that conclusion?
>
> A. Well, the fact every time we tested wells we had a substantial change in deliverability.
>
> Q. What was the average change in deliverability tests for all of your wells?
>
> A. I don't believe I have an overall figure but, based on our 1959 tests or retests, which are shown on Exhibit 3, compared to the 1958 tests, we had an average change of slightly more than 40 percent.
>
> Q. Is that a situation which is peculiar to Continental Oil Company's wells? Wells operated by them?
>
> A. We found that it is not.
>
> Q. How did you check that?
>
> A. We made the comparison which is shown on Exhibit No. 3, comparing the percentage change of each well in the pool."

There were 379 wells shown on Petitioners' Trial Exhibit No. 3. All but six of the wells in the pool, on which consecutive deliverability tests were available, showed substantial variations. Sixty-three wells showed variations of 100 percent or more (II Ct. 152).

When it is considered that seventy-five percent of the gas production to be allocated to each well in the pool is based upon the results of these deliverability tests, the impact upon Appellants' property rights and the total lack of due process of law becomes apparent.

Appellees attempted to show in the trial court that these wide variations in deliverability as to 63 wells were due to such factors as accumulation of fluids (II Ct. 153-160), lack of tubing in the wells (II Ct. 156-157), changes in line pressures against which wells are tested (II Ct. 157-158), and anomalies in the reservoir (II Ct. 142). Even if these causes be admitted in those wells, which they are not, they demonstrate the unreliability of the tests and the arbitrary results flowing from them when used in an old, developed pool such as Jalmat. The standard of reasonableness required by the statute clearly requires a more uniform and reliable basis on which to test the property rights of operators.

It is submitted that any order, rule, regulation or directive of the Commission which is to affect seventy-five percent of the allowable production to be assigned to an individual well must be reasonably definite and certain both in its provisions and in the results achieved in order to assure each operator in the pool the opportunity to produce his just and equitable share of the gas in the pool. The results achieved under the orders complained of, and the directives issued to implement those orders, fall far short of that standard and of the provisions of Sec. 65-3-14, supra.

No cases, of course, are found in New Mexico on this particular question. The case of Anderson-Prichard Oil Corp. v. Corporation Commission, 207 Okla. 686, 252 P.2d 450, (1953) quoted earlier in this brief gives support to Appellants' position as to the unreliability of deliverability or well potentials

as a basis for allocation of production. The court there upheld the Commission in refusing to make this factor the basis of a proration order.

The unreliability of calculated well deliverability as a factor on which to base substantial property rights of operators is clearly demonstrated by the fluctuations in deliverability test results hereinabove referred to.

It is obvious that no such fluctuation in the recoverable gas in place under the tracts involved had occurred. In the words of one witness "it is inconceivable that a change of that magnitude could occur." (II Ct. 118). Yet under the formula here under attack, the right of an operator to take gas from the Jalmat Pool will fluctuate from year to year with the results of these tests, with no relationship whatever to the recoverable gas in place under his tract. The statute requires that such an order afford each operator the opportunity to produce his portion of the gas in the pool as defined by the statute--yet this major factor in the deliverability formula as applied through deliverability tests, has no relation to the recoverable gas under a tract.

As pointed out under the first point in this brief, even the Commission's findings do not find the required relationship. If the findings be accepted at face value, they find only "a general correlation"; but the evidence actually shows a fluctuation in practice which could not, by the wildest stretch of imagination, be correlated with recoverable gas in place under the tracts involved.

The point here presented may be summarized as follows:

1. If Orders R-1092-A and R-1092-C can be validly implemented by the ex parte memorandum of February 24, 1958, erratic, inconsistent, unpredictable deliverability test results are obtained in the Jalmat Gas Pool.

2. Although the same testing procedure was used, successive deliverability tests showed variations in deliverability ranging up to 2880 percent.

3. The average variation of tests conducted in 1959 as compared to those made in 1958 was in excess of 40 percent. Re-tests made after the 1959 tests had originally been made showed an even greater variation.

4. The discrepancy in results achieved on successive deliverability tests has no relation to recoverable gas in place under the tracts dedicated to the individual wells.

From these facts the conclusion is apparent that:

(a) Deliverability tests as conducted under the provisions of Order R-1092-A and the subsequently-issued memorandum of February 24, 1958, do not constitute a reasonable basis, as required by the statute, upon which to prorate gas production from the Jalmat Gas Pool.

(b) The variations in results between successive tests on individual wells has no relationship whatever to the amount of recoverable gas in place under the tracts dedicated to such wells.

(c) The orders of the Commission in their application are so vague, indefinite and uncertain as to amount to a confiscation of Appellants' property without due process of law.

(d) To allocate seventy-five percent of the production from the pool on the basis of tests resulting in such erratic, unpredictable and inconsistent calculated deliverabilities amounts to a reallocation of the ownership of the gas in place in the pool on an illegal, arbitrary and capricious basis, depriving Appellants of their property without due process of law.

CONCLUSION

Appellants submit that the orders of the Oil Conservation Commission which are the subject of this appeal are invalid and that the trial court erred when it dismissed Appellants' appeal and affirmed the orders.

The Commission wholly failed to make the findings required by the statute as a prerequisite for a valid order changing the basis of the allocation of production in a prorated gas field. In the face of findings which demonstrate that the Commission acted on the basis of different and inconsistent facts and standards, these essential findings cannot be presumed.

There is no substantial evidence in the record to support the findings on which the Commission did base its orders because the evidence presented by Appellee, Texas Pacific, dealt entirely with the effect of the proposed formula on reallocated well "reserves" and provides no support for a finding as to the effect of the formula on the recoverable gas in place under the tracts in the pool, which is the property right of the owners and the standard fixed by the statute. As a further result of reliance upon such evidence there is no evidence as to the drainage not equalized by counter drainage, which would result from the proposed proration formula; yet this is an affirmative requirement of the statute also. Absent such evidence and appropriate findings based thereon, the orders of the Commission are arbitrary, capricious and unlawful and giving effect to them results in a taking of the property of Appellants without due process of law in violation of the state and federal constitutions.

Furthermore, the orders attacked are so vague, indefinite and uncertain as a result of their failure to define the term "deliverability" that they fail to meet the constitutional requirement of due process. The deficiency so occurring could not be, and was not, remedied by the memorandum issued approximately one month later specifying the deliverability test to be applied.

Finally, regardless of the sufficiency of the orders themselves, the deliverability test prescribed by the Commission, on the basis of which a well's deliverability is determined for purposes of determining the production to be allocated to it, results in erratic, inconsistent and unpredictable results having no relationship to the recoverable gas in place under the tracts in the pool. Orders allocating allowable to Appellants' wells on the basis of the results of such tests are unreasonable, and arbitrary and deprive Appellants of their property without due process of law.

For the foregoing reasons, the judgment of the trial court should be reversed with direction to enter judgment annulling Orders R-1092-A and R-1092-C of the Oil Conservation Commission.

Respectfully submitted,

ATWOOD & MALONE

By _____
Post Office Box 867
Roswell, New Mexico

HERVEY, DOW & HINKLE

By _____
Post Office Box 547
Roswell, New Mexico

KELLAHIN AND FOX

By _____
Post Office Box 1713
Santa Fe, New Mexico