BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED

MAY 18 1989

OIL CONSERVATION DIVISION

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO

NO. 9671

BRIEF OF AMOCO PRODUCTION COMPANY

Pursuant to Examiner Michael E. Stogner's order at the conclusion of the May 10 and 11, 1989, hearing in this case, Amoco Production Company ("Amoco") respectfully submits the following brief:

I. FACTS.

This case involves the Applicant Benson-Montin-Greer's ("BMG") Application to Amend Order No. R-8344 (Case No. 8952), issued by the New Mexico Oil Conservation Commission on November 7, 1986, which unitized the Canada Ojitos Unit ("COU") pursuant to the New Mexico Statutory Unitization Act. Specifically, BMG seeks to extend the COU Area established in that Order into the E/2 of Section 12, Township 25 North, Range 2 West, Rio Arriba County, New Mexico. The E/2 of Section 12 is currently contained within the boundaries of the Gavilan Mancos Oil Pool as defined by New Mexico Oil Conservation Commission Orders. The West Puerto Chiquito Mancos Oil Pool, within which lies the COU, is located immediately to the east of the Gavilan Mancos Oil Pool. BMG is the Unit Operator of the COU, and conducts pressure maintenance operations in that unit.

The hearing on this Application took place on May 10 and 11, 1989, before Hearing Examiner Michael E. Stogner. Three witnesses and extensive exhibits were presented by BMG and two companies appearing in support of the BMG Application: Dugan Production Corporation ("Dugan") and Sun Exploration and Production Company (Sun recently changed its name to Oryx, but it will be referred to in this Brief as "Sun").

During the course of the May 10 and 11 hearing, the transcript of which is not yet available, it became clear that BMG's sole reason in filing its Application is to protect the COU from the possibility, remote as it may be, that a well may sometime in the future be drilled in the E/2 of Section 12. The Section immediately offsetting Section 12 to the east, Section 7, is within the COU Area. In addition, the evidence introduced during the hearing demonstrated that the holders of the federal oil and gas lease in the E/2 of Section 12 (most significantly, Dugan and Sun) are motivated in their support of the BMG Application solely because they wish to "economically" hold that lease prior to its expiration by its own terms in July of 1989.

The first witness testifying at the hearing in support of the BMG Application was Dugan's Mr. John Roe, a petroleum engineer. Mr. Roe, in essence, testified that the only "economic option" for Dugan to hold its oil and gas leasehold interest is to add the E/2 of Section 12 into the COU. Admitted into evidence as Mesa Grande Exhibit 1 was a May 2, 1989, letter written by Mr. Roe which specified that economics and lease savings concerns are the basis for Dugan's support of the BMG request to include the E/2 of Section 12 in the COU.

Mr. William J. LeMay, Director of the New Mexico Oil Conservation Division, attended virtually all of the hearings held in this case on May 10 and 11. In response to questions from Mr. LeMay, Mr. Roe testified that his objective in supporting the BMG Application was to prevent the drilling of a well in the E/2 of Section 12 and, accordingly, to guard against the need to drill a protection well in the offsetting section, Section 7, in the COU. Mr. Roe further testified, in response to questioning from Mr. LeMay, that it is not economic to force pool the E/2 of Section 12 into the W/2 of Section 12 and share in the production from the existing well located in the W/2 of Section 12, the Johnson-Federal well, because the remaining reserves in that well are not sufficient.

The second witness testifying in support of the BMG Application was Sun's Mr. Richard Dillon, also a petroleum engineer. Mr. Dillon testified that there are three (3) available options as to how to hold the federal oil and gas lease on the E/2 of Section 12: (1) drill a well on the E/2 of Section 12; (2) pool the E/2 of Section 12 with the W/2 of Section 12 to form a 640 acre drilling unit; and (3) expand the COU into the E/2 of Section 12. Mr. Dillon's conclusion was that the "only economic option" is to expand the COU into the E/2 of Section 12. In response to a question from Mr. LeMay, Mr. Dillon admitted that the proposed expansion of the COU into the E/2 of Section 12 is a "protection measure" for the COU. Significantly, Mr. Dillon estimated that there are approximately 1,200 barrels of oil remaining under the E/2 of Section 12 (See Dugan/Sun Exhibit 16), and he concluded that the other two options he identified for holding the federal oil and gas lease in the E/2 of Section 12 were "not economic."

The final witness on behalf of the Application was BMG's Mr. Al Greer. Mr. Greer is also a petroleum engineer and his company, BMG, is the Unit Operator of the COU. BMG Exhibit 1, Tab D Article 4; Tab E Article 1.2. Mr. Greer testified that he has "no interest" in further expanding the COU into developed areas of the Gavilan Mancos Oil Pool which lies immediately to the west of the COU, and that the one half section expansion proposed by BMG in this case is a "one time shot." Mr. Greer also testified that any expansion of the COU into the Gavilan Mancos Oil Pool is not economically warranted because, in his view, it would be too expensive for the COU working interest owners to "buy into" the Gavilan Mancos Oil Pool. In response to questioning from Mobil's attorney, W. Perry Pearce, Mr. Greer testified that, if the BMG Application is granted, approximately 60,000 barrels of oil will be allocated to the E/2 of Section 12 pursuant to the allocation of production provisions of the COU Unit and Unit Operating Agreements. In contrast, and according to Mr. Dillon, only approximately 1,200 barrels of oil actually remain under the E/2 of Section 12.

It was clear from Mr. Greer's testimony is that his sole concern is a purported need to protect the COU. Mr. Greer testified that he does not desire to drill a "protection well" in Section 7 and that no well would ever be drilled in the E/2 of Section 12 if that land were included in the COU. As Mr. LeMay pointed out in his questioning of Mr. Greer, the real issue in this case is "fear." Mr. Greer is fearful that a well will be drilled in the E/2 of Section 12 and that the COU would either lose reserves due to allegedly potential drainage from such a well and/or that the COU would be constrained to drill a protection well on Section 7

offsetting such a new well. This "fear" was expressed by Mr. Greer and the other witnesses who testified on behalf of the BMG Application despite extensive testimony by those witnesses that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic.

At the conclusion of the hearing on May 11, Examiner Stogner requested that briefs be submitted as to the issues raised by the BMG Application. For the reasons set forth below, the BMG Application has no basis in fact or law, and accordingly must be denied.

II. NO EVIDENCE WAS PRESENTED WHICH JUSTIFIES OR SUPPORTS THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12 PURSUANT TO THE AUTHORITY OF THE NEW MEXICO STATUTORY UNITIZATION ACT.

BMG seeks an expansion of the COU pursuant to the authority granted in the New Mexico Statutory Unitization Act, N.M. Stat. Ann. Secs. 70-7-1 to 70-7-21. In particular, BMG seeks amendment of the statutory unitization order issued by the New Mexico Oil Conservation Commission in Case No. 8952, Order No. R-8344, to expand the Unit Area of the COU to include the E/2 of Section 12.

The general purpose of the New Mexico Statutory Unitization Act is to allow secondary recovery operations such that greater ultimate recovery will be achieved, waste will be prevented and correlative rights will be protected. Section 70-7-1. Part of the statutory definition of "waste" is economic and physical waste from development and operation of tracts separately "that can best be developed and operated as a unit." Section 70-7-4.

Before the Oil Conservation Division can lawfully issue an order establishing a statutory unit pursuant to this Act, the Division is statutorily obligated to determine whether certain enumerated conditions exist. Section 70-7-6. For example, the Division is obligated to determine whether the unitized management of a "pool or portion thereof" is "reasonably necessary" to effectively carry on "pressure maintenance or secondary or tertiary recovery operations...." Such operations are required to "substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof."

Further, the Division must determine whether the unitized operations are "feasible" and whether such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered." There must be a benefit to the working interest owners and the royalty interest owners "of the oil and gas rights within the pool or portion thereof directly affected." Before statutory unitization can be granted, the unit operator (in this case BMG) must have made a good faith effort to secure voluntary unitization of the pool or the portion directly affected. Finally, and perhaps most important, the allocation of production of unitized substances to the separately owned tracts must be made on a "fair, reasonable and equitable basis."

A plan of unitization may be amended by Oil Conservation Division order "in the same manner and subject to the same conditions as the original order providing for unit operations." Section 70-7-9. As mentioned above, the statute mandates that "the participation formula

contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis." Section 70-7-6(A)(6). This element of the statute was not proven because the Applicant BMG seeks to allocate approximately 60,000 barrels of oil to the E/2 of Section 12 when the evidence indicates that that land has only approximately 1,200 barrels of oil remaining under that tract. At the very least, therefore, the Division must independently determine the value of the E/2 of Section 12 and determine its own allocation of production to that tract "on a fair, reasonable and equitable basis." Section 70-7-6(B).

A more detailed discussion of how the BMG Application is not warranted under the Statutory Unitization Act is set forth in Section V below.

III. THE APPLICANT'S PURPORTED GOAL OF PROTECTING THE CANADA OJITOS UNIT FROM A HYPOTHETICAL FEAR DOES NOT PROVIDE ANY LEGAL BASIS TO EXPAND THE UNIT AS REQUESTED.

There is no reference in the Statutory Unitization Act to the protection of a particular unit from the purported fears expressed by BMG and its supporters in this case as a statutory basis for expanding a unit established under that Act. Despite the Applicant's extensive testimony and evidence that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic, the Applicant nevertheless asks this Division to expand the COU into the E/2 of Section 12 on the basis of this "fear."

The Division is not empowered by the Statutory Unitization Act to expand the COU for those reasons.

IV. APPLICANT'S GOAL TO SAVE THE LEASE IN THE E/2 OF SECTION 12 FROM EXPIRING BY ITS OWN TERMS IN JULY OF 1989 DOES NOT PROVIDE A STATUTORY BASIS TO GRANT THE APPLICATION.

It is clear that the Applicant and the supporting parties are motivated by their desire to hold the federal lease for the E/2 of Section 12 which is currently scheduled to expire by its own terms in July of 1989. Sun and Dugan are the holders of all or part of that oil and gas lease.

The New Mexico Statutory Unitization Act does not empower this Division to grant the Application for an expansion of a unit where the reason for that request is to save an oil and gas lease from expiration. Since the Applicant and the supporting parties are motivated by their desire to "hold the lease" in the E/2 of Section 12, see Mesa Grande Exhibit 1, May 2, 1989, letter by John Roe, the Division lacks legal authority to grant the Application.

V. THE STATUTORY REQUIREMENTS SET FORTH IN SECTION 70-7-6 HAVE NOT BEEN AND CANNOT BE ESTABLISHED AS TO THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12.

Without question, the Applicant and its supporting parties did not prove that all of the statutorily-required conditions for statutory unitization have been established as to the expansion of the COU into the E/2 of Section 12. Such proof must be made before the BMG Application can be granted. See Section 70-7-9.

First, BMG did not prove that the unitized management of the E/2 of Section 12, and its inclusion into the COU is "reasonably necessary" to "effectively carry on pressure maintenance or secondary or tertiary recovery operations." Indeed, no such evidence was presented, and it cannot be seriously contended that the E/2 of Section 12 is "reasonably necessary" for the effective and proper operation of the pressure maintenance project in the COU.

Second, BMG did not prove that unitized operations in the E/2 of Section 12 are "feasible" and that such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof that would otherwise be recovered." Indeed, Mr. Greer, the operator of the COU, could not quantify any additional recovery from Section 12 that would reasonably result as a result of its inclusion in the COU. No "unitized operations" will ever take place in the E/2 of Section 12.

Finally, the evidence presented at the hearing demonstrated that the proposed participation formula for including the E/2 of Section 12 into the COU is <u>not</u> "fair, reasonable and equitable." On the contrary, the evidence dramatically demonstrated that the proposed participation formula is incredibly unfair, unreasonable and inequitable. All the proposed participation formula does is enrich Dugan and Sun at the expense of the remaining owners of the COU.

The testimony established that if the Application were granted, approximately 60,000 barrels of oil would be allocated to the E/2 of Section 12 when there is only approximately 1,200 barrels remaining under that tract. It must be noted that the supporters of the Application,

Dugan and Sun, hold all or most of the federal oil and gas the lease in the E/2 of Section 12 and stand to reap substantial financial rewards if the Application were granted.

In examining their so-called "economic options," BMG, Sun and Dugan, based on the evidence presented during the hearing, are mindful only of their own pocketbooks and their remarkable paranoia. BMG desires to protect the COU against purported drainage possibilities which may or may not occur in the future. Moreover, BMG does not want to drill a protection well if some operator were, by their own testimony, stupid enough to drill a well in the E/2 of Section 12.

Sun and Dugan want to hold their lease in the E/2 of Section 12 by the most economic means available. To do that, they want to allocate themselves 60,000 barrels of oil when only 1,200 barrels of oil remain under their tract. Sun and Dugan ask this Division to excuse them from their legal obligation to develop their lease and, in crafting their request, intend to unfairly enrich themselves by virtue of an unfair, unreasonable and inequitable participation of production formula.

V. THE DIVISION IS NOT EMPOWERED TO ALTER THE POOL BOUNDARY BETWEEN THE GAVILAN MANCOS OIL POOL AND THE CANADA OJITOS UNIT.

The hearing examiner took administrative notice of several Commission orders which, after extensive hearings held over several years, finally and conclusively established the pool boundary between the Gavilan Mancos and West Puerto Chiquito Oil Pools (the COU is within the West Puerto Chiquito Oil Pool). Dugan/Sun Exhibit 1 (please note that Amoco and the other protesters made a motion, denied by Examiner Stogner,

that the Dissenting Opinion by Commissioner Brostuen be admitted into evidence along with that Exhibit; Amoco respectfully reasserts that motion at this time).

The proper boundary between those pools, and, indeed, whether they constitute two pools, were hotly disputed and resolved by the Commission. The Division is not now empowered, in fact or in law, to disturb those Commission rulings and to alter the boundary between those pools as requested by BMG and its supporters, Dugan and Sun.

VI. CONCLUSION.

Chairman LeMay properly characterized the nature of the BMG Application as one based on "fear." No evidence was presented during the hearing which provides a basis under the New Mexico Statutory Unitization Act for granting the relief requested. There is no basis to disturb the Commission's rulings as to the proper location of the boundary between the Gavilan Mancos Oil Pool and the West Puerto Chiquito Mancos Oil Pool containing the COU.

In addition, Examiner Stogner properly pointed out that the Applicant and its supporters have waited approximately two and one-half years without taking any steps to develop the federal oil and gas lease on the E/2 of Section 12, and have acted now only because that federal oil and gas lease is due to expire for lack of development in July of 1989. Examiner Stogner further pointed out that the Application might be premature because this situation could be reexamined at such time, if any, as an application for a permit to drill a well in the E/2 of Section 12 is ever filed with the New Mexico Oil Conservation Division.

The bottom line is that the Application must be rejected since it has no basis in fact or law. For the reasons set forth above, and for the reasons discussed in the hearing on this case, the Application must be rejected and the case dismissed.

Respectfully submitted this 18th day of May, 1989.

AMOCO PRODUCTION COMPANY

By _____

Kent J. Lund, Attorney
Amoco Production Company
1670 Broadway
Denver, Colorado 80202
(303) 830-4250

In Association With
Charles B. Sanchez, Attorney
P.O. Box 7
Belen, New Mexico 87002
(505) 864-8989

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing Brief was forwarded to the following by placing a copy of same, properly addressed and postage prepaid, in the United State mail this 18 day of May, 1989.

Owen Lopez, Esq.
Hinkle Law Firm
P.O. Box 2068
Santa Fe, New Mexico 87504

W. Perry Pearce, Esq.
Montgomery & Andrews
P.O. Box 2307
Santa Fe, New Mexico 87504

William F. Carr, Esq.
Campbell & Black
P.O. Box 2208
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
P.O. Box 2265
Santa Fe, New Mexico 87504

kj1517

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO

NO. 9671

BRIEF OF AMOCO PRODUCTION COMPANY

Pursuant to Examiner Michael E. Stogner's order at the conclusion of the May 10 and 11, 1989, hearing in this case, Amoco Production Company ("Amcco") respectfully submits the following brief:

I. FACTS.

This case involves the Applicant Benson-Montin-Greer's ("BMG") Application to Amend Order No. R-8344 (Case No. 8952), issued by the New Mexico Oil Conservation Commission on November 7, 1986, which unitized the Canada Ojitos Unit ("COU") pursuant to the New Mexico Statutory Unitization Act. Specifically, BMG seeks to extend the COU Area established in that Order into the E/2 of Section 12, Township 25 North, Range 2 West, Rio Arriba County, New Mexico. The E/2 of Section 12 is currently contained within the boundaries of the Gavilan Mancos Oil Pool as defined by New Mexico Oil Conservation Commission Orders. The West Puerto Chiquito Mancos Oil Pool, within which lies the COU, is located immediately to the east of the Gavilan Mancos Oil Pool. BMG is the Unit Operator of the COU, and conducts pressure maintenance operations in that unit.

The hearing on this Application took place on May 10 and 11, 1989, before Hearing Examiner Michael E. Stogner. Three witnesses and extensive exhibits were presented by BMG and two companies appearing in support of the BMG Application: Dugan Production Corporation ("Dugan") and Sun Exploration and Production Company (Sun recently changed its name to Oryx, but it will be referred to in this Brief as "Sun").

During the course of the May 10 and 11 hearing, the transcript of which is not yet available, it became clear that BMG's sole reason in filing its Application is to protect the COU from the possibility, remote as it may be, that a well may sometime in the future be drilled in the E/2 of Section 12. The Section immediately offsetting Section 12 to the east, Section 7, is within the COU Area. In addition, the evidence introduced during the hearing demonstrated that the holders of the federal oil and gas lease in the E/2 of Section 12 (most significantly, Dugan and Sun) are motivated in their support of the BMG Application solely because they wish to "economically" hold that lease prior to its expiration by its own terms in July of 1989.

The first witness testifying at the hearing in support of the BMG Application was Dugan's Mr. John Roe, a petroleum engineer. Mr. Roe, in essence, testified that the only "economic option" for Dugan to hold its oil and gas leasehold interest is to add the E/2 of Section 12 into the COU. Admitted into evidence as Mesa Grande Exhibit 1 was a May 2, 1989, letter written by Mr. Roe which specified that economics and lease savings concerns are the basis for Dugan's support of the BMG request to include the E/2 of Section 12 in the COU.

Mr. William J. LeMay, Director of the New Mexico Oil Conservation Division, attended virtually all of the hearings held in this case on May 10 and 11. In response to questions from Mr. LeMay, Mr. Roe testified that his objective in supporting the BMG Application was to prevent the drilling of a well in the E/2 of Section 12 and, accordingly, to guard against the need to drill a protection well in the offsetting section, Section 7, in the COU. Mr. Roe further testified, in response to questioning from Mr. LeMay, that it is not economic to force pool the E/2 of Section 12 into the W/2 of Section 12 and share in the production from the existing well located in the W/2 of Section 12, the Johnson-Federal well, because the remaining reserves in that well are not sufficient.

The second witness testifying in support of the BMG Application was Sun's Mr. Richard Dillon, also a petroleum engineer. Mr. Dillon testified that there are three (3) available options as to how to hold the federal oil and gas lease on the E/2 of Section 12: (1) drill a well on the E/2 of Section 12; (2) pool the E/2 of Section 12 with the W/2 of Section 12 to form a 640 acre drilling unit; and (3) expand the COU into the E/2 of Section 12. Mr. Dillon's conclusion was that the "only economic option" is to expand the COU into the E/2 of Section 12. In response to a question from Mr. LeMay, Mr. Dillon admitted that the proposed expansion of the COU into the E/2 of Section 12 is a "protection measure" for the COU. Significantly, Mr. Dillon estimated that there are approximately 1,200 barrels of oil remaining under the E/2 of Section 12 (See Dugan/Sun Exhibit 16), and he concluded that the other two options he identified for holding the federal oil and gas lease in the E/2 of Section 12 were "not economic."

The final witness on behalf of the Application was BMG's Mr. Al Greer. Mr. Greer is also a petroleum engineer and his company, BMG, is the Unit Operator of the COU. BMG Exhibit 1, Tab D Article 4; Tab E Article 1.2. Mr. Greer testified that he has "no interest" in further expanding the COU into developed areas of the Gavilan Mancos Oil Pool which lies immediately to the west of the COU, and that the one half section expansion proposed by BMG in this case is a "one time shot." Mr. Greer also testified that any expansion of the COU into the Gavilan Mancos Oil Pool is not economically warranted because, in his view, it would be too expensive for the COU working interest owners to "buy into" the Gavilan Mancos Oil Pool. In response to questioning from Mobil's attorney, W. Perry Pearce, Mr. Greer testified that, if the BMG Application is granted, approximately 60,000 barrels of oil will be allocated to the E/2 of Section 12 pursuant to the allocation of production provisions of the COU Unit and Unit Operating Agreements. In contrast, and according to Mr. Dillon, only approximately 1,200 barrels of oil actually remain under the E/2 of Section 12.

It was clear from Mr. Greer's testimony is that his sole concern is a purported need to protect the COU. Mr. Greer testified that he does not desire to drill a "protection well" in Section 7 and that no well would ever be drilled in the E/2 of Section 12 if that land were included in the COU. As Mr. LeMay pointed out in his questioning of Mr. Greer, the real issue in this case is "fear." Mr. Greer is fearful that a well will be drilled in the E/2 of Section 12 and that the COU would either lose reserves due to allegedly potential drainage from such a well and/or that the COU would be constrained to drill a protection well on Section 7

offsetting such a new well. This "fear" was expressed by Mr. Greer and the other witnesses who testified on behalf of the BMG Application despite extensive testimony by those witnesses that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic.

At the conclusion of the hearing on May 11, Examiner Stogner requested that briefs be submitted as to the issues raised by the BMG Application. For the reasons set forth below, the BMG Application has no basis in fact or law, and accordingly must be denied.

II. NO EVIDENCE WAS PRESENTED WHICH JUSTIFIES OR SUPPORTS THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12 PURSUANT TO THE AUTHORITY OF THE NEW MEXICO STATUTORY UNITIZATION ACT.

BMG seeks an expansion of the COU pursuant to the authority granted in the New Mexico Statutory Unitization Act, N.M. Stat. Ann. Secs. 70-7-1 to 70-7-21. In particular, BMG seeks amendment of the statutory unitization order issued by the New Mexico Oil Conservation Commission in Case No. 8952, Order No. R-8344, to expand the Unit Area of the COU to include the E/2 of Section 12.

The general purpose of the New Mexico Statutory Unitization Act is to allow secondary recovery operations such that greater ultimate recovery will be achieved, waste will be prevented and correlative rights will be protected. Section 70-7-1. Part of the statutory definition of "waste" is economic and physical waste from development and operation of tracts separately "that can best be developed and operated as a unit." Section 70-7-4.

Before the Oil Conservation Division can lawfully issue an order establishing a statutory unit pursuant to this Act, the Division is statutorily obligated to determine whether certain enumerated conditions exist. Section 70-7-6. For example, the Division is obligated to determine whether the unitized management of a "pool or portion thereof" is "reasonably necessary" to effectively carry on "pressure maintenance or secondary or tertiary recovery operations...." Such operations are required to "substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof."

Further, the Division must determine whether the unitized operations are "feasible" and whether such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered." There must be a benefit to the working interest owners and the royalty interest owners "of the oil and gas rights within the pool or portion thereof directly affected." Before statutory unitization can be granted, the unit operator (in this case BMG) must have made a good faith effort to secure voluntary unitization of the pool or the portion directly affected. Finally, and perhaps most important, the allocation of production of unitized substances to the separately owned tracts must be made on a "fair, reasonable and equitable basis."

A plan of unitization may be amended by Oil Conservation Division order "in the same manner and subject to the same conditions as the original order providing for unit operations." Section 70-7-9. As mentioned above, the statute mandates that "the participation formula

contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis." Section 70-7-6(A)(6). This element of the statute was not proven because the Applicant BMG seeks to allocate approximately 60,000 barrels of oil to the E/2 of Section 12 when the evidence indicates that that land has only approximately 1,200 barrels of oil remaining under that tract. At the very least, therefore, the Division must independently determine the value of the E/2 of Section 12 and determine its own allocation of production to that tract "on a fair, reasonable and equitable basis." Section 70-7-6(B).

A more detailed discussion of how the BMG Application is not warranted under the Statutory Unitization Act is set forth in Section V below.

III. THE APPLICANT'S PURPORTED GOAL OF PROTECTING THE CANADA OJITOS UNIT FROM A HYPOTHETICAL FEAR DOES NOT PROVIDE ANY LEGAL BASIS TO EXPAND THE UNIT AS REQUESTED.

There is no reference in the Statutory Unitization Act to the protection of a particular unit from the purported fears expressed by BMG and its supporters in this case as a statutory basis for expanding a unit established under that Act. Despite the Applicant's extensive testimony and evidence that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic, the Applicant nevertheless asks this Division to expand the COU into the E/2 of Section 12 on the basis of this "fear."

The Division is not empowered by the Statutory Unitization Act to expand the COU for those reasons.

IV. APPLICANT'S GOAL TO SAVE THE LEASE IN THE E/2 OF SECTION 12 FROM EXPIRING BY ITS OWN TERMS IN JULY OF 1989 DOES NOT PROVIDE A STATUTORY BASIS TO GRANT THE APPLICATION.

It is clear that the Applicant and the supporting parties are motivated by their desire to hold the federal lease for the E/2 of Section 12 which is currently scheduled to expire by its own terms in July of 1989. Sun and Dugan are the holders of all or part of that oil and gas lease.

The New Mexico Statutory Unitization Act does not empower this Division to grant the Application for an expansion of a unit where the reason for that request is to save an oil and gas lease from expiration. Since the Applicant and the supporting parties are motivated by their desire to "hold the lease" in the E/2 of Section 12, see Mesa Grande Exhibit 1, May 2, 1989, letter by John Roe, the Division lacks legal authority to grant the Application.

V. THE STATUTORY REQUIREMENTS SET FORTH IN SECTION 70-7-6 HAVE NOT BEEN AND CANNOT BE ESTABLISHED AS TO THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12.

Without question, the Applicant and its supporting parties did not prove that all of the statutorily-required conditions for statutory unitization have been established as to the expansion of the COU into the E/2 of Section 12. Such proof must be made before the BMG Application can be granted. See Section 70-7-9.

First, BMG did not prove that the unitized management of the E/2 of Section 12, and its inclusion into the COU is "reasonably necessary" to "effectively carry on pressure maintenance or secondary or tertiary recovery operations." Indeed, no such evidence was presented, and it cannot be seriously contended that the E/2 of Section 12 is "reasonably necessary" for the effective and proper operation of the pressure maintenance project in the COU.

Second, BMG did not prove that unitized operations in the E/2 of Section 12 are "feasible" and that such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof that would otherwise be recovered." Indeed, Mr. Greer, the operator of the COU, could not quantify any additional recovery from Section 12 that would reasonably result as a result of its inclusion in the COU. No "unitized operations" will ever take place in the E/2 of Section 12.

Finally, the evidence presented at the hearing demonstrated that the proposed participation formula for including the E/2 of Section 12 into the COU is not "fair, reasonable and equitable." On the contrary, the evidence dramatically demonstrated that the proposed participation formula is incredibly unfair, unreasonable and inequitable. All the proposed participation formula does is enrich Dugan and Sun at the expense of the remaining owners of the COU.

The testimony established that if the Application were granted, approximately 60,000 barrels of oil would be allocated to the E/2 of Section 12 when there is only approximately 1,200 barrels remaining under that tract. It must be noted that the supporters of the Application,

Dugan and Sun, hold all or most of the federal oil and gas the lease in the E/2 of Section 12 and stand to reap substantial financial rewards if the Application were granted.

In examining their so-called "economic options," BMG, Sun and Dugan, based on the evidence presented during the hearing, are mindful only of their own pocketbooks and their remarkable paranoia. BMG desires to protect the COU against purported drainage possibilities which may or may not occur in the future. Moreover, BMG does not want to drill a protection well if some operator were, by their own testimony, stupid enough to drill a well in the E/2 of Section 12.

Sun and Dugan want to hold their lease in the E/2 of Section 12 by the most economic means available. To do that, they want to allocate themselves 60,000 barrels of oil when only 1,200 barrels of oil remain under their tract. Sun and Dugan ask this Division to excuse them from their legal obligation to develop their lease and, in crafting their request, intend to unfairly enrich themselves by virtue of an unfair, unreasonable and inequitable participation of production formula.

V. THE DIVISION IS NOT EMPOWERED TO ALTER THE POOL BOUNDARY BETWEEN THE GAVILAN MANCOS OIL POOL AND THE CANADA OJITOS UNIT.

The hearing examiner took administrative notice of several Commission orders which, after extensive hearings held over several years, finally and conclusively established the pool boundary between the Gavilan Mancos and West Puerto Chiquito Oil Pools (the COU is within the West Puerto Chiquito Oil Pool). Dugan/Sun Exhibit 1 (please note that Amoco and the other protesters made a motion, denied by Examiner Stogner,

that the Dissenting Opinion by Commissioner Brostuen be admitted into evidence along with that Exhibit; Amoco respectfully reasserts that motion at this time).

The proper boundary between those pools, and, indeed, whether they constitute two pools, were hotly disputed and resolved by the Commission. The Division is not now empowered, in fact or in law, to disturb those Commission rulings and to alter the boundary between those pools as requested by BMG and its supporters, Dugan and Sun.

VI. CONCLUSION.

Chairman LeMay properly characterized the nature of the BMG Application as one based on "fear." No evidence was presented during the hearing which provides a basis under the New Mexico Statutory Unitization Act for granting the relief requested. There is no basis to disturb the Commission's rulings as to the proper location of the boundary between the Gavilan Mancos Oil Pool and the West Puerto Chiquito Mancos Oil Pool containing the COU.

In addition, Examiner Stogner properly pointed out that the Applicant and its supporters have waited approximately two and one-half years without taking any steps to develop the federal oil and gas lease on the E/2 of Section 12, and have acted now only because that federal oil and gas lease is due to expire for lack of development in July of 1989. Examiner Stogner further pointed out that the Application might be premature because this situation could be reexamined at such time, if any, as an application for a permit to drill a well in the E/2 of Section 12 is ever filed with the New Mexico Oil Conservation Division.

The bottom line is that the Application must be rejected since it has no basis in fact or law. For the reasons set forth above, and for the reasons discussed in the hearing on this case, the Application must be rejected and the case dismissed.

Respectfully submitted this 18th day of May, 1989.

AMOCO PRODUCTION COMPANY

By _____

Kent J. Lund, Attorney
Amoco Production Company
1670 Broadway
Denver, Colorado 80202
(303) 830-4250

In Association With
Charles B. Sanchez, Attorney
P.O. Box 7
Belen, New Mexico 87002
(505) 864-8989

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing Brief was forwarded to the following by placing a copy of same, properly addressed and postage prepaid, in the United State mail this 18 day of May, 1989.

Owen Lopez, Esq.
Hinkle Law Firm
P.O. Box 2068
Santa Fe, New Mexico 87504

W. Perry Pearce, Esq.
Montgomery & Andrews
P.O. Box 2307
Santa Fe, New Mexico 87504

William F. Carr, Esq.
Campbell & Black
P.O. Box 2208
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
P.O. Box 2265
Santa Fe, New Mexico 87504

_____

kj1517

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED
MAY 18 1989
OIL CONSERVATION DIVISION

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO

NO. 9671

BRIEF OF AMOCO PRODUCTION COMPANY

Pursuant to Examiner Michael E. Stogner's order at the conclusion of the May 10 and 11, 1989, hearing in this case, Amoco Production Company ("Amoco") respectfully submits the following brief:

I. FACTS.

This case involves the Applicant Benson-Montin-Greer's ("BMG") Application to Amend Order No. R-8344 (Case No. 8952), issued by the New Mexico Oil Conservation Commission on November 7, 1986, which unitized the Canada Ojitos Unit ("COU") pursuant to the New Mexico Statutory Unitization Act. Specifically, BMG seeks to extend the COU Area established in that Order into the E/2 of Section 12, Township 25 North, Range 2 West, Rio Arriba County, New Mexico. The E/2 of Section 12 is currently contained within the boundaries of the Gavilan Mancos Oil Pool as defined by New Mexico Oil Conservation Commission Orders. The West Puerto Chiquito Mancos Oil Pool, within which lies the COU, is located immediately to the east of the Gavilan Mancos Oil Pool. BMG is the Unit Operator of the COU, and conducts pressure maintenance operations in that unit.

The hearing on this Application took place on May 10 and 11, 1989, before Hearing Examiner Michael E. Stogner. Three witnesses and extensive exhibits were presented by BMG and two companies appearing in support of the BMG Application: Dugan Production Corporation ("Dugan") and Sun Exploration and Production Company (Sun recently changed its name to Oryx, but it will be referred to in this Brief as "Sun").

During the course of the May 10 and 11 hearing, the transcript of which is not yet available, it became clear that BMG's sole reason in filing its Application is to protect the COU from the possibility, remote as it may be, that a well may sometime in the future be drilled in the E/2 of Section 12. The Section immediately offsetting Section 12 to the east, Section 7, is within the COU Area. In addition, the evidence introduced during the hearing demonstrated that the holders of the federal oil and gas lease in the E/2 of Section 12 (most significantly, Dugan and Sun) are motivated in their support of the BMG Application solely because they wish to "economically" hold that lease prior to its expiration by its own terms in July of 1989.

The first witness testifying at the hearing in support of the BMG Application was Dugan's Mr. John Roe, a petroleum engineer. Mr. Roe, in essence, testified that the only "economic option" for Dugan to hold its oil and gas leasehold interest is to add the E/2 of Section 12 into the COU. Admitted into evidence as Mesa Grande Exhibit 1 was a May 2, 1989, letter written by Mr. Roe which specified that economics and lease savings concerns are the basis for Dugan's support of the BMG request to include the E/2 of Section 12 in the COU.

Mr. William J. LeMay, Director of the New Mexico Oil Conservation Division, attended virtually all of the hearings held in this case on May 10 and 11. In response to questions from Mr. LeMay, Mr. Roe testified that his objective in supporting the BMG Application was to prevent the drilling of a well in the E/2 of Section 12 and, accordingly, to guard against the need to drill a protection well in the offsetting section, Section 7, in the COU. Mr. Roe further testified, in response to questioning from Mr. LeMay, that it is not economic to force pool the E/2 of Section 12 into the W/2 of Section 12 and share in the production from the existing well located in the W/2 of Section 12, the Johnson-Federal well, because the remaining reserves in that well are not sufficient.

The second witness testifying in support of the BMG Application was Sun's Mr. Richard Dillon, also a petroleum engineer. Mr. Dillon testified that there are three (3) available options as to how to hold the federal oil and gas lease on the E/2 of Section 12: (1) drill a well on the E/2 of Section 12; (2) pool the E/2 of Section 12 with the W/2 of Section 12 to form a 640 acre drilling unit; and (3) expand the COU into the E/2 of Section 12. Mr. Dillon's conclusion was that the "only economic option" is to expand the COU into the E/2 of Section 12. In response to a question from Mr. LeMay, Mr. Dillon admitted that the proposed expansion of the COU into the E/2 of Section 12 is a "protection measure" for the COU. Significantly, Mr. Dillon estimated that there are approximately 1,200 barrels of oil remaining under the E/2 of Section 12 (See Dugan/Sun Exhibit 16), and he concluded that the other two options he identified for holding the federal oil and gas lease in the E/2 of Section 12 were "not economic."

The final witness on behalf of the Application was BMG's Mr. Al Greer. Mr. Greer is also a petroleum engineer and his company, BMG, is the Unit Operator of the COU. BMG Exhibit 1, Tab D Article 4; Tab E Article 1.2. Mr. Greer testified that he has "no interest" in further expanding the COU into developed areas of the Gavilan Mancos Oil Pool which lies immediately to the west of the COU, and that the one half section expansion proposed by BMG in this case is a "one time shot." Mr. Greer also testified that any expansion of the COU into the Gavilan Mancos Oil Pool is not economically warranted because, in his view, it would be too expensive for the COU working interest owners to "buy into" the Gavilan Mancos Oil Pool. In response to questioning from Mobil's attorney, W. Perry Pearce, Mr. Greer testified that, if the BMG Application is granted, approximately 60,000 barrels of oil will be allocated to the E/2 of Section 12 pursuant to the allocation of production provisions of the COU Unit and Unit Operating Agreements. In contrast, and according to Mr. Dillon, only approximately 1,200 barrels of oil actually remain under the E/2 of Section 12.

It was clear from Mr. Greer's testimony is that his sole concern is a purported need to protect the COU. Mr. Greer testified that he does not desire to drill a "protection well" in Section 7 and that no well would ever be drilled in the E/2 of Section 12 if that land were included in the COU. As Mr. LeMay pointed out in his questioning of Mr. Greer, the real issue in this case is "fear." Mr. Greer is fearful that a well will be drilled in the E/2 of Section 12 and that the COU would either lose reserves due to allegedly potential drainage from such a well and/or that the COU would be constrained to drill a protection well on Section 7

offsetting such a new well. This "fear" was expressed by Mr. Greer and the other witnesses who testified on behalf of the BMG Application despite extensive testimony by those witnesses that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic.

At the conclusion of the hearing on May 11, Examiner Stogner requested that briefs be submitted as to the issues raised by the BMG Application. For the reasons set forth below, the BMG Application has no basis in fact or law, and accordingly must be denied.

II. NO EVIDENCE WAS PRESENTED WHICH JUSTIFIES OR SUPPORTS THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12 PURSUANT TO THE AUTHORITY OF THE NEW MEXICO STATUTORY UNITIZATION ACT.

BMG seeks an expansion of the COU pursuant to the authority granted in the New Mexico Statutory Unitization Act, N.M. Stat. Ann. Secs. 70-7-1 to 70-7-21. In particular, BMG seeks amendment of the statutory unitization order issued by the New Mexico Oil Conservation Commission in Case No. 8952, Order No. R-8344, to expand the Unit Area of the COU to include the E/2 of Section 12.

The general purpose of the New Mexico Statutory Unitization Act is to allow secondary recovery operations such that greater ultimate recovery will be achieved, waste will be prevented and correlative rights will be protected. Section 70-7-1. Part of the statutory definition of "waste" is economic and physical waste from development and operation of tracts separately "that can best be developed and operated as a unit." Section 70-7-4.

Before the Oil Conservation Division can lawfully issue an order establishing a statutory unit pursuant to this Act, the Division is statutorily obligated to determine whether certain enumerated conditions exist. Section 70-7-6. For example, the Division is obligated to determine whether the unitized management of a "pool or portion thereof" is "reasonably necessary" to effectively carry on "pressure maintenance or secondary or tertiary recovery operations...." Such operations are required to "substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof."

Further, the Division must determine whether the unitized operations are "feasible" and whether such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered." There must be a benefit to the working interest owners and the royalty interest owners "of the oil and gas rights within the pool or portion thereof directly affected." Before statutory unitization can be granted, the unit operator (in this case BMG) must have made a good faith effort to secure voluntary unitization of the pool or the portion directly affected. Finally, and perhaps most important, the allocation of production of unitized substances to the separately owned tracts must be made on a "fair, reasonable and equitable basis."

A plan of unitization may be amended by Oil Conservation Division order "in the same manner and subject to the same conditions as the original order providing for unit operations." Section 70-7-9. As mentioned above, the statute mandates that "the participation formula

contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis." Section 70-7-6(A)(6). This element of the statute was not proven because the Applicant BMG seeks to allocate approximately 60,000 barrels of oil to the E/2 of Section 12 when the evidence indicates that that land has only approximately 1,200 barrels of oil remaining under that tract. At the very least, therefore, the Division must independently determine the value of the E/2 of Section 12 and determine its own allocation of production to that tract "on a fair, reasonable and equitable basis." Section 70-7-6(B).

A more detailed discussion of how the BMG Application is not warranted under the Statutory Unitization Act is set forth in Section V below.

III. THE APPLICANT'S PURPORTED GOAL OF PROTECTING THE CANADA OJITOS UNIT FROM A HYPOTHETICAL FEAR DOES NOT PROVIDE ANY LEGAL BASIS TO EXPAND THE UNIT AS REQUESTED.

There is no reference in the Statutory Unitization Act to the protection of a particular unit from the purported fears expressed by BMG and its supporters in this case as a statutory basis for expanding a unit established under that Act. Despite the Applicant's extensive testimony and evidence that the drilling of a new well in the E/2 of Section 12 would be incredibly imprudent and uneconomic, the Applicant nevertheless asks this Division to expand the COU into the E/2 of Section 12 on the basis of this "fear."

The Division is not empowered by the Statutory Unitization Act to expand the COU for those reasons.

IV. APPLICANT'S GOAL TO SAVE THE LEASE IN THE E/2 OF SECTION 12 FROM EXPIRING BY ITS OWN TERMS IN JULY OF 1989 DOES NOT PROVIDE A STATUTORY BASIS TO GRANT THE APPLICATION.

It is clear that the Applicant and the supporting parties are motivated by their desire to hold the federal lease for the E/2 of Section 12 which is currently scheduled to expire by its own terms in July of 1989. Sun and Dugan are the holders of all or part of that oil and gas lease.

The New Mexico Statutory Unitization Act does not empower this Division to grant the Application for an expansion of a unit where the reason for that request is to save an oil and gas lease from expiration. Since the Applicant and the supporting parties are motivated by their desire to "hold the lease" in the E/2 of Section 12, see Mesa Grande Exhibit 1, May 2, 1989, letter by John Roe, the Division lacks legal authority to grant the Application.

V. THE STATUTORY REQUIREMENTS SET FORTH IN SECTION 70-7-6 HAVE NOT BEEN AND CANNOT BE ESTABLISHED AS TO THE EXPANSION OF THE CANADA OJITOS UNIT INTO THE E/2 OF SECTION 12.

Without question, the Applicant and its supporting parties did not prove that all of the statutorily-required conditions for statutory unitization have been established as to the expansion of the COU into the E/2 of Section 12. Such proof must be made before the BMG Application can be granted. See Section 70-7-9.

First, BMG did not prove that the unitized management of the E/2 of Section 12, and its inclusion into the COU is "reasonably necessary" to "effectively carry on pressure maintenance or secondary or tertiary recovery operations." Indeed, no such evidence was presented, and it cannot be seriously contended that the E/2 of Section 12 is "reasonably necessary" for the effective and proper operation of the pressure maintenance project in the COU.

Second, BMG did not prove that unitized operations in the E/2 of Section 12 are "feasible" and that such operations "will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof that would otherwise be recovered." Indeed, Mr. Greer, the operator of the COU, could not quantify any additional recovery from Section 12 that would reasonably result as a result of its inclusion in the COU. No "unitized operations" will ever take place in the E/2 of Section 12.

Finally, the evidence presented at the hearing demonstrated that the proposed participation formula for including the E/2 of Section 12 into the COU is not "fair, reasonable and equitable." On the contrary, the evidence dramatically demonstrated that the proposed participation formula is incredibly unfair, unreasonable and inequitable. All the proposed participation formula does is enrich Dugan and Sun at the expense of the remaining owners of the COU.

The testimony established that if the Application were granted, approximately 60,000 barrels of oil would be allocated to the E/2 of Section 12 when there is only approximately 1,200 barrels remaining under that tract. It must be noted that the supporters of the Application,

Dugar and Sun, hold all or most of the federal oil and gas the lease in the E/2 of Section 12 and stand to reap substantial financial rewards if the Application were granted.

In examining their so-called "economic options," BMG, Sun and Dugan, based on the evidence presented during the hearing, are mindful only of their own pocketbooks and their remarkable paranoia. BMG desires to protect the COU against purported drainage possibilities which may or may not occur in the future. Moreover, BMG does not want to drill a protection well if some operator were, by their own testimony, stupid enough to drill a well in the E/2 of Section 12.

Sun and Dugan want to hold their lease in the E/2 of Section 12 by the most economic means available. To do that, they want to allocate themselves 60,000 barrels of oil when only 1,200 barrels of oil remain under their tract. Sun and Dugan ask this Division to excuse them from their legal obligation to develop their lease and, in crafting their request, intend to unfairly enrich themselves by virtue of an unfair, unreasonable and inequitable participation of production formula.

V. THE DIVISION IS NOT EMPOWERED TO ALTER THE POOL BOUNDARY BETWEEN THE GAVILAN MANCOS OIL POOL AND THE CANADA OJITOS UNIT.

The hearing examiner took administrative notice of several Commission orders which, after extensive hearings held over several years, finally and conclusively established the pool boundary between the Gavilan Mancos and West Puerto Chiquito Oil Pools (the COU is within the West Puerto Chiquito Oil Pool). Dugan/Sun Exhibit 1 (please note that Amoco and the other protesters made a motion, denied by Examiner Stogner,

that the Dissenting Opinion by Commissioner Brostuen be admitted into evidence along with that Exhibit; Amoco respectfully reasserts that motion at this time).

The proper boundary between those pools, and, indeed, whether they constitute two pools, were hotly disputed and resolved by the Commission. The Division is not now empowered, in fact or in law, to disturb those Commission rulings and to alter the boundary between those pools as requested by BMG and its supporters, Dugan and Sun.

VI. CONCLUSION.

Chairman LeMay properly characterized the nature of the BMG Application as one based on "fear." No evidence was presented during the hearing which provides a basis under the New Mexico Statutory Unitization Act for granting the relief requested. There is no basis to disturb the Commission's rulings as to the proper location of the boundary between the Gavilan Mancos Oil Pool and the West Puerto Chiquito Mancos Oil Pool containing the COU.

In addition, Examiner Stogner properly pointed out that the Applicant and its supporters have waited approximately two and one-half years without taking any steps to develop the federal oil and gas lease on the E/2 of Section 12, and have acted now only because that federal oil and gas lease is due to expire for lack of development in July of 1989. Examiner Stogner further pointed out that the Application might be premature because this situation could be reexamined at such time, if any, as an application for a permit to drill a well in the E/2 of Section 12 is ever filed with the New Mexico Oil Conservation Division.

The bottom line is that the Application must be rejected since it has no basis in fact or law. For the reasons set forth above, and for the reasons discussed in the hearing on this case, the Application must be rejected and the case dismissed.

Respectfully submitted this 18th day of May, 1989.

AMOCO PRODUCTION COMPANY

By _____

Kent J. Lund, Attorney
Amoco Production Company
1670 Broadway
Denver, Colorado 80202
(303) 830-4250

In Association With
Charles B. Sanchez, Attorney
P.O. Box 7
Belen, New Mexico 87002
(505) 864-8989

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing Brief was forwarded to the following by placing a copy of same, properly addressed and postage prepaid, in the United State mail this 18 day of May, 1989.

Owen Lopez, Esq.
Hinkle Law Firm
P.O. Box 2068
Santa Fe, New Mexico 87504

W. Perry Pearce, Esq.
Montgomery & Andrews
P.O. Box 2307
Santa Fe, New Mexico 87504

William F. Carr, Esq.
Campbell & Black
P.O. Box 2208
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
P.O. Box 2265
Santa Fe, New Mexico 87504

_____

kj1517

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

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO.

RECEIVED
MAY 18 1989
OIL CONSERVATION DIVISION

Docket No. 9671

BRIEF OF MOBIL EXPLORATION AND PRODUCING US

COMES NOW Mobil Exploration and Producing U.S. by and through its attorneys Montgomery & Andrews, P.A. and hereby joins in the brief filed in this matter by Amoco Production Company.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

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

Attorneys for Mobil Exploration and Producing U.S.

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing Brief of Mobil Exploration and Producing U.S. to be mailed to Owen M. Lopez, Esquire, Hinkle, Cox, Eaton, Coffield & Hensley, 218 Montezuma, Santa Fe, New Mexico, 87501; Kent J. Lund, Esquire, Amoco Production Company, 1670 Broadway, Denver, Colorado 80202; William F. Carr, Esquire, Campbell & Black, Post Office Box 2208, Santa Fe, New Mexico 87504; W. Thomas Kellahin, Esquire, Kellahin, Kellahin & Aubrey, Post Office Box 2265, Santa Fe, New Mexico 87504-2265, on this 18th day of May, 1989.

W. Perry Pearce

wpp:46

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

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO.

RECEIVED

MAY 18 1989

OIL CONSERVATION DIVISION

Docket No. 9671

BRIEF OF MOBIL EXPLORATION AND PRODUCING US

COMES NOW Mobil Exploration and Producing U.S. by and through its attorneys Montgomery & Andrews, P.A. and hereby joins in the brief filed in this matter by Amoco Production Company.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

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

Attorneys for Mobil Exploration and Producing U.S.

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing Brief of Mobil Exploration and Producing U.S. to be mailed to Owen M. Lopez, Esquire, Hinkle, Cox, Eaton, Coffield & Hensley, 218 Montezuma, Santa Fe, New Mexico, 87501; Kent J. Lund, Esquire, Amoco Production Company, 1670 Broadway, Denver, Colorado 80202; William F. Carr, Esquire, Campbell & Black, Post Office Box 2208, Santa Fe, New Mexico 87504; W. Thomas Kellahin, Esquire, Kellahin, Kellahin & Aubrey, Post Office Box 2265, Santa Fe, New Mexico 87504-2265, on this 18th day of May, 1989.

W. Perry Pearce

wpp:46

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

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR AMENDMENT OF ORDER R-8344, WHICH STATUTORILY UNITIZED THE CANADA OJITOS UNIT, RIO ARRIBA COUNTY, NEW MEXICO.

RECEIVED
MAY 18 1989
OIL CONSERVATION DIVISION

Docket No. 9671

BRIEF OF MOBIL EXPLORATION AND PRODUCING US

COMES NOW Mobil Exploration and Producing U.S. by and through its attorneys Montgomery & Andrews, P.A. and hereby joins in the brief filed in this matter by Amoco Production Company.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

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

Attorneys for Mobil Exploration and Producing U.S.

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing Brief of Mobil Exploration and Producing U.S. to be mailed to Owen M. Lopez, Esquire, Hinkle, Cox, Eaton, Coffield & Hensley, 218 Montezuma, Santa Fe, New Mexico, 87501; Kent J. Lund, Esquire, Amoco Production Company, 1670 Broadway, Denver, Colorado 80202; William F. Carr, Esquire, Campbell & Black, Post Office Box 2208, Santa Fe, New Mexico 87504; W. Thomas Kellahin, Esquire, Kellahin, Kellahin & Aubrey, Post Office Box 2265, Santa Fe, New Mexico 87504-2265, on this 18th day of May, 1989.

W. Perry Pearce

wpp:46

HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW
218 MONTEZUMA
POST OFFICE BOX 2068
SANTA FE, NEW MEXICO 87504-2068
(505) 982-4554

2800 CLAYDESTA NATIONAL BANK BUILDING
POST OFFICE BOX 3580
MIDLAND, TEXAS 79702
(915) 683-4691

1700 TEXAS AMERICAN BANK BUILDING
POST OFFICE BOX 9238
AMARILLO, TEXAS 79105
(806) 372-5569

700 UNITED BANK PLAZA
POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88202
(505) 622-6510

500 MARQUETTE N.W., SUITE 740
ALBUQUERQUE, NEW MEXICO 87102-2121
(505) 768-1500

LEWIS C. COX
PAUL W. EATON
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.
OWEN M. LOPEZ
DOUGLAS L. LUNSFORD
JOHN J. KELLY
T. CALDER EZZELL, JR.
WILLIAM B. BURFORD*
RICHARD E. OLSON
RICHARD R. WILFONG*
STEVEN D. ARNOLD
JAMES J. WECHSLER
NANCY S. CUSACK
JEFFREY L. FORNACIARI
JEFFREY D. HEWETT*
JAMES BRUCE
JERRY F. SHACKELFORD*
JEFFREY W. HELLBERG*
ALBERT L. PITTS
THOMAS M. HNASKO
JOHN C. CHAMBERS*
THOMAS D. HAINES, JR.
FRANKLIN H. McCALLUM*
GREGORY J. NIBERT

DAVID T. MARKETTE*
MARK C. DOW
KAREN M. RICHARDSON*

FRED W. SCHWENDMANN
DAVID MORAN
JAMES R. McADAMS*
JAMES M. HUDSON
MACDONNELL GORDON
REBECCA NICHOLS JOHNSON
PAUL R. NEWTON
WILLIAM P. JOHNSON
ELLEN S. CASEY
MARGARET C. LUDEWIG
PATRICIA A. WATTS*
MARTIN MEYERS
GREGORY S. WHEELER
ANDREW J. CLOUTIER
IWANA RADEMAEKERS*
S. BARRY PAISNER
W. CRAIG BARLOW*
ROBERT W. CASE*
JAMES A. GILLESPIE
KAREN L. COLLIER*
GARY W. LARSON
STEPHANIE LANDRY

OF COUNSEL
O. M. CALHOUN
MACK EASLEY
JOE W. WOOD
STEPHEN L. ELLIOTT

CLARENCE E. HINKLE (1901-1985)
W. E. BONDURANT, JR. (1913-1973)
ROY C. SNODGRASS, JR. (1914-1987)

*NOT LICENSED IN NEW MEXICO

May 19, 1989

HAND DELIVERED

RECEIVED
MAY 19 1989
OIL CONSERVATION DIVISION

Mr. Michael E. Stogner
Hearing Examiner
Oil Conservation Division
State Land Office
Santa Fe, New Mexico 87503

Re: Case No. 9671

Dear Mr. Stogner:

I am enclosing the original and three copies of the Memorandum of Mesa Grande, Ltd., et al. in Opposition for filing in the above-referenced case. Please conform one copy for our records.

Thank you for your assistance with this matter.

Sincerely,

Owen M. Lopez

OML:frs

enclosures

cc: Larry Sweet
Kevin Fitzgerald
William F. Carr, Esq.
W. Thomas Kellahin, Esq.
W. Perry Pearce, Esq.
Kent J. Lund, Esq.

BEFORE THE OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION TO AMEND DIVISION ORDER NO. 4-8344, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 9671

RECEIVED
MAY 19 1989
OIL CONSERVATION DIVISION

ATTENTION: MICHAEL E. STOGNER
HEARING EXAMINER

MEMORANDUM OF MESA GRANDE, LTD., ET AL. IN OPPOSITION

Mesa Grande, Ltd., Mallon Oil Company and Hooper, Kimball and Williams (hereinafter collectively referred to as "Mesa Grande") oppose the application of Benson-Montin-Greer Drilling Corporation ("B-M-G") which was supported by Sun Exploration and Production Company ("Sun") and Dugan Production Corporation ("Dugan") in the above-referenced matter. The application seeks to add the E/2 of Section 12, T25N, R2W presently part of the Gavilan-Mancos Pool ("Gavilan") to the Canada Ojitos Unit area which encompasses all mineral interests underlying the West Puerto Chiquito-Mancos Oil Pool ("WPCM"). The application is ill-advised for a variety of reasons.

First, B-M-G is attempting to do what cannot lawfully be done. The New Mexico Statutory Unitization Act makes it clear that any unit must embrace the defined limits of a pool or common source of supply § 70-7-1 N.M.S.A. 1978 et seq. Whether the 25 North township line which separates R1W from R2W is a "political" boundary or otherwise, until the pool boundaries of the Gavilan and

WPCM pools are redefined, it remains the boundary separating the two pools and their respective common sources of supply. Therefore, all the discussion of pressure communication dredged up by B-M-G from the June, 1988 hearings is simply irrelevant. It is sophistry to suggest that the E/2 of Section 12 is more suited to be a part of the Canada Ojitos Unit than any other part of Gavilan is suited to be a part of the unit.

Moreover, § 70-7-6 of the Act sets forth certain prerequisites that must be met before an order may issue. Among these are that unitized operation is necessary to carry on pressure maintenance to substantially increase ultimate recovery from the pool, that the estimated additional costs will not exceed the estimated value of the additional hydrocarbons so recovered plus a reasonable profit and that the participation formula allocates the hydrocarbons to the separately owned tracts on a fair, reasonable and equitable basis. Mr. Greer by his own testimony stated that there exist no more than 1,200 barrels of remaining recoverable reserves in place underlying the E/2 of Section 12. Compared to his estimate that his unit can expect to recover an additional ten million barrels of oil, the recovery of .0012 percent is clearly less than substantial. Mr. Greer also admitted that the E/2 of Section 12 was not necessary to carry on his pressure maintenance project. The only purpose in adding the E/2 of Section 12 to the unit is to prevent the lease from expiring (cf. Mesa Grande's Exhibit 1) and so that no fool will be tempted to drill a well in the E/2 of

Section 12 thereby throwing more than one-half million dollars down the drain (Dugan/Sun Exhibit No. 18).

To alleviate this fear, Mr. Greer is willing to give the working interest owners in the E/2 of Section 12 0.6207% of the Unit's remaining 10 million barrels of oil (not to mention gas reserves) or more than 60,000 barrels to prevent someone from possibly drilling a $750,000 well to recover 1,200 barrels of oil. Clearly, the cost of 60,000 barrels of oil to the present unit owners far exceeds the estimated value of the recoverable reserves under the E/2 of Section 12 plus a reasonable profit. Moreover, the participation formula will not allocate hydrocarbons to the separately owned tracts on a fair and reasonable basis when the E/2 owners will receive 60,000 barrels in exchange for their 1,200 barrels of oil.

Since these three essential conditions are missing, no order can issue adding the E/2 of Section 12 to the unit. In addition, § 70-7-8 requires 75% ratification by the unit's royalty owners before the unit can become effective. The BLM who owns well in excess of 75% of the production royalties has yet to consent. We suggest that if the BLM were fully apprised of the evidence brought forth at the examiner hearings on May 10 and 11, it is doubtful that it would wish to be a party to the chicanery described above, particularly when it is also pointed out that the Pictured Cliffs, Mesa Verde and Dakota Sands are also reasonable exploratory targets in the E/2 of Section 12.

At the examiner hearing, the proponents insisted that there exist only three options for them to pursue: (1) to drill a well in the E/2; (2) to join the Johnson Federal 12-5 in the W/2 or (3) to include the E/2 in Mr. Greer's unit. Obviously, the first two options are now available to both Dugan and Sun under existing Gavilan rules, but they have pointed out why they find these options undesirable. The third option, which cannot be accomplished without unprecedented departure from existing law, would result in a clear windfall to both Dugan and Sun and their motives are obvious. They can hold indefinitely a federal lease which they haven't developed during the five years they have had it, and they can trade 1,200 barrels of oil for 60,000. What remains a mystery is Mr. Greer's not only willingness, but even enthusiasm to buy in to such a transparently bad deal. It suggests that there is more than meets the eye involving the relationship among the proponents.

Mr. LeMay during the course of cross-examination rightfully pointed out that there exists an obvious fourth choice which the proponents failed to mention which is to allow the lease to expire by its own terms. This is indeed what should happen and undoubtedly will happen if B-M-G's request is denied. We urge the examiner to deny B-M-G's application for the foregoing reasons.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD
& HENSLEY

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

Attorneys for Mesa Grande, Ltd., Mallon Oil Company, and Hooper, Kimball & Williams

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Memorandum in Opposition of Benson-Montin-Greer Drilling Corporation to Amend Division Order No. R-8344, Rio Arriba County, New Mexico was hand-delivered to the following counsel of record this 19th day of May, 1989.

William F. Carr, Esq.
Campbell & Black, P.A.
W. San Francisco & North
Guadalupe Streets
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
Kellahin, Kellahin & Aubrey
117 North Guadalupe
Santa Fe, New Mexico 87501

W. Perry Pearce, Esq.
Montgomery & Andrews, P.A.
325 Paseo de Peralta
Santa Fe, New Mexico 87501

Kent J. Lund, Esq.*
Amoco Production Company
1670 Broadway
Denver, Colorado 80202

Owen M. Lopez

* - indicates delivery via
First Class Mail

BEFORE THE OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION TO AMEND DIVISION ORDER NO. 4-8344, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 9671

RECEIVED
MAY 19
OIL CONSERVATION DIVISION

ATTENTION: MICHAEL E. STOGNER
HEARING EXAMINER

MEMORANDUM OF MESA GRANDE, LTD., ET AL. IN OPPOSITION

Mesa Grande, Ltd., Mallon Oil Company and Hooper, Kimball and Williams (hereinafter collectively referred to as "Mesa Grande") oppose the application of Benson-Montin-Greer Drilling Corporation ("B-M-G") which was supported by Sun Exploration and Production Company ("Sun") and Dugan Production Corporation ("Dugan") in the above-referenced matter. The application seeks to add the E/2 of Section 12, T25N, R2W presently part of the Gavilan-Mancos Pool ("Gavilan") to the Canada Ojitos Unit area which encompasses all mineral interests underlying the West Puerto Chiquito-Mancos Oil Pool ("WPCM"). The application is ill-advised for a variety of reasons.

First, B-M-G is attempting to do what cannot lawfully be done. The New Mexico Statutory Unitization Act makes it clear that any unit must embrace the defined limits of a pool or common source of supply § 70-7-1 N.M.S.A. 1978 et seq. Whether the 25 North township line which separates R1W from R2W is a "political" boundary or otherwise, until the pool boundaries of the Gavilan and

WPCM pools are redefined, it remains the boundary separating the two pools and their respective common sources of supply. Therefore, all the discussion of pressure communication dredged up by B-M-G from the June, 1988 hearings is simply irrelevant. It is sophistry to suggest that the E/2 of Section 12 is more suited to be a part of the Canada Ojitos Unit than any other part of Gavilan is suited to be a part of the unit.

Moreover, § 70-7-6 of the Act sets forth certain prerequisites that must be met before an order may issue. Among these are that unitized operation is necessary to carry on pressure maintenance to substantially increase ultimate recovery from the pool, that the estimated additional costs will not exceed the estimated value of the additional hydrocarbons so recovered plus a reasonable profit and that the participation formula allocates the hydrocarbons to the separately owned tracts on a fair, reasonable and equitable basis. Mr. Greer by his own testimony stated that there exist no more than 1,200 barrels of remaining recoverable reserves in place underlying the E/2 of Section 12. Compared to his estimate that his unit can expect to recover an additional ten million barrels of oil, the recovery of .0012 percent is clearly less than substantial. Mr. Greer also admitted that the E/2 of Section 12 was not necessary to carry on his pressure maintenance project. The only purpose in adding the E/2 of Section 12 to the unit is to prevent the lease from expiring (cf. Mesa Grande's Exhibit 1) and so that no fool will be tempted to drill a well in the E/2 of

Section 12 thereby throwing more than one-half million dollars down the drain (Dugan/Sun Exhibit No. 18).

To alleviate this fear, Mr. Greer is willing to give the working interest owners in the E/2 of Section 12 0.6207% of the Unit's remaining 10 million barrels of oil (not to mention gas reserves) or more than 60,000 barrels to prevent someone from possibly drilling a $750,000 well to recover 1,200 barrels of oil. Clearly, the cost of 60,000 barrels of oil to the present unit owners far exceeds the estimated value of the recoverable reserves under the E/2 of Section 12 plus a reasonable profit. Moreover, the participation formula will not allocate hydrocarbons to the separately owned tracts on a fair and reasonable basis when the E/2 owners will receive 60,000 barrels in exchange for their 1,200 barrels of oil.

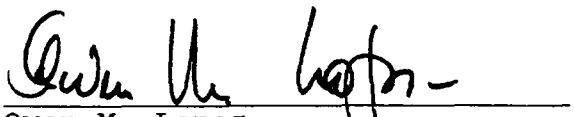
Since these three essential conditions are missing, no order can issue adding the E/2 of Section 12 to the unit. In addition, § 70-7-8 requires 75% ratification by the unit's royalty owners before the unit can become effective. The BLM who owns well in excess of 75% of the production royalties has yet to consent. We suggest that if the BLM were fully apprised of the evidence brought forth at the examiner hearings on May 10 and 11, it is doubtful that it would wish to be a party to the chicanery described above, particularly when it is also pointed out that the Pictured Cliffs, Mesa Verde and Dakota Sands are also reasonable exploratory targets in the E/2 of Section 12.

At the examiner hearing, the proponents insisted that there exist only three options for them to pursue: (1) to drill a well in the E/2; (2) to join the Johnson Federal 12-5 in the W/2 or (3) to include the E/2 in Mr. Greer's unit. Obviously, the first two options are now available to both Dugan and Sun under existing Gavilan rules, but they have pointed out why they find these options undesirable. The third option, which cannot be accomplished without unprecedented departure from existing law, would result in a clear windfall to both Dugan and Sun and their motives are obvious. They can hold indefinitely a federal lease which they haven't developed during the five years they have had it, and they can trade 1,200 barrels of oil for 60,000. What remains a mystery is Mr. Greer's not only willingness, but even enthusiasm to buy in to such a transparently bad deal. It suggests that there is more than meets the eye involving the relationship among the proponents.

Mr. LeMay during the course of cross-examination rightfully pointed out that there exists an obvious fourth choice which the proponents failed to mention which is to allow the lease to expire by its own terms. This is indeed what should happen and undoubtedly will happen if B-M-G's request is denied. We urge the examiner to deny B-M-G's application for the foregoing reasons.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD
& HENSLEY



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

Attorneys for Mesa Grande, Ltd.,
Mallon Oil Company, and Hooper,
Kimball & Williams

CERTIFICATE OF SERVICE

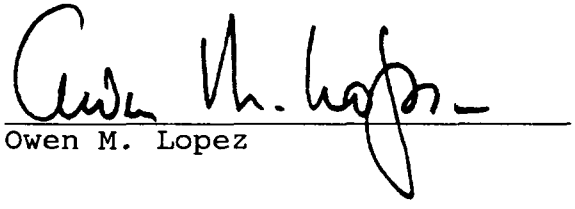
I hereby certify that a true and correct copy of the foregoing Memorandum in Opposition of Benson-Montin-Greer Drilling Corporation to Amend Division Order No. R-8344, Rio Arriba County, New Mexico was hand-delivered to the following counsel of record this 19th day of May, 1989.

William F. Carr, Esq.
Campbell & Black, P.A.
W. San Francisco & North
Guadalupe Streets
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
Kellahin, Kellahin & Aubrey
117 North Guadalupe
Santa Fe, New Mexico 87501

W. Perry Pearce, Esq.
Montgomery & Andrews, P.A.
325 Paseo de Peralta
Santa Fe, New Mexico 87501

Kent J. Lund, Esq.*
Amoco Production Company
1670 Broadway
Denver, Colorado 80202



Owen M. Lopez

* - indicates delivery via
First Class Mail

BEFORE THE OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION TO AMEND DIVISION ORDER NO. 4-8344, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 9671

RECEIVED

MAY 19 1989

OIL CONSERVATION DIVISION

ATTENTION: MICHAEL E. STOGNER
HEARING EXAMINER

MEMORANDUM OF MESA GRANDE, LTD., ET AL. IN OPPOSITION

Mesa Grande, Ltd., Mallon Oil Company and Hooper, Kimball and Williams (hereinafter collectively referred to as "Mesa Grande") oppose the application of Benson-Montin-Greer Drilling Corporation ("B-M-G") which was supported by Sun Exploration and Production Company ("Sun") and Dugan Production Corporation ("Dugan") in the above-referenced matter. The application seeks to add the E/2 of Section 12, T25N, R2W presently part of the Gavilan-Mancos Pool ("Gavilan") to the Canada Ojitos Unit area which encompasses all mineral interests underlying the West Puerto Chiquito-Mancos Oil Pool ("WPCM"). The application is ill-advised for a variety of reasons.

First, B-M-G is attempting to do what cannot lawfully be done. The New Mexico Statutory Unitization Act makes it clear that any unit must embrace the defined limits of a pool or common source of supply § 70-7-1 N.M.S.A. 1978 et seq. Whether the 25 North township line which separates R1W from R2W is a "political" boundary or otherwise, until the pool boundaries of the Gavilan and

WPCM pools are redefined, it remains the boundary separating the two pools and their respective common sources of supply. Therefore, all the discussion of pressure communication dredged up by B-M-G from the June, 1988 hearings is simply irrelevant. It is sophistry to suggest that the E/2 of Section 12 is more suited to be a part of the Canada Ojitos Unit than any other part of Gavilan is suited to be a part of the unit.

Moreover, § 70-7-6 of the Act sets forth certain prerequisites that must be met before an order may issue. Among these are that unitized operation is necessary to carry on pressure maintenance to substantially increase ultimate recovery from the pool, that the estimated additional costs will not exceed the estimated value of the additional hydrocarbons so recovered plus a reasonable profit and that the participation formula allocates the hydrocarbons to the separately owned tracts on a fair, reasonable and equitable basis. Mr. Greer by his own testimony stated that there exist no more than 1,200 barrels of remaining recoverable reserves in place underlying the E/2 of Section 12. Compared to his estimate that his unit can expect to recover an additional ten million barrels of oil, the recovery of .0012 percent is clearly less than substantial. Mr. Greer also admitted that the E/2 of Section 12 was not necessary to carry on his pressure maintenance project. The only purpose in adding the E/2 of Section 12 to the unit is to prevent the lease from expiring (cf. Mesa Grande's Exhibit 1) and so that no fool will be tempted to drill a well in the E/2 of

Section 12 thereby throwing more than one-half million dollars down the drain (Dugan/Sun Exhibit No. 18).

To alleviate this fear, Mr. Greer is willing to give the working interest owners in the E/2 of Section 12 0.6207% of the Unit's remaining 10 million barrels of oil (not to mention gas reserves) or more than 60,000 barrels to prevent someone from possibly drilling a $750,000 well to recover 1,200 barrels of oil. Clearly, the cost of 60,000 barrels of oil to the present unit owners far exceeds the estimated value of the recoverable reserves under the E/2 of Section 12 plus a reasonable profit. Moreover, the participation formula will not allocate hydrocarbons to the separately owned tracts on a fair and reasonable basis when the E/2 owners will receive 60,000 barrels in exchange for their 1,200 barrels of oil.

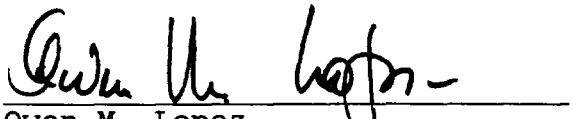
Since these three essential conditions are missing, no order can issue adding the E/2 of Section 12 to the unit. In addition, § 70-7-8 requires 75% ratification by the unit's royalty owners before the unit can become effective. The BLM who owns well in excess of 75% of the production royalties has yet to consent. We suggest that if the BLM were fully apprised of the evidence brought forth at the examiner hearings on May 10 and 11, it is doubtful that it would wish to be a party to the chicanery described above, particularly when it is also pointed out that the Pictured Cliffs, Mesa Verde and Dakota Sands are also reasonable exploratory targets in the E/2 of Section 12.

At the examiner hearing, the proponents insisted that there exist only three options for them to pursue: (1) to drill a well in the E/2; (2) to join the Johnson Federal 12-5 in the W/2 or (3) to include the E/2 in Mr. Greer's unit. Obviously, the first two options are now available to both Dugan and Sun under existing Gavilan rules, but they have pointed out why they find these options undesirable. The third option, which cannot be accomplished without unprecedented departure from existing law, would result in a clear windfall to both Dugan and Sun and their motives are obvious. They can hold indefinitely a federal lease which they haven't developed during the five years they have had it, and they can trade 1,200 barrels of oil for 60,000. What remains a mystery is Mr. Greer's not only willingness, but even enthusiasm to buy in to such a transparently bad deal. It suggests that there is more than meets the eye involving the relationship among the proponents.

Mr. LeMay during the course of cross-examination rightfully pointed out that there exists an obvious fourth choice which the proponents failed to mention which is to allow the lease to expire by its own terms. This is indeed what should happen and undoubtedly will happen if B-M-G's request is denied. We urge the examiner to deny B-M-G's application for the foregoing reasons.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD
& HENSLEY



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

Attorneys for Mesa Grande, Ltd., Mallon Oil Company, and Hooper, Kimball & Williams

CERTIFICATE OF SERVICE

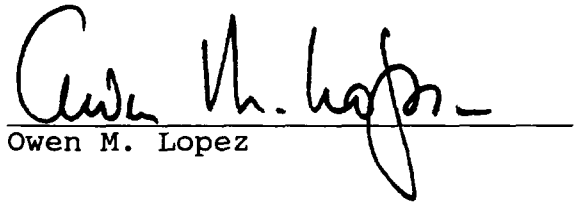
I hereby certify that a true and correct copy of the foregoing Memorandum in Opposition of Benson-Montin-Greer Drilling Corporation to Amend Division Order No. R-8344, Rio Arriba County, New Mexico was hand-delivered to the following counsel of record this 19th day of May, 1989.

William F. Carr, Esq.
Campbell & Black, P.A.
W. San Francisco & North
Guadalupe Streets
Santa Fe, New Mexico 87501

W. Thomas Kellahin, Esq.
Kellahin, Kellahin & Aubrey
117 North Guadalupe
Santa Fe, New Mexico 87501

W. Perry Pearce, Esq.
Montgomery & Andrews, P.A.
325 Paseo de Peralta
Santa Fe, New Mexico 87501

Kent J. Lund, Esq.*
Amoco Production Company
1670 Broadway
Denver, Colorado 80202



Owen M. Lopez

* - indicates delivery via First Class Mail

CAMPBELL & BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
J. SCOTT HALL
JOHN H. BEMIS
WILLIAM P. SLATTERY
MARTE D. LIGHTSTONE
PATRICIA A. MATTHEWS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

May 19, 1989

HAND-DELIVERED

RECEIVED
MAY 19 1989
OIL CONSERVATION DIVISION

Mr. Michael E. Stogner
Hearing Examiner
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87501

Re: Case 9671: Application of Benson-Montin-Greer Drilling Corp. to Amend Division Order R-8344, Rio Arriba County, New Mexico

Dear Mr. Stogner:

Enclosed is the Hearing Memorandum of Benson-Montin-Greer Drilling Corp., Dugan Production Corp. and Sun Exploration and Production Company which you requested at the May 10, 1989 hearing on the above-referenced application.

Also, enclosed is a proposed Order of the Division which provides, among other things, that this Order shall become effective at 7:00 AM on the last day of the month in which appropriate ratifications are obtained pursuant to Section 70-7-8 N.M.S.A., 1978 Comp. As you will recall from the testimony, it is essential that the effective date of this Order be on the last day instead of the first day of the month for certain leases in the E/2 of Section 12 expire on July 31, 1989 and it is our hope to have this Order ratified and in effect on that date. A provision making the Order effective on the 1st of the month, therefore, could result in lease expirations.

If you need anything further to proceed with this matter from Benson-Montin-Greer Drilling Corp., Dugan Production Corp. or Sun Exploration and Production Company, please advise.

Very truly yours,

WILLIAM F. CARR
WFC:mlh
Enclosures
cc w/enclosures: Mr. Albert R. Greer,
Benson-Montin-Greer Drilling Corp.
Mr. John Roe, Dugan Production Corp.
Kirk Moore, Esq. and Mr. Richard Dillon,
Sun Exploration and Production Company
Owen Lopez, Esq.
W. Perry Pearce, Esq.
Kent Lund, Esq.

RECEIVED

MAY 19 1989

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

CASE NO. 9671
Order No. R-8344-A

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION TO AMEND
DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO.

BENSON-MONTIN-GREER DRILLING CORPORATION,
DUGAN PRODUCTION CORPORATION AND
SUN EXPLORATION AND PRODUCTION COMPANY
PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 o'clock a.m. on May 10 and 11, 1989, at Santa Fe, New Mexico, before examiner Michael E. Stogner of the Oil Conservation Division of New Mexico, hereinafter referred to as the "Division".

NOW, on this _____ day of May, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

1. Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

2. The applicant, Benson-Montin-Greer Drilling Corp., seeks the amendment of Division Order R-8344 to include an additional 320 acres comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, ("the expansion area") within the previously approved Canada Ojitos Unit.

3. The expansion area should be included within the unit area for the continued successful and efficient conduct of the unitized method of operation for which the unit was created.

4. That the conduct thereof will have no material adverse effect upon the remainder of the common source of supply in the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool.

5. The expansion area is in connection with the existing unit area so as to permit the migration of oil or gas or both from one portion of the common source of supply to the other wherever and whenever pressure differential are created as a result of production or operations for the production of oil.

6. The proposed expanded unit area has been reasonably defined by development.

7. The applicant operates a pressure maintenance project for the secondary recovery of oil and gas in the Canada Ojitos Unit area.

8. The unitized management, operation and further development of the unit area including the expansion area of the Gavilan Mancos Oil Pool, as proposed, is reasonably necessary in order to effectively carry on secondary recovery operations and to avoid the drilling of unnecessary wells thereby substantially increasing the ultimate recovery of oil from the pool by unit operations.

9. The proposed unitized method of operation as applied to the expansion area is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the unit than would otherwise be recovered.

10. The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.

11. Such unitization and adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Canada Ojitos Unit Area and the expansion area.

12. The Applicant has made a good faith effort to secure voluntary unitization of the lands.

13. The participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis, and protects the correlative rights of all owners of interest within the unit area.

14. The Unit Agreement and the Unit Operation Agreement admitted into evidence in this case should be incorporated by reference into this order.

15. The Statutory Unitization of the expansion area into the Canada Ojitos Unit Area, in conformance to the above findings, will prevent waste and protect correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

1. Division Order R-8344 is hereby amended to include an additional 320 acres, more or less, of federal lands comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, within the previously approved Canada Ojitos Unit, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation.

2. The lands covered by said Canada Ojitos Unit Agreement shall be designated the Canada Ojitos Unit Area and shall be amended to include the E/2 of Section 12, T25N, R2W.

3. The Canada Ojitos Unit Agreement and Unit Operating Agreement, admitted into evidence in this case are hereby incorporated by reference into this order.

4. The Canada Ojitos Unit Agreement and the Canada Ojitos Unit Operating Agreement provide for unitization and unit operation of the subject portion of the West Puerto Chiquito-Mancos Oil Pool upon terms and conditions that are fair, reasonable and equitable and include:

an allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

a provision governing how the costs of unit operations including capital investment shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the costs of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions determined by the Division Director to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, including a two hundred percent nonconsent penalty for drilling of wells and a fifty percent nonconsent penalty for investment adjustments, provided that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of its operating rights and working interest in and to the unit until his share of the costs, service charge and penalty or interest are repaid;

a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

a provision for voting procedure for deciding matters by the working interest owners which states that each working interest owner shall have a voting interest equal to its unit participation; and the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination;

and are therefore hereby adopted.

5. This order shall become effective at 7:00 a.m. on the last day of the month in which appropriate ratification of the Canada Ojitos Unit Agreement, as amended, and Canada Ojitos Unit Operating Agreement, as amended, is obtained pursuant to Section 70-7-8, NMSA, 1978 Compilation.

6. If the persons owning the required percentage of interest in the unit area as set out in Section 70-7-8, NMSA, 1978 Compilation, do not approve the plan for unit

operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Division, unless the Division shall extend the time for ratification for good cause shown.

7. When the persons owning the required percentage of interest in the unit area have approved the plan for unit operations, the interests of all persons in the unit are unitized whether or not such persons have approved the plan of unitization in writing.

8. Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

_____

WILLIAM J. LEMAY,
DIRECTOR

S E A L

/rs

RECEIVED

MAY 1 [illegible]

OIL CONSERVATION DIVISION

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF
BENSON-MONTIN-GREER DRILLING CORP.
TO AMEND DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO. CASE NO. 9671

HEARING MEMORANDUM
BENSON-MONTIN-GREER DRILLING CORP., DUGAN PRODUCTION CORP. AND SUN EXPLORATION AND PRODUCTION COMPANY

This matter is currently pending decision before Examiner Michael E. Stogner of the New Mexico Oil Conservation Division as a result of a hearing held on May 10 and 11, 1989.

During the course of the hearing several legal issues arose and the Examiner directed the parties to submit memoranda by noon on May 19, 1989 on those issues.

Benson-Montin-Greer Drilling Corp. ("BMG"), Dugan Production Corp. ("Dugan") and Sun Exploration and Production Company, now Oryx Energy Company ("Sun") submit this Hearing Memorandum in response to the Examiner's request.

Background

The New Mexico Oil Conservation Division ("Division") has authority to establish pools and to adopt special rules and regulations to govern their operation and development.[1] §70-2-18(C) N.M.S.A. (1978).

---

[1]See Section 70-2-18C, N.M.S.A. 1978, attached as Exhibit 1.

Pursuant to this authority, the Division has promulgated Special Rules and Regulations for the Gavilan Mancos Oil Pool, (Order R-7407, December 23, 1983;[2] Order R-7407-E, June 8, 1987[3]) and the West Puerto Chiquito-Mancos Oil Pool (Order R-2565-B, November 28, 1966). The Division has also approved a pressure maintenance project in the Canada Ojitos Unit (Order R-2544, August 9, 1963[4]) and Statutorily Unitized this Unit Area within the West Puerto Chiquito-Mancos Oil Pool (Order R-8344, November 7, 1986[5]).

During the past several years a number of questions concerning the development of the Mancos formation in this area have been the subject of Division and Oil Conservation Commission ("Commission") hearings. These hearings resulted in the entry of orders on August 5, 1988 in which the Commission found, among other matters, that the Gavilan Mancos Oil Pool ("Gavilan") and the West Puerto Chiquito-Mancos Oil Pool ("WPC") "... constitute a single source of supply...." (Finding 13, Order R-7407-F as amended to R-7407-G by Nunc Pro Tunc Order R-7407-F-1 and Finding No. 6, Order R-3401-B)[6]. The Commission also found that this common source of supply could be regulated as two separate pools.

In 1989 Dugan and Sun, working interest owners in the NE/4 of

---

[2]See Order R-7407 attached as Exhibit 2.

[3]See Order R-7407-E attached as Exhibit 3.

[4]See Order R-2544 attached as Exhibit 4.

[5]See Order R-8344 attached as Exhibit 5.

[6]See Order R-7407-G attached as Exhibit 6; See Order Order R-3401-B attached as Exhibit 6-A.

Section 12, Township 25 North, Range 2 West, requested that the operator of the Canada Ojitos Unit ("Unit") consider including the E/2 of Section 12 ("Expansion Area") in the Unit[7]. In response to that request, BMG filed this application to amend Order R-8344 and expand the Unit by Statutory Unitization.

This application was opposed at the time of hearing by Mobil, Amoco, Mallon, Mesa Grande Ltd. and Hooper, Kimball & Williams, Inc. ("the opponents"). It must be emphasized, however, that Mobil, Mallon and Mesa Grande Ltd. have no interests in either the Unit or the E/2 of Section 12 and, in fact, lack standing to challenge this application. Amoco only has 0.01% overriding royalty interest in the Unit and Hooper, Kimball & Williams, Inc. has only a 12.5% interest in the 320-acre Expansion Area.

In contrast to the minor ownership interests of the opponents, 89% of the working interest owners in the 69.568 acre Unit have approved the expansion, 10% have not yet responded and only 1% have responded in the negative. Furthermore, in the Expansion Area, 81.25% of the working interest ownership supports expansion of the Unit, 6.25% has not responded and 12.5% (Hooper, Kimball & Williams, Inc.) oppose expansion.

---

[7]A plat of the area showing the E/2 of Section 12 and the Current Unit Area is attached as Exhibit 7.

Point I

THE NEW MEXICO STATUTORY UNITIZATION ACT ALLOWS FOR THE EXPANSION OF THE UNIT TO INCLUDE THE EXPANSION AREA BECAUSE IT IS PART OF THE SAME COMMON SOURCE OF SUPPLY

The opponents contend that since the Division has classified the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool as two separate pools, acreage in Gavilan may not be unitized with acreage in WPC under the New Mexico Statutory Unitization Act.

This argument is designed to confuse and mislead the Division and is neither supported by law nor the facts of this case. Furthermore, it ignores the express language of the Statutory Unitization Act.

Unit operation of an oil and gas pool is defined as the combination, for operating purposes, of the separately owned tracts of land overlying **A COMMON SOURCE OF SUPPLY** and a division of the total production among the separate owners therein on a fair and equitable basis.

A customary feature of statutory unitization statutes is that they expressly or implicitly limit unitization to a common source of supply[8].

The underlying basis for finding a common source of supply before approving statutory unitization is obvious. If the acreage to be included in the Unit is not all within part of the same reservoir or common source of supply, then one part cannot be in

---

[8]Williams and Myers, Oil and Gas Law, Section 913.4 at 112, attached as Exhibit 8.

effective communication with the other and unitization will be of no benefit.

The opponents attempt to confuse and mislead the Division by focusing on the fact that here the Division administers this common source of supply as two pools. That fact is neither relevant nor important for the existence of a common source of supply controls and this issue has already been resolved by the Commission in Orders R-7407-G and R-6469-F[9] where it found:

> (13) the preponderance of the evidence demonstrates the Gavilan and WPC Pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

It is therefore clear that neither the existing WPC and Gavilan Pool boundaries do not need to be changed nor do the rules that govern these pools need to be amended before the E/2 of Section 12 may be statutorily unitized with the existing Unit.

The Commission not only found one single common source of supply but it went further by declaring in Order R-3401-B[10] that:

> (6) The two western most rows of sections inside the Unit area are in effective pressure communication with the Gavilan Mancos Pool as demonstrated by shut-in pressure measurements[11].

While the New Mexico Judiciary has not yet decided any case

---

[9]See Order R-6469-F attached as Exhibit 9.

[10]See Order R-3401-B attached as Exhibit 10.

[11]The two sections immediately to the east of the proposed Expansion Area, E/2 of Section 12, are part of the two westernmost rows of Sections referenced here.

involving the Statutory Unitization Act, Oklahoma has two cases that specifically discuss the prerequisite of "a common source of supply" in unitizing oil and gas pools. In both Jones Oil Company v. Continental Oil Company, 420 P.2d 905, 26 OGR 78 (Okla. 1966)[12] and Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 997 (1951)[13], the Oklahoma Supreme Court dealt with the issues of both the vertical extent and horizontal extent of the field (pool) to be unitized. Both cases found that the Statutory Unitization Act had been properly applied in one instance to a field containing 21 individual sand stringers and in the other case to the interrelation of the Commission definition of a field defined by a discovery well and the implementation of the Statutory Unitization Act.

In addition to the argument set forth above, the opponents argument also must fail for it is contrary to the express provisions of the New Mexico Statutory Unitization Act and established rules in New Mexico for statutory construction.

The Statutory Unitization Act expressly defines the term "pool" as follows:

> "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common

---

[12]See excerpt attached as Exhibit 11.

[13]See excerpt attached as Exhibit 12.

reservoir";... (emphasis added).[14]

The New Mexico Supreme Court has found that when a term is defined by statute, the term is interpreted in accordance with that definition. Buzbee v. Donnelly, 96 N.M. 692, 634 P.2d 1244, 1981).[15] The Tenth Circuit has also found that general definitions of a term may be used only when the term is not defined by statute. See, U.S. v. Mayberry, 774 F.2d 1018 (10th Cir. 1985).[16] New Mexico law therefore requires that the definition of pool in the Statutory Unitization Act be applied to this case.

Since, as noted above, the Commission has determined that Gavilan and WPC are a common source of supply, the E/2 of Section 12 and the WPC Pool are not only expressly within the definition of "pool" in the Statutory Unitization Act but the inclusion at the E/2 of Section 12 in the Unit is authorized by this statute.

Point II

EXPANSION OF THE EXISTING CANADA OJITOS UNIT AREA TO INCLUDE THE E/2 OF SECTION 12 WILL AVOID THE WASTE THAT WILL RESULT FROM THE DRILLING OF UNNECESSARY WELLS, WILL RESULT IN INCREASED RECOVERY OF OIL AND IS FULLY AUTHORIZED BY THE STATUTORY UNITIZATION ACT

This Point, like Point I of this Memorandum, requires review and construction of the New Mexico Statutory Unitization Act.

---

[14]See Section 70-7-4A, N.M.S.A. 1978, attached as Exhibit 13.

[15]See excerpts attached as Exhibit 14.

[16]See excerpt attached as Exhibit 15.

The Legislature stated the purpose of this Act as follows:

> The Legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act is applicable, to the end, that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units. (emphasis added).[17]

The New Mexico Supreme Court has found that a statute should be interpreted to mean that which the Legislature intended it to mean and to accomplish the end sought to be accomplished by it. State, ex rel., Newsome v. Alarid, 90 N.M. 790, 568 P.2d 1236 (1977).[18] This Court has also ruled that ..."statutes are to be interpreted with reference to their manifest object, and if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." Martinez v. Research Park Inc., 75 N.M. 672, 410 P.2d 200 (1965).[19]

Here opponents are attempting to defeat the purpose and the

---

[17]See Section 70-7-1, N.M.S.A. (1978) attached as Exhibit 16.

[18]See excerpt attached as Exhibit 17.

[19]See excerpt attached as Exhibit 18.

manifest object of the Statutory Unitization Act by proposing a construction of certain of its provisions that would defeat what the Legislature intended to accomplish by enacting this law. To do this the opponents argue that the expansion area has only a limited remaining future reserve potential, and that its inclusion in the unit area will not satisfy the requirements of §70-7-6(A)(2) N.M.S.A. 1978 which states:

> (2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered.[20]

Contrary to the express intent of the Statutory Unitization Act the opponents argue that the amount of producible reserves underlying each individual tract or lease in the proposed unit, somehow, must be shown to be capable of producing a significantly increased amount of oil under unit operations. Again, the opponents have misread the Statutory Unitization Act and have misapplied the facts.

All that §70-7-6(A) N.M.S.A. (1978) requires is that the proponents establish that within the "unitized portion" of the pool there be a substantial increase in the recovery of oil from the reservoir for the Unit. The evidence presented at the Examiner hearing clearly meet this requirement by establishing that a

---

[20]See Section 70-7-6(A)(2), N.M.S.A. 1978 attached as Exhibit 19.

minimum of 18,000 barrels of additional oil can be recovered by the Canada Ojitos Unit with the inclusion of the Expansion Area. The evidence also established that inclusion of the E/2 of Section 12 is the only viable option available to the owners of this acreage for the following reasons:

(1) The expansion area cannot independently support the drilling of a well.

(2) The expansion area cannot economically be joined with the W/2 of Section 12 to form a 640-acre spacing unit.[21]

(3) Even if the owners of the W/2 of Section 12 would agree to pooling at a minimal cost, this would be only a temporary solution since, in 1 to 2 years, the well in the W/2 of Section 12 will reach its economic limit, allowing underlying leases to expire.

(4) Further the pooling of the proposed expansion lands in a Gavilan 640-acre proration unit does not in itself avoid the drilling of an unnecessary well in the E/2 of Section 12. As noted in the testimony, this is a real concern of owners in the E/2 of Section 12 since at least one of the W/2 owners has expressed a desire to drill a second well in Section 12.

(4) Neither the purchase of leases from existing owners under

---

[21]The economics of forming a 640-acre Gavilan spacing unit are well established by similar prior cases (i.e. Sun's Loddy No. 1 in Section 20, Township 25 North, Range 2 West) and the insistence of similar terms by at least one of the working interest parties in the existing W/2 Section 12 well.

the expansion area nor letting these leases expire and repurchasing them will, in itself, develop the lands in the E/2 of Section 12 and put them in a producing status.

Further, the Unit Operator's testimony noted if the lands in the E/2 of Section 12 are not included in the Canada Ojitos Unit and a well drilled thereon, the Unit Operator would drill a protective well if the anticipated reduction in drainage to the offending well would equal the cost of drilling the unit protection well. This means at a drilling cost of $700,000 and an oil price of $15 per barrel, which would equate to the value of 60,000 barrels of oil. This volume approximates that anticipated as credit to the E/2 of Section 12 given a weighting factor of 1, which is the weighting factor recommended by the Unit Operator.

However, should the Commission disagree with the Unit Operator's recommendation, the statute provides that the Commission can set the equity factor at whatever level it elects. This authority of the Commission is balanced by the statute's further providing that the unitization does not become effective until it has been approved by the prescribed percentage of unit interest owners.

The Division therefore should enter its Order approving the application with the following findings:

(1) That the expansion area is in effective pressure communication with the existing unit area.[22]

---

[22]See, Jones, supra; and R-3401, Finding 6.

(2) That each tract in the expansion area can be productive of oil and gas from the same common source of supply that is being produced in the existing unit area.[23]

(3) That inclusion of the expansion area will substantially increase the ultimate recovery of oil from the expanded Unit area and is therefore necessary in order to prevent the waste of hydrocarbons.[24]

(4) Inclusion of the expansion area will protect the correlative rights of all interest owners within the expanded unit area.[25]

A majority of the working interest owners (81.25%) within the Expansion Area recognize the benefits of BMG's application and want the E/2 of Section 12, Township 25 North, Range 2 West included in the existing Unit for it is the only viable economic means of developing this acreage. A majority of the working interest owners (89%) in the existing unit, likewise, seek inclusion of this land in the Unit because of the savings and increased recovery that such inclusion will affect.

---

[23]See, 6 Williams and Myers, Section 913.8 at p. 122.4, excerpt attached as Exhibit 20.

[24]Testimony of Albert R. Greer and Richard Dillon, May 11, 1989.

[25]Testimony of John Roe, May 10, 1989 and Albert R. Greer, May 11, 1989.

Conclusion

The proponents have satisfied all the conditions of the New Mexico Statutory Unitization Act and are entitled to inclusion of the E/2 of Section 12 in the Canada Ojitos Unit. Without the inclusion of the Expansion Area in the Unit, one of the Division's primary duties will be violated for at least one unnecessary well will be drilled which will drain unit reserves that are now being pushed toward the Expansion Area by the Unit's pressure maintenance project and further undermine the effectiveness of this pressure maintenance project. By including the Expansion Area in the Unit, the drilling of this unnecessary well will be avoided and the drilling of an offsetting Unit protection well (also unnecessary) will not be required. Furthermore, substantial increased recovery of oil will result from the unitized portion of this common source of supply while production from Gavilan will remain unaffected.

Simple arithmetic shows that the unitized operation of the Canada Ojitos Unit has resulted in a substantial increase in the ultimate recovery of oil from the reservoir. Wells under Unit operations, on an average, are recovering in excess of four times as much as non-unit wells in this common source of supply. The owners in the undeveloped Expansion Area should be afforded the opportunity to participate in such a successful operation.

This application, therefore, should be granted for it will result in increase recovery of oil, will prevent the economic waste caused by the drilling of unnecessary wells and will serve to protect the correlative rights of all owners of interest in the

expanded unit area while not affecting the correlative rights of any offsetting interest owner.

Respectfully submitted,

KELLAHIN, KELLAHIN & AUBREY

W. Thomas Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504
Telephone: (505) 982-4285

ATTORNEYS FOR DUGAN PRODUCTION CORP. AND SUN EXPLORATION AND PRODUCTION COMPANY now (ORYX ENERGY COMPANY)

CAMPBELL & BLACK, P.A.

By: _____
WILLIAM F. CARR
Post Office Box 2208
Santa Fe, New Mexico 87504
Telephone: (505) 988-4421

ATTORNEYS FOR BENSON-MONTIN-GREER DRILLING CORP.

has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Elements of property right of natural gas owners. — The legislature has stated definitively the elements contained in property right of natural gas owners. Such right is not absolute or unconditional. It consists of merely (1) an opportunity to produce, (2) only insofar as it is practicable to do so, (3) without waste, (4) a proportion, (5) insofar as it can be practically determined and obtained without waste, (6) of gas in the pool. Continental Oil Co. v. Oil Conservation Comm'n, 70 N.M. 310, 373 P.2d 809 (1962).

Law reviews. — For article, "Compulsory Pooling of Oil and Gas Interests in New Mexico," see 3 Nat. Resources J. 316 (1963).

For comment on El Paso Natural Gas Co. v. Oil Conservation Comm'n, 76 N.M. 268, 414 P.2d 496 (1966), see 7 Nat. Resources J. 425 (1967).

For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 161, 164.

38 C.J.S. Mines and Minerals §§ 229, 230.

70-2-18. Spacing or proration unit with divided mineral ownership.

A. Whenever the operator of any oil or gas well shall dedicate lands comprising a standard spacing or proration unit to an oil or gas well, it shall be the obligation of the operator, if two or more separately owned tracts of land are embraced within the spacing or proration unit, or where there are owners of royalty interests or undivided interests in oil or gas minerals which are separately owned or any combination thereof, embraced within such spacing or proration unit, to obtain voluntary agreements pooling said lands or interests or an order of the division pooling said lands, which agreement or order shall be effective from the first production. Any division order that increases the size of a standard spacing or proration unit for a pool, or extends the boundaries of such a pool, shall require dedication of acreage to existing wells in the pool in accordance with the acreage dedication requirements for said pool, and all interests in the spacing or proration units that are dedicated to the affected wells shall share in production from the effective date of the said order.

B. Any operator failing to obtain voluntary pooling agreements, or failing to apply for an order of the division pooling the lands dedicated to the spacing or proration unit as required by this section, shall nevertheless be liable to account to and pay each owner of minerals or leasehold interest, including owners of overriding royalty interests and other payments out of production, either the amount to which each interest would be entitled if pooling had occurred or the amount to which each interest is entitled in the absence of pooling, whichever is greater.

C. Nonstandard spacing or proration units may be established by the division and all mineral and leasehold interests in any such nonstandard unit shall share in production from that unit from the date of the order establishing the said nonstandard unit.

History: 1953 Comp., § 65-3-14.5, enacted by Laws 1969, ch. 271, § 1; 1977, ch. 255, § 52.

Constitutionality. — Standards of preventing waste and protecting correlative rights, as laid out in 70-2-11 NMSA 1978, are sufficient to allow commission's power to prorate and create standard or nonstandard spacing units to remain intact, and this section is not unlawful delegation of legislative power under N.M. Const., art. III, § 1. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

The terms "spacing unit" and "proration unit" are not synonymous and commission has power to fix spacing units without first creating proration units. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Authority to pool separately owned tracts. — Since commission has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, the commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Creation of proration units, force pooling and participation formula upheld. — Commission's (now division's) findings that it would be unreasonable and contrary to spirit of conservation statutes to drill an unnecessary and economically wasteful well were held sufficient to justify creation of two nonstandard gas proration units, and force pooling thereof, and were supported by substantial evidence. Likewise, participation formula adopted by commission, which gave each owner a share in production in same ratio as his acreage bore to the acreage of whole, was upheld despite limited proof as to extent and character of the pool. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Law reviews. — For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 164, 172.

58 C.J.S. Mines and Minerals §§ 230, 240.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 7980
Order No. R-7407

NOMENCLATURE

APPLICATION OF JEROME P. McHUGH
FOR THE CREATION OF A NEW OIL POOL
AND SPECIAL POOL RULES, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 16, 1983, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of December, 1983, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Jerome P. McHugh, seeks an order creating a new oil pool, vertical limits to be the Niobrara member of the Mancos formation, with special pool rules including a provision for 320-acre spacing, Rio Arriba County, New Mexico.

(3) That in companion Case 7979, Northwest Pipeline Company seeks an order deleting certain lands from the Basin Dakota Pool, the creation of a new oil pool with vertical limits defined as being from the base of the Mesaverde formation to the base of the Dakota formation, (the Mancos and Dakota formations), and the promulgation of special pool rules including a provision for 160-acre spacing, Rio Arriba County, New Mexico.

Exhibit 2

(4) That Cases 7979 and 7980 were consolidated for the purpose of obtaining testimony.

(5) That geological information and bottomhole pressure differentials indicate that the Mancos and Dakota Formations are separate and distinct common sources of supply.

(6) That the testimony presented would not support a finding that one well would efficiently drain 320 acres in the Dakota formation.

(7) That the Mancos formation in the area is a fractured reservoir with low porosity and with a matrix permeability characteristic of the Mancos being produced in the West Puerto Chiquito Mancos Pool immediately to the east of the area.

(8) That said West Puerto Chiquito-Mancos Pool is a gravity drainage reservoir spaced at 640 acres to the well.

(9) That the evidence presented in this case established that the gravity drainage in this area will not be as effective as that in said West Puerto Chiquito-Mancos Pool and that smaller proration units should be established therein.

(10) That the currently available information indicates that one well in the Gavilan-Mancos Oil Pool should be capable of effectively and efficiently draining 320 acres.

(11) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to prevent reduced recovery of hydrocarbons which might result from the drilling of too many wells, and to otherwise prevent waste and protect correlative rights, the Gavilan-Mancos Oil Pool should be created with temporary Special Rules providing for 320-acre spacing.

(12) That the vertical limits of the Gavilan-Mancos Pool should be defined as: The Niobrara member of the Mancos formation between the depths of 6590 feet and 7574 feet as found in the Northwest Exploration Company, Gavilan Well No. 1, located in Unit A of Section 26, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.

(13) That the horizontal limits of the Gavilan-Mancos Oil Pool should be as follows:

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

(TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM)
Sections 19 through 30: All
Sections 33 through 36: All

(14) That to protect the correlative rights of interested parties in the West Puerto-Chiquito Mancos Oil Pool, it is necessary to adopt a restriction requiring that no more than one well be completed in the Gavilan-Mancos Oil Pool in the E/2 of each section adjoining the western boundary of the West Puerto Chiquito-Mancos Oil Pool, and shall be no closer than 1650 feet to the common boundary line between the two pools.

(15) That in order to gather information pertaining to reservoir characteristics in the Gavilan-Mancos Oil Pool and its potential impact upon the West Puerto Chiquito-Mancos Oil Pool, the Special Rules for the Gavilan-Mancos Oil Pool should provide for the annual testing of the Mancos in any well drilled in the E/2 of a section adjoining the West Puerto Chiquito-Mancos Pool.

(16) That the said Temporary Special Rules and Regulations should be established for a three-year period in order to allow the operators in the Gavilan-Mancos Oil Pool to gather reservoir information to establish whether the temporary rules should be made permanent.

(17) That the effective date of the Special Rules and Regulations promulgated for the Gavilan-Mancos Oil Pool should be more than sixty days from the date of this order in order to allow the operators time to amend their existing proration and spacing units to conform to the new spacing and proration rules.

IT IS THEREFORE ORDERED:

(1) That a new pool in Rio Arriba County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated as the Gavilan-Mancos Oil Pool, with the vertical limits comprising the Niobrara member of the Mancos shale as described in Finding No. (12) of this Order and with horizontal limits as follows:

GAVILAN-MANCOS OIL POOL
RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM
Sections 19 through 30: All
Sections 33 through 36: All

(2) That temporary Special Rules and Regulations for the Gavilan Mancos Oil Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
GAVILAN-MANCOS OIL POOL

RULE 1. Each well completed or recompleted in the Gavilan-Mancos Oil Pool or in a correlative interval within one mile of its northern, western or southern boundary, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. No more than one well shall be completed or recompleted on a standard unit containing 320 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental section.

RULE 3. Non-standard spacing or proration units shall be authorized only after proper notice and hearing.

RULE 4. Each well shall be located no nearer than 790 feet to the outer boundary of the spacing or proration unit, nor nearer than 330 feet to a governmental quarter-quarter section line.

RULE 5. That no more than one well in the Gavilan-Mancos Oil Pool shall be completed in the East one-half of any section that is contiguous with the western boundary of the West Puerto Chiquito-Mancos Oil Pool, with said well being located no closer than 1650 feet to said boundary.

RULE 6. That the operator of any Gavilan-Mancos Oil Pool well located in any of the governmental sections contiguous to the West Puerto Chiquito-Mancos Oil Pool the production from which is commingled with production from any other pool or formation and which is capable of producing more than 50 barrels of oil per day or which has a gas-oil ratio greater than 2,000 to 1, shall annually, during the month of April or May, conduct a production test of the Mancos formation production in each said well in accordance with testing procedures acceptable to the Aztec district office of the Oil Conservation Division.

IT IS FURTHER ORDERED:

(1) That the Special Rules and Regulations for the Gavilan-Mancos Oil Pool shall become effective March 1, 1984.

(2) That any well presently producing from the Gavilan-Mancos Oil Pool which does not have a standard 320-acre proration unit, an approved non-standard proration unit, or which does not have a pending application for a hearing for a standard or non-standard proration unit by March 1, 1984, shall be shut-in until a standard or non-standard unit is assigned the well.

(3) That this case shall be reopened at an examiner hearing in March, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the Gavilan-Mancos Oil Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JIM BACA, MEMBER

ED KELLEY, MEMBER

JOE D. RAMEY, CHAIRMAN AND SECRETARY

S E A L

STATE OF NEW MEX)
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

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

CASE NO. 7980

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

CASE NO. 8946

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

CASE NO. 9113

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

CASE NO. 9114

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

These causes came on for hearing on March 30 and 31 and April 1, 2, and 3, 1987 at Santa Fe, New Mexico before the Oil Conservation Commission of New Mexico hereinafter referred to as the "Commission."

NOW, on this 8th day of June, 1987, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearings and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of hearing, Cases 7980, 8946, 8950, 9113 and 9114 were consolidated for purposes of testimony.

(3) Case 7980 involves review of temporary pool rules promulgated by Order R-7407 and Case 8946 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit, under Order R-7407-D, both orders pertaining to the Gavilan-Mancos Oil Pool.

(4) Case 8950 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit under Order R-3401-A pertaining to the West Puerto-Chiquito-Mancos Oil Pool.

(5) Case 9113 involves a proposal to abolish the Gavilan-Mancos Oil Pool and consolidate that pool into the West Puerto-Chiquito-Mancos Oil Pool and Case 9114 involves a proposal to shift the boundary between Gavilan-Mancos and West Puerto Chiquito-Mancos Oil Pools.

(6) The evidence shows that there is limited pressure communication between the two designated pools, and that there are two weakly connected areas separated by some restriction at or near the common boundary of the two designated pools.

(7) The evidence shows there are three principal productive zones in the Mancos formation in both presently designated pools, designated A, B, and C zones listed from top to bottom and that, while all three zones are productive in both designated pools, West Puerto Chiquito produces primarily from the C zone and Gavilan produces chiefly from the A and B zones.

(8) It is clear from the evidence that there is natural fracture communication between zones A and B but that natural fracture communication is minor or non-existent between zones B and C.

(9) The reservoir consists of fractures ranging from major channels of high transmissibility to micro-fractures of negligible transmissibility, and possibly, some intergranular porosity that must feed into the fracture system in order for oil therein to be recovered.

(10) The productive capacity of an individual well depends upon the degree of success in communicating the wellbore with the major fracture system.

(11) Interference tests indicate: 1) a high degree of communication between certain wells, 2) the ability of certain wells to economically and efficiently drain a large area of at least 640 acres; and 3) the probability exists that the better wells recover oil from adjacent tracts and even more distant tracts if such tracts have wells which were less successful in connecting with the major fracture system.

(12) There is conflicting testimony as to whether the reservoir is rate-sensitive and the Commission should act to order the operators in West Puerto Chiquito and Gavilan-Mancos pools to collect additional data during 90-day periods of increased and decreased allowables and limiting gas-oil ratios.

(13) Two very sophisticated model studies conducted by highly skilled technicians with data input from competent reservoir engineers produced diametrically opposed results so that estimates of original oil in place, recovery efficiency and ultimate recoverable oil are very different and therefore are in a wide range of values.

(14) There was agreement that pressure maintenance would enhance recovery from the reservoir and that a unit would be required to implement such a program in the Gavilan-Mancos Pool.

(15) Estimates of the amount of time required to deplete the Gavilan pool at current producing rates varied from 33 months to approximately five years from hearing date.

(16) Many wells are shut in or are severely curtailed by OCD limits on permissible gas venting because of lack of pipeline connections and have been so shut in or curtailed for many months, during which time reservoir pressure has been shown by pressure surveys to be declining at 1 psi per day or more, indicating severe drainage conditions.

(17) No party requested making the temporary rules permanent, although certain royalty (not unleased minerals)

owners requested a return to 40-acre spacing, without presenting supporting evidence.

(18) Proration units comprised of 640 acres with the option to drill a second well would permit wider spacing and also provide flexibility.

(19) Recognizing that the two designated pools constitute two weakly connected areas with different geologic and operating conditions, the administration of the two areas will be simplified by maintaining two separate pools.

(20) A ninety day period commencing July 1, 1987, should be given for the connection for casinghead gas sale from now-unconnected wells in the Gavilan pool, after which allowables should be reduced in that pool until said wells are connected.

(21) To provide continuity of operation and to prevent waste by the drilling of unnecessary wells, the temporary spacing rules promulgated by Order R-7407 should remain in effect until superceded by this Order.

(22) Rules for 640-acre spacing units with the option for a second well on each unit should be adopted together with a provision that units existing at the date of this order should be continued in effect.

IT IS THEREFORE ORDERED THAT:

(1) The application of Benson-Montin-Greer et al in Case No. 9113 to abolish the Gavilan-Mancos pool and extend the West Puerto Chiquito-Mancos pool to include the area occupied by the Gavilan-Mancos Pool is denied.

(2) The application of Mesa Grande Resources, Inc. for the extension of the Gavilan-Mancos and the concomitant contraction of West Puerto Chiquito-Mancos Pool is denied.

(3) Rule 2 of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor

closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby granted exception to this rule.

(b). A buffer zone is hereby created consisting of the east half of sections bordering Township 1 West. Only one well per section shall be drilled in said buffer zone and if such well is located closer than 2310 feet from the western boundary of the West Puerto Chiquito-Mancos Oil Pool it shall not be allowed to produce more than one-half the top allowable for a 640-acre proration unit.

(4) Beginning July 1, 1987, the allowable shall be 1280 barrels of oil per day per 640 acres with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil. Operators are required to monitor reservoir performance, including but not limited to, production rates, gas-oil ratios, reservoir pressures, and shall report this information to the Commission within 30 days after completion of the tests. Within the first week of July, 1987, bottom hole pressure tests shall be taken on all wells. Wells shall be shut-in until pressure stabilizes or for a period not longer than 72 hours. Additional bottom hole tests shall be taken within the first week of October, 1987, with similar testing requirements. All produced gas, [illegible] gas vented or flared, shall be metered. Operators are required to submit a testing schedule to the District Supervisor of the Aztec office of the Oil Conservation Division prior to testing so that tests may be witnessed by OCD personnel.

(5) Beginning October 1, 1987, the allowable shall be [illegible] barrels of oil per day per 640 acres with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil. Operators are required to monitor reservoir performance as in (4) above with bottom hole pressure tests to be taken within the first week of January, 1988. This allowable and GOR limitation shall remain in effect until further notice from the Commission.

(6) In order to prevent further waste and impairment of correlative rights each well in the Gavilan-Mancos Oil Pool shall be connected to a gas gathering system by October 1, 1987 or within ninety days of completion. If Wells presently unconnected are not connected by October 1 the Director may reduce the Gavilan-Mancos allowable as may be appropriate to prevent waste and protect correlative rights. In instances where it can be shown that connection is absolutely uneconomic the well involved may be granted authority to flow or vent the

gas under such circumstances as to minimize waste as determined by the Director.

(7) The temporary special pool rules promulgated by Order R-7407 are hereby extended to the effective date of this order and said rules as amended herein are hereby made permanent.

(8) This case shall be reopened at a hearing to be held in May, 1988 to review the pools in light of information to be gained in the next year and to determine if further changes in rules may be advisable.

(9) Jurisdiction of this cause is retained for entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2871
Order No. R-2544

APPLICATION OF BOLACK-GREER, INC.,
FOR APPROVAL OF THE CANADA OJITOS
UNIT AGREEMENT, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 7, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 9th day of August, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Bolack-Greer, Inc., seeks approval of the Canada Ojitos Unit Agreement covering 35,829.84 acres, more or less, of Federal and Fee lands in Townships 25 and 26 North, Ranges 1 East and 1 West, NMPM, Rio Arriba County, New Mexico.

(3) That approval of the proposed Canada Ojitos Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Canada Ojitos Unit Agreement is hereby approved.

(2) That the plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Canada Ojitos Unit Area, and such plan shall be known as the Canada Ojitos Unit Agreement Plan.

(3) That the Canada Ojitos Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Canada Ojitos Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 25 NORTH, RANGE 1 EAST	
Sections 6 and 7:	All
Section 18:	All
Section 19:	W/2
TOWNSHIP 25 NORTH, RANGE 1 WEST	
Sections 1 through 4:	All
Sections 9 through 16:	All
Sections 21 through 28:	All
Sections 33 through 35:	All
Section 36:	W/2
TOWNSHIP 26 NORTH, RANGE 1 EAST	
Section 19:	All
Sections 30 and 31:	All
TOWNSHIP 26 NORTH, RANGE 1 WEST	
Sections 1 through 4:	All
Section 5:	E/2
Section 8:	E/2
Sections 9 through 16:	All
Section 17:	E/2
Section 20:	E/2
Sections 21 through 28:	All
Sections 33 through 36:	All

containing 35,829.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Canada Ojitos Unit Agreement within 30 days after the effective date thereof.

In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 8952
Order No. R-8344

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR STATUTORY
UNITIZATION, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION:

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a.m. on October 24, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of November, 1986, the Commission, a quorum being present, having considered the testimony, the record, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The Applicant, Benson-Montin-Greer Drilling Corp., seeks the statutory unitization, pursuant to the "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, N.M.S.A., 1978 Compilation, of 69,567.235 acres, more or less, of federal, state and fee lands, being a portion of the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, and approval of the plan of unitization and the proposed operating plan.

(3) The proposed unit area should be designated the Canada Ojitos Unit Area; the vertical limits of said unit area will be the subsurface formation commonly known as the Mancos formation identified between the depths of 6968 feet and 7865 feet on the Schlumberger Induction Electrical Log, dated June 18, 1963, in the Canada Ojitos 0-9 Well (previously the Bolack-Greer No. 1 Bolack) located 1080 feet from the South line and 1920 feet from the East line of Section 9, Township 26 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and

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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-~~F~~G
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

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

REOPENED CASES NO. 7980, 8946 AND 8950
ORDER NO. R-7407-F-1
ORDER NO. R-6469-F-1

REOPENING CASES 7980, 8946 AND 8950
FOR FURTHER TESTIMONY AS PROVIDED BY
ORDER R-7407-E IN REGARD TO THE
GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D
IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS
OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Oil Conservation Commission of New Mexico (Commission) that the combined order (Order Nos. R-7407-F and R-6469-F) issued in Reopened Case Nos. 7980, 8946 and 8950 and dated August 5, 1988, does not correctly state the intended order of the Commission;

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-7407-F being inadvertently issued twice, the first in Reopened Case 7980 heard before the Commission on March 17, 1988, and the second being erroneously issued in the immediate case as described above; therefore, all references to "Order No. R-7407-F" throughout said order issued in Reopened Case Nos. 7980, 8946 and 8950, dated August 5, 1988, are hereby amended to read "Order No. R-7407-G."

(2) The corrections set forth in this order be entered nunc pro tunc as of August 5, 1988.

DONE at Santa Fe, New Mexico, on this 17th day of August, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and
Secretary

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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and tne subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

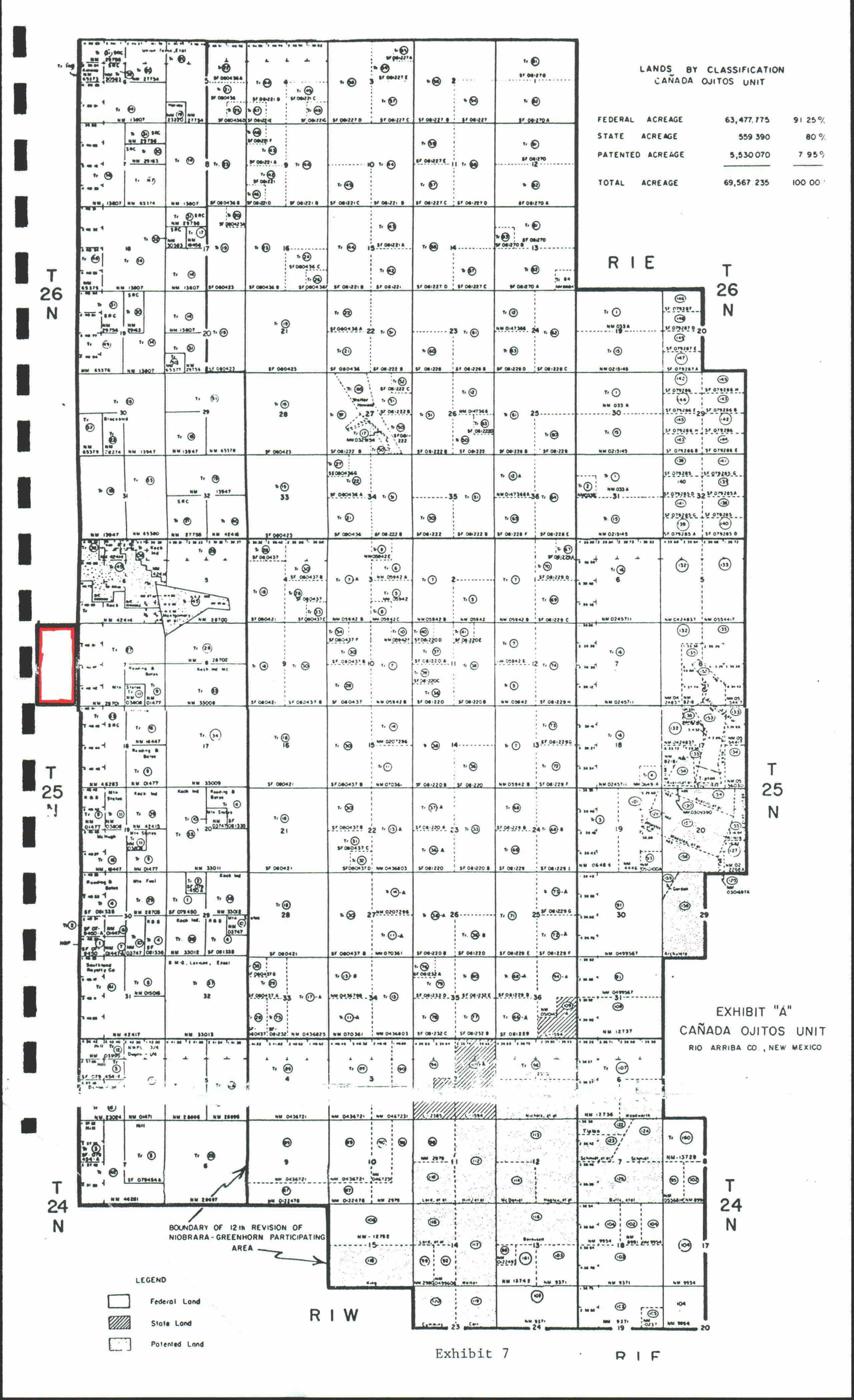

LANDS BY CLASSIFICATION
CAÑADA OJITOS UNIT
FEDERAL ACREAGE 63,477,775 91 25%
STATE ACREAGE 559 390 80%
PATENTED ACREAGE 5,530 070 7 95%
TOTAL ACREAGE 69,567 235 100 00%
T 26 N
R I E
T 25 N
T 24 N
R I W
R I F
EXHIBIT "A"
CAÑADA OJITOS UNIT
RIO ARRIBA CO., NEW MEXICO
BOUNDARY OF 12th REVISION OF NIOBRARA-GREENHORN PARTICIPATING AREA
LEGEND
Federal Land
State Land
Patented Land

Exhibit 7

[Common source of supply]

Unitization statutes appear customarily to include some reference to a "common source of supply" which expressly or implicitly limits unitization to such a common source. Thus the Oklahoma statute provides that:

> "Each unit and unit area shall be limited to all or a portion of a single common source of supply. Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual operations may be so included within the unit area."[2]

The meaning of the term "common source of supply" as used in the compulsory unitization statute has been discussed in cases arising in Oklahoma. In *Jones Oil Co. v. Corporation Commission*,[3] the commission issued an order unitizing three producing sands despite the contention that there were three common sources of supply rather than the one common source required by the statute. On the basis of evidence that some sixty-one wells had been completed in and produced from two or more of these sands and the production therefrom was com-

---

§ 913.4

[2] 52 Okla. Stat. § 287.4. A similar provision was included in the 1945 Unitization Act. 52 Okla. Stat. § 286.5.

[3] Jones Oil Co. v. Corporation Comm'n, 382 P.2d 751, 18 *O.&G.R.* 1041 (Okla. 1963), *cert. denied*, 375 U.S. 931, 19 *O.&G.R.* 362 (1963).

mingled, the court concluded that the order was valid, declaring that:

> "With this contention we cannot agree. The fact remains that oil is being produced from these three sands through the same well-bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S. 1961 § 287.1. . . . We can see nothing wrong in the Corporation Commission designating these three sands as a common source of supply. . . . For us to hold otherwise on this Point would violate the spirit of unitization."[4]

In *Palmer Oil Corp. v. Phillips Petroleum Co.*,[5] the contention was made that a unitization order was invalid since the unit was not limited to a common source of supply and since the unitized area had not been reasonably defined by actual drilling operations. In rejecting the contention, the court commented as follows:

> "The finding of the Commission (in paragraph 2) which is di-

---

[4] 382 P.2d at 752–753, 18 *O.&G.R.* at 1043–1044.

In Jones v. Continental Oil Co., 420 P.2d 905, 26 *O.&G.R.* 78 (Okla. 1966), the court sustained a unitization order involving twenty-one sand stringers underlying the lands, concluding that there was evidence of a substantial nature that all of the twenty-one producing sands were in communication with each other as a result of the completion and production practices used in the field.

In Cameron v. Corporation Comm'n, 418 P.2d 932, 25 *O.&G.R.* 535 (Okla. 1966), the court held that the Corporation Commission exceeded its authority under the Well Spacing Act in creating well spacing units when it was not established by substantial evidence that the area sought to be spaced was underlaid by a common source or supply.

> "That the existence of a source of supply common to lands covered by a spacing order is a necessary prerequisite to the jurisdiction of the Commission to enter such an order, is shown by the wording of our Conservative Statutes, and has always been recognized by this Court," 418 P.2d at 938, 25 *O.&G.R.* at 544.

[5] Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 977 (1951), *appeal dismissed sub nom.*, Palmer Oil Corp. v. Amerada Petroleum Corp., 343 U.S. 390, 1 *O.&G.R.* 876 (1952). This case was concerned with the 1945 Act, 52 Okla. Stat. § 286.5.

rectly responsive to the issue is as follows: '. . . that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool.'

"The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence. . . . Since the evidence before the Commission was competent and sufficient if believed, to sustain the order we must, and do, hold that the order is sustained by the evidence and that the contention is without merit."[6]

As to the contention that the boundaries had not been defined by actual drilling operations as required by the act, the court concluded that:

"Actual drilling upon the undrilled tracts or within a definite proximity thereto is neither prescribed by the statute nor by law. . . . The only prescription is that the source of supply must have been reasonably defined thereby. The drilling operations required are simply those the evidentiary force of which is sufficient to justify a conclusion, by those capable in law of weighing the facts as to the existence of the source of supply. There is unanimity in the testimony herein that the wells drilled afforded sufficient evidence to define the common source of supply

[6] 231 P.2d at 1008–1009.

within the unit area and the Commission so found. We hold that said attack upon the order is without merit."[7]

[Discovery well]

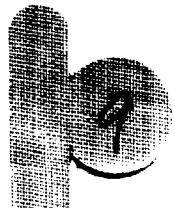
The same case, *Palmer Oil Corp. v. Phillips Petroleum Co.*, was also concerned with the meaning of the term "field" as employed in a provision of the 1945 Act exempting from compulsory unitization any field in which the discovery well had been drilled twenty years prior to the effective date of the act.[8] The first discovery of oil and gas in the area occurred in 1917 but the unitized sand had not been discovered until 1936. The court commented as follows:

> "the only logical deduction to be made, when considering the Act as a whole, is that the discovery well, in the mind of the Legislature, is that well in the field that discovered the common source of supply which is the subject of the unification. To hold otherwise would not only defeat the legislative intent herein but in other situations as well because the court takes judicial knowledge of the fact major pools have been and may yet be discovered in areas where many years ago oil had been discovered in upper and shallower sands which have become practically if not completely depleted."[9]

[7] 231 P.2d at 1010.

[8] 52 Okla. Stat. § 286.2.

[9] 231 P.2d at 1011–1012.



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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-F
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

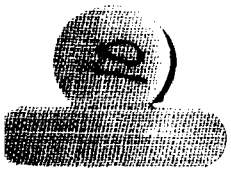
WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/



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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and tne subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection gas in the I_g term of the formula above.

(3) The Aztec district office of the Division, with due counselling and advice from pool operators, shall, by October 1, 1988, develop a program for semi-annual bottomhole pressure surveys of wells in both pools located not less than 3/8 mile and not more than 1 1/2 miles from the common pool boundary, designed to measure accurately the pressure differential across the pool boundary and to be used as a basis for adjusting the gas injection credit to wells in the expansion area. The program shall be presented for approval to the Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hearing, to offset any advantage gained by wells on either side of the common boundary of the Gavilan and West Puerto Chiquito Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

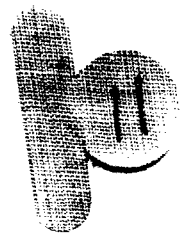
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L



SERIES

...l is underlain by one or more ...enty-one (21) Pennsylvanian ...ringers, which are generally ...en the depths of 2,030 feet ... et, and are identified as vari... ...bers of the Bayou, M Series, and ...ve groups or the Stray, Norris ... Sands. Development of the ... an Sand in the Bayou Field ...ed in the early 1920s; additional ... conducted in the late 1940s ... y 1950s, and at this time the ... been fully developed for ap... ...ly twelve (12) years; the exist... ...ation of a large East-West ... t across the northern portion ...d has been proven. There are ... two hundred (200) wells in ... The typical well penetrates as ...veen (15) of the some twenty-... Pennsylvanian Sand stringers, ... of the productive stringers ... ve been perforated and com... ... the well bore. In a number ...ls in the field, the lower sand ... e completed in the open hole ... eously produced with various ... and commingled Pennsylvan... ...ngers found above the point ... was set. In the history of ... there has been no significant ...olate or segregate the various ...n Sand stringers; the equipment and producing operations in the field have been to treat the ...uctive Pennsylvanian Sand ... a single common source of ... and gas. There is consider... ...on as to whether it is now ...ssible to completely and ef...rate and segregate the vari...s. In nature there was little ...tive communication between ...ringers of the Pennsylvan... ...ne field. However, as a re...completion and producing prac... ...any years, such Pennsyl... stringers are now in direct ...irect pressure communication ...other and the pressures within ... have equalized so as to create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, are a single common source of supply of oil and gas."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order, that it is supported by substantial evidence, and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

> "The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:
>
> 'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'
>
> "* * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a single massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by

is underlain by one or more twenty-one (21) Pennsylvanian stringers, which are generally en the depths of 2,030 feet t, and are identified as variers of the Bayou, M Series, and ve groups or the Stray, Norris d Sands. Development of the n Sand in the Bayou Field d in the early 1920s; additional conducted in the late 1940s a 1950s, and at this time the been fully developed for aply twelve (12) years; the existation of a large East-West t across the northern portion d has been proven. There are two hundred (200) wells in he typical well penetrates as fifteen (15) of the some twenty-Pennsylvanian Sand stringers, of the productive stringers ve been perforated and com- the well bore. In a number s in the field, the lower sand e completed in the open hole ously produced with various and commingled Pennsylvangers found above the point was set. In the history of there has been no significant olate or segregate the various n Sand stringers; the equipment and producing operafield have been to treat the ective Pennsylvanian Sand a single common source of and gas. There is consideron as to whether it is now sible to completely and effate and segregate the varis. In nature there was little tive communication between ringers of the Pennsylvanue field. However, as a re- mpletion and producing prac- any years, such Pennsylstringers are now in direct rect pressure communication ther and the pressures within have equalized so as to create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, are a single common source of supply of oil and gas."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order, that it is supported by substantial evidence, and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

"The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:

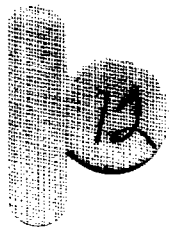
'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'

* * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a single massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by



due to the fact that his interests in the lands are fixed by the judgment in favor of the defendant, Mrs. Lee Aulick, who died after the judgment herein was appealed from.

The question as to the ownership of the $500.00 in the bank in Carmen is not involved in this suit, and we express no opinion thereon.

Judgment affirmed.

PALMER OIL CORP. et al. v. PHILLIPS PETROLEUM CO. et al.

STERBA et al. v. CORPORATION COMMISSION et al.

Nos. 33336, 33708.

Supreme Court of Oklahoma.
March 20, 1951.

Petitions for Rehearing Denied May 22, 1951.

Applications for Leave to File Second Petition for Rehearing Denied June 5, 1951.

Proceedings before the Corporation Commission by the Phillips Petroleum Company and others, lessees who petitioned for the creation of a unit having for its purpose the unitized management, operation and further development of what is known as the West Cement Medrano common source of supply of oil and gas. The Palmer Oil Corporation and others, lessees, lessors and royalty owners protested. From an order of the Commission creating the unit, protestants appealed. Original action by the Palmer Oil Corporation and others, against the Corporation Commission for a writ of prohibition. The Supreme Court, Gibson, J., held that the Unitization Act was not unconstitutional and that the order of the Corporation Commission creating the unit was not contrary to either the law or the evidence.

Order affirmed. Writ denied.

Luttrell, V. C. J., and Welch, Davison and O'Neal, JJ., dissented.

1. Constitutional law ⇐148
Mines and minerals ⇐92.4

The Unitization Act is not unconstitutional as unreasonable in that in the formation of the unit and in the committee management thereof, lessees only are recognized, that the act imposes an unauthorized burden upon royalty interest in the production, that it imposes an unauthorized burden upon the leased premises of the lessor and that it is violative of the obligation of contracts. 52 O.S.Supp. §§ 286.1 to 286.17; O.S.1941 Const. art. 2, §§ 7, 15, 23, 24; art. 5, § 51; U.S.C.A.Const. art. 1, § 10; Amend. 14.

2. Constitutional law ⇐70(3)

The authority of the legislature in dealing with matters of policy is without the scope of judicial inquiry.

3. Constitutional law ⇐253

The legislature is itself a judge of conditions warranting legislative enactments and they are only to be set aside when they involve such palpable abuse of power and lack of reasonableness to accomplish a lawful end that they may be said to be arbitrary, capricious and unreasonable and hence irreconcilable with the conception of due process of law. U.S.C.A.Const. Amend. 14.

4. Constitutional law ⇐70(3)

Whether enactment is wise or unwise, whether it is based on sound economic theory, whether it is the best means to achieve the desired result are ordinarily matters for the judgment of the legislature and the earnest conflict of serious opinion does not bring it within the range of judicial cognizance.

5. Constitutional law ⇐64
Mines and minerals ⇐92.4

The Unitization Act is not invalid as an unconstitutional delegation of legislative power because of the provision requiring a petition of lessees of record of more than 50 per cent of the area of the common source of supply in order to give the Corporation Commission jurisdiction under the act to create a unit. 52 O.S.Supp. §§ 286.1 to 286.17.

6. Mines and minerals ⇐92.4

The Unitization Act does not impose an undue burden upon royalty because of provisions treating a royalty interest that is in excess of one-eighth of the production,

Exhibit 12

trusted to the Commission because it is thought to be peculiarly experienced and fitted for the purpose and it is not to be contemplated that the courts may substitute their notions of expediency and fairness for that of the Commission. Peppers Refining Co. v. Corporation Commission, 198 Okl. 451, 179 P.2d 899; Denver Producing & Refining Co. v. State supra.

In the light of these governing rules we consider the several alleged grounds of error in making the order.

It is contended that the area of the West Cement Medrano Unit is not limited to one "common source of supply."

[11] Under the Act, a unit must be limited to a common source of supply. The Act does not in express terms define a common source of supply, but there was at the time of the enactment a legislative definition of the term, 52 O.S.1941 § 84(c), now 52 O.S.Supp.1947 § 86.1(c), and we construe such definition as a part of the Act. Therein, the term is thus defined: "(c) The term 'Common Source of Supply' shall comprise and include that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid by a common accumulation of oil or gas or both; provided that if any such area is underlaid or appears from geological or other scientific data or from drilling operations or other evidence to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by a strata of earth and not connected with each other, then such area, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply;".

That more than one common source of supply may exist in a given sand appears to be recognized in the statute and in H. F. Wilcox Oil & Gas Co. v. State, 162 Okl. 89, 19 P.2d 347, 86 A.L.R. 421, we held that more than one common source of supply could obtain in such sand by reason of faults that constitute impervious barriers between segments thereof.

.The existence of faults in the unit area is recognized and the question before Commission was whether the segments of the sand were disconnected by reason of the faults. The finding of the Commission (in paragraph 2) which is directly responsive to the issue is as follows: "* * * that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool."

[12, 13] The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence. Under the holding of this court and that of courts generally, Chicago, R. I. & P. Ry. Co. v. Pruitt, 67 Okl. 219, 170 P. 1143; 22 C.J. 728, sec. 823, 32 C.J.S., Evidence, § 567, p. 378, the weight to be given opinion evidence is, within the bounds of reason, entirely for the determination of the jury or of the court, when trying an issue of fact, it taking into consideration


13

70-7-4. Definitions.

For the purposes of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], unless the context otherwise requires:

A. "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common reservoir";

B. "oil and gas" means crude oil, natural gas, casinghead gas, condensate or any combination thereof;

C. "waste," in addition to its meaning in Section 70-2-3 NMSA 1978, shall include both economic and physical waste resulting, or that could reasonably be expected to result, from the development and operation separately of tracts that can best be developed and operated as a unit;

D. "working interest" means an interest in unitized substances by virtue of a lease, operating agreement, fee title or otherwise, excluding royalty owners, owners of overriding royalties, oil and gas payments, carried interests, mortgages and lien claimants but including a carried interest, the owner of which is primarily obligated to pay, either in cash or out of production or otherwise, a portion of the unit expense; however, oil and gas rights that are free of lease or other instrument creating a working interest shall be regarded as a working interest to the extent of seven-eighths thereof and a royalty interest to the extent of the remaining one-eighth thereof;

E. "working interest owner" or "lessee" means a person who owns a working interest;

F. "royalty interest" means a right to or interest in any portion of the unitized substances or proceeds thereof other than a working interest;

G. "royalty owner" means a person who owns a royalty interest;

H. "unit operator" means the working interest owner, designated by working interest owners under the unit operating agreement or the division to conduct unit operations, acting as operator and not as a working interest owner;

I. "basic royalty" means the royalty reserved in the lease but in no event exceeding one-eighth; and

J. "relative value" means the value of each separately owned tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of said factors, or such other pertinent engineering, geological, operating or pricing factors, as may be reasonably susceptible of determination.

History: 1953 Comp., § 65-14-4, enacted by Laws 1975, ch. 293, § 4; 1977, ch. 255, § 110.

70-7-5. Requisites of application for unitization.

Any working interest owner may file an application with the division requesting an order for the unit operation of a pool or any part thereof. The application shall contain:

A. a description of the proposed unit area and the vertical limits to be included therein with a map or plat thereof attached;

B. a statement that the reservoir or portion thereof involved in the application has been reasonably defined by development;

C. a statement of the type of operations contemplated for the unit area;

D. a copy of a proposed plan of unitization which the applicant considers fair, reasonable and equitable;

IT IS FURTHER ORDERED that this matter be, and it hereby is, referred to this Court's Disciplinary Board with direction immediately to assign it to Hearing Committee C, Southern District (Ben S. Shantz, Chairman) and Disciplinary Counsel is directed immediately to file a petition instituting formal proceedings hereon before such hearing committee.

96 N.M. 692

In the Matter of Harold M. MORGAN, Esquire.

No. 13231.

Supreme Court of New Mexico.

Sept. 9, 1981.

Disciplinary Proceeding.

IT HAVING BEEN MADE TO APPEAR TO THE COURT by affidavit of Glen L. Houston, Attorney at Law, that the respondent, HAROLD M. MORGAN, has served the time heretofore prescribed for practice under probationary conditions and supervision by our Order of August 13, 1980, 95 N.M. 653, 625 P.2d 582, and has fully complied with the conditions of his probation;

NOW IT IS ORDERED that HAROLD M. MORGAN, Esquire, be and he hereby is released from probation and the conditions thereof with respect to his license to practice law in the courts of this state.

96 N.M. 692

Richard BUZBEE, Reggie D. Bell, and Richard Chapman, Petitioner and Intervenors,

v.

Hon. Thomas A. DONNELLY, Hon. Lorenzo F. Garcia, Hon. Bruce E. Kaufman, District Judges, Respondents.

STATE of New Mexico, Plaintiff-Appellee,

v.

Richard Nave CHAPMAN, et al., and Narciso Telles Flores, et al., Defendants-Appellants.

Nos. 13783, 13789.

Supreme Court of New Mexico.

Sept. 25, 1981.

Rehearing Denied Oct. 23, 1981.

Prison inmates, indicted for murdering other inmates, moved to dismiss the indictments on the ground that exculpatory evidence had been withheld from the grand jury. When the motions were denied, the inmates brought interlocutory appeals or sought writs of prohibition. The cases were consolidated on appeal. The Supreme Court, Easley, C. J., held that: (1) prosecutor properly withheld inmates' self-serving statements from grand jury since statements were not such evidence as would be admissible at trial; (2) prosecutor had no duty to submit to grand jury circumstantial exculpatory evidence bearing on credibility of witnesses who testified; and (3) failure of prosecutor to submit such exculpatory evidence to grand jury did not violate inmates' due process right to fair trial.

Affirmed and remanded.

Sosa, Senior Justice, and Wood, Senior Judge, Court of Appeals, dissented and filed opinion.

1. Grand Jury ⇐36.2

Statute requiring prosecutor to present to grand jury evidence that directly negates

not identified the same defendant in his prior statement.

3. A witness, who did not testify before the grand jury, said in a statement that the way a murder was carried out was different than what was described by other witnesses before the grand jury.

4. A witness, who testified before the grand jury, named other persons as participants but not the defendant.

5. A witness whose grand jury testimony implicated a defendant had given a previous statement in which he was confused as to the identity of the defendant.

6. Statements that the killers were masked.

7. Statements that a defendant was present for a while at a killing, but the witness did not see the defendant participate in the killing.

8. A witness, who testified before the grand jury, but changed his mind or made a mistake as to the identity of the perpetrator in his prior statement.

[3] Although this indirect or circumstantial evidence may be inconsistent with that presented to the grand jury, we inquire whether it directly negates guilt. Basic to the analysis of this issue is a determination of the legislative intent in specifying that evidence *directly* negating guilt should be furnished the grand jury. A most logical assumption is that the intent was also to proscribe the use of evidence *indirectly* negating guilt. When a statute uses terms of art, we interpret these terms in accordance with case law interpretation or statutory definition of those words, if any. *See State v. Aragon*, 55 N.M. 423, 234 P.2d 358 (1951); *State v. Grissom*, 35 N.M. 323, 298 P. 666 (1931); *Burch v. Ortiz*, 31 N.M. 427, 246 P.2d 908 (1926); *Bradley v. United States*, 410 U.S. 605, 93 S.Ct. 1151, 35 L.Ed.2d 528 (1973).

Neither the statutes nor case law give us any help with a specific definition of the term "directly negating" guilt. However, given the history of the statutes here, where hearsay and secondary evidence were specifically not allowed for 115 years and the fact that the law was then changed to allow any evidence that would be admissible at trial, we believe the Legislature was thinking in terms of the traditional categories of evidence. The only common sense explanation for the use of the words in question is that the Legislature intended to permit the use of *direct* evidence negating guilt and to prohibit the use of indirect, or circumstantial, evidence negating guilt.

[4] Direct evidence is evidence which, if believed, proves the existence of the fact without inference or presumption. *People v. Thomas*, 87 Cal.App.3d 1014, 151 Cal. Rptr. 483 (Ct.App.1979); *State v. Thompson*, 519 S.W.2d 789 (Tenn.1975); *Frazier v. State*, 576 S.W.2d 617 (Tex.Cr.App.1978). Direct evidence is actual knowledge gained through a witness' senses. *State v. Hubbard*, 351 Mo. 143, 171 S.W.2d 701 (1943); *see also State v. Farrington*, 411 A.2d 396 (Me.1980); *State v. Musgrove*, 178 Mont. 162, 582 P.2d 1246 (1978).

The court in *State v. Lewis*, 177 Neb. 173, 128 N.W.2d 610, 613 (1964), used the following definition: "Otherwise stated, direct evidence is proof of facts by witnesses who saw acts done or heard words spoken, while circumstantial evidence is proof of collateral facts and circumstances from which the mind infers the conclusion that the facts sought to be established in fact existed." *United Textile Workers v. Newberry Mills, Inc.*, 238 F.Supp. 366, 372 (W.D.S.C.1965).

[5] All of the withheld evidence in our case, other than the self-serving statements of defendants, is circumstantial in nature. It does not directly negate the guilt of the defendants. It must be aided by inferences or presumptions. The prosecutor had no duty under the statutes to submit this evidence to the grand jury.

Our decision on this issue differs in part with the theory expressed in dicta by the Court of Appeals in *State v. Herrera*, 93 N.M. 442, 601 P.2d 75 (N.M.App.1979), and followed in later cases, which holds that knowingly withholding *exculpatory* evidence from a grand jury denies the defendant due process. That Court obviously

considered the EPA's several responses to this argument, including its contention that any error was harmless. We are not persuaded by such arguments and cannot agree that the ALJ did not rely considerably on the letter in assessing the civil penalty. We conclude therefore that the penalty assessed of $21,000 must be vacated and that this penalty issue must be remanded to the agency for reconsideration, without consideration being given to the October 4, 1977, letter (Tr. Ex. C–1) as having afforded notice to Yaffe of the presence of PCBs.

CONCLUSION

In sum, we find no reversible error requiring that we set aside the findings by the EPA of the violations by Yaffe. However, the assessment of the civil penalty must be vacated for the reasons stated above and the cause is remanded to the agency for further proceedings to reconsider the civil penalty of $21,000 assessed against petitioner Yaffee.

IT IS SO ORDERED.

UNITED STATES of America, Plaintiff-Appellee,

v.

Charles E. MAYBERRY, Defendant-Appellant.

No. 85–1405.

United States Court of Appeals, Tenth Circuit.

Oct. 7, 1985.

Defendant was convicted before the United States District Court for the District of New Mexico, Howard C. Bratton, Chief Judge, of breaking and entering a dwelling located on a federal enclave, and he appealed. The Court of Appeals, John P. Moore, Circuit Judge, held that special assessments imposed upon defendant pursuant to statute providing for such assessments to generate income to offset cost of victim's assistance fund violated provision of Assimilative Crimes Act that an individual who commits an act on a federal reservation which is illegal under laws of the state where the enclave is located "shall be guilty of a like offense and subject to a like punishment" under the federal law, since the special assessments constituted a "punishment" within meaning of the Act, and state in which enclave was located had no similar punishment.

Reversed and remanded with instructions.

1. Criminal Law ⇐16

Purpose of Assimilative Crimes Act [18 U.S.C.A. § 13] providing that criminal law of surrounding jurisdiction is incorporated into federal law with regard to crimes committed in federal enclaves is to conform criminal law of federal enclaves to that of the local law except in cases of specific federal crimes.

2. Statutes ⇐188

Where a statute contains no definition of term in question, general rule is that word is to be interpreted in its ordinary, everyday sense.

3. Criminal Law ⇐16

Policy behind Assimilative Crimes Act [18 U.S.C.A. § 13] conforming criminal law of federal enclaves to that of local law is to assure that those persons alleged to have

edge with respect to the PCB content of its transformer oil indicates a lack of responsibility and concern. ... It should be stated in Respondent's behalf, however, that Respondent expended monies subsequent to the state and federal inspections to cure deficiencies. It demonstrated, after the inspections by Complainant's employees, a cooperative attitude and attempted to comply with the pertinent regulations issued under the act and, in large measure, was successful in such attempt.

I R.I.D. at 24–25; (Emphasis added).

in 1984 U.S.Code Cong. & Ad.News 3182, 3607, 3619.

The Assimilative Crimes Act, 18 U.S.C. § 13, states:

> Whoever within or upon any of the places now existing or hereafter reserved or acquired as provided in section 7 of this title, is guilty of any act or omission which, although not made punishable by any enactment of Congress, would be punishable if committed or omitted within the jurisdiction of the State, Territory, Possession, or District in which such place is situated, by the laws thereof in force at the time of such act or omission, shall be guilty of a like offense *and subject to a like punishment.*

(Emphasis added.) The purpose of this Act is to conform the criminal law of federal enclaves to that of local law except in cases of specific federal crimes. *United States v. Best*, 573 F.2d 1095 (9th Cir.1978). Essentially, the Act fills gaps in the federal law by providing a set of criminal laws for federal reservations. *United States v. Prejean*, 494 F.2d 495, 496 (5th Cir.1974). Since there is no express enactment of Congress providing punishment for breaking and entering, the Assimilative Crimes Act and New Mexico law were appropriately applied in this case.

The question we now face, whether the penalty assessment applies to assimilative crimes, has not yet been considered. As we view the problem, it is one of statutory construction. The assessment, by its terms, applies to "any person convicted of an offense against the United States." 18 U.S.C. § 3013. Clearly, persons convicted of assimilative crimes have been "convicted of an offense against the United States." This does not mean, however, that the assessment necessarily applies to assimilative crimes. Dependent upon the laws of the forum state, the terms of the Assimilative Crimes Act may preclude this result in some cases.

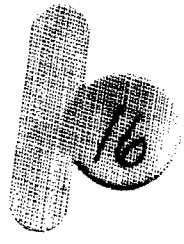
The Assimilative Crimes Act makes clear that an individual who commits an act on a federal reservation which is illegal under the laws of the state where the enclave is located "shall be guilty of a like offense *and subject to a like punishment*" under the federal law. (Emphasis added.) This language has consistently been construed to require punishment only in the way and to the extent that the same offense would have been punishable if the territory embraced by the federal reservation or enclave where the crime was committed remained subject to the jurisdiction of the state. *United States v. Press Publishing Co.*, 219 U.S. 1, 31 S.Ct. 212, 55 L.Ed. 65 (1911); *United States v. Dunn*, 545 F.2d 1281 (10th Cir.1976). Thus, if the special assessment is found to be a punishment, and New Mexico has no similar punishment, imposition of the assessment *in this case*, would be violative of the Assimilative Crimes Act.

Because the parties agree that New Mexico has no similar provision for collecting special assessments from convicted persons, the issue before us resolves to whether the special assessment is a "punishment" as that term is used in the Assimilative Crimes Act. As such, the issue is one of federal and not state law. *Johnson v. Yellow Cab Transit Co.*, 321 U.S. 383, 64 S.Ct. 622, 88 L.Ed. 814 (1944).

[2] The term "punishment" is not defined in the Assimilative Crimes Act. Where a statute contains no definition of the term in question, the general rule is that the word is to be interpreted in its ordinary, everyday sense. *First Nat. Bank & Trust Co. of Chickasha v. United States*, 462 F.2d 908 (10th Cir.1972). Accordingly, we adopt the definition of punishment set forth in Black's Law Dictionary 1398 (rev. 4th ed. 1968) as follows:

> Any pain, penalty, suffering, or confinement inflicted upon a person by the authority of the law and the judgment and sentence of a court, for some crime or offense committed by him, or for his omission of a duty enjoined by law.

Those cases which have considered the term in connection with the question of whether a specific statute can be incorporated into the federal law under the Assimilative Crimes Act have found the word to


16

ARTICLE 7

Statutory Unitization Act

70-7-1. Purpose of act.

The legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978] is applicable, to the end that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units.

History: 1953 Comp., § 65-14-1, enacted by Laws 1975, ch. 293, § 1.

Law reviews. — For article, "On an Institutional Arrangement for Developing Oil and Gas in the Gulf of Mexico", see 26 Nat. Resources J. 717 (1986).

70-7-2. Short title.

This act [70-7-1 to 70-7-21 NMSA 1978] may be cited as the "Statutory Unitization Act."

History: 1953 Comp., § 65-14-2, enacted by Laws 1975, ch. 293, § 2.

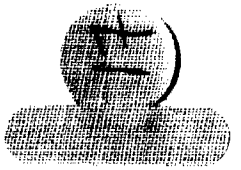
70-7-3. Additional powers and duties of the oil conservation division.

Subject to the limitations of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], the oil conservation division of the energy, minerals and natural resources department, hereinafter referred to as the "division", is vested with jurisdiction, power and authority and it shall be its duty to make and enforce such orders and do such things as may be necessary or proper to carry out and effectuate the purposes of the Statutory Unitization Act.

History: 1953 Comp., § 65-14-3, enacted by Laws 1975, ch. 293, § 3; 1977, ch. 255, § 109; 1987, ch. 234, § 67.

The 1987 amendment, effective July 1, 1987, substituted "energy, minerals and natural resources" for "energy and minerals" and made minor changes in language.

Exhibit 16



number of claims are considered, it is clear that different procedures are necessary and this is a relevant fact in such a determination. *Crowder v. Salt Lake County*, 552 P.2d 646 (Utah 1976).

In this state, cities are clearly limited in their expenditures. See § 11–6–1, N.M.S.A. 1953 [Repl. Vol. 2, pt. 2 (Supp.1975)] and § 11–6–6, N.M.S.A.1953 [Repl. Vol. 2, pt. 2, 1974]. The ability of cities to raise money to meet such extraordinary expense is also restricted.

Therefore, it appears that some rational basis does exist for limiting the time period in which a suit may be brought against a city. This determination is sufficient to overcome respondents' contention that § 23–1–23 is unconstitutional. Therefore, the decision of the Court of Appeals is reversed and the order of the District Court of Rio Arriba County dismissing the complaint is hereby affirmed.

IT IS SO ORDERED.

SOSA, EASLEY and FEDERICI, JJ., concur.

PAYNE, J., respectfully dissents.

90 N.M. 790

STATE of New Mexico ex rel. Thomas Ray NEWSOME, Jr., Petitioner-Appellant,

v.

Phillip ALARID, Director of Personnel, University of New Mexico, Respondent-Appellee.

No. 11207.

Supreme Court of New Mexico.

Sept. 26, 1977.

Student newspaper reporter at university sought alternative writ of mandamus permitting him to gain access to information within university's nonacademic staff personnel records. The District Court, Bernalillo County, James A. Maloney, D. J., quashed writ and dismissed petition, and reporter appealed. The Supreme Court, Easley, J., held that: (1) statutory provision exempts, from disclosure, State's public records consisting of doctor's opinions and other medical information in personnel files; (2) university's records, which pertained to illness, injury, disability, inability to perform a job task and sick leave, were confidential and not subject to release to public; (3) university's records, which pertained to letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be rehired or as to reason an applicant was not hired and other matters of opinion, were exempt from disclosure; (4) if required to determine whether to permit inspection of public record of State, trial judge should make a private examination of the record; (5) university's records regarding military discharges and arrest records were not necessarily exempt from disclosure, but such information would be immune to disclosure under certain circumstances; (6) request for inspection of records could not be denied merely on basis of contention that the request posed an extreme burden on university's personnel director's office, and (7) fact that reporter sought disclosure of all of university's nonacademic staff personnel records, but was only entitled to disclosure of such records which were not confidential, did not warrant a refusal to grant any relief to petitioner.

Cause remanded.

1. Appeal and Error ⇐766, 768

Where there is a failure to comply with rule, which provides that a statement of proceedings shall contain "[A] concise, chronological summary of such findings as are material to the review with appropriate references to the transcript. If any finding is challenged, it must be so indicated by a parenthetical note referring to the appropriate numbered point in the argument," reviewing court may assume the findings are correct and conclusive on appeal, court

C. letters or memorandums which are matters of opinion in personnel files or students' cumulative files; and

D. as otherwise provided by law.

The statute is not entirely clear in Section A as to whether all medical records are exempt from disclosure.

[3-6] A statute should be interpreted to mean what the Legislature intended it to mean, and to accomplish the ends sought to be accomplished by it. *Burroughs v. Board of County Comm'ners*, 88 N.M. 303, 540 P.2d 233 (1975). The entire statute is to be read as a whole so that each provision may be considered in its relation to every other part. *Winston v. New Mexico State Police Bd.*, 80 N.M. 310, 454 P.2d 967 (1969). A construction must be given which will not render the statute's application absurd or unreasonable and which will not defeat the object of the Legislature. *State v. Nance*, 77 N.M. 39, 419 P.2d 242 (1966), *cert. denied*, 386 U.S. 1039, 87 S.Ct. 1495, 18 L.Ed.2d 605 (1967). Moreover, enactments of the Legislature are to be interpreted to accord with common sense and reason. *Westland Development Co. v. Saavedra*, 80 N.M. 615, 459 P.2d 141 (1969).

[7] The intent of the Legislature to exempt doctors' opinions and other medical information in personnel files from disclosure is evident from an analysis of this statute, and the intent comports with common sense and reasoning as well as with good public policy.

Exemptions Under the Statute

[8] Most of the information in dispute clearly falls within the exemptions allowed by statute. We hold that the personnel records of the employees which pertain to illness, injury, disability, inability to perform a job task, and sick leave shall be considered confidential under the statute and not subject to release to the public, except, of course, by the consent or waiver of the particular employee.

[9] Letters of reference are specifically exempt from disclosure under Section B of the statute as are letters or memorandums which are matters of opinion as noted in Section C. The Legislature quite obviously anticipated that there would be critical material and adverse opinions in letters of reference, in documents concerning disciplinary action and promotions and in various other opinion information that might have no foundation in fact but, if released for public view, could be seriously damaging to an employee. We hold that letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be re-hired or as to why an applicant was not hired, and other matters of opinion are also exempt from disclosure under the statute.

Records Not Specifically Exempt

Alarid contends that in addition to those items which fall within the statutory exemptions, there are other matters of a personal or sensitive nature in the files that, for reasons of public policy, should be kept confidential and not be subject to disclosure. This argument is based on balancing the interests that favor disclosure against those interests that favor confidentiality.

Alarid claims that military discharge and arrest records are of a confidential nature but are not specifically exempted by statute. There is no New Mexico case which faces this issue squarely. Only three cases have mentioned this statute. *Ortiz v. Jaramillo*, 82 N.M. 445, 483 P.2d 500 (1971) (deciding that the county clerk's mag-card list of registered voters is a public record and must be made available on reasonable terms to persons demanding the list); *Sanchez v. Board of Regents of Eastern New Mexico University*, 82 N.M. 672, 486 P.2d 608 (1971) (holding that a preliminary list setting forth proposed faculty salaries which had not been submitted to or accepted by the faculty members was not a public record within the meaning of this statute); *State v. Harrison*, 81 N.M. 623, 471 P.2d 193 (Ct.App.1970), *cert. denied*, 81 N.M. 668, 472 P.2d 382 (1970) (assuming but declining to hold that there is an exemption under the statute permitting a criminal defendant to inspect police records during the investigation of a crime).

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2, 3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2, 3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2, 3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

E. a copy of a proposed operating plan covering the manner in which the unit will be supervised and managed and costs allocated and paid; and

F. an allegation of the facts required to be found by the division under Section 70-7-6 NMSA 1978.

History: 1953 Comp., § 65-14-5, enacted by Laws 1975, ch. 293, § 5; 1977, ch. 255, § 111.

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 164, 172.

Compulsory pooling or unitization statute or ordinance requiring owners or lessees of oil and gas lands to develop their holdings as a single drilling unit and the like, 37 A.L.R.2d 434.

70-7-6. Matters to be found by the division precedent to issuance of unitization order.

A. After an application for unitization has been filed with the division and after notice and hearing, all in the form and manner and in accordance with the procedural requirements of the division, and prior to reaching a decision on the petition, the division shall determine whether or not each of the following conditions exists:

(1) that the unitized management, operation and further development of the oil or gas pool or a portion thereof is reasonably necessary in order to effectively carry on pressure maintenance or secondary or tertiary recovery operations, to substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof;

(2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered;

(3) that the estimated additional costs, if any, of conducting such operations will not exceed the estimated value of the additional oil and gas so recovered plus a reasonable profit;

(4) that such unitization and adoption of one or more of such unitized methods of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the pool or portion thereof directly affected;

(5) that the operator has made a good faith effort to secure voluntary unitization within the pool or portion thereof directly affected; and

(6) that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

B. If the division determines that the participation formula contained in the unitization agreement does not allocate unitized hydrocarbons on a fair, reasonable and equitable basis, the division shall determine the relative value, from evidence introduced at the hearing, taking into account the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the relative value of each tract so determined bears to the relative value of all tracts in the unit area.

C. When the division determines that the preceding conditions exist, it shall make findings to that effect and make an order creating the unit and providing for the unitization and unitized operation of the pool or portion thereof described in the order, all upon such terms and conditions as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect and safeguard the respective rights and obligations of the working interest owners and royalty owners.

History: 1953 Comp., § 65-14-6, enacted by Laws 1975, ch. 293, § 6; 1977, ch. 255, § 112.

Exhibit 19

§ 913.8 Provisions of compulsory unitization statutes: Inclusion of nonproductive lands in unit

It appears generally assumed in some unitization statutes that only lands proved to be productive shall be included in a compulsory unit. This is made explicit in several statutes in manner as follows:

> "Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual drilling operations may be so included within the unit area."[1]

§ 913.8 [1] 52 Okla. Stat. Ann. § 287.4.

In Manufacturers Nat'l Bank of Detroit v. Director, Dep't of Natural Resources, 85 Mich. App. 173, 270 N.W.2d 550, 62 *O.&G.R.* 79 (1978), plaintiffs complained of the determination by the Supervisor of Wells of a well-spacing and drilling unit on the ground it encompassed tracts of land not completely underlain by the pool. The court denied relief on the ground that plaintiffs had failed to exhaust their administrative remedy against any inequity created by the unit determination. On rehearing after remand, 115 Mich. App. 294, 320 N.W.2d 403, 74 *O.&G.R.* 479 (1982), the court concluded that the Supervisor of Wells erred in applying the allocation formula contained in the lease to a compulsory unit. The case was remanded to the Supervisor to adjust the allocation of royalties using the formula set forth in the court's original opinion, *viz.*, in the proportion to which the lease's acreage bears to the total drilling unit acreage underlain by the pool. On appeal the court held that the creation of a drilling unit by the Supervisor of Wells did not amount to a pooling of the legal interests of those whose lands were within the unit. — Mich. —, 362 N.W.2d 572, — *O.&G.R.* — (1984).

CAMPBELL & BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
J. SCOTT HALL
JOHN H. BEMIS
WILLIAM P. SLATTERY
MARTE D. LIGHTSTONE
PATRICIA A. MATTHEWS

JEFFERSON PLACE
SUITE I - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

May 19, 1989

HAND-DELIVERED

Mr. Michael E. Stogner
Hearing Examiner
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87501

Re: Case 9671: Application of Benson-Montin-Greer Drilling Corp. to Amend Division Order R-8344, Rio Arriba County, New Mexico

Dear Mr. Stogner:

Enclosed is the Hearing Memorandum of Benson-Montin-Greer Drilling Corp., Dugan Production Corp. and Sun Exploration and Production Company which you requested at the May 10, 1989 hearing on the above-referenced application.

Also, enclosed is a proposed Order of the Division which provides, among other things, that this Order shall become effective at 7:00 AM on the last day of the month in which appropriate ratifications are obtained pursuant to Section 70-7-8 N.M.S.A., 1978 Comp. As you will recall from the testimony, it is essential that the effective date of this Order be on the last day instead of the first day of the month for certain leases in the E/2 of Section 12 expire on July 31, 1989 and it is our hope to have this Order ratified and in effect on that date. A provision making the Order effective on the 1st of the month, therefore, could result in lease expirations.

If you need anything further to proceed with this matter from Benson-Montin-Greer Drilling Corp., Dugan Production Corp. or Sun Exploration and Production Company, please advise.

Very truly yours,

William F. Carr

WILLIAM F. CARR
WFC:mlh
Enclosures
cc w/enclosures: Mr. Albert R. Greer,
Benson-Montin-Greer Drilling Corp.
Mr. John Roe, Dugan Production Corp.
Kirk Moore, Esq. and Mr. Richard Dillon,
Sun Exploration and Production Company
Owen Lopez, Esq.
W. Perry Pearce, Esq.
Kent Lund, Esq.

RECEIVED

MAY 19

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

CASE NO. 9671
Order No. R-8344-A

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION TO AMEND
DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO.

BENSON-MONTIN-GREER DRILLING CORPORATION,
DUGAN PRODUCTION CORPORATION AND
SUN EXPLORATION AND PRODUCTION COMPANY
PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 o'clock a.m. on May 10 and 11, 1989, at Santa Fe, New Mexico, before examiner Michael E. Stogner of the Oil Conservation Division of New Mexico, hereinafter referred to as the "Division".

NOW, on this _____ day of May, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

1. Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

2. The applicant, Benson-Montin-Greer Drilling Corp., seeks the amendment of Division Order R-8344 to include an additional 320 acres comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, ("the expansion area") within the previously approved Canada Ojitos Unit.

3. The expansion area should be included within the unit area for the continued successful and efficient conduct of the unitized method of operation for which the unit was created.

4. That the conduct thereof will have no material adverse effect upon the remainder of the common source of supply in the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool.

5. The expansion area is in connection with the existing unit area so as to permit the migration of oil or gas or both from one portion of the common source of supply to the other wherever and whenever pressure differential are created as a result of production or operations for the production of oil.

6. The proposed expanded unit area has been reasonably defined by development.

7. The applicant operates a pressure maintenance project for the secondary recovery of oil and gas in the Canada Ojitos Unit area.

8. The unitized management, operation and further development of the unit area including the expansion area of the Gavilan Mancos Oil Pool, as proposed, is reasonably necessary in order to effectively carry on secondary recovery operations and to avoid the drilling of unnecessary wells thereby substantially increasing the ultimate recovery of oil from the pool by unit operations.

9. The proposed unitized method of operation as applied to the expansion area is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the unit than would otherwise be recovered.

10. The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.

11. Such unitization and adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Canada Ojitos Unit Area and the expansion area.

12. The Applicant has made a good faith effort to secure voluntary unitization of the lands.

13. The participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis, and protects the correlative rights of all owners of interest within the unit area.

14. The Unit Agreement and the Unit Operation Agreement admitted into evidence in this case should be incorporated by reference into this order.

15. The Statutory Unitization of the expansion area into the Canada Ojitos Unit Area, in conformance to the above findings, will prevent waste and protect correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

1. Division Order R-8344 is hereby amended to include an additional 320 acres, more or less, of federal lands comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, within the previously approved Canada Ojitos Unit, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation.

2. The lands covered by said Canada Ojitos Unit Agreement shall be designated the Canada Ojitos Unit Area and shall be amended to include the E/2 of Section 12, T25N, R2W.

3. The Canada Ojitos Unit Agreement and Unit Operating Agreement, admitted into evidence in this case are hereby incorporated by reference into this order.

4. The Canada Ojitos Unit Agreement and the Canada Ojitos Unit Operating Agreement provide for unitization and unit operation of the subject portion of the West Puerto Chiquito-Mancos Oil Pool upon terms and conditions that are fair, reasonable and equitable and include:

an allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

a provision governing how the costs of unit operations including capital investment shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the costs of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions determined by the Division Director to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, including a two hundred percent nonconsent penalty for drilling of wells and a fifty percent nonconsent penalty for investment adjustments, provided that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of its operating rights and working interest in and to the unit until his share of the costs, service charge and penalty or interest are repaid;

a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

a provision for voting procedure for deciding matters by the working interest owners which states that each working interest owner shall have a voting interest equal to its unit participation; and the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination;

and are therefore hereby adopted.

5. This order shall become effective at 7:00 a.m. on the last day of the month in which appropriate ratification of the Canada Ojitos Unit Agreement, as amended, and Canada Ojitos Unit Operating Agreement, as amended, is obtained pursuant to Section 70-7-8, NMSA, 1978 Compilation.

6. If the persons owning the required percentage of interest in the unit area as set out in Section 70-7-8, NMSA, 1978 Compilation, do not approve the plan for unit

operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Division, unless the Division shall extend the time for ratification for good cause shown.

7. When the persons owning the required percentage of interest in the unit area have approved the plan for unit operations, the interests of all persons in the unit are unitized whether or not such persons have approved the plan of unitization in writing.

8. Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

_____

WILLIAM J. LEMAY,
DIRECTOR

S E A L

/rs

RECEIVED

MAY 19 1989

OIL CONSERVATION DIVISION

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF
BENSON-MONTIN-GREER DRILLING CORP.
TO AMEND DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO. CASE NO. 9671

HEARING MEMORANDUM
BENSON-MONTIN-GREER DRILLING CORP.,
DUGAN PRODUCTION CORP. AND
SUN EXPLORATION AND PRODUCTION COMPANY

This matter is currently pending decision before Examiner Michael E. Stogner of the New Mexico Oil Conservation Division as a result of a hearing held on May 10 and 11, 1989.

During the course of the hearing several legal issues arose and the Examiner directed the parties to submit memoranda by noon on May 19, 1989 on those issues.

Benson-Montin-Greer Drilling Corp. ("BMG"), Dugan Production Corp. ("Dugan") and Sun Exploration and Production Company, now Oryx Energy Company ("Sun") submit this Hearing Memorandum in response to the Examiner's request.

Background

The New Mexico Oil Conservation Division ("Division") has authority to establish pools and to adopt special rules and regulations to govern their operation and development.[1] §70-2-18(C) N.M.S.A. (1978).

---

[1]See Section 70-2-18C, N.M.S.A. 1978, attached as Exhibit 1.

Pursuant to this authority, the Division has promulgated Special Rules and Regulations for the Gavilan Mancos Oil Pool, (Order R-7407, December 23, 1983;[2] Order R-7407-E, June 8, 1987[3]) and the West Puerto Chiquito-Mancos Oil Pool (Order R-2565-B, November 28, 1966). The Division has also approved a pressure maintenance project in the Canada Ojitos Unit (Order R-2544, August 9, 1963[4]) and Statutorily Unitized this Unit Area within the West Puerto Chiquito-Mancos Oil Pool (Order R-8344, November 7, 1986[5]).

During the past several years a number of questions concerning the development of the Mancos formation in this area have been the subject of Division and Oil Conservation Commission ("Commission") hearings. These hearings resulted in the entry of orders on August 5, 1988 in which the Commission found, among other matters, that the Gavilan Mancos Oil Pool ("Gavilan") and the West Puerto Chiquito-Mancos Oil Pool ("WPC") "... constitute a single source of supply...." (Finding 13, Order R-7407-F as amended to R-7407-G by Nunc Pro Tunc Order R-7407-F-1 and Finding No. 6, Order R-3401-B)[6]. The Commission also found that this common source of supply could be regulated as two separate pools.

In 1989 Dugan and Sun, working interest owners in the NE/4 of

---

[2]See Order R-7407 attached as Exhibit 2.

[3]See Order R-7407-E attached as Exhibit 3.

[4]See Order R-2544 attached as Exhibit 4.

[5]See Order R-8344 attached as Exhibit 5.

[6]See Order R-7407-G attached as Exhibit 6; See Order Order R-3401-B attached as Exhibit 6-A.

Section 12, Township 25 North, Range 2 West, requested that the operator of the Canada Ojitos Unit ("Unit") consider including the E/2 of Section 12 ("Expansion Area") in the Unit[7]. In response to that request, BMG filed this application to amend Order R-8344 and expand the Unit by Statutory Unitization.

This application was opposed at the time of hearing by Mobil, Amoco, Mallon, Mesa Grande Ltd. and Hooper, Kimball & Williams, Inc. ("the opponents"). It must be emphasized, however, that Mobil, Mallon and Mesa Grande Ltd. have no interests in either the Unit or the E/2 of Section 12 and, in fact, lack standing to challenge this application. Amoco only has 0.01% overriding royalty interest in the Unit and Hooper, Kimball & Williams, Inc. has only a 12.5% interest in the 320-acre Expansion Area.

In contrast to the minor ownership interests of the opponents, 89% of the working interest owners in the 69.568 acre Unit have approved the expansion, 10% have not yet responded and only 1% have responded in the negative. Furthermore, in the Expansion Area, 81.25% of the working interest ownership supports expansion of the Unit, 6.25% has not responded and 12.5% (Hooper, Kimball & Williams, Inc.) oppose expansion.

---

[7]A plat of the area showing the E/2 of Section 12 and the Current Unit Area is attached as Exhibit 7.

Point I

THE NEW MEXICO STATUTORY UNITIZATION ACT ALLOWS FOR THE EXPANSION OF THE UNIT TO INCLUDE THE EXPANSION AREA BECAUSE IT IS PART OF THE SAME COMMON SOURCE OF SUPPLY

The opponents contend that since the Division has classified the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool as two separate pools, acreage in Gavilan may not be unitized with acreage in WPC under the New Mexico Statutory Unitization Act.

This argument is designed to confuse and mislead the Division and is neither supported by law nor the facts of this case. Furthermore, it ignores the express language of the Statutory Unitization Act.

Unit operation of an oil and gas pool is defined as the combination, for operating purposes, of the separately owned tracts of land overlying **A COMMON SOURCE OF SUPPLY** and a division of the total production among the separate owners therein on a fair and equitable basis.

A customary feature of statutory unitization statutes is that they expressly or implicitly limit unitization to a common source of supply[8].

The underlying basis for finding a common source of supply before approving statutory unitization is obvious. If the acreage to be included in the Unit is not all within part of the same reservoir or common source of supply, then one part cannot be in

---

[8]Williams and Myers, Oil and Gas Law, Section 913.4 at 112, attached as Exhibit 8.

effective communication with the other and unitization will be of no benefit.

The opponents attempt to confuse and mislead the Division by focusing on the fact that here the Division administers this common source of supply as two pools. That fact is neither relevant nor important for the existence of a common source of supply controls and this issue has already been resolved by the Commission in Orders R-7407-G and R-6469-F[9] where it found:

> (13) the preponderance of the evidence demonstrates the Gavilan and WPC Pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

It is therefore clear that neither the existing WPC and Gavilan Pool boundaries do not need to be changed nor do the rules that govern these pools need to be amended before the E/2 of Section 12 may be statutorily unitized with the existing Unit.

The Commission not only found one single common source of supply but it went further by declaring in Order R-3401-B[10] that:

> (6) The two western most rows of sections inside the Unit area are in effective pressure communication with the Gavilan Mancos Pool as demonstrated by shut-in pressure measurements[11].

While the New Mexico Judiciary has not yet decided any case

---

[9]See Order R-6469-F attached as Exhibit 9.

[10]See Order R-3401-B attached as Exhibit 10.

[11]The two sections immediately to the east of the proposed Expansion Area, E/2 of Section 12, are part of the two westernmost rows of Sections referenced here.

involving the Statutory Unitization Act, Oklahoma has two cases that specifically discuss the prerequisite of "a common source of supply" in unitizing oil and gas pools. In both Jones Oil Company v. Continental Oil Company, 420 P.2d 905, 26 OGR 78 (Okla. 1966)[12] and Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 997 (1951)[13], the Oklahoma Supreme Court dealt with the issues of both the vertical extent and horizontal extent of the field (pool) to be unitized. Both cases found that the Statutory Unitization Act had been properly applied in one instance to a field containing 21 individual sand stringers and in the other case to the interrelation of the Commission definition of a field defined by a discovery well and the implementation of the Statutory Unitization Act.

In addition to the argument set forth above, the opponents argument also must fail for it is contrary to the express provisions of the New Mexico Statutory Unitization Act and established rules in New Mexico for statutory construction.

The Statutory Unitization Act expressly defines the term "pool" as follows:

> "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common

---

[12]See excerpt attached as Exhibit 11.

[13]See excerpt attached as Exhibit 12.

reservoir";... (emphasis added).[14]

The New Mexico Supreme Court has found that when a term is defined by statute, the term is interpreted in accordance with that definition. Buzbee v. Donnelly, 96 N.M. 692, 634 P.2d 1244, 1981).[15] The Tenth Circuit has also found that general definitions of a term may be used only when the term is not defined by statute. See, U.S. v. Mayberry, 774 F.2d 1018 (10th Cir. 1985).[16] New Mexico law therefore requires that the definition of pool in the Statutory Unitization Act be applied to this case.

Since, as noted above, the Commission has determined that Gavilan and WPC are a common source of supply, the E/2 of Section 12 and the WPC Pool are not only expressly within the definition of "pool" in the Statutory Unitization Act but the inclusion at the E/2 of Section 12 in the Unit is authorized by this statute.

Point II

EXPANSION OF THE EXISTING CANADA OJITOS UNIT AREA TO INCLUDE THE E/2 OF SECTION 12 WILL AVOID THE WASTE THAT WILL RESULT FROM THE DRILLING OF UNNECESSARY WELLS, WILL RESULT IN INCREASED RECOVERY OF OIL AND IS FULLY AUTHORIZED BY THE STATUTORY UNITIZATION ACT

This Point, like Point I of this Memorandum, requires review and construction of the New Mexico Statutory Unitization Act.

---

[14]See Section 70-7-4A, N.M.S.A. 1978, attached as Exhibit 13.

[15]See excerpts attached as Exhibit 14.

[16]See excerpt attached as Exhibit 15.

The Legislature stated the purpose of this Act as follows:

> The Legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act is applicable, to the end, that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units. (emphasis added).[17]

The New Mexico Supreme Court has found that a statute should be interpreted to mean that which the Legislature intended it to mean and to accomplish the end sought to be accomplished by it. State, ex rel., Newsome v. Alarid, 90 N.M. 790, 568 P.2d 1236 (1977).[18] This Court has also ruled that ..."statutes are to be interpreted with reference to their manifest object, and if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." Martinez v. Research Park Inc., 75 N.M. 672, 410 P.2d 200 (1965).[19]

Here opponents are attempting to defeat the purpose and the

---

[17]See Section 70-7-1, N.M.S.A. (1978) attached as Exhibit 16.

[18]See excerpt attached as Exhibit 17.

[19]See excerpt attached as Exhibit 18.

manifest object of the Statutory Unitization Act by proposing a construction of certain of its provisions that would defeat what the Legislature intended to accomplish by enacting this law. To do this the opponents argue that the expansion area has only a limited remaining future reserve potential, and that its inclusion in the unit area will not satisfy the requirements of §70-7-6(A)(2) N.M.S.A. 1978 which states:

> (2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered.[20]

Contrary to the express intent of the Statutory Unitization Act the opponents argue that the amount of producible reserves underlying each individual tract or lease in the proposed unit, somehow, must be shown to be capable of producing a significantly increased amount of oil under unit operations. Again, the opponents have misread the Statutory Unitization Act and have misapplied the facts.

All that §70-7-6(A) N.M.S.A. (1978) requires is that the proponents establish that within the "unitized portion" of the pool there be a substantial increase in the recovery of oil from the reservoir for the Unit. The evidence presented at the Examiner hearing clearly meet this requirement by establishing that a

---

[20]See Section 70-7-6(A)(2), N.M.S.A. 1978 attached as Exhibit 19.

minimum of 18,000 barrels of additional oil can be recovered by the Canada Ojitos Unit with the inclusion of the Expansion Area. The evidence also established that inclusion of the E/2 of Section 12 is the only viable option available to the owners of this acreage for the following reasons:

(1) The expansion area cannot independently support the drilling of a well.

(2) The expansion area cannot economically be joined with the W/2 of Section 12 to form a 640-acre spacing unit.[21]

(3) Even if the owners of the W/2 of Section 12 would agree to pooling at a minimal cost, this would be only a temporary solution since, in 1 to 2 years, the well in the W/2 of Section 12 will reach its economic limit, allowing underlying leases to expire.

(4) Further the pooling of the proposed expansion lands in a Gavilan 640-acre proration unit does not in itself avoid the drilling of an unnecessary well in the E/2 of Section 12. As noted in the testimony, this is a real concern of owners in the E/2 of Section 12 since at least one of the W/2 owners has expressed a desire to drill a second well in Section 12.

(4) Neither the purchase of leases from existing owners under

---

[21]The economics of forming a 640-acre Gavilan spacing unit are well established by similar prior cases (i.e. Sun's Loddy No. 1 in Section 20, Township 25 North, Range 2 West) and the insistence of similar terms by at least one of the working interest parties in the existing W/2 Section 12 well.

the expansion area nor letting these leases expire and repurchasing them will, in itself, develop the lands in the E/2 of Section 12 and put them in a producing status.

Further, the Unit Operator's testimony noted if the lands in the E/2 of Section 12 are not included in the Canada Ojitos Unit and a well drilled thereon, the Unit Operator would drill a protective well if the anticipated reduction in drainage to the offending well would equal the cost of drilling the unit protection well. This means at a drilling cost of $700,000 and an oil price of $15 per barrel, which would equate to the value of 60,000 barrels of oil. This volume approximates that anticipated as credit to the E/2 of Section 12 given a weighting factor of 1, which is the weighting factor recommended by the Unit Operator.

However, should the Commission disagree with the Unit Operator's recommendation, the statute provides that the Commission can set the equity factor at whatever level it elects. This authority of the Commission is balanced by the statute's further providing that the unitization does not become effective until it has been approved by the prescribed percentage of unit interest owners.

The Division therefore should enter its Order approving the application with the following findings:

(1) That the expansion area is in effective pressure communication with the existing unit area.[22]

---

[22] See, Jones, supra; and R-3401, Finding 6.

(2) That each tract in the expansion area can be productive of oil and gas from the same common source of supply that is being produced in the existing unit area.[23]

(3) That inclusion of the expansion area will substantially increase the ultimate recovery of oil from the expanded Unit area and is therefore necessary in order to prevent the waste of hydrocarbons.[24]

(4) Inclusion of the expansion area will protect the correlative rights of all interest owners within the expanded unit area.[25]

A majority of the working interest owners (81.25%) within the Expansion Area recognize the benefits of BMG's application and want the E/2 of Section 12, Township 25 North, Range 2 West included in the existing Unit for it is the only viable economic means of developing this acreage. A majority of the working interest owners (89%) in the existing unit, likewise, seek inclusion of this land in the Unit because of the savings and increased recovery that such inclusion will affect.

---

[23]See, 6 Williams and Myers, Section 913.8 at p. 122.4, excerpt attached as Exhibit 20.

[24]Testimony of Albert R. Greer and Richard Dillon, May 11, 1989.

[25]Testimony of John Roe, May 10, 1989 and Albert R. Greer, May 11, 1989.

Conclusion

The proponents have satisfied all the conditions of the New Mexico Statutory Unitization Act and are entitled to inclusion of the E/2 of Section 12 in the Canada Ojitos Unit. Without the inclusion of the Expansion Area in the Unit, one of the Division's primary duties will be violated for at least one unnecessary well will be drilled which will drain unit reserves that are now being pushed toward the Expansion Area by the Unit's pressure maintenance project and further undermine the effectiveness of this pressure maintenance project. By including the Expansion Area in the Unit, the drilling of this unnecessary well will be avoided and the drilling of an offsetting Unit protection well (also unnecessary) will not be required. Furthermore, substantial increased recovery of oil will result from the unitized portion of this common source of supply while production from Gavilan will remain unaffected.

Simple arithmetic shows that the unitized operation of the Canada Ojitos Unit has resulted in a substantial increase in the ultimate recovery of oil from the reservoir. Wells under Unit operations, on an average, are recovering in excess of four times as much as non-unit wells in this common source of supply. The owners in the undeveloped Expansion Area should be afforded the opportunity to participate in such a successful operation.

This application, therefore, should be granted for it will result in increase recovery of oil, will prevent the economic waste caused by the drilling of unnecessary wells and will serve to protect the correlative rights of all owners of interest in the

expanded unit area while not affecting the correlative rights of any offsetting interest owner.

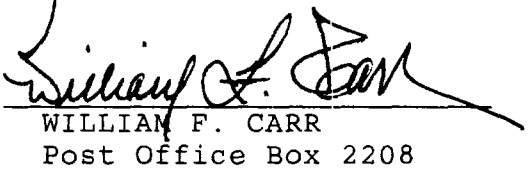
Respectfully submitted,

KELLAHIN, KELLAHIN & AUBREY

W. Thomas Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504
Telephone: (505) 982-4285

ATTORNEYS FOR DUGAN PRODUCTION CORP. AND SUN EXPLORATION AND PRODUCTION COMPANY now (ORYX ENERGY COMPANY)

CAMPBELL & BLACK, P.A.

By: 

WILLIAM F. CARR
Post Office Box 2208
Santa Fe, New Mexico 87504
Telephone: (505) 988-4421

ATTORNEYS FOR BENSON-MONTIN-GREER DRILLING CORP.

has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Elements of property right of natural gas owners. — The legislature has stated definitively the elements contained in property right of natural gas owners. Such right is not absolute or unconditional. It consists of merely (1) an opportunity to produce, (2) only insofar as it is practicable to do so, (3) without waste, (4) a proportion, (5) insofar as it can be practically determined and obtained without waste, (6) of gas in the pool. Continental Oil Co. v. Oil Conservation Comm'n, 70 N.M. 310, 373 P.2d 809 (1962).

Law reviews. — For article, "Compulsory Pooling of Oil and Gas Interests in New Mexico," see 3 Nat. Resources J. 316 (1963).

For comment on El Paso Natural Gas Co. v. Oil Conservation Comm'n, 76 N.M. 268, 414 P.2d 496 (1966), see 7 Nat. Resources J. 425 (1967).

For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 161, 164.

38 C.J.S. Mines and Minerals §§ 229, 230.

70-2-18. Spacing or proration unit with divided mineral ownership.

A. Whenever the operator of any oil or gas well shall dedicate lands comprising a standard spacing or proration unit to an oil or gas well, it shall be the obligation of the operator, if two or more separately owned tracts of land are embraced within the spacing or proration unit, or where there are owners of royalty interests or undivided interests in oil or gas minerals which are separately owned or any combination thereof, embraced within such spacing or proration unit, to obtain voluntary agreements pooling said lands or interests or an order of the division pooling said lands, which agreement or order shall be effective from the first production. Any division order that increases the size of a standard spacing or proration unit for a pool, or extends the boundaries of such a pool, shall require dedication of acreage to existing wells in the pool in accordance with the acreage dedication requirements for said pool, and all interests in the spacing or proration units that are dedicated to the affected wells shall share in production from the effective date of the said order.

B. Any operator failing to obtain voluntary pooling agreements, or failing to apply for an order of the division pooling the lands dedicated to the spacing or proration unit as required by this section, shall nevertheless be liable to account to and pay each owner of minerals or leasehold interest, including owners of overriding royalty interests and other payments out of production, either the amount to which each interest would be entitled if pooling had occurred or the amount to which each interest is entitled in the absence of pooling, whichever is greater.

C. Nonstandard spacing or proration units may be established by the division and all mineral and leasehold interests in any such nonstandard unit shall share in production from that unit from the date of the order establishing the said nonstandard unit.

History: 1953 Comp., § 65-3-14.5, enacted by Laws 1969, ch. 271, § 1; 1977, ch. 255, § 52.

Constitutionality. — Standards of preventing waste and protecting correlative rights, as laid out in 70-2-11 NMSA 1978, are sufficient to allow commission's power to prorate and create standard or nonstandard spacing units to remain intact, and this section is not unlawful delegation of legislative power under N.M. Const., art. III, § 1. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

The terms "spacing unit" and "proration unit" are not synonymous and commission has power to fix spacing units without first creating proration units. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Authority to pool separately owned tracts. — Since commission has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, the commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Creation of proration units, force pooling and participation formula upheld. — Commission's (now division's) findings that it would be unreasonable and contrary to spirit of conservation statutes to drill an unnecessary and economically wasteful well were held sufficient to justify creation of two nonstandard gas proration units, and force pooling thereof, and were supported by substantial evidence. Likewise, participation formula adopted by commission, which gave each owner a share in production in same ratio as his acreage bore to the acreage of whole, was upheld despite limited proof as to extent and character of the pool. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Law reviews. — For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 164, 172.

58 C.J.S. Mines and Minerals §§ 230, 240.

Exhibit 1

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 7980
Order No. R-7407

NOMENCLATURE

APPLICATION OF JEROME P. McHUGH
FOR THE CREATION OF A NEW OIL POOL
AND SPECIAL POOL RULES, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 16, 1983, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of December, 1983, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Jerome P. McHugh, seeks an order creating a new oil pool, vertical limits to be the Niobrara member of the Mancos formation, with special pool rules including a provision for 320-acre spacing, Rio Arriba County, New Mexico.

(3) That in companion Case 7979, Northwest Pipeline Company seeks an order deleting certain lands from the Basin Dakota Pool, the creation of a new oil pool with vertical limits defined as being from the base of the Mesaverde formation to the base of the Dakota formation, (the Mancos and Dakota formations), and the promulgation of special pool rules including a provision for 160-acre spacing, Rio Arriba County, New Mexico.

Exhibit 2

(4) That Cases 7979 and 7980 were consolidated for the purpose of obtaining testimony.

(5) That geological information and bottomhole pressur differentials indicate that the Mancos and Dakota Formations are separate and distinct common sources of supply.

(6) That the testimony presented would not support a finding that one well would efficiently drain 320 acres in the Dakota formation.

(7) That the Mancos formation in the area is a fractured reservoir with low porosity and with a matrix permeability characteristic of the Mancos being produced in the West Puerto Chiquito Mancos Pool immediately to the east of the area.

(8) That said West Puerto Chiquito-Mancos Pool is a gravity drainage reservoir spaced at 640 acres to the well.

(9) That the evidence presented in this case established that the gravity drainage in this area will not be as effective as that in said West Puerto Chiquito-Mancos Pool and that smaller proration units should be established therein.

(10) That the currently available information indicates that one well in the Gavilan-Mancos Oil Pool should be capable of effectively and efficiently draining 320 acres.

(11) That in order to prevent the economic loss caused b the drilling of unnecessary wells, to prevent reduced recovery of hydrocarbons which might result from the drilling of too many wells, and to otherwise prevent waste and protect correlative rights, the Gavilan-Mancos Oil Pool should be created with temporary Special Rules providing for 320-acre spacing.

(12) That the vertical limits of the Gavilan-Mancos Pool should be defined as: The Niobrara member of the Mancos formation between the depths of 6590 feet and 7574 feet as found in the Northwest Exploration Company, Gavilan Well No. 1, located in Unit A of Section 26, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.

(13) That the horizontal limits of the Gavilan-Mancos Oil Pool should be as follows:

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

(TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM)
Sections 19 through 30: All
Sections 33 through 36: All

(14) That to protect the correlative rights of interested parties in the West Puerto-Chiquito Mancos Oil Pool, it is necessary to adopt a restriction requiring that no more than one well be completed in the Gavilan-Mancos Oil Pool in the E/2 of each section adjoining the western boundary of the West Puerto Chiquito-Mancos Oil Pool, and shall be no closer than 1650 feet to the common boundary line between the two pools.

(15) That in order to gather information pertaining to reservoir characteristics in the Gavilan-Mancos Oil Pool and its potential impact upon the West Puerto Chiquito-Mancos Oil Pool, the Special Rules for the Gavilan-Mancos Oil Pool should provide for the annual testing of the Mancos in any well drilled in the E/2 of a section adjoining the West Puerto Chiquito-Mancos Pool.

(16) That the said Temporary Special Rules and Regulations should be established for a three-year period in order to allow the operators in the Gavilan-Mancos Oil Pool to gather reservoir information to establish whether the temporary rules should be made permanent.

(17) That the effective date of the Special Rules and Regulations promulgated for the Gavilan-Mancos Oil Pool should be more than sixty days from the date of this order in order to allow the operators time to amend their existing proration and spacing units to conform to the new spacing and proration rules.

IT IS THEREFORE ORDERED:

(1) That a new pool in Rio Arriba County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated as the Gavilan-Mancos Oil Pool, with the vertical limits comprising the Niobrara member of the Mancos shale as described in Finding No. (12) of this Order and with horizontal limits as follows:

GAVILAN-MANCOS OIL POOL
RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM
Sections 19 through 30: All
Sections 33 through 36: All

(2) That temporary Special Rules and Regulations for the Gavilan Mancos Oil Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
GAVILAN-MANCOS OIL POOL

RULE 1. Each well completed or recompleted in the Gavilan-Mancos Oil Pool or in a correlative interval within one mile of its northern, western or southern boundary, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. No more than one well shall be completed or recompleted on a standard unit containing 320 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental section.

RULE 3. Non-standard spacing or proration units shall be authorized only after proper notice and hearing.

RULE 4. Each well shall be located no nearer than 790 feet to the outer boundary of the spacing or proration unit, nor nearer than 330 feet to a governmental quarter-quarter section line.

RULE 5. That no more than one well in the Gavilan-Mancos Oil Pool shall be completed in the East one-half of any section that is contiguous with the western boundary of the West Puerto Chiquito-Mancos Oil Pool, with said well being located no closer than 1650 feet to said boundary.

RULE 6. That the operator of any Gavilan-Mancos Oil Pool well located in any of the governmental sections contiguous to the West Puerto Chiquito-Mancos Oil Pool the production from which is commingled with production from any other pool or formation and which is capable of producing more than 50 barrels of oil per day or which has a gas-oil ratio greater than 2,000 to 1, shall annually, during the month of April or May, conduct a production test of the Mancos formation production in each said well in accordance with testing procedures acceptable to the Aztec district office of the Oil Conservation Division.

IT IS FURTHER ORDERED:

(1) That the Special Rules and Regulations for the Gavilan-Mancos Oil Pool shall become effective March 1, 1984.

(2) That any well presently producing from the Gavilan-Mancos Oil Pool which does not have a standard 320-acre proration unit, an approved non-standard proration unit, or which does not have a pending application for a hearing for a standard or non-standard proration unit by March 1, 1984, shall be shut-in until a standard or non-standard unit is assigned the well.

(3) That this case shall be reopened at an examiner hearing in March, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the Gavilan-Mancos Oil Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JIM BACA, MEMBER

ED KELLEY, MEMBER

JOE D. RAMEY, CHAIRMAN AND SECRETARY

S E A L

STATE OF NEW MEX)
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

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

CASE NO. 7980

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

CASE NO. 8946

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

CASE NO. 9113

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

CASE NO. 9114

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

These causes came on for hearing on March 30 and 31 and April 1, 2, and 3, 1987 at Santa Fe, New Mexico before the Oil Conservation Commission of New Mexico hereinafter referred to as the "Commission."

NOW, on this 8th day of June, 1987, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearings and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of hearing, Cases 7980, 8946, 8950, 9113 and 9114 were consolidated for purposes of testimony.

(3) Case 7980 involves review of temporary pool rules promulgated by Order R-7407 and Case 8946 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit, under Order R-7407-D, both orders pertaining to the Gavilan-Mancos Oil Pool.

(4) Case 8950 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit under Order R-3401-A pertaining to the West Puerto-Chiquito-Mancos Oil Pool.

(5) Case 9113 involves a proposal to abolish the Gavilan-Mancos Oil Pool and consolidate that pool into the West Puerto-Chiquito-Mancos Oil Pool and Case 9114 involves a proposal to shift the boundary between Gavilan-Mancos and West Puerto Chiquito-Mancos Oil Pools.

(6) The evidence shows that there is limited pressure communication between the two designated pools, and that there are two weakly connected areas separated by some restriction at or near the common boundary of the two designated pools.

(7) The evidence shows there are three principal productive zones in the Mancos formation in both presently designated pools, designated A, B, and C zones listed from top to bottom and that, while all three zones are productive in both designated pools, West Puerto Chiquito produces primarily from the C zone and Gavilan produces chiefly from the A and B zones.

(8) It is clear from the evidence that there is natural fracture communication between zones A and B but that natural fracture communication is minor or non-existent between zones B and C.

(9) The reservoir consists of fractures ranging from major channels of high transmissibility to micro-fractures of negligible transmissibility, and possibly, some intergranular porosity that must feed into the fracture system in order for oil therein to be recovered.

(10) The productive capacity of an individual well depends upon the degree of success in communicating the wellbore with the major fracture system.

(11) Interference tests indicate: 1) a high degree of communication between certain wells, 2) the ability of certain wells to economically and efficiently drain a large area of at least 640 acres; and 3) the probability exists that the better wells recover oil from adjacent tracts and even more distant tracts if such tracts have wells which were less successful in connecting with the major fracture system.

(12) There is conflicting testimony as to whether the reservoir is rate-sensitive and the Commission should act to order the operators in West Puerto Chiquito and Gavilan-Mancos pools to collect additional data during 90-day periods of increased and decreased allowables and limiting gas-oil ratios.

(13) Two very sophisticated model studies conducted by highly skilled technicians with data input from competent reservoir engineers produced diametrically opposed results so that estimates of original oil in place, recovery efficiency and ultimate recoverable oil are very different and therefore are in a wide range of values.

(14) There was agreement that pressure maintenance would enhance recovery from the reservoir and that a unit would be required to implement such a program in the Gavilan-Mancos Pool.

(15) Estimates of the amount of time required to deplete the Gavilan pool at current producing rates varied from 33 months to approximately five years from hearing date.

(16) Many wells are shut in or are severely curtailed by OCD limits on permissible gas venting because of lack of pipeline connections and have been so shut in or curtailed for many months, during which time reservoir pressure has been shown by pressure surveys to be declining at 1 psi per day or more, indicating severe drainage conditions.

(17) No party requested making the temporary rules permanent, although certain royalty (not unleased minerals)

owners requested a return to 40-acre spacing, without presenting supporting evidence.

(18) Proration units comprised of 640 acres with the option to drill a second well would permit wider spacing and also provide flexibility.

(19) Recognizing that the two designated pools constitute two weakly connected areas with different geologic and operating conditions, the administration of the two areas will be simplified by maintaining two separate pools.

(20) A ninety day period commencing July 1, 1987, should be given for the connection for casinghead gas sale from now-unconnected wells in the Gavilan pool, after which allowables should be reduced in that pool until said wells are connected.

(21) To provide continuity of operation and to prevent waste by the drilling of unnecessary wells, the temporary spacing rules promulgated by Order R-7407 should remain in effect until superceded by this Order.

(22) Rules for 640-acre spacing units with the option for a second well on each unit should be adopted together with a provision that units existing at the date of this order should be continued in effect.

IT IS THEREFORE ORDERED THAT:

(1) The application of Benson-Montin-Greer et al in Case No. 9113 to abolish the Gavilan-Mancos pool and extend the West Puerto Chiquito-Mancos pool to include the area occupied by the Gavilan-Mancos Pool is denied.

(2) The application of Mesa Grande Resources, Inc. for the extension of the Gavilan-Mancos and the concomitant contraction of West Puerto Chiquito-Mancos Pool is denied.

(3) Rule 2 of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor

gas under such circumstances as to minimize waste as determined by the Director.

(7) The temporary special pool rules promulgated by Order R-7407 are hereby extended to the effective date of this order and said rules as amended herein are hereby made permanent.

(8) This case shall be reopened at a hearing to be held in May, 1988 to review the pools in light of information to be gained in the next year and to determine if further changes in rules may be advisable.

(9) Jurisdiction of this cause is retained for entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2871
Order No. R-2544

APPLICATION OF BOLACK-GREER, INC.,
FOR APPROVAL OF THE CANADA OJITOS
UNIT AGREEMENT, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 7, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 9th day of August, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Bolack-Greer, Inc., seeks approval of the Canada Ojitos Unit Agreement covering 35,829.84 acres, more or less, of Federal and Fee lands in Townships 25 and 26 North, Ranges 1 East and 1 West, NMPM, Rio Arriba County, New Mexico.

(3) That approval of the proposed Canada Ojitos Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Canada Ojitos Unit Agreement is hereby approved.

(2) That the plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Canada Ojitos Unit Area, and such plan shall be known as the Canada Ojitos Unit Agreement Plan.

(3) That the Canada Ojitos Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Canada Ojitos Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 25 NORTH, RANGE 1 EAST	
Sections 6 and 7:	All
Section 18:	All
Section 19:	W/2
TOWNSHIP 25 NORTH, RANGE 1 WEST	
Sections 1 through 4:	All
Sections 9 through 16:	All
Sections 21 through 28:	All
Sections 33 through 35:	All
Section 36:	W/2
TOWNSHIP 26 NORTH, RANGE 1 EAST	
Section 19:	All
Sections 30 and 31:	All
TOWNSHIP 26 NORTH, RANGE 1 WEST	
Sections 1 through 4:	All
Section 5:	E/2
Section 8:	E/2
Sections 9 through 16:	All
Section 17:	E/2
Section 20:	E/2
Sections 21 through 28:	All
Sections 33 through 36:	All

containing 35,829.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Canada Ojitos Unit Agreement within 30 days after the effective date thereof.

In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

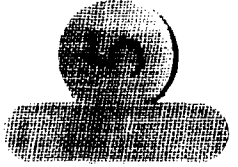
JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 8952
Order No. R-8344

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR STATUTORY
UNITIZATION, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION:

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a.m. on October 24, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of November, 1986, the Commission, a quorum being present, having considered the testimony, the record, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The Applicant, Benson-Montin-Greer Drilling Corp., seeks the statutory unitization, pursuant to the "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, N.M.S.A., 1978 Compilation, of 69,567.235 acres, more or less, of federal, state and fee lands, being a portion of the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, and approval of the plan of unitization and the proposed operating plan.

(3) The proposed unit area should be designated the Canada Ojitos Unit Area; the vertical limits of said unit area will be the subsurface formation commonly known as the Mancos formation identified between the depths of 6968 feet and 7865 feet on the Schlumberger Induction Electrical Log, dated June 18, 1963, in the Canada Ojitos 0-9 Well (previously the Bolack-Greer No. 1 Bolack) located 1080 feet from the South line and 1920 feet from the East line of Section 9, Township 26 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and

is to include all subsurface points throughout the unit area correlative to those identified depths, and the unit area should comprise the following described lands:

RIO ARRIBA COUNTY, NEW MEXICO

Township 24 North, Range 1 East, NMPM
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Section 18: All
Section 19: N/2
Section 20: NW/4

Township 24 North, Range 1 West, NMPM
Sections 1 through 15: All
Section 23: N/2
Section 24: N/2

Township 25 North, Range 1 East, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All

Township 25 North, Range 1 West, NMPM
Sections 1 through 36: All

Township 26 North, Range 1 East, NMPM
Section 19: All
Section 20: W/2
Sections 29 through 32: All

Township 26 North, Range 1 West, NMPM
Sections 1 through 36: All

(4) The portion of the West Puerto Chiquito-Mancos Oil Pool proposed to be included in the aforesaid Canada Ojitos Unit Area has been reasonably defined by development.

(5) The Applicant operates a pressure maintenance project for the secondary recovery of oil and gas in the proposed unit area.

(6) The unitized management, operation and further development of the subject portion of the West Puerto Chiquito-Mancos Oil Pool, as proposed, is reasonably necessary in order to effectively carry on secondary recovery operations and

to substantially increase the ultimate recovery of oil from the pool.

(7) The proposed unitized method of operation as applied to the Canada Ojitos Unit Area is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the pool than would otherwise be recovered.

(8) The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.

(9) Such unitization and adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Canada Ojitos Unit Area.

(10) The Applicant has made a good faith effort to secure voluntary unitization within the West Puerto Chiquito-Mancos Oil Pool.

(11) The participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis, and protects the correlative rights of all owners of interest within the unit area.

(12) The Unit Agreement and the Unit Operating Agreement admitted into evidence in this case should be incorporated by reference into this order.

(13) The Statutory Unitization of the Canada Ojitos Unit Area, in conformance to the above findings, will prevent waste and protect correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The Canada Ojitos Unit Agreement, covering 69,567.235 acres, more or less, of federal, state and fee lands in the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation.

(2) The lands covered by said Canada Ojitos Unit Agreement shall be designated the Canada Ojitos Unit Area and shall comprise:

RIO ARRIBA COUNTY, NEW MEXICO

Township 24 North, Range 1 East, NMPM
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Section 18: All
Section 19: N/2
Section 20: NW/4

Township 24 North, Range 1 West, NMPM
Sections 1 through 15: All
Section 23: N/2
Section 24: N/2

Township 25 North, Range 1 East, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All

Township 25 North, Range 1 West, NMPM
Sections 1 through 36: All

Township 26 North, Range 1 East, NMPM
Section 19: All
Section 20: W/2
Sections 29 through 32: All

Township 26 North, Range 1 West, NMPM
Sections 1 through 36: All

(3) The vertical limits of the Canada Ojitos Unit Area shall be the Mancos formation identified between the depths of 6968 feet and 7865 feet on the Schlumberger Induction Electrical Log dated June 18, 1963, in the Canada Ojitos 0-9 Well (previously the Bolack-Greer No. 1 Bolack), located 1080 feet from the South line and 1920 feet from the East line of Section 9, Township 26 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and is to include all subsurface points throughout the unit area correlative to those identified depths.

(4) The Canada Ojitos Unit Agreement, admitted into evidence in this case as a portion of Exhibit 1, is hereby incorporated by reference into this order.

(5) The Canada Ojitos Unit Operating Agreement, admitted into evidence in this case as a portion of Exhibit 1, is hereby incorporated by reference into this order.

(6) The Canada Ojitos Unit Agreement and the Canada Ojitos Unit Operating Agreement provide for unitization and unit operation of the subject portion of the West Puerto Chiquito-Mancos Oil Pool upon terms and conditions that are fair, reasonable and equitable and include:

an allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the costs of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions determined by the Division Director to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, including a two hundred percent nonconsent penalty, provided that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of its operating rights and working interest in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator, including a two hundred percent nonconsent penalty;

a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

a provision for a voting procedure for deciding matters by the working interest owners which states that each working interest owner shall have a voting interest equal to its unit participation; and

the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination;

and are therefore hereby adopted.

(7) This order shall become effective at 7:00 o'clock a.m. on the first day of the month following the month in which appropriate ratification of the Canada Ojitos Unit Agreement and Canada Ojitos Unit Operating Agreement is obtained pursuant to Section 70-7-8, N.M.S.A., 1978 Compilation.

(8) If the persons owning the required percentage of interest in the unit area as set out in Section 70-7-8, N.M.S.A., 1978 Compilation, do not approve the plan for unit operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Commission, unless the Commission shall extend the time for ratification for good cause shown.

(9) When the persons owning the required percentage of interest in the unit area have approved the plan for unit operations, the interests of all persons in the unit are unitized whether or not such persons have approved the plan of unitization in writing.

(10) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

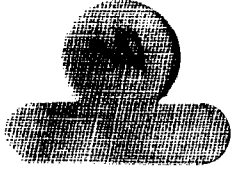
JIM BACA, Member

ED KELLEY, Member

R. L. STAMETS, Secretary and Chairman

S E A L

dr/



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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-~~F~~G
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Cavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Cavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

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

REOPENED CASES NO. 7980, 8946 AND 8950
ORDER NO. R-7407-F-1
ORDER NO. R-6469-F-1

REOPENING CASES 7980, 8946 AND 8950
FOR FURTHER TESTIMONY AS PROVIDED BY
ORDER R-7407-E IN REGARD TO THE
GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D
IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS
OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Oil Conservation Commission of New Mexico (Commission) that the combined order (Order Nos. R-7407-F and R-6469-F) issued in Reopened Case Nos. 7980, 8946 and 8950 and dated August 5, 1988, does not correctly state the intended order of the Commission;

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-7407-F being inadvertently issued twice, the first in Reopened Case 7980 heard before the Commission on March 17, 1988, and the second being erroneously issued in the immediate case as described above; therefore, all references to "Order No. R-7407-F" throughout said order issued in Reopened Case Nos. 7980, 8946 and 8950, dated August 5, 1988, are hereby amended to read "Order No. R-7407-G."

(2) The corrections set forth in this order be entered nunc pro tunc as of August 5, 1988.

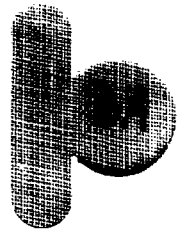
DONE at Santa Fe, New Mexico, on this 17th day of August, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and
Secretary



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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and tne subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection gas in the I_g term of the formula above.

(3) The Aztec district office of the Division, with due counselling and advice from pool operators, shall, by October 1, 1988, develop a program for semi-annual bottomhole pressure surveys of wells in both pools located not less than 3/8 mile and not more than 1 1/2 miles from the common pool boundary, designed to measure accurately the pressure differential across the pool boundary and to be used as a basis for adjusting the gas injection credit to wells in the expansion area. The program shall be presented for approval to the Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hearing, to offset any advantage gained by wells on either side of the common boundary of the Gavilan and West Puerto Chiquito Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

LANDS BY CLASSIFICATION
CAÑADA OJITOS UNIT

FEDERAL ACREAGE	63,477.775	91.25%
STATE ACREAGE	559.390	80%
PATENTED ACREAGE	5,530.070	7.95%
TOTAL ACREAGE	69,567.235	100.00%

T 26 N

R I E

T 26 N

T 25 N

T 25 N

T 24 N

T 24 N

R I W

R I E

EXHIBIT "A"
CAÑADA OJITOS UNIT
RIO ARRIBA CO., NEW MEXICO

BOUNDARY OF 12th REVISION OF NIOBRARA-GREENHORN PARTICIPATING AREA

LEGEND

- Federal Land
- State Land
- Patented Land

Exhibit 7

[Common source of supply]

Unitization statutes appear customarily to include some reference to a "common source of supply" which expressly or implicitly limits unitization to such a common source. Thus the Oklahoma statute provides that:

> "Each unit and unit area shall be limited to all or a portion of a single common source of supply. Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual operations may be so included within the unit area."[2]

The meaning of the term "common source of supply" as used in the compulsory unitization statute has been discussed in cases arising in Oklahoma. In *Jones Oil Co. v. Corporation Commission*,[3] the commission issued an order unitizing three producing sands despite the contention that there were three common sources of supply rather than the one common source required by the statute. On the basis of evidence that some sixty-one wells had been completed in and produced from two or more of these sands and the production therefrom was com-

---

§ 913.4

[2] 52 Okla. Stat. § 287.4. A similar provision was included in the 1945 Unitization Act. 52 Okla. Stat. § 286.5.

[3] Jones Oil Co. v. Corporation Comm'n, 382 P.2d 751, 18 *O.&G.R.* 1041 (Okla. 1963), *cert. denied*, 375 U.S. 931, 19 *O.&G.R.* 362 (1963).

mingled, the court concluded that the order was valid, declaring that:

> "With this contention we cannot agree. The fact remains that oil is being produced from these three sands through the same well-bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S. 1961 § 287.1. . . . We can see nothing wrong in the Corporation Commission designating these three sands as a common source of supply. . . . For us to hold otherwise on this Point would violate the spirit of unitization."[4]

In *Palmer Oil Corp. v. Phillips Petroleum Co.*,[5] the contention was made that a unitization order was invalid since the unit was not limited to a common source of supply and since the unitized area had not been reasonably defined by actual drilling operations. In rejecting the contention, the court commented as follows:

> "The finding of the Commission (in paragraph 2) which is di-

---

[4] 382 P.2d at 752–753, 18 *O.&G.R.* at 1043–1044.

In Jones v. Continental Oil Co., 420 P.2d 905, 26 *O.&G.R.* 78 (Okla. 1966), the court sustained a unitization order involving twenty-one sand stringers underlying the lands, concluding that there was evidence of a substantial nature that all of the twenty-one producing sands were in communication with each other as a result of the completion and production practices used in the field.

In Cameron v. Corporation Comm'n, 418 P.2d 932, 25 *O.&G.R.* 535 (Okla. 1966), the court held that the Corporation Commission exceeded its authority under the Well Spacing Act in creating well spacing units when it was not established by substantial evidence that the area sought to be spaced was underlaid by a common source or supply.

> "That the existence of a source of supply common to lands covered by a spacing order is a necessary prerequisite to the jurisdiction of the Commission to enter such an order, is shown by the wording of our Conservative Statutes, and has always been recognized by this Court," 418 P.2d at 938, 25 *O.&G.R.* at 544.

[5] Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 977 (1951), *appeal dismissed sub nom.*, Palmer Oil Corp. v. Amerada Petroleum Corp., 343 U.S. 390, 1 *O.&G.R.* 876 (1952). This case was concerned with the 1945 Act, 52 Okla. Stat. § 286.5.

rectly responsive to the issue is as follows: '... that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool.'

"The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence.... Since the evidence before the Commission was competent and sufficient if believed, to sustain the order we must, and do, hold that the order is sustained by the evidence and that the contention is without merit."[6]

As to the contention that the boundaries had not been defined by actual drilling operations as required by the act, the court concluded that:

"Actual drilling upon the undrilled tracts or within a definite proximity thereto is neither prescribed by the statute nor by law.... The only prescription is that the source of supply must have been reasonably defined thereby. The drilling operations required are simply those the evidentiary force of which is sufficient to justify a conclusion, by those capable in law of weighing the facts as to the existence of the source of supply. There is unanimity in the testimony herein that the wells drilled afforded sufficient evidence to define the common source of supply

[6] 231 P.2d at 1008–1009.

within the unit area and the Commission so found. We hold that said attack upon the order is without merit."[7]

[Discovery well]

The same case, *Palmer Oil Corp. v. Phillips Petroleum Co.*, was also concerned with the meaning of the term "field" as employed in a provision of the 1945 Act exempting from compulsory unitization any field in which the discovery well had been drilled twenty years prior to the effective date of the act.[8] The first discovery of oil and gas in the area occurred in 1917 but the unitized sand had not been discovered until 1936. The court commented as follows:

"the only logical deduction to be made, when considering the Act as a whole, is that the discovery well, in the mind of the Legislature, is that well in the field that discovered the common source of supply which is the subject of the unification. To hold otherwise would not only defeat the legislative intent herein but in other situations as well because the court takes judicial knowledge of the fact major pools have been and may yet be discovered in areas where many years ago oil had been discovered in upper and shallower sands which have become practically if not completely depleted."[9]

[7] 231 P.2d at 1010.

[8] 52 Okla. Stat. § 286.2.

[9] 231 P.2d at 1011–1012.

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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-F
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and tne subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} - TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection gas in the l_g term of the formula above.

(3) The Aztec district office of the Division, with due counselling and advice from pool operators, shall, by October 1, 1988, develop a program for semi-annual bottomhole pressure surveys of wells in both pools located not less than 3/8 mile and not more than 1 1/2 miles from the common pool boundary, designed to measure accurately the pressure differential across the pool boundary and to be used as a basis for adjusting the gas injection credit to wells in the expansion area. The program shall be presented for approval to the Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hearing, to offset any advantage gained by wells on either side of the common boundary of the Gavilan and West Puerto Chiquito Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

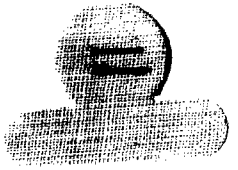
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L



create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, are a single common source of supply of oil and gas."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order, that it is supported by substantial evidence, and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

> "The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:
>
> 'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'
>
> "* * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a single massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by

create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, are a single common source of supply of oil and gas."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order, that it is supported by substantial evidence, and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

"The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:

'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'

" * * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a single massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by

due to the fact that his interests in the lands are fixed by the judgment in favor of the defendant, Mrs. Lee Aulick, who died after the judgment herein was appealed from.

The question as to the ownership of the $500.00 in the bank in Carmen is not involved in this suit, and we express no opinion thereon.

Judgment affirmed.

PALMER OIL CORP. et al. v. PHILLIPS PETROLEUM CO. et al.

STERBA et al. v. CORPORATION COMMISSION et al.

Nos. 33336, 33708.

Supreme Court of Oklahoma.
March 20, 1951.

Petitions for Rehearing Denied May 22, 1951.

Applications for Leave to File Second Petition for Rehearing Denied June 5, 1951.

Proceedings before the Corporation Commission by the Phillips Petroleum Company and others, lessees who petitioned for the creation of a unit having for its purpose the unitized management, operation and further development of what is known as the West Cement Medrano common source of supply of oil and gas. The Palmer Oil Corporation and others, lessees, lessors and royalty owners protested. From an order of the Commission creating the unit, protestants appealed. Original action by the Palmer Oil Corporation and others, against the Corporation Commission for a writ of prohibition. The Supreme Court, Gibson, J., held that the Unitization Act was not unconstitutional and that the order of the Corporation Commission creating the unit was not contrary to either the law or the evidence.

Order affirmed. Writ denied.

Luttrell, V. C. J., and Welch, Davison and O'Neal, JJ., dissented.

1. Constitutional law ⇐148
Mines and minerals ⇐92.4

The Unitization Act is not unconstitutional as unreasonable in that in the formation of the unit and in the committee management thereof, lessees only are recognized, that the act imposes an unauthorized burden upon royalty interest in the production, that it imposes an unauthorized burden upon the leased premises of the lessor and that it is violative of the obligation of contracts. 52 O.S.Supp. §§ 286.1 to 286.17; O.S.1941 Const. art. 2, §§ 7, 15, 23, 24; art. 5, § 51; U.S.C.A.Const. art. 1, § 10; Amend. 14.

2. Constitutional law ⇐70(3)

The authority of the legislature in dealing with matters of policy is without the scope of judicial inquiry.

3. Constitutional law ⇐253

The legislature is itself a judge of conditions warranting legislative enactments and they are only to be set aside when they involve such palpable abuse of power and lack of reasonableness to accomplish a lawful end that they may be said to be arbitrary, capricious and unreasonable and hence irreconcilable with the conception of due process of law. U.S.C.A.Const. Amend. 14.

4. Constitutional law ⇐70(3)

Whether enactment is wise or unwise, whether it is based on sound economic theory, whether it is the best means to achieve the desired result are ordinarily matters for the judgment of the legislature and the earnest conflict of serious opinion does not bring it within the range of judicial cognizance.

5. Constitutional law ⇐64
Mines and minerals ⇐92.4

The Unitization Act is not invalid as an unconstitutional delegation of legislative power because of the provision requiring a petition of lessees of record of more than 50 per cent of the area of the common source of supply in order to give the Corporation Commission jurisdiction under the act to create a unit. 52 O.S.Supp. §§ 286.1 to 286.17.

6. Mines and minerals ⇐92.4

The Unitization Act does not impose an undue burden upon royalty because of provisions treating a royalty interest that is in excess of one-eighth of the production,

Exhibit 12

trusted to the Commission because it is thought to be peculiarly experienced and fitted for the purpose and it is not to be contemplated that the courts may substitute their notions of expediency and fairness for that of the Commission. Peppers Refining Co. v. Corporation Commission, 198 Okl. 451, 179 P.2d 899; Denver Producing & Refining Co. v. State supra.

In the light of these governing rules we consider the several alleged grounds of error in making the order.

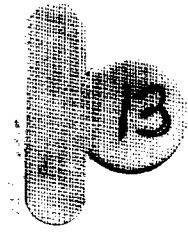
It is contended that the area of the West Cement Medrano Unit is not limited to one "common source of supply."

[11] Under the Act, a unit must be limited to a common source of supply. The Act does not in express terms define a common source of supply, but there was at the time of the enactment a legislative definition of the term, 52 O.S.1941 § 84(c), now 52 O.S.Supp.1947 § 86.1(c), and we construe such definition as a part of the Act. Therein, the term is thus defined: "(c) The term 'Common Source of Supply' shall comprise and include that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid by a common accumulation of oil or gas or both; provided that if any such area is underlaid or appears from geological or other scientific data or from drilling operations or other evidence to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by a strata of earth and not connected with each other, then such area, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply;".

That more than one common source of supply may exist in a given sand appears to be recognized in the statute and in H. F. Wilcox Oil & Gas Co. v. State, 162 Okl. 89, 19 P.2d 347, 86 A.L.R. 421, we held that more than one common source of supply could obtain in such sand by reason of faults that constitute impervious barriers between segments thereof.

.The existence of faults in the unit area is recognized and the question before Commission was whether the segments of the sand were disconnected by reason of the faults. The finding of the Commission (in paragraph 2) which is directly responsive to the issue is as follows: "* * * that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool."

[12, 13] The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence. Under the holding of this court and that of courts generally, Chicago, R. I. & P. Ry. Co. v. Pruitt, 67 Okl. 219, 170 P. 1143; 22 C.J. 728, sec. 823, 32 C.J.S., Evidence, § 567, p. 378, the weight to be given opinion evidence is, within the bounds of reason, entirely for the determination of the jury or of the court, when trying an issue of fact, it taking into consideration


13

70-7-4. Definitions.

For the purposes of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], unless the context otherwise requires:

A. "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common reservoir";

B. "oil and gas" means crude oil, natural gas, casinghead gas, condensate or any combination thereof;

C. "waste," in addition to its meaning in Section 70-2-3 NMSA 1978, shall include both economic and physical waste resulting, or that could reasonably be expected to result, from the development and operation separately of tracts that can best be developed and operated as a unit;

D. "working interest" means an interest in unitized substances by virtue of a lease, operating agreement, fee title or otherwise, excluding royalty owners, owners of overriding royalties, oil and gas payments, carried interests, mortgages and lien claimants but including a carried interest, the owner of which is primarily obligated to pay, either in cash or out of production or otherwise, a portion of the unit expense; however, oil and gas rights that are free of lease or other instrument creating a working interest shall be regarded as a working interest to the extent of seven-eighths thereof and a royalty interest to the extent of the remaining one-eighth thereof;

E. "working interest owner" or "lessee" means a person who owns a working interest;

F. "royalty interest" means a right to or interest in any portion of the unitized substances or proceeds thereof other than a working interest;

G. "royalty owner" means a person who owns a royalty interest;

H. "unit operator" means the working interest owner, designated by working interest owners under the unit operating agreement or the division to conduct unit operations, acting as operator and not as a working interest owner;

I. "basic royalty" means the royalty reserved in the lease but in no event exceeding one-eighth; and

J. "relative value" means the value of each separately owned tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of said factors, or such other pertinent engineering, geological, operating or pricing factors, as may be reasonably susceptible of determination.

History: 1953 Comp., § 65-14-4, enacted by Laws 1975, ch. 293, § 4; 1977, ch. 255, § 110.

70-7-5. Requisites of application for unitization.

Any working interest owner may file an application with the division requesting an order for the unit operation of a pool or any part thereof. The application shall contain:

A. a description of the proposed unit area and the vertical limits to be included therein with a map or plat thereof attached;

B. a statement that the reservoir or portion thereof involved in the application has been reasonably defined by development;

C. a statement of the type of operations contemplated for the unit area;

D. a copy of a proposed plan of unitization which the applicant considers fair, reasonable and equitable;

IT IS FURTHER ORDERED that this matter be, and it hereby is, referred to this Court's Disciplinary Board with direction immediately to assign it to Hearing Committee C, Southern District (Ben S. Shantz, Chairman) and Disciplinary Counsel is directed immediately to file a petition instituting formal proceedings hereon before such hearing committee.

96 N.M. 692

In the Matter of Harold M. MORGAN, Esquire.

No. 13231.

Supreme Court of New Mexico.

Sept. 9, 1981.

Disciplinary Proceeding.

IT HAVING BEEN MADE TO APPEAR TO THE COURT by affidavit of Glen L. Houston, Attorney at Law, that the respondent, HAROLD M. MORGAN, has served the time heretofore prescribed for practice under probationary conditions and supervision by our Order of August 13, 1980, 95 N.M. 653, 625 P.2d 582, and has fully complied with the conditions of his probation;

NOW IT IS ORDERED that HAROLD M. MORGAN, Esquire, be and he hereby is released from probation and the conditions thereof with respect to his license to practice law in the courts of this state.

96 N.M. 692

Richard BUZBEE, Reggie D. Bell, and Richard Chapman, Petitioner and Intervenors,

v.

Hon. Thomas A. DONNELLY, Hon. Lorenzo F. Garcia, Hon. Bruce E. Kaufman, District Judges, Respondents.

STATE of New Mexico, Plaintiff-Appellee,

v.

Richard Nave CHAPMAN, et al., and Narciso Telles Flores, et al., Defendants-Appellants.

Nos. 13783, 13789.

Supreme Court of New Mexico.

Sept. 25, 1981.

Rehearing Denied Oct. 23, 1981.

Prison inmates, indicted for murdering other inmates, moved to dismiss the indictments on the ground that exculpatory evidence had been withheld from the grand jury. When the motions were denied, the inmates brought interlocutory appeals or sought writs of prohibition. The cases were consolidated on appeal. The Supreme Court, Easley, C. J., held that: (1) prosecutor properly withheld inmates' self-serving statements from grand jury since statements were not such evidence as would be admissible at trial; (2) prosecutor had no duty to submit to grand jury circumstantial exculpatory evidence bearing on credibility of witnesses who testified; and (3) failure of prosecutor to submit such exculpatory evidence to grand jury did not violate inmates' due process right to fair trial.

Affirmed and remanded.

Sosa, Senior Justice, and Wood, Senior Judge, Court of Appeals, dissented and filed opinion.

1. Grand Jury ⇐36.2

Statute requiring prosecutor to present to grand jury evidence that directly negates

not identified the same defendant in his prior statement.

3. A witness, who did not testify before the grand jury, said in a statement that the way a murder was carried out was different than what was described by other witnesses before the grand jury.

4. A witness, who testified before the grand jury, named other persons as participants but not the defendant.

5. A witness whose grand jury testimony implicated a defendant had given a previous statement in which he was confused as to the identity of the defendant.

6. Statements that the killers were masked.

7. Statements that a defendant was present for a while at a killing, but the witness did not see the defendant participate in the killing.

8. A witness, who testified before the grand jury, but changed his mind or made a mistake as to the identity of the perpetrator in his prior statement.

[3] Although this indirect or circumstantial evidence may be inconsistent with that presented to the grand jury, we inquire whether it directly negates guilt. Basic to the analysis of this issue is a determination of the legislative intent in specifying that evidence *directly* negating guilt should be furnished the grand jury. A most logical assumption is that the intent was also to proscribe the use of evidence *indirectly* negating guilt. When a statute uses terms of art, we interpret these terms in accordance with case law interpretation or statutory definition of those words, if any. *See State v. Aragon*, 55 N.M. 423, 234 P.2d 358 (1951); *State v. Grissom*, 35 N.M. 323, 298 P. 666 (1931); *Burch v. Ortiz*, 31 N.M. 427, 246 P.2d 908 (1926); *Bradley v. United States*, 410 U.S. 605, 93 S.Ct. 1151, 35 L.Ed.2d 528 (1973).

Neither the statutes nor case law give us any help with a specific definition of the term "directly negating" guilt. However, given the history of the statutes here, where hearsay and secondary evidence were specifically not allowed for 115 years and the fact that the law was then changed to allow any evidence that would be admissible at trial, we believe the Legislature was thinking in terms of the traditional categories of evidence. The only common sense explanation for the use of the words in question is that the Legislature intended to permit the use of *direct* evidence negating guilt and to prohibit the use of indirect, or circumstantial, evidence negating guilt.

[4] Direct evidence is evidence which, if believed, proves the existence of the fact without inference or presumption. *People v. Thomas*, 87 Cal.App.3d 1014, 151 Cal. Rptr. 483 (Ct.App.1979); *State v. Thompson*, 519 S.W.2d 789 (Tenn.1975); *Frazier v. State*, 576 S.W.2d 617 (Tex.Cr.App.1978). Direct evidence is actual knowledge gained through a witness' senses. *State v. Hubbard*, 351 Mo. 143, 171 S.W.2d 701 (1943); *see also State v. Farrington*, 411 A.2d 396 (Me.1980); *State v. Musgrove*, 178 Mont. 162, 582 P.2d 1246 (1978).

The court in *State v. Lewis*, 177 Neb. 173, 128 N.W.2d 610, 613 (1964), used the following definition: "Otherwise stated, direct evidence is proof of facts by witnesses who saw acts done or heard words spoken, while circumstantial evidence is proof of collateral facts and circumstances from which the mind infers the conclusion that the facts sought to be established in fact existed." *United Textile Workers v. Newberry Mills, Inc.*, 238 F.Supp. 366, 372 (W.D.S.C.1965).

[5] All of the withheld evidence in our case, other than the self-serving statements of defendants, is circumstantial in nature. It does not directly negate the guilt of the defendants. It must be aided by inferences or presumptions. The prosecutor had no duty under the statutes to submit this evidence to the grand jury.

Our decision on this issue differs in part with the theory expressed in dicta by the Court of Appeals in *State v. Herrera*, 93 N.M. 442, 601 P.2d 75 (N.M.App.1979), and followed in later cases, which holds that knowingly withholding *exculpatory* evidence from a grand jury denies the defendant due process. That Court obviously

considered the EPA's several responses to this argument, including its contention that any error was harmless. We are not persuaded by such arguments and cannot agree that the ALJ did not rely considerably on the letter in assessing the civil penalty. We conclude therefore that the penalty assessed of $21,000 must be vacated and that this penalty issue must be remanded to the agency for reconsideration, without consideration being given to the October 4, 1977, letter (Tr. Ex. C–1) as having afforded notice to Yaffe of the presence of PCBs.

CONCLUSION

In sum, we find no reversible error requiring that we set aside the findings by the EPA of the violations by Yaffe. However, the assessment of the civil penalty must be vacated for the reasons stated above and the cause is remanded to the agency for further proceedings to reconsider the civil penalty of $21,000 assessed against petitioner Yaffee.

IT IS SO ORDERED.

UNITED STATES of America, Plaintiff-Appellee,

v.

Charles E. MAYBERRY, Defendant-Appellant.

No. 85-1405.

United States Court of Appeals, Tenth Circuit.

Oct. 7, 1985.

Defendant was convicted before the United States District Court for the District of New Mexico, Howard C. Bratton, Chief Judge, of breaking and entering a dwelling located on a federal enclave, and he appealed. The Court of Appeals, John P. Moore, Circuit Judge, held that special assessments imposed upon defendant pursuant to statute providing for such assessments to generate income to offset cost of victim's assistance fund violated provision of Assimilative Crimes Act that an individual who commits an act on a federal reservation which is illegal under laws of the state where the enclave is located "shall be guilty of a like offense and subject to a like punishment" under the federal law, since the special assessments constituted a "punishment" within meaning of the Act, and state in which enclave was located had no similar punishment.

Reversed and remanded with instructions.

1. Criminal Law ⇐16

Purpose of Assimilative Crimes Act [18 U.S.C.A. § 13] providing that criminal law of surrounding jurisdiction is incorporated into federal law with regard to crimes committed in federal enclaves is to conform criminal law of federal enclaves to that of the local law except in cases of specific federal crimes.

2. Statutes ⇐188

Where a statute contains no definition of term in question, general rule is that word is to be interpreted in its ordinary, everyday sense.

3. Criminal Law ⇐16

Policy behind Assimilative Crimes Act [18 U.S.C.A. § 13] conforming criminal law of federal enclaves to that of local law is to assure that those persons alleged to have

edge with respect to the PCB content of its transformer oil indicates a lack of responsibility and concern. ... It should be stated in Respondent's behalf, however, that Respondent expended monies subsequent to the state and federal inspections to cure deficiencies. It demonstrated, after the inspections by Complainant's employees, a cooperative attitude and attempted to comply with the pertinent regulations issued under the act and, in large measure, was successful in such attempt.
I R.I.D. at 24–25; (Emphasis added).

Exhibit 15

in 1984 U.S.Code Cong. & Ad.News 3182, 3607, 3619.

The Assimilative Crimes Act, 18 U.S.C. § 13, states:

> Whoever within or upon any of the places now existing or hereafter reserved or acquired as provided in section 7 of this title, is guilty of any act or omission which, although not made punishable by any enactment of Congress, would be punishable if committed or omitted within the jurisdiction of the State, Territory, Possession, or District in which such place is situated, by the laws thereof in force at the time of such act or omission, shall be guilty of a like offense *and subject to a like punishment.*

(Emphasis added.) The purpose of this Act is to conform the criminal law of federal enclaves to that of local law except in cases of specific federal crimes. *United States v. Best*, 573 F.2d 1095 (9th Cir.1978). Essentially, the Act fills gaps in the federal law by providing a set of criminal laws for federal reservations. *United States v. Prejean*, 494 F.2d 495, 496 (5th Cir.1974). Since there is no express enactment of Congress providing punishment for breaking and entering, the Assimilative Crimes Act and New Mexico law were appropriately applied in this case.

The question we now face, whether the penalty assessment applies to assimilative crimes, has not yet been considered. As we view the problem, it is one of statutory construction. The assessment, by its terms, applies to "any person convicted of an offense against the United States." 18 U.S.C. § 3013. Clearly, persons convicted of assimilative crimes have been "convicted of an offense against the United States." This does not mean, however, that the assessment necessarily applies to assimilative crimes. Dependent upon the laws of the forum state, the terms of the Assimilative Crimes Act may preclude this result in some cases.

The Assimilative Crimes Act makes clear that an individual who commits an act on a federal reservation which is illegal under the laws of the state where the enclave is located "shall be guilty of a like offense *and subject to a like punishment*" under the federal law. (Emphasis added.) This language has consistently been construed to require punishment only in the way and to the extent that the same offense would have been punishable if the territory embraced by the federal reservation or enclave where the crime was committed remained subject to the jurisdiction of the state. *United States v. Press Publishing Co.*, 219 U.S. 1, 31 S.Ct. 212, 55 L.Ed. 65 (1911); *United States v. Dunn*, 545 F.2d 1281 (10th Cir.1976). Thus, if the special assessment is found to be a punishment, and New Mexico has no similar punishment, imposition of the assessment *in this case*, would be violative of the Assimilative Crimes Act.

Because the parties agree that New Mexico has no similar provision for collecting special assessments from convicted persons, the issue before us resolves to whether the special assessment is a "punishment" as that term is used in the Assimilative Crimes Act. As such, the issue is one of federal and not state law. *Johnson v. Yellow Cab Transit Co.*, 321 U.S. 383, 64 S.Ct. 622, 88 L.Ed. 814 (1944).

[2] The term "punishment" is not defined in the Assimilative Crimes Act. Where a statute contains no definition of the term in question, the general rule is that the word is to be interpreted in its ordinary, everyday sense. *First Nat. Bank & Trust Co. of Chickasha v. United States*, 462 F.2d 908 (10th Cir.1972). Accordingly, we adopt the definition of punishment set forth in Black's Law Dictionary 1398 (rev. 4th ed. 1968) as follows:

> Any pain, penalty, suffering, or confinement inflicted upon a person by the authority of the law and the judgment and sentence of a court, for some crime or offense committed by him, or for his omission of a duty enjoined by law.

Those cases which have considered the term in connection with the question of whether a specific statute can be incorporated into the federal law under the Assimilative Crimes Act have found the word to


16

ARTICLE 7

Statutory Unitization Act

70-7-1. Purpose of act.

The legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978] is applicable, to the end that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units.

History: 1953 Comp., § 65-14-1, enacted by Laws 1975, ch. 293, § 1.

Law reviews. — For article, "On an Institutional Arrangement for Developing Oil and Gas in the Gulf of Mexico", see 26 Nat. Resources J. 717 (1986).

70-7-2. Short title.

This act [70-7-1 to 70-7-21 NMSA 1978] may be cited as the "Statutory Unitization Act."

History: 1953 Comp., § 65-14-2, enacted by Laws 1975, ch. 293, § 2.

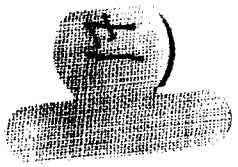
70-7-3. Additional powers and duties of the oil conservation division.

Subject to the limitations of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], the oil conservation division of the energy, minerals and natural resources department, hereinafter referred to as the "division", is vested with jurisdiction, power and authority and it shall be its duty to make and enforce such orders and do such things as may be necessary or proper to carry out and effectuate the purposes of the Statutory Unitization Act.

History: 1953 Comp., § 65-14-3, enacted by Laws 1975, ch. 293, § 3; 1977, ch. 255, § 109; 1987, ch. 234, § 67.

The 1987 amendment, effective July 1, 1987, substituted "energy, minerals and natural resources" for "energy and minerals" and made minor changes in language.

Exhibit 16



number of claims are considered, it is clear that different procedures are necessary and this is a relevant fact in such a determination. *Crowder v. Salt Lake County*, 552 P.2d 646 (Utah 1976).

In this state, cities are clearly limited in their expenditures. See § 11–6–1, N.M.S.A. 1953 [Repl. Vol. 2, pt. 2 (Supp.1975)] and § 11–6–6, N.M.S.A.1953 [Repl. Vol. 2, pt. 2, 1974]. The ability of cities to raise money to meet such extraordinary expense is also restricted.

Therefore, it appears that some rational basis does exist for limiting the time period in which a suit may be brought against a city. This determination is sufficient to overcome respondents' contention that § 23–1–23 is unconstitutional. Therefore, the decision of the Court of Appeals is reversed and the order of the District Court of Rio Arriba County dismissing the complaint is hereby affirmed.

IT IS SO ORDERED.

SOSA, EASLEY and FEDERICI, JJ., concur.

PAYNE, J., respectfully dissents.

90 N.M. 790

STATE of New Mexico ex rel. Thomas Ray NEWSOME, Jr., Petitioner-Appellant,

v.

Phillip ALARID, Director of Personnel, University of New Mexico, Respondent-Appellee.

No. 11207.

Supreme Court of New Mexico.

Sept. 26, 1977.

Student newspaper reporter at university sought alternative writ of mandamus permitting him to gain access to information within university's nonacademic staff personnel records. The District Court, Bernalillo County, James A. Maloney, D. J., quashed writ and dismissed petition, and reporter appealed. The Supreme Court, Easley, J., held that: (1) statutory provision exempts, from disclosure, State's public records consisting of doctor's opinions and other medical information in personnel files; (2) university's records, which pertained to illness, injury, disability, inability to perform a job task and sick leave, were confidential and not subject to release to public; (3) university's records, which pertained to letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be rehired or as to reason an applicant was not hired and other matters of opinion, were exempt from disclosure; (4) if required to determine whether to permit inspection of public record of State, trial judge should make a private examination of the record; (5) university's records regarding military discharges and arrest records were not necessarily exempt from disclosure, but such information would be immune to disclosure under certain circumstances; (6) request for inspection of records could not be denied merely on basis of contention that the request posed an extreme burden on university's personnel director's office, and (7) fact that reporter sought disclosure of all of university's nonacademic staff personnel records, but was only entitled to disclosure of such records which were not confidential, did not warrant a refusal to grant any relief to petitioner.

Cause remanded.

1. Appeal and Error ⇐766, 768

Where there is a failure to comply with rule, which provides that a statement of proceedings shall contain "[A] concise, chronological summary of such findings as are material to the review with appropriate references to the transcript. If any finding is challenged, it must be so indicated by a parenthetical note referring to the appropriate numbered point in the argument," reviewing court may assume the findings are correct and conclusive on appeal, court

C. letters or memorandums which are matters of opinion in personnel files or students' cumulative files; and

D. as otherwise provided by law.

The statute is not entirely clear in Section A as to whether all medical records are exempt from disclosure.

[3–6] A statute should be interpreted to mean what the Legislature intended it to mean, and to accomplish the ends sought to be accomplished by it. *Burroughs v. Board of County Comm'ners*, 88 N.M. 303, 540 P.2d 233 (1975). The entire statute is to be read as a whole so that each provision may be considered in its relation to every other part. *Winston v. New Mexico State Police Bd.*, 80 N.M. 310, 454 P.2d 967 (1969). A construction must be given which will not render the statute's application absurd or unreasonable and which will not defeat the object of the Legislature. *State v. Nance*, 77 N.M. 39, 419 P.2d 242 (1966), *cert. denied*, 386 U.S. 1039, 87 S.Ct. 1495, 18 L.Ed.2d 605 (1967). Moreover, enactments of the Legislature are to be interpreted to accord with common sense and reason. *Westland Development Co. v. Saavedra*, 80 N.M. 615, 459 P.2d 141 (1969).

[7] The intent of the Legislature to exempt doctors' opinions and other medical information in personnel files from disclosure is evident from an analysis of this statute, and the intent comports with common sense and reasoning as well as with good public policy.

Exemptions Under the Statute

[8] Most of the information in dispute clearly falls within the exemptions allowed by statute. We hold that the personnel records of the employees which pertain to illness, injury, disability, inability to perform a job task, and sick leave shall be considered confidential under the statute and not subject to release to the public, except, of course, by the consent or waiver of the particular employee.

[9] Letters of reference are specifically exempt from disclosure under Section B of the statute as are letters or memorandums which are matters of opinion as noted in Section C. The Legislature quite obviously anticipated that there would be critical material and adverse opinions in letters of reference, in documents concerning disciplinary action and promotions and in various other opinion information that might have no foundation in fact but, if released for public view, could be seriously damaging to an employee. We hold that letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be re-hired or as to why an applicant was not hired, and other matters of opinion are also exempt from disclosure under the statute.

Records Not Specifically Exempt

Alarid contends that in addition to those items which fall within the statutory exemptions, there are other matters of a personal or sensitive nature in the files that, for reasons of public policy, should be kept confidential and not be subject to disclosure. This argument is based on balancing the interests that favor disclosure against those interests that favor confidentiality.

Alarid claims that military discharge and arrest records are of a confidential nature but are not specifically exempted by statute. There is no New Mexico case which faces this issue squarely. Only three cases have mentioned this statute. *Ortiz v. Jaramillo*, 82 N.M. 445, 483 P.2d 500 (1971) (deciding that the county clerk's mag-card list of registered voters is a public record and must be made available on reasonable terms to persons demanding the list); *Sanchez v. Board of Regents of Eastern New Mexico University*, 82 N.M. 672, 486 P.2d 608 (1971) (holding that a preliminary list setting forth proposed faculty salaries which had not been submitted to or accepted by the faculty members was not a public record within the meaning of this statute); *State v. Harrison*, 81 N.M. 623, 471 P.2d 193 (Ct.App.1970), *cert. denied*, 81 N.M. 668, 472 P.2d 382 (1970) (assuming but declining to hold that there is an exemption under the statute permitting a criminal defendant to inspect police records during the investigation of a crime).

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2, 3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2,3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

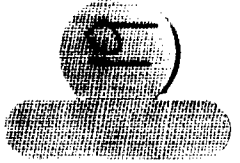
> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2,3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,



E. a copy of a proposed operating plan covering the manner in which the unit will be supervised and managed and costs allocated and paid; and

F. an allegation of the facts required to be found by the division under Section 70-7-6 NMSA 1978.

History: 1953 Comp., § 65-14-5, enacted by Laws 1975, ch. 293, § 5; 1977, ch. 255, § 111.

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 164, 172.

Compulsory pooling or unitization statute or ordinance requiring owners or lessees of oil and gas lands to develop their holdings as a single drilling unit and the like, 37 A.L.R.2d 434.

70-7-6. Matters to be found by the division precedent to issuance of unitization order.

A. After an application for unitization has been filed with the division and after notice and hearing, all in the form and manner and in accordance with the procedural requirements of the division, and prior to reaching a decision on the petition, the division shall determine whether or not each of the following conditions exists:

(1) that the unitized management, operation and further development of the oil or gas pool or a portion thereof is reasonably necessary in order to effectively carry on pressure maintenance or secondary or tertiary recovery operations, to substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof;

(2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered;

(3) that the estimated additional costs, if any, of conducting such operations will not exceed the estimated value of the additional oil and gas so recovered plus a reasonable profit;

(4) that such unitization and adoption of one or more of such unitized methods of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the pool or portion thereof directly affected;

(5) that the operator has made a good faith effort to secure voluntary unitization within the pool or portion thereof directly affected; and

(6) that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

B. If the division determines that the participation formula contained in the unitization agreement does not allocate unitized hydrocarbons on a fair, reasonable and equitable basis, the division shall determine the relative value, from evidence introduced at the hearing, taking into account the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the relative value of each tract so determined bears to the relative value of all tracts in the unit area.

C. When the division determines that the preceding conditions exist, it shall make findings to that effect and make an order creating the unit and providing for the unitization and unitized operation of the pool or portion thereof described in the order, all upon such terms and conditions as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect and safeguard the respective rights and obligations of the working interest owners and royalty owners.

History: 1953 Comp., § 65-14-6, enacted by Laws 1975, ch. 293, § 6; 1977, ch. 255, § 112.

Exhibit 19

§ 913.8 Provisions of compulsory unitization statutes: Inclusion of nonproductive lands in unit

It appears generally assumed in some unitization statutes that only lands proved to be productive shall be included in a compulsory unit. This is made explicit in several statutes in manner as follows:

> "Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual drilling operations may be so included within the unit area."[1]

§ 913.8 [1] 52 Okla. Stat. Ann. § 287.4.

In Manufacturers Nat'l Bank of Detroit v. Director, Dep't of Natural Resources, 85 Mich. App. 173, 270 N.W.2d 550, 62 *O.&G.R.* 79 (1978), plaintiffs complained of the determination by the Supervisor of Wells of a well-spacing and drilling unit on the ground it encompassed tracts of land not completely underlain by the pool. The court denied relief on the ground that plaintiffs had failed to exhaust their administrative remedy against any inequity created by the unit determination. On rehearing after remand, 115 Mich. App. 294, 320 N.W.2d 403, 74 *O.&G.R.* 479 (1982), the court concluded that the Supervisor of Wells erred in applying the allocation formula contained in the lease to a compulsory unit. The case was remanded to the Supervisor to adjust the allocation of royalties using the formula set forth in the court's original opinion, *viz.*, in the proportion to which the lease's acreage bears to the total drilling unit acreage underlain by the pool. On appeal the court held that the creation of a drilling unit by the Supervisor of Wells did not amount to a pooling of the legal interests of those whose lands were within the unit. — Mich. —, 362 N.W.2d 572, — *O.&G.R.* — (1984).

Exhibit 20

CAMPBELL & BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
J. SCOTT HALL
JOHN H. BEMIS
WILLIAM P. SLATTERY
MARTE D. LIGHTSTONE
PATRICIA A. MATTHEWS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

May 19, 1989

HAND-DELIVERED

Mr. Michael E. Stogner
Hearing Examiner
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87501

Re: Case 9671: Application of Benson-Montin-Greer Drilling Corp. to Amend Division Order R-8344, Rio Arriba County, New Mexico

Dear Mr. Stogner:

Enclosed is the Hearing Memorandum of Benson-Montin-Greer Drilling Corp., Dugan Production Corp. and Sun Exploration and Production Company which you requested at the May 10, 1989 hearing on the above-referenced application.

Also, enclosed is a proposed Order of the Division which provides, among other things, that this Order shall become effective at 7:00 AM on the last day of the month in which appropriate ratifications are obtained pursuant to Section 70-7-8 N.M.S.A., 1978 Comp. As you will recall from the testimony, it is essential that the effective date of this Order be on the last day instead of the first day of the month for certain leases in the E/2 of Section 12 expire on July 31, 1989 and it is our hope to have this Order ratified and in effect on that date. A provision making the Order effective on the 1st of the month, therefore, could result in lease expirations.

If you need anything further to proceed with this matter from Benson-Montin-Greer Drilling Corp., Dugan Production Corp. or Sun Exploration and Production Company, please advise.

Very truly yours,

WILLIAM F. CARR
WFC:mlh
Enclosures
cc w/enclosures: Mr. Albert R. Greer,
Benson-Montin-Greer Drilling Corp.
Mr. John Roe, Dugan Production Corp.
Kirk Moore, Esq. and Mr. Richard Dillon,
Sun Exploration and Production Company
Owen Lopez, Esq.
W. Perry Pearce, Esq.
Kent Lund, Esq.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

CASE NO. 9671
Order No. R-8344-A

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION TO AMEND
DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO.

BENSON-MONTIN-GREER DRILLING CORPORATION,
DUGAN PRODUCTION CORPORATION AND
SUN EXPLORATION AND PRODUCTION COMPANY
PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 o'clock a.m. on May 10 and 11, 1989, at Santa Fe, New Mexico, before examiner Michael E. Stogner of the Oil Conservation Division of New Mexico, hereinafter referred to as the "Division".

NOW, on this _____ day of May, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

1. Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

2. The applicant, Benson-Montin-Greer Drilling Corp., seeks the amendment of Division Order R-8344 to include an additional 320 acres comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, ("the expansion area") within the previously approved Canada Ojitos Unit.

3. The expansion area should be included within the unit area for the continued successful and efficient conduct of the unitized method of operation for which the unit was created.

4. That the conduct thereof will have no material adverse effect upon the remainder of the common source of supply in the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool.

5. The expansion area is in connection with the existing unit area so as to permit the migration of oil or gas or both from one portion of the common source of supply to the other wherever and whenever pressure differential are created as a result of production or operations for the production of oil.

6. The proposed expanded unit area has been reasonably defined by development.

7. The applicant operates a pressure maintenance project for the secondary recovery of oil and gas in the Canada Ojitos Unit area.

8. The unitized management, operation and further development of the unit area including the expansion area of the Gavilan Mancos Oil Pool, as proposed, is reasonably necessary in order to effectively carry on secondary recovery operations and to avoid the drilling of unnecessary wells thereby substantially increasing the ultimate recovery of oil from the pool by unit operations.

9. The proposed unitized method of operation as applied to the expansion area is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the unit than would otherwise be recovered.

10. The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.

11. Such unitization and adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Canada Ojitos Unit Area and the expansion area.

12. The Applicant has made a good faith effort to secure voluntary unitization of the lands.

13. The participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis, and protects the correlative rights of all owners of interest within the unit area.

14. The Unit Agreement and the Unit Operation Agreement admitted into evidence in this case should be incorporated by reference into this order.

15. The Statutory Unitization of the expansion area into the Canada Ojitos Unit Area, in conformance to the above findings, will prevent waste and protect correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

1. Division Order R-8344 is hereby amended to include an additional 320 acres, more or less, of federal lands comprising the E/2 of Section 12, T25N, R2W, Gavilan Mancos Oil Pool, Rio Arriba County, New Mexico, within the previously approved Canada Ojitos Unit, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation.

2. The lands covered by said Canada Ojitos Unit Agreement shall be designated the Canada Ojitos Unit Area and shall be amended to include the E/2 of Section 12, T25N, R2W.

3. The Canada Ojitos Unit Agreement and Unit Operating Agreement, admitted into evidence in this case are hereby incorporated by reference into this order.

4. The Canada Ojitos Unit Agreement and the Canada Ojitos Unit Operating Agreement provide for unitization and unit operation of the subject portion of the West Puerto Chiquito-Mancos Oil Pool upon terms and conditions that are fair, reasonable and equitable and include:

an allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

a provision governing how the costs of unit operations including capital investment shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the costs of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions determined by the Division Director to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, including a two hundred percent nonconsent penalty for drilling of wells and a fifty percent nonconsent penalty for investment adjustments, provided that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of its operating rights and working interest in and to the unit until his share of the costs, service charge and penalty or interest are repaid;

a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

a provision for voting procedure for deciding matters by the working interest owners which states that each working interest owner shall have a voting interest equal to its unit participation; and the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination;

and are therefore hereby adopted.

5. This order shall become effective at 7:00 a.m. on the last day of the month in which appropriate ratification of the Canada Ojitos Unit Agreement, as amended, and Canada Ojitos Unit Operating Agreement, as amended, is obtained pursuant to Section 70-7-8, NMSA, 1978 Compilation.

6. If the persons owning the required percentage of interest in the unit area as set out in Section 70-7-8, NMSA, 1978 Compilation, do not approve the plan for unit

operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Division, unless the Division shall extend the time for ratification for good cause shown.

7. When the persons owning the required percentage of interest in the unit area have approved the plan for unit operations, the interests of all persons in the unit are unitized whether or not such persons have approved the plan of unitization in writing.

8. Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

_____

WILLIAM J. LEMAY,
DIRECTOR

S E A L

/rs

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF
BENSON-MONTIN-GREER DRILLING CORP.
TO AMEND DIVISION ORDER R-8344,
RIO ARRIBA COUNTY, NEW MEXICO. CASE NO. 9671

HEARING MEMORANDUM
BENSON-MONTIN-GREER DRILLING CORP., DUGAN PRODUCTION CORP. AND SUN EXPLORATION AND PRODUCTION COMPANY

This matter is currently pending decision before Examiner Michael E. Stogner of the New Mexico Oil Conservation Division as a result of a hearing held on May 10 and 11, 1989.

During the course of the hearing several legal issues arose and the Examiner directed the parties to submit memoranda by noon on May 19, 1989 on those issues.

Benson-Montin-Greer Drilling Corp. ("BMG"), Dugan Production Corp. ("Dugan") and Sun Exploration and Production Company, now Oryx Energy Company ("Sun") submit this Hearing Memorandum in response to the Examiner's request.

Background

The New Mexico Oil Conservation Division ("Division") has authority to establish pools and to adopt special rules and regulations to govern their operation and development.[1] §70-2-18(C) N.M.S.A. (1978).

---

[1]See Section 70-2-18C, N.M.S.A. 1978, attached as Exhibit 1.

Pursuant to this authority, the Division has promulgated Special Rules and Regulations for the Gavilan Mancos Oil Pool, (Order R-7407, December 23, 1983;[2] Order R-7407-E, June 8, 1987[3]) and the West Puerto Chiquito-Mancos Oil Pool (Order R-2565-B, November 28, 1966). The Division has also approved a pressure maintenance project in the Canada Ojitos Unit (Order R-2544, August 9, 1963[4]) and Statutorily Unitized this Unit Area within the West Puerto Chiquito-Mancos Oil Pool (Order R-8344, November 7, 1986[5]).

During the past several years a number of questions concerning the development of the Mancos formation in this area have been the subject of Division and Oil Conservation Commission ("Commission") hearings. These hearings resulted in the entry of orders on August 5, 1988 in which the Commission found, among other matters, that the Gavilan Mancos Oil Pool ("Gavilan") and the West Puerto Chiquito-Mancos Oil Pool ("WPC") "... constitute a single source of supply...." (Finding 13, Order R-7407-F as amended to R-7407-G by Nunc Pro Tunc Order R-7407-F-1 and Finding No. 6, Order R-3401-B)[6]. The Commission also found that this common source of supply could be regulated as two separate pools.

In 1989 Dugan and Sun, working interest owners in the NE/4 of

---

[2]See Order R-7407 attached as Exhibit 2

[3]See Order R-7407-E attached as Exhibit 3.

[4]See Order R-2544 attached as Exhibit 4.

[5]See Order R-8344 attached as Exhibit 5.

[6]See Order R-7407-G attached as Exhibit 6; See Order Order R-3401-B attached as Exhibit 6-A.

Section 12, Township 25 North, Range 2 West, requested that the operator of the Canada Ojitos Unit ("Unit") consider including the E/2 of Section 12 ("Expansion Area") in the Unit[7]. In response to that request, BMG filed this application to amend Order R-8344 and expand the Unit by Statutory Unitization.

This application was opposed at the time of hearing by Mobil, Amoco, Mallon, Mesa Grande Ltd. and Hooper, Kimball & Williams, Inc. ("the opponents"). It must be emphasized, however, that Mobil, Mallon and Mesa Grande Ltd. have no interests in either the Unit or the E/2 of Section 12 and, in fact, lack standing to challenge this application. Amoco only has 0.01% overriding royalty interest in the Unit and Hooper, Kimball & Williams, Inc. has only a 12.5% interest in the 320-acre Expansion Area.

In contrast to the minor ownership interests of the opponents, 89% of the working interest owners in the 69.568 acre Unit have approved the expansion, 10% have not yet responded and only 1% have responded in the negative. Furthermore, in the Expansion Area, 81.25% of the working interest ownership supports expansion of the Unit, 6.25% has not responded and 12.5% (Hooper, Kimball & Williams, Inc.) oppose expansion.

---

[7]A plat of the area showing the E/2 of Section 12 and the Current Unit Area is attached as Exhibit 7.

Point I

THE NEW MEXICO STATUTORY UNITIZATION ACT ALLOWS FOR THE EXPANSION OF THE UNIT TO INCLUDE THE EXPANSION AREA BECAUSE IT IS PART OF THE SAME COMMON SOURCE OF SUPPLY

The opponents contend that since the Division has classified the West Puerto Chiquito-Mancos Oil Pool and the Gavilan Mancos Oil Pool as two separate pools, acreage in Gavilan may not be unitized with acreage in WPC under the New Mexico Statutory Unitization Act.

This argument is designed to confuse and mislead the Division and is neither supported by law nor the facts of this case. Furthermore, it ignores the express language of the Statutory Unitization Act.

Unit operation of an oil and gas pool is defined as the combination, for operating purposes, of the separately owned tracts of land overlying **A COMMON SOURCE OF SUPPLY** and a division of the total production among the separate owners therein on a fair and equitable basis.

A customary feature of statutory unitization statutes is that they expressly or implicitly limit unitization to a common source of supply[8].

The underlying basis for finding a common source of supply before approving statutory unitization is obvious. If the acreage to be included in the Unit is not all within part of the same reservoir or common source of supply, then one part cannot be in

---

[8]Williams and Myers, Oil and Gas Law, Section 913.4 at 112, attached as Exhibit 8.

effective communication with the other and unitization will be of no benefit.

The opponents attempt to confuse and mislead the Division by focusing on the fact that here the Division administers this common source of supply as two pools. That fact is neither relevant nor important for the existence of a common source of supply controls and this issue has already been resolved by the Commission in Orders R-7407-G and R-6469-F[9] where it found:

> (13) the preponderance of the evidence demonstrates the Gavilan and WPC Pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

It is therefore clear that neither the existing WPC and Gavilan Pool boundaries do not need to be changed nor do the rules that govern these pools need to be amended before the E/2 of Section 12 may be statutorily unitized with the existing Unit.

The Commission not only found one single common source of supply but it went further by declaring in Order R-3401-B[10] that:

> (6) The two western most rows of sections inside the Unit area are in effective pressure communication with the Gavilan Mancos Pool as demonstrated by shut-in pressure measurements[11].

While the New Mexico Judiciary has not yet decided any case

---

[9]See Order R-6469-F attached as Exhibit 9.

[10]See Order R-3401-B attached as Exhibit 10.

[11]The two sections immediately to the east of the proposed Expansion Area, E/2 of Section 12, are part of the two westernmost rows of Sections referenced here.

involving the Statutory Unitization Act, Oklahoma has two cases that specifically discuss the prerequisite of "a common source of supply" in unitizing oil and gas pools. In both Jones Oil Company v. Continental Oil Company, 420 P.2d 905, 26 OGR 78 (Okla. 1966)[12] and Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 997 (1951)[13], the Oklahoma Supreme Court dealt with the issues of both the vertical extent and horizontal extent of the field (pool) to be unitized. Both cases found that the Statutory Unitization Act had been properly applied in one instance to a field containing 21 individual sand stringers and in the other case to the interrelation of the Commission definition of a field defined by a discovery well and the implementation of the Statutory Unitization Act.

In addition to the argument set forth above, the opponents argument also must fail for it is contrary to the express provisions of the New Mexico Statutory Unitization Act and established rules in New Mexico for statutory construction.

The Statutory Unitization Act expressly defines the term "pool" as follows:

> "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common

---

[12]See excerpt attached as Exhibit 11.

[13]See excerpt attached as Exhibit 12.

reservoir";... (emphasis added).[14]

The New Mexico Supreme Court has found that when a term is defined by statute, the term is interpreted in accordance with that definition. Buzbee v. Donnelly, 96 N.M. 692, 634 P.2d 1244, 1981).[15] The Tenth Circuit has also found that general definitions of a term may be used only when the term is not defined by statute. See, U.S. v. Mayberry, 774 F.2d 1018 (10th Cir. 1985).[16] New Mexico law therefore requires that the definition of pool in the Statutory Unitization Act be applied to this case.

Since, as noted above, the Commission has determined that Gavilan and WPC are a common source of supply, the E/2 of Section 12 and the WPC Pool are not only expressly within the definition of "pool" in the Statutory Unitization Act but the inclusion at the E/2 of Section 12 in the Unit is authorized by this statute.

Point II

EXPANSION OF THE EXISTING CANADA OJITOS UNIT AREA TO INCLUDE THE E/2 OF SECTION 12 WILL AVOID THE WASTE THAT WILL RESULT FROM THE DRILLING OF UNNECESSARY WELLS, WILL RESULT IN INCREASED RECOVERY OF OIL AND IS FULLY AUTHORIZED BY THE STATUTORY UNITIZATION ACT

This Point, like Point I of this Memorandum, requires review and construction of the New Mexico Statutory Unitization Act.

---

[14]See Section 70-7-4A, N.M.S.A. 1978, attached as Exhibit 13.

[15]See excerpts attached as Exhibit 14.

[16]See excerpt attached as Exhibit 15.

The Legislature stated the purpose of this Act as follows:

> The Legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act is applicable, to the end, that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units. (emphasis added).[17]

The New Mexico Supreme Court has found that a statute should be interpreted to mean that which the Legislature intended it to mean and to accomplish the end sought to be accomplished by it. State, ex rel., Newsome v. Alarid, 90 N.M. 790, 568 P.2d 1236 (1977).[18] This Court has also ruled that ..."statutes are to be interpreted with reference to their manifest object, and if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." Martinez v. Research Park Inc., 75 N.M. 672, 410 P.2d 200 (1965).[19]

Here opponents are attempting to defeat the purpose and the

---

[17]See Section 70-7-1, N.M.S.A. (1978) attached as Exhibit 16.

[18]See excerpt attached as Exhibit 17.

[19]See excerpt attached as Exhibit 18.

manifest object of the Statutory Unitization Act by proposing a construction of certain of its provisions that would defeat what the Legislature intended to accomplish by enacting this law. To do this the opponents argue that the expansion area has only a limited remaining future reserve potential, and that its inclusion in the unit area will not satisfy the requirements of §70-7-6(A)(2) N.M.S.A. 1978 which states:

> (2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered.[20]

Contrary to the express intent of the Statutory Unitization Act the opponents argue that the amount of producible reserves underlying each individual tract or lease in the proposed unit, somehow, must be shown to be capable of producing a significantly increased amount of oil under unit operations. Again, the opponents have misread the Statutory Unitization Act and have misapplied the facts.

All that §70-7-6(A) N.M.S.A. (1978) requires is that the proponents establish that within the "unitized portion" of the pool there be a substantial increase in the recovery of oil from the reservoir for the Unit. The evidence presented at the Examiner hearing clearly meet this requirement by establishing that a

---

[20]See Section 70-7-6(A)(2), N.M.S.A. 1978 attached as Exhibit 19.

minimum of 18,000 barrels of additional oil can be recovered by the Canada Ojitos Unit with the inclusion of the Expansion Area. The evidence also established that inclusion of the E/2 of Section 12 is the only viable option available to the owners of this acreage for the following reasons:

(1) The expansion area cannot independently support the drilling of a well.

(2) The expansion area cannot economically be joined with the W/2 of Section 12 to form a 640-acre spacing unit.[21]

(3) Even if the owners of the W/2 of Section 12 would agree to pooling at a minimal cost, this would be only a temporary solution since, in 1 to 2 years, the well in the W/2 of Section 12 will reach its economic limit, allowing underlying leases to expire.

(4) Further the pooling of the proposed expansion lands in a Gavilan 640-acre proration unit does not in itself avoid the drilling of an unnecessary well in the E/2 of Section 12. As noted in the testimony, this is a real concern of owners in the E/2 of Section 12 since at least one of the W/2 owners has expressed a desire to drill a second well in Section 12.

(4) Neither the purchase of leases from existing owners under

---

[21]The economics of forming a 640-acre Gavilan spacing unit are well established by similar prior cases (i.e. Sun's Loddy No. 1 in Section 20, Township 25 North, Range 2 West) and the insistence of similar terms by at least one of the working interest parties in the existing W/2 Section 12 well.

the expansion area nor letting these leases expire and repurchasing them will, in itself, develop the lands in the E/2 of Section 12 and put them in a producing status.

Further, the Unit Operator's testimony noted if the lands in the E/2 of Section 12 are not included in the Canada Ojitos Unit and a well drilled thereon, the Unit Operator would drill a protective well if the anticipated reduction in drainage to the offending well would equal the cost of drilling the unit protection well. This means at a drilling cost of $700,000 and an oil price of $15 per barrel, which would equate to the value of 60,000 barrels of oil. This volume approximates that anticipated as credit to the E/2 of Section 12 given a weighting factor of 1, which is the weighting factor recommended by the Unit Operator.

However, should the Commission disagree with the Unit Operator's recommendation, the statute provides that the Commission can set the equity factor at whatever level it elects. This authority of the Commission is balanced by the statute's further providing that the unitization does not become effective until it has been approved by the prescribed percentage of unit interest owners.

The Division therefore should enter its Order approving the application with the following findings:

(1) That the expansion area is in effective pressure communication with the existing unit area.[22]

---

[22]See, Jones, supra; and R-3401, Finding 6.

(2) That each tract in the expansion area can be productive of oil and gas from the same common source of supply that is being produced in the existing unit area.[23]

(3) That inclusion of the expansion area will substantially increase the ultimate recovery of oil from the expanded Unit area and is therefore necessary in order to prevent the waste of hydrocarbons.[24]

(4) Inclusion of the expansion area will protect the correlative rights of all interest owners within the expanded unit area.[25]

A majority of the working interest owners (81.25%) within the Expansion Area recognize the benefits of BMG's application and want the E/2 of Section 12, Township 25 North, Range 2 West included in the existing Unit for it is the only viable economic means of developing this acreage. A majority of the working interest owners (89%) in the existing unit, likewise, seek inclusion of this land in the Unit because of the savings and increased recovery that such inclusion will affect.

---

[23]See, 6 Williams and Myers, Section 913.8 at p. 122.4, excerpt attached as Exhibit 20.

[24]Testimony of Albert R. Greer and Richard Dillon, May 11, 1989.

[25]Testimony of John Roe, May 10, 1989 and Albert R. Greer, May 11, 1989.

Conclusion

The proponents have satisfied all the conditions of the New Mexico Statutory Unitization Act and are entitled to inclusion of the E/2 of Section 12 in the Canada Ojitos Unit. Without the inclusion of the Expansion Area in the Unit, one of the Division's primary duties will be violated for at least one unnecessary well will be drilled which will drain unit reserves that are now being pushed toward the Expansion Area by the Unit's pressure maintenance project and further undermine the effectiveness of this pressure maintenance project. By including the Expansion Area in the Unit, the drilling of this unnecessary well will be avoided and the drilling of an offsetting Unit protection well (also unnecessary) will not be required. Furthermore, substantial increased recovery of oil will result from the unitized portion of this common source of supply while production from Gavilan will remain unaffected.

Simple arithmetic shows that the unitized operation of the Canada Ojitos Unit has resulted in a substantial increase in the ultimate recovery of oil from the reservoir. Wells under Unit operations, on an average, are recovering in excess of four times as much as non-unit wells in this common source of supply. The owners in the undeveloped Expansion Area should be afforded the opportunity to participate in such a successful operation.

This application, therefore, should be granted for it will result in increase recovery of oil, will prevent the economic waste caused by the drilling of unnecessary wells and will serve to protect the correlative rights of all owners of interest in the

expanded unit area while not affecting the correlative rights of any offsetting interest owner.

Respectfully submitted,

KELLAHIN, KELLAHIN & AUBREY

W. Thomas Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504
Telephone: (505) 982-4285

ATTORNEYS FOR DUGAN PRODUCTION CORP. AND SUN EXPLORATION AND PRODUCTION COMPANY now (ORYX ENERGY COMPANY)

CAMPBELL & BLACK, P.A.

By: William F. Carr

WILLIAM F. CARR
Post Office Box 2208
Santa Fe, New Mexico 87504
Telephone: (505) 988-4421

ATTORNEYS FOR BENSON-MONTIN-GREER DRILLING CORP.

has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Elements of property right of natural gas owners. — The legislature has stated definitively the elements contained in property right of natural gas owners. Such right is not absolute or unconditional. It consists of merely (1) an opportunity to produce, (2) only insofar as it is practicable to do so, (3) without waste, (4) a proportion, (5) insofar as it can be practically determined and obtained without waste, (6) of gas in the pool. Continental Oil Co. v. Oil Conservation Comm'n, 70 N.M. 310, 373 P.2d 809 (1962).

Law reviews. — For article, "Compulsory Pooling of Oil and Gas Interests in New Mexico," see 3 Nat. Resources J. 316 (1963).

For comment on El Paso Natural Gas Co. v. Oil Conservation Comm'n, 76 N.M. 268, 414 P.2d 496 (1966), see 7 Nat. Resources J. 425 (1967).

For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 161, 164.

38 C.J.S. Mines and Minerals §§ 229, 230.

70-2-18. Spacing or proration unit with divided mineral ownership.

A. Whenever the operator of any oil or gas well shall dedicate lands comprising a standard spacing or proration unit to an oil or gas well, it shall be the obligation of the operator, if two or more separately owned tracts of land are embraced within the spacing or proration unit, or where there are owners of royalty interests or undivided interests in oil or gas minerals which are separately owned or any combination thereof, embraced within such spacing or proration unit, to obtain voluntary agreements pooling said lands or interests or an order of the division pooling said lands, which agreement or order shall be effective from the first production. Any division order that increases the size of a standard spacing or proration unit for a pool, or extends the boundaries of such a pool, shall require dedication of acreage to existing wells in the pool in accordance with the acreage dedication requirements for said pool, and all interests in the spacing or proration units that are dedicated to the affected wells shall share in production from the effective date of the said order.

B. Any operator failing to obtain voluntary pooling agreements, or failing to apply for an order of the division pooling the lands dedicated to the spacing or proration unit as required by this section, shall nevertheless be liable to account to and pay each owner of minerals or leasehold interest, including owners of overriding royalty interests and other payments out of production, either the amount to which each interest would be entitled if pooling had occurred or the amount to which each interest is entitled in the absence of pooling, whichever is greater.

C. Nonstandard spacing or proration units may be established by the division and all mineral and leasehold interests in any such nonstandard unit shall share in production from that unit from the date of the order establishing the said nonstandard unit.

History: 1953 Comp., § 65-3-14.5, enacted by Laws 1969, ch. 271, § 1; 1977, ch. 255, § 52.

Constitutionality. — Standards of preventing waste and protecting correlative rights, as laid out in 70-2-11 NMSA 1978, are sufficient to allow commission's power to prorate and create standard or nonstandard spacing units to remain intact, and this section is not unlawful delegation of legislative power under N.M. Const., art. III, § 1. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

The terms "spacing unit" and "proration unit" are not synonymous and commission has power to fix spacing units without first creating proration units. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Authority to pool separately owned tracts. — Since commission has power to pool separately owned tracts within a spacing or proration unit, as well as concomitant authority to establish oversize nonstandard spacing units, the commission also has authority to pool separately owned tracts within an oversize nonstandard spacing unit. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Creation of proration units, force pooling and participation formula upheld. — Commission's (now division's) findings that it would be unreasonable and contrary to spirit of conservation statutes to drill an unnecessary and economically wasteful well were held sufficient to justify creation of two nonstandard gas proration units, and force pooling thereof, and were supported by substantial evidence. Likewise, participation formula adopted by commission, which gave each owner a share in production in same ratio as his acreage bore to the acreage of whole, was upheld despite limited proof as to extent and character of the pool. Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582 (1975).

Law reviews. — For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 159, 164, 172.

58 C.J.S. Mines and Minerals §§ 230, 240.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 7980
Order No. R-7407

NOMENCLATURE

APPLICATION OF JEROME P. McHUGH
FOR THE CREATION OF A NEW OIL POOL
AND SPECIAL POOL RULES, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 16, 1983, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of December, 1983, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Jerome P. McHugh, seeks an order creating a new oil pool, vertical limits to be the Niobrara member of the Mancos formation, with special pool rules including a provision for 320-acre spacing, Rio Arriba County, New Mexico.

(3) That in companion Case 7979, Northwest Pipeline Company seeks an order deleting certain lands from the Basin Dakota Pool, the creation of a new oil pool with vertical limits defined as being from the base of the Mesaverde formation to the base of the Dakota formation, (the Mancos and Dakota formations), and the promulgation of special pool rules including a provision for 160-acre spacing, Rio Arriba County, New Mexico.

Exhibit 2

(4) That Cases 7979 and 7980 were consolidated for the purpose of obtaining testimony.

(5) That geological information and bottomhole pressur differentials indicate that the Mancos and Dakota Formations are separate and distinct common sources of supply.

(6) That the testimony presented would not support a finding that one well would efficiently drain 320 acres in the Dakota formation.

(7) That the Mancos formation in the area is a fractured reservoir with low porosity and with a matrix permeability characteristic of the Mancos being produced in the West Puerto Chiquito Mancos Pool immediately to the east of the area.

(8) That said West Puerto Chiquito-Mancos Pool is a gravity drainage reservoir spaced at 640 acres to the well.

(9) That the evidence presented in this case established that the gravity drainage in this area will not be as effective as that in said West Puerto Chiquito-Mancos Pool and that smaller proration units should be established therein.

(10) That the currently available information indicates that one well in the Gavilan-Mancos Oil Pool should be capable of effectively and efficiently draining 320 acres.

(11) That in order to prevent the economic loss caused b the drilling of unnecessary wells, to prevent reduced recovery of hydrocarbons which might result from the drilling of too many wells, and to otherwise prevent waste and protect correlative rights, the Gavilan-Mancos Oil Pool should be created with temporary Special Rules providing for 320-acre spacing.

(12) That the vertical limits of the Gavilan-Mancos Pool should be defined as: The Niobrara member of the Mancos formation between the depths of 6590 feet and 7574 feet as found in the Northwest Exploration Company, Gavilan Well No. 1, located in Unit A of Section 26, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.

(13) That the horizontal limits of the Gavilan-Mancos Oil Pool should be as follows:

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

(TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM)
Sections 19 through 30: All
Sections 33 through 36: All

(14) That to protect the correlative rights of interested parties in the West Puerto-Chiquito Mancos Oil Pool, it is necessary to adopt a restriction requiring that no more than one well be completed in the Gavilan-Mancos Oil Pool in the E/2 of each section adjoining the western boundary of the West Puerto Chiquito-Mancos Oil Pool, and shall be no closer than 1650 feet to the common boundary line between the two pools.

(15) That in order to gather information pertaining to reservoir characteristics in the Gavilan-Mancos Oil Pool and its potential impact upon the West Puerto Chiquito-Mancos Oil Pool, the Special Rules for the Gavilan-Mancos Oil Pool should provide for the annual testing of the Mancos in any well drilled in the E/2 of a section adjoining the West Puerto Chiquito-Mancos Pool.

(16) That the said Temporary Special Rules and Regulations should be established for a three-year period in order to allow the operators in the Gavilan-Mancos Oil Pool to gather reservoir information to establish whether the temporary rules should be made permanent.

(17) That the effective date of the Special Rules and Regulations promulgated for the Gavilan-Mancos Oil Pool should be more than sixty days from the date of this order in order to allow the operators time to amend their existing proration and spacing units to conform to the new spacing and proration rules.

IT IS THEREFORE ORDERED:

(1) That a new pool in Rio Arriba County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated as the Gavilan-Mancos Oil Pool, with the vertical limits comprising the Niobrara member of the Mancos shale as described in Finding No. (12) of this Order and with horizontal limits as follows:

GAVILAN-MANCOS OIL POOL
RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 3: All

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM
Sections 19 through 30: All
Sections 33 through 36: All

(2) That temporary Special Rules and Regulations for the Gavilan Mancos Oil Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
GAVILAN-MANCOS OIL POOL

RULE 1. Each well completed or recompleted in the Gavilan-Mancos Oil Pool or in a correlative interval within one mile of its northern, western or southern boundary, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. No more than one well shall be completed or recompleted on a standard unit containing 320 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental section.

RULE 3. Non-standard spacing or proration units shall be authorized only after proper notice and hearing.

RULE 4. Each well shall be located no nearer than 790 feet to the outer boundary of the spacing or proration unit, nor nearer than 330 feet to a governmental quarter-quarter section line.

RULE 5. That no more than one well in the Gavilan-Mancos Oil Pool shall be completed in the East one-half of any section that is contiguous with the western boundary of the West Puerto Chiquito-Mancos Oil Pool, with said well being located no closer than 1650 feet to said boundary.

RULE 6. That the operator of any Gavilan-Mancos Oil Pool well located in any of the governmental sections contiguous to the West Puerto Chiquito-Mancos Oil Pool the production from which is commingled with production from any other pool or formation and which is capable of producing more than 50 barrels of oil per day or which has a gas-oil ratio greater than 2,000 to 1, shall annually, during the month of April or May, conduct a production test of the Mancos formation production in each said well in accordance with testing procedures acceptable to the Aztec district office of the Oil Conservation Division.

IT IS FURTHER ORDERED:

(1) That the Special Rules and Regulations for the Gavilan-Mancos Oil Pool shall become effective March 1, 1984.

(2) That any well presently producing from the Gavilan-Mancos Oil Pool which does not have a standard 320-acre proration unit, an approved non-standard proration unit, or which does not have a pending application for a hearing for a standard or non-standard proration unit by March 1, 1984, shall be shut-in until a standard or non-standard unit is assigned the well.

(3) That this case shall be reopened at an examiner hearing in March, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the Gavilan-Mancos Oil Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JIM BACA, MEMBER

ED KELLEY, MEMBER

JOE D. RAMEY, CHAIRMAN AND SECRETARY

S E A L

STATE OF NEW MEX)
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

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

CASE NO. 7980

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

CASE NO. 8946

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

CASE NO. 9113

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

CASE NO. 9114

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

These causes came on for hearing on March 30 and 31 and April 1, 2, and 3, 1987 at Santa Fe, New Mexico before the Oil Conservation Commission of New Mexico hereinafter referred to as the "Commission."

NOW, on this 8th day of June, 1987, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearings and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of hearing, Cases 7980, 8946, 8950, 9113 and 9114 were consolidated for purposes of testimony.

(3) Case 7980 involves review of temporary pool rules promulgated by Order R-7407 and Case 8946 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit, under Order R-7407-D, both orders pertaining to the Gavilan-Mancos Oil Pool.

(4) Case 8950 involves reopening the matter of temporary reduction of allowable and gas/oil ratio limit under Order R-3401-A pertaining to the West Puerto-Chiquito-Mancos Oil Pool.

(5) Case 9113 involves a proposal to abolish the Gavilan-Mancos Oil Pool and consolidate that pool into the West Puerto-Chiquito-Mancos Oil Pool and Case 9114 involves a proposal to shift the boundary between Gavilan-Mancos and West Puerto Chiquito-Mancos Oil Pools.

(6) The evidence shows that there is limited pressure communication between the two designated pools, and that there are two weakly connected areas separated by some restriction at or near the common boundary of the two designated pools.

(7) The evidence shows there are three principal productive zones in the Mancos formation in both presently designated pools, designated A, B, and C zones listed from top to bottom and that, while all three zones are productive in both designated pools, West Puerto Chiquito produces primarily from the C zone and Gavilan produces chiefly from the A and B zones.

(8) It is clear from the evidence that there is natural fracture communication between zones A and B but that natural fracture communication is minor or non-existent between zones B and C.

(9) The reservoir consists of fractures ranging from major channels of high transmissibility to micro-fractures of negligible transmissibility, and possibly, some intergranular porosity that must feed into the fracture system in order for oil therein to be recovered.

(10) The productive capacity of an individual well depends upon the degree of success in communicating the wellbore with the major fracture system.

(11) Interference tests indicate: 1) a high degree of communication between certain wells, 2) the ability of certain wells to economically and efficiently drain a large area of at least 640 acres; and 3) the probability exists that the better wells recover oil from adjacent tracts and even more distant tracts if such tracts have wells which were less successful in connecting with the major fracture system.

(12) There is conflicting testimony as to whether the reservoir is rate-sensitive and the Commission should act to order the operators in West Puerto Chiquito and Gavilan-Mancos pools to collect additional data during 90-day periods of increased and decreased allowables and limiting gas-oil ratios.

(13) Two very sophisticated model studies conducted by highly skilled technicians with data input from competent reservoir engineers produced diametrically opposed results so that estimates of original oil in place, recovery efficiency and ultimate recoverable oil are very different and therefore are in a wide range of values.

(14) There was agreement that pressure maintenance would enhance recovery from the reservoir and that a unit would be required to implement such a program in the Gavilan-Mancos Pool.

(15) Estimates of the amount of time required to deplete the Gavilan pool at current producing rates varied from 33 months to approximately five years from hearing date.

(16) Many wells are shut in or are severely curtailed by OCD limits on permissible gas venting because of lack of pipeline connections and have been so shut in or curtailed for many months, during which time reservoir pressure has been shown by pressure surveys to be declining at 1 psi per day or more, indicating severe drainage conditions.

(17) No party requested making the temporary rules permanent, although certain royalty (not unleased minerals)

owners requested a return to 40-acre spacing, without presenting supporting evidence.

(18) Proration units comprised of 640 acres with the option to drill a second well would permit wider spacing and also provide flexibility.

(19) Recognizing that the two designated pools constitute two weakly connected areas with different geologic and operating conditions, the administration of the two areas will be simplified by maintaining two separate pools.

(20) A ninety day period commencing July 1, 1987, should be given for the connection for casinghead gas sale from now-unconnected wells in the Gavilan pool, after which allowables should be reduced in that pool until said wells are connected.

(21) To provide continuity of operation and to prevent waste by the drilling of unnecessary wells, the temporary spacing rules promulgated by Order R-7407 should remain in effect until superceded by this Order.

(22) Rules for 640-acre spacing units with the option for a second well on each unit should be adopted together with a provision that units existing at the date of this order should be continued in effect.

IT IS THEREFORE ORDERED THAT:

(1) The application of Benson-Montin-Greer et al in Case No. 9113 to abolish the Gavilan-Mancos pool and extend the West Puerto Chiquito-Mancos pool to include the area occupied by the Gavilan-Mancos Pool is denied.

(2) The application of Mesa Grande Resources, Inc. for the extension of the Gavilan-Mancos and the concomitant contraction of West Puerto Chiquito-Mancos Pool is denied.

(3) Rule 2 of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor

closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby granted exception to this rule.

(b). A buffer zone is hereby created consisting of the east half of sections bordering Township 1 West. Only one well per section shall be drilled in said buffer zone and if such well is located closer than 2310 feet from the western boundary of the West Puerto Chiquito-Mancos Oil Pool it shall not be allowed to produce more than one-half the top allowable for a 640-acre proration unit.

(4) Beginning July 1, 1987, the allowable shall be 1,500 barrels of oil per day per 640 acres with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil. Operators are required to monitor reservoir performance, including but not limited to, production rates, gas-oil ratios, reservoir pressures, and shall report this information to the Commission within 30 days after completion of the tests. Within the first week of July, 1987, bottom hole pressure tests shall be taken on all wells. Wells shall be shut-in until pressure stabilizes or for a period not longer than 72 hours. Additional bottom hole tests shall be taken within the first week of October, [illegible] with similar testing requirements. All produced gas, [illegible] gas vented or flared, shall be metered. Operators are required to submit a testing schedule to the District Supervisor of the Aztec office of the Oil Conservation Division prior to testing so that tests may be witnessed by OCD personnel.

(5) Beginning October 1, 1987, the allowable shall be 1,000 barrels of oil per day per 640 acres with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil. Operators are required to monitor reservoir performance as in (4) above with bottom hole pressure tests to be taken within the first week of January, 1988. This allowable and GOR limitation shall remain in effect until further notice from the Commission.

(6) In order to prevent further waste and impairment of correlative rights each well in the Gavilan-Mancos Oil Pool shall be connected to a gas gathering system by October 1, 1987 or within ninety days of completion. If Wells presently unconnected are not connected by October 1 the Director may reduce the Gavilan-Mancos allowable as may be appropriate to prevent waste and protect correlative rights. In instances where it can be shown that connection is absolutely uneconomic the well involved may be granted authority to flow or vent the

gas under such circumstances as to minimize waste as determined by the Director.

(7) The temporary special pool rules promulgated by Order R-7407 are hereby extended to the effective date of this order and said rules as amended herein are hereby made permanent.

(8) This case shall be reopened at a hearing to be held in May, 1988 to review the pools in light of information to be gained in the next year and to determine if further changes in rules may be advisable.

(9) Jurisdiction of this cause is retained for entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

4

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2871
Order No. R-2544

APPLICATION OF BOLACK-GREER, INC.,
FOR APPROVAL OF THE CANADA OJITOS
UNIT AGREEMENT, RIO ARRIBA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 7, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 9th day of August, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Bolack-Greer, Inc., seeks approval of the Canada Ojitos Unit Agreement covering 35,829.84 acres, more or less, of Federal and Fee lands in Townships 25 and 26 North, Ranges 1 East and 1 West, NMPM, Rio Arriba County, New Mexico.

(3) That approval of the proposed Canada Ojitos Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Canada Ojitos Unit Agreement is hereby approved.

(2) That the plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Canada Ojitos Unit Area, and such plan shall be known as the Canada Ojitos Unit Agreement Plan.

(3) That the Canada Ojitos Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Canada Ojitos Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

RIO ARRIBA COUNTY, NEW MEXICO

TOWNSHIP 25 NORTH, RANGE 1 EAST

Sections 6 and 7:	All
Section 18:	All
Section 19:	W/2

TOWNSHIP 25 NORTH, RANGE 1 WEST

Sections 1 through 4:	All
Sections 9 through 16:	All
Sections 21 through 28:	All
Sections 33 through 35:	All
Section 36:	W/2

TOWNSHIP 26 NORTH, RANGE 1 EAST

Section 19:	All
Sections 30 and 31:	All

TOWNSHIP 26 NORTH, RANGE 1 WEST

Sections 1 through 4:	All
Section 5:	E/2
Section 8:	E/2
Sections 9 through 16:	All
Section 17:	E/2
Section 20:	E/2
Sections 21 through 28:	All
Sections 33 through 36:	All

containing 35,829.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Canada Ojitos Unit Agreement within 30 days after the effective date thereof.

In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

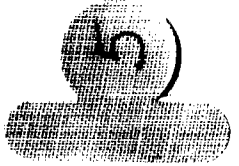
JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 8952
Order No. R-8344

APPLICATION OF BENSON-MONTIN-GREER DRILLING CORPORATION FOR STATUTORY UNITIZATION, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION:

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a.m. on October 24, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of November, 1986, the Commission, a quorum being present, having considered the testimony, the record, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The Applicant, Benson-Montin-Greer Drilling Corp., seeks the statutory unitization, pursuant to the "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, N.M.S.A., 1978 Compilation, of 69,567.235 acres, more or less, of federal, state and fee lands, being a portion of the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, and approval of the plan of unitization and the proposed operating plan.

(3) The proposed unit area should be designated the Canada Ojitos Unit Area; the vertical limits of said unit area will be the subsurface formation commonly known as the Mancos formation identified between the depths of 6968 feet and 7865 feet on the Schlumberger Induction Electrical Log, dated June 18, 1963, in the Canada Ojitos 0-9 Well (previously the Bolack-Greer No. 1 Bolack) located 1080 feet from the South line and 1920 feet from the East line of Section 9, Township 26 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and

is to include all subsurface points throughout the unit area correlative to those identified depths, and the unit area should comprise the following described lands:

RIO ARRIBA COUNTY, NEW MEXICO

Township 24 North, Range 1 East, NMPM
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Section 18: All
Section 19: N/2
Section 20: NW/4

Township 24 North, Range 1 West, NMPM
Sections 1 through 15: All
Section 23: N/2
Section 24: N/2

Township 25 North, Range 1 East, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All

Township 25 North, Range 1 West, NMPM
Sections 1 through 36: All

Township 26 North, Range 1 East, NMPM
Section 19: All
Section 20: W/2
Sections 29 through 32: All

Township 26 North, Range 1 West, NMPM
Sections 1 through 36: All

(4) The portion of the West Puerto Chiquito-Mancos Oil Pool proposed to be included in the aforesaid Canada Ojitos Unit Area has been reasonably defined by development.

(5) The Applicant operates a pressure maintenance project for the secondary recovery of oil and gas in the proposed unit area.

(6) The unitized management, operation and further development of the subject portion of the West Puerto Chiquito-Mancos Oil Pool, as proposed, is reasonably necessary in order to effectively carry on secondary recovery operations and

to substantially increase the ultimate recovery of oil from the pool.

(7) The proposed unitized method of operation as applied to the Canada Ojitos Unit Area is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the pool than would otherwise be recovered.

(8) The estimated additional costs of such operations will not exceed the estimated value of the additional oil so recovered plus a reasonable profit.

(9) Such unitization and adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Canada Ojitos Unit Area.

(10) The Applicant has made a good faith effort to secure voluntary unitization within the West Puerto Chiquito-Mancos Oil Pool.

(11) The participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis, and protects the correlative rights of all owners of interest within the unit area.

(12) The Unit Agreement and the Unit Operating Agreement admitted into evidence in this case should be incorporated by reference into this order.

(13) The Statutory Unitization of the Canada Ojitos Unit Area, in conformance to the above findings, will prevent waste and protect correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The Canada Ojitos Unit Agreement, covering 69,567.235 acres, more or less, of federal, state and fee lands in the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation.

(2) The lands covered by said Canada Ojitos Unit Agreement shall be designated the Canada Ojitos Unit Area and shall comprise:

RIO ARRIBA COUNTY, NEW MEXICO

Township 24 North, Range 1 East, NMPM
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Section 18: All
Section 19: N/2
Section 20: NW/4

Township 24 North, Range 1 West, NMPM
Sections 1 through 15: All
Section 23: N/2
Section 24: N/2

Township 25 North, Range 1 East, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All

Township 25 North, Range 1 West, NMPM
Sections 1 through 36: All

Township 26 North, Range 1 East, NMPM
Section 19: All
Section 20: W/2
Sections 29 through 32: All

Township 26 North, Range 1 West, NMPM
Sections 1 through 36: All

(3) The vertical limits of the Canada Ojitos Unit Area shall be the Mancos formation identified between the depths of 6968 feet and 7865 feet on the Schlumberger Induction Electrical Log dated June 18, 1963, in the Canada Ojitos 0-9 Well (previously the Bolack-Greer No. 1 Bolack), located 1080 feet from the South line and 1920 feet from the East line of Section 9, Township 26 North, Range 1 West, NMPM, Rio Arriba County, New Mexico, and is to include all subsurface points throughout the unit area correlative to those identified depths.

(4) The Canada Ojitos Unit Agreement, admitted into evidence in this case as a portion of Exhibit 1, is hereby incorporated by reference into this order.

(5) The Canada Ojitos Unit Operating Agreement, admitted into evidence in this case as a portion of Exhibit 1, is hereby incorporated by reference into this order.

(6) The Canada Ojitos Unit Agreement and the Canada Ojitos Unit Operating Agreement provide for unitization and unit operation of the subject portion of the West Puerto Chiquito-Mancos Oil Pool upon terms and conditions that are fair, reasonable and equitable and include:

an allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the costs of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions determined by the Division Director to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, including a two hundred percent nonconsent penalty, provided that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of its operating rights and working interest in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator, including a two hundred percent nonconsent penalty;

a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

a provision for a voting procedure for deciding matters by the working interest owners which states that each working interest owner shall have a voting interest equal to its unit participation; and

the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination;

and are therefore hereby adopted.

(7) This order shall become effective at 7:00 o'clock a.m. on the first day of the month following the month in which appropriate ratification of the Canada Ojitos Unit Agreement and Canada Ojitos Unit Operating Agreement is obtained pursuant to Section 70-7-8, N.M.S.A., 1978 Compilation.

(8) If the persons owning the required percentage of interest in the unit area as set out in Section 70-7-8, N.M.S.A., 1978 Compilation, do not approve the plan for unit operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Commission, unless the Commission shall extend the time for ratification for good cause shown.

(9) When the persons owning the required percentage of interest in the unit area have approved the plan for unit operations, the interests of all persons in the unit are unitized whether or not such persons have approved the plan of unitization in writing.

(10) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JIM BACA, Member

ED KELLEY, Member

R. L. STAMETS, Secretary and
Chairman

S E A L

dr/

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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-~~F~~G
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

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

REOPENED CASES NO. 7980, 8946 AND 8950
ORDER NO. R-7407-F-1
ORDER NO. R-6469-F-1

REOPENING CASES 7980, 8946 AND 8950
FOR FURTHER TESTIMONY AS PROVIDED BY
ORDER R-7407-E IN REGARD TO THE
GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D
IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS
OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Oil Conservation Commission of New Mexico (Commission) that the combined order (Order Nos. R-7407-F and R-6469-F) issued in Reopened Case Nos. 7980, 8946 and 8950 and dated August 5, 1988, does not correctly state the intended order of the Commission;

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-7407-F being inadvertently issued twice, the first in Reopened Case 7980 heard before the Commission on March 17, 1988, and the second being erroneously issued in the immediate case as described above; therefore, all references to "Order No. R-7407-F" throughout said order issued in Reopened Case Nos. 7980, 8946 and 8950, dated August 5, 1988, are hereby amended to read "Order No. R-7407-G."

(2) The corrections set forth in this order be entered nunc pro tunc as of August 5, 1988.

DONE at Santa Fe, New Mexico, on this 17th day of August, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and
Secretary

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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and tne subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection gas in the I_g term of the formula above.

(3) The Aztec district office of the Division, with due counselling and advice from pool operators, shall, by October 1, 1988, develop a program for semi-annual bottomhole pressure surveys of wells in both pools located not less than 3/8 mile and not more than 1 1/2 miles from the common pool boundary, designed to measure accurately the pressure differential across the pool boundary and to be used as a basis for adjusting the gas injection credit to wells in the expansion area. The program shall be presented for approval to the Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hearing, to offset any advantage gained by wells on either side of the common boundary of the Gavilan and West Puerto Chiquito Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

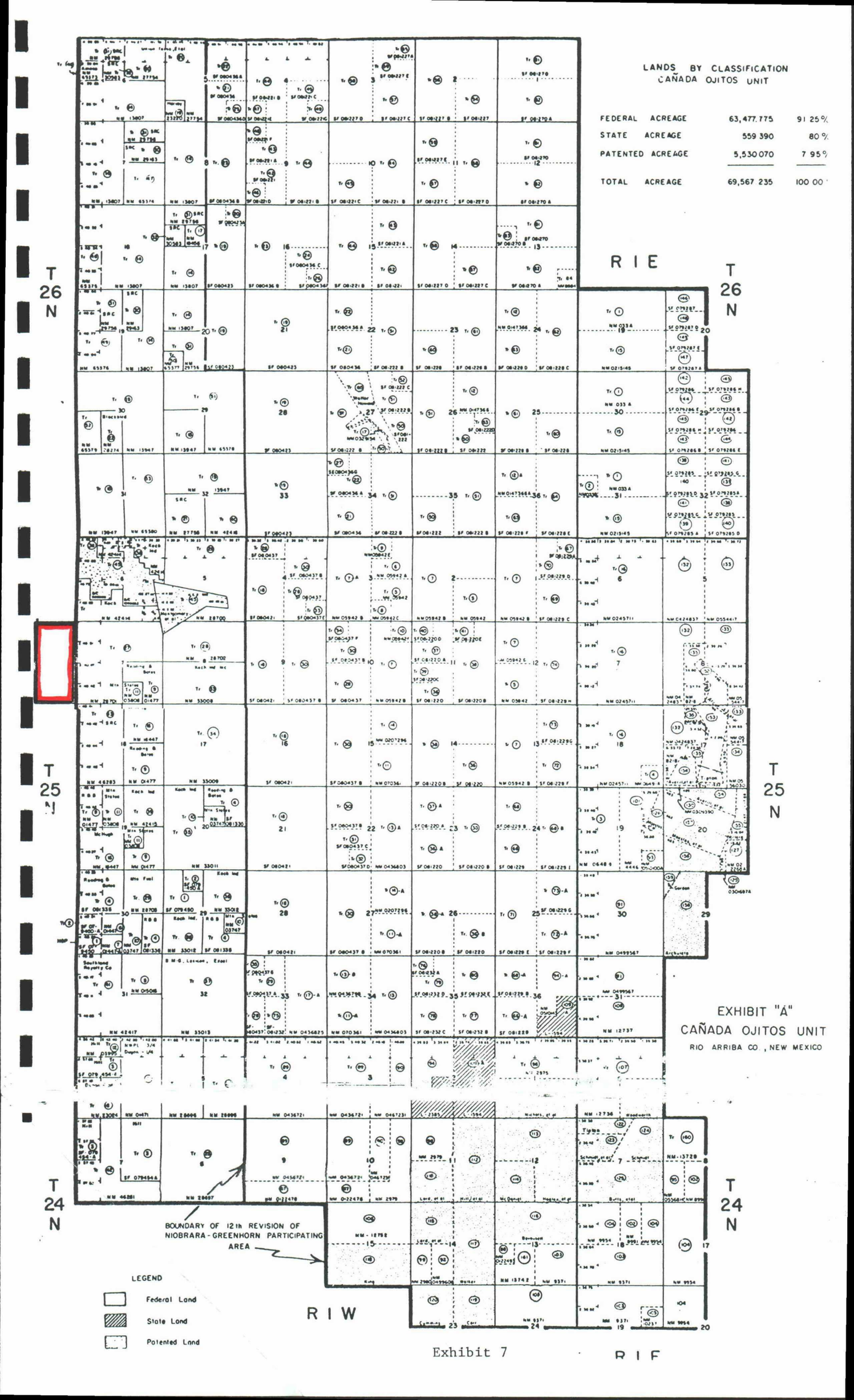
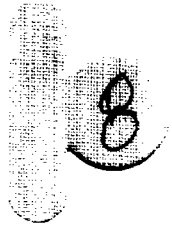

LANDS BY CLASSIFICATION
CAÑADA OJITOS UNIT
FEDERAL ACREAGE 63,477.775 91.25%
STATE ACREAGE 559.390 .80%
PATENTED ACREAGE 5,530.070 7.95%
TOTAL ACREAGE 69,567.235 100.00%
T 26 N
R I E
T 25 N
T 24 N
R I W
R I F
EXHIBIT "A"
CAÑADA OJITOS UNIT
RIO ARRIBA CO., NEW MEXICO
BOUNDARY OF 12th REVISION OF NIOBRARA-GREENHORN PARTICIPATING AREA
LEGEND
Federal Land
State Land
Patented Land

Exhibit 7



[Common source of supply]

Unitization statutes appear customarily to include some reference to a "common source of supply" which expressly or implicitly limits unitization to such a common source. Thus the Oklahoma statute provides that:

> "Each unit and unit area shall be limited to all or a portion of a single common source of supply. Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual operations may be so included within the unit area."[2]

The meaning of the term "common source of supply" as used in the compulsory unitization statute has been discussed in cases arising in Oklahoma. In *Jones Oil Co. v. Corporation Commission*,[3] the commission issued an order unitizing three producing sands despite the contention that there were three common sources of supply rather than the one common source required by the statute. On the basis of evidence that some sixty-one wells had been completed in and produced from two or more of these sands and the production therefrom was com-

---

§ 913.4

[2] 52 Okla. Stat. § 287.4. A similar provision was included in the 1945 Unitization Act. 52 Okla. Stat. § 286.5.

[3] Jones Oil Co. v. Corporation Comm'n, 382 P.2d 751, 18 *O.&G.R.* 1041 (Okla. 1963), *cert. denied*, 375 U.S. 931, 19 *O.&G.R.* 362 (1963).

mingled, the court concluded that the order was valid, declaring that:

> "With this contention we cannot agree. The fact remains that oil is being produced from these three sands through the same well-bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S. 1961 § 287.1. . . . We can see nothing wrong in the Corporation Commission designating these three sands as a common source of supply. . . . For us to hold otherwise on this Point would violate the spirit of unitization."[4]

In *Palmer Oil Corp. v. Phillips Petroleum Co.*,[5] the contention was made that a unitization order was invalid since the unit was not limited to a common source of supply and since the unitized area had not been reasonably defined by actual drilling operations. In rejecting the contention, the court commented as follows:

> "The finding of the Commission (in paragraph 2) which is di-

---

[4] 382 P.2d at 752–753, 18 *O.&G.R.* at 1043–1044.

In Jones v. Continental Oil Co., 420 P.2d 905, 26 *O.&G.R.* 78 (Okla. 1966), the court sustained a unitization order involving twenty-one sand stringers underlying the lands, concluding that there was evidence of a substantial nature that all of the twenty-one producing sands were in communication with each other as a result of the completion and production practices used in the field.

In Cameron v. Corporation Comm'n, 418 P.2d 932, 25 *O.&G.R.* 535 (Okla. 1966), the court held that the Corporation Commission exceeded its authority under the Well Spacing Act in creating well spacing units when it was not established by substantial evidence that the area sought to be spaced was underlaid by a common source or supply.

> "That the existence of a source of supply common to lands covered by a spacing order is a necessary prerequisite to the jurisdiction of the Commission to enter such an order, is shown by the wording of our Conservative Statutes, and has always been recognized by this Court," 418 P.2d at 938, 25 *O.&G.R.* at 544

[5] Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 977 (1951), *appeal dismissed sub nom.*, Palmer Oil Corp. v. Amerada Petroleum Corp., 343 U.S. 390, 1 *O.&G.R.* 876 (1952). This case was concerned with the 1945 Act, 52 Okla. Stat. § 286.5.

rectly responsive to the issue is as follows: '... that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool.'

"The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence.... Since the evidence before the Commission was competent and sufficient if believed, to sustain the order we must, and do, hold that the order is sustained by the evidence and that the contention is without merit."[6]

As to the contention that the boundaries had not been defined by actual drilling operations as required by the act, the court concluded that:

"Actual drilling upon the undrilled tracts or within a definite proximity thereto is neither prescribed by the statute nor by law.... The only prescription is that the source of supply must have been reasonably defined thereby. The drilling operations required are simply those the evidentiary force of which is sufficient to justify a conclusion, by those capable in law of weighing the facts as to the existence of the source of supply. There is unanimity in the testimony herein that the wells drilled afforded sufficient evidence to define the common source of supply

[6] 231 P.2d at 1008–1009.

within the unit area and the Commission so found. We hold that said attack upon the order is without merit."[7]

[Discovery well]

The same case, *Palmer Oil Corp. v. Phillips Petroleum Co.*, was also concerned with the meaning of the term "field" as employed in a provision of the 1945 Act exempting from compulsory unitization any field in which the discovery well had been drilled twenty years prior to the effective date of the act.[8] The first discovery of oil and gas in the area occurred in 1917 but the unitized sand had not been discovered until 1936. The court commented as follows:

"the only logical deduction to be made, when considering the Act as a whole, is that the discovery well, in the mind of the Legislature, is that well in the field that discovered the common source of supply which is the subject of the unification. To hold otherwise would not only defeat the legislative intent herein but in other situations as well because the court takes judicial knowledge of the fact major pools have been and may yet be discovered in areas where many years ago oil had been discovered in upper and shallower sands which have become practically if not completely depleted."[9]

[7] 231 P.2d at 1010.

[8] 52 Okla. Stat. § 286.2.

[9] 231 P.2d at 1011–1012.

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

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

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-F
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR FURTHER TESTIMONY AS PROVIDED BY ORDER R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.

(2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.

(3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

(9) Proponents presented testimony and exhibits intended to demonstrate:

(a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.

(b) Insignificant oil has moved across the alleged barrier.

(c) Gas-oil ratio limitations are unfair to Gavilan operators.

(d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.

(e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.

(f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.

(g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.

(h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

(a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.

(b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

recovery in the COU located wholly within the WPC pool.

(c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.

(d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.

(e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.

(f) Gravity segregation was responsible for the lower GOR performance during high-rate production.

(g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.

(h) The reservoir performance during the test period shows pronounced effects of depletion.

(i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

> Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

dr/

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

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

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced GOR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 1 (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} - TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection gas in the I_g term of the formula above.

(3) The Aztec district office of the Division, with due counselling and advice from pool operators, shall, by October 1, 1988, develop a program for semi-annual bottomhole pressure surveys of wells in both pools located not less than 3/8 mile and not more than 1 1/2 miles from the common pool boundary, designed to measure accurately the pressure differential across the pool boundary and to be used as a basis for adjusting the gas injection credit to wells in the expansion area. The program shall be presented for approval to the Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hearing, to offset any advantage gained by wells on either side of the common boundary of the Gavilan and West Puerto Chiquito Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member

WILLIAM J. LEMAY, Chairman and Secretary

S E A L

create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, are a single common source of supply of oil and gas."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order, that it is supported by substantial evidence, and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

> "The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:
>
> 'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'
>
> "* * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a single massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by

Exhibit 11

create and constitute, for all practical purposes, a single Pennsylvanian Sand common source of supply of oil and gas. Many of the wells in the field are in a stripper stage and it appears that the field as a whole is approaching its economic limits. With respect to remaining primary reserves, it would not be practical for this Commission to undertake to treat the various stringers of the Pennsylvanian Sand in the Bayou Pool other than as a single common source of supply of oil and gas. Further, in connection with the secondary recovery operations, it is neither practical nor economically feasible to attempt to segregate and separately operate and produce the various Pennsylvanian Sand stringers or lenses, although in the interest of efficient operations in the conduct of a waterflood, it might be or at sometime become advisable for an operator to attempt to segregate, to the extent possible, one group of the various sand stringers from the remaining stringers for the purpose of attempting to selectively inject and/or produce. The Commission therefore finds that said Pennsylvanian Sand stringers underlying the lands above described and found South and/or below the East-West trending fault shown on Exhibit 'A' attached to the Plan of Unitization, Bayou Unit, [illegible] common source of supply [illegible] of Lots."

[1] We feel, after a careful review of the evidence with reference to the above paragraph of the Order that it is supported by substantial evidence and should be approved by us, and we hereby approve the findings set out therein. The language we used in the case of Jones Oil Company et al. v. Corporation Commission et al., Okl., 382 P.2d 751, is particularly appropriate here. There we said:

> "The fact remains that oil is being produced from these three sands through the same well bore. The evidence clearly shows that it would be uneconomical to make three separate units of these sands. To us it would violate the very reasons for unitization as set out in the first section of the Unitization Act passed in 1951, which is 52 O.S.1961, § 287.1, and is as follows:
>
> 'The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this Act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.'
>
> * * * For us to hold otherwise on this Point would violate the spirit of unitization."

[2] Protestant's second point under its first proposition is without merit. Applicant's witnesses testified that there would be some attempt at segregation in order to determine flood performance and in the interest of flood efficiencies, but that complete effective segregation would not be physically possible. All of this is to say that the flood would be developed in stages, which is common, whether the reservoir is a sand of massive sand or a series of sands.

[3] Likewise, the third point raised by Protestant under its first proposition fails. The authorities quoted by the Protestant in support of its position does not fall squarely within the rule sought by the Protestant under this point. Here the Commission did not find 21 separate common sources of supply but found that the 21 different producing sands in the field constituted a common source of supply, thereby negating the rule sought by the Protestant under the authority of In re Lovell-Crescent Field, Logan County, Okl., 198 Okl. 284, 178 P.2d 876.

[4, 5] Protestant's second proposition is generally to the effect that the Plan is not feasible and that it is not supported by

due to the fact that his interests in the lands are fixed by the judgment in favor of the defendant, Mrs. Lee Aulick, who died after the judgment herein was appealed from.

The question as to the ownership of the $500.00 in the bank in Carmen is not involved in this suit, and we express no opinion thereon.

Judgment affirmed.

PALMER OIL CORP. et al. v. PHILLIPS PETROLEUM CO. et al.

STERBA et al. v. CORPORATION COMMISSION et al.

Nos. 33336, 33708.

Supreme Court of Oklahoma.
March 20, 1951.

Petitions for Rehearing Denied May 22, 1951.

Applications for Leave to File Second Petition for Rehearing Denied June 5, 1951.

Proceedings before the Corporation Commission by the Phillips Petroleum Company and others, lessees who petitioned for the creation of a unit having for its purpose the unitized management, operation and further development of what is known as the West Cement Medrano common source of supply of oil and gas. The Palmer Oil Corporation and others, lessees, lessors and royalty owners protested. From an order of the Commission creating the unit, protestants appealed. Original action by the Palmer Oil Corporation and others, against the Corporation Commission for a writ of prohibition. The Supreme Court, Gibson, J., held that the Unitization Act was not unconstitutional and that the order of the Corporation Commission creating the unit was not contrary to either the law or the evidence.

Order affirmed. Writ denied.

Luttrell, V. C. J., and Welch, Davison and O'Neal, JJ., dissented.

1. Constitutional law ⇐148
Mines and minerals ⇐92.4

The Unitization Act is not unconstitutional as unreasonable in that in the formation of the unit and in the committee management thereof, lessees only are recognized, that the act imposes an unauthorized burden upon royalty interest in the production, that it imposes an unauthorized burden upon the leased premises of the lessor and that it is violative of the obligation of contracts. 52 O.S.Supp. §§ 286.1 to 286.17; O.S 1941 Const. art. 2, §§ 7, 15, 23, 24; art. 5, § 51; U.S.C.A.Const. art. 1, § 10; Amend. 14.

2. Constitutional law ⇐70(3)

The authority of the legislature in dealing with matters of policy is without the scope of judicial inquiry.

3. Constitutional law ⇐253

The legislature is itself a judge of conditions warranting legislative enactments and they are only to be set aside when they involve such palpable abuse of power and lack of reasonableness to accomplish a lawful end that they may be said to be arbitrary, capricious and unreasonable and hence irreconcilable with the conception of due process of law. U.S.C.A.Const. Amend. 14.

4. Constitutional law ⇐70(3)

Whether enactment is wise or unwise, whether it is based on sound economic theory, whether it is the best means to achieve the desired result are ordinarily matters for the judgment of the legislature and the earnest conflict of serious opinion does not bring it within the range of judicial cognizance.

5. Constitutional law ⇐64
Mines and minerals ⇐92.4

The Unitization Act is not invalid as an unconstitutional delegation of legislative power because of the provision requiring a petition of lessees of record of more than 50 per cent of the area of the common source of supply in order to give the Corporation Commission jurisdiction under the act to create a unit. 52 O.S.Supp. §§ 286.1 to 286.17.

6. Mines and minerals ⇐92.4

The Unitization Act does not impose an undue burden upon royalty because of provisions treating a royalty interest that is in excess of one-eighth of the production,

trusted to the Commission because it is thought to be peculiarly experienced and fitted for the purpose and it is not to be contemplated that the courts may substitute their notions of expediency and fairness for that of the Commission. Peppers Refining Co. v. Corporation Commission, 198 Okl. 451, 179 P.2d 899; Denver Producing & Refining Co. v. State supra.

In the light of these governing rules we consider the several alleged grounds of error in making the order.

It is contended that the area of the West Cement Medrano Unit is not limited to one "common source of supply."

[11] Under the Act, a unit must be limited to a common source of supply. The Act does not in express terms define a common source of supply, but there was at the time of the enactment a legislative definition of the term, 52 O.S.1941 § 84(c), now 52 O.S.Supp.1947 § 86.1(c), and we construe such definition as a part of the Act. Therein, the term is thus defined: "(c) The term 'Common Source of Supply' shall comprise and include that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid by a common accumulation of oil or gas or both; provided that if any such area is underlaid or appears from geological or other scientific data or from drilling operations or other evidence to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by a strata of earth and not connected with each other, then such area, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply;".

That more than one common source of supply may exist in a given sand appears to be recognized in the statute and in H. F. Wilcox Oil & Gas Co. v. State, 162 Okl. 89, 19 P.2d 347, 86 A.L.R. 421, we held that more than one common source of supply could obtain in such sand by reason of faults that constitute impervious barriers between segments thereof.

The existence of faults in the unit area is recognized and the question before Commission was whether the segments of the sand were disconnected by reason of the faults. The finding of the Commission (in paragraph 2) which is directly responsive to the issue is as follows: "* * * that the said Medrano sandstone underlying said above described lands as aforesaid constitutes a single common source of supply of oil and gas, all parts of which are permeably connected so as to permit the migration of oil or gas or both from one portion of said common source of supply to another wherever and whenever pressure differentials are created as a result of the production or operations for the production of oil or gas from said producing formation; that although faults are known to exist in parts of said common source of supply said faults do not prevent substantial migration of oil and gas and of pressures from one part of said common source of supply to another; that said common source of supply of oil and gas has heretofore been designated by the Commission and is generally known as the West Cement Medrano Pool."

[12, 13] The question of the faults in the area and the effect thereof had previously been before the Commission a number of times, and the study and hearings thereon had culminated in orders wherein the Commission found that the whole of the Medrano sand as then developed was in fact one common source of supply. At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence. Under the holding of this court and that of courts generally, Chicago, R. I. & P. Ry. Co. v. Pruitt, 67 Okl. 219, 170 P. 1143; 22 C.J. 728, sec. 823, 32 C.J.S., Evidence, § 567, p. 378, the weight to be given opinion evidence is, within the bounds of reason, entirely for the determination of the jury or of the court, when trying an issue of fact, it taking into consideration

70-7-4. Definitions.

For the purposes of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], unless the context otherwise requires:

A. "pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word pool as used herein. Pool is synonymous with "common source of supply" and with "common reservoir";

B. "oil and gas" means crude oil, natural gas, casinghead gas, condensate or any combination thereof;

C. "waste," in addition to its meaning in Section 70-2-3 NMSA 1978, shall include both economic and physical waste resulting, or that could reasonably be expected to result, from the development and operation separately of tracts that can best be developed and operated as a unit;

D. "working interest" means an interest in unitized substances by virtue of a lease, operating agreement, fee title or otherwise, excluding royalty owners, owners of overriding royalties, oil and gas payments, carried interests, mortgages and lien claimants but including a carried interest, the owner of which is primarily obligated to pay, either in cash or out of production or otherwise, a portion of the unit expense; however, oil and gas rights that are free of lease or other instrument creating a working interest shall be regarded as a working interest to the extent of seven-eighths thereof and a royalty interest to the extent of the remaining one-eighth thereof;

E. "working interest owner" or "lessee" means a person who owns a working interest;

F. "royalty interest" means a right to or interest in any portion of the unitized substances or proceeds thereof other than a working interest;

G. "royalty owner" means a person who owns a royalty interest;

H. "unit operator" means the working interest owner, designated by working interest owners under the unit operating agreement or the division to conduct unit operations, acting as operator and not as a working interest owner;

I. "basic royalty" means the royalty reserved in the lease but in no event exceeding one-eighth; and

J. "relative value" means the value of each separately owned tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of said factors, or such other pertinent engineering, geological, operating or pricing factors, as may be reasonably susceptible of determination.

History: 1953 Comp., § 65-14-4, enacted by Laws 1975, ch. 293, § 4; 1977, ch. 255, § 110.

70-7-5. Requisites of application for unitization.

Any working interest owner may file an application with the division requesting an order for the unit operation of a pool or any part thereof. The application shall contain:

A. a description of the proposed unit area and the vertical limits to be included therein with a map or plat thereof attached;

B. a statement that the reservoir or portion thereof involved in the application has been reasonably defined by development;

C. a statement of the type of operations contemplated for the unit area;

D. a copy of a proposed plan of unitization which the applicant considers fair, reasonable and equitable;

IT IS FURTHER ORDERED that this matter be, and it hereby is, referred to this Court's Disciplinary Board with direction immediately to assign it to Hearing Committee C, Southern District (Ben S. Shantz, Chairman) and Disciplinary Counsel is directed immediately to file a petition instituting formal proceedings hereon before such hearing committee.

96 N.M. 692

In the Matter of Harold M. MORGAN, Esquire.

No. 13231.

Supreme Court of New Mexico.

Sept. 9, 1981.

Disciplinary Proceeding.

IT HAVING BEEN MADE TO APPEAR TO THE COURT by affidavit of Glen L. Houston, Attorney at Law, that the respondent, HAROLD M. MORGAN, has served the time heretofore prescribed for practice under probationary conditions and supervision by our Order of August 13, 1980, 95 N.M. 653, 625 P.2d 582, and has fully complied with the conditions of his probation;

NOW IT IS ORDERED that HAROLD M. MORGAN, Esquire, be and he hereby is released from probation and the conditions thereof with respect to his license to practice law in the courts of this state.

96 N.M. 692

Richard BUZBEE, Reggie D. Bell, and Richard Chapman, Petitioner and Intervenors,

v.

Hon. Thomas A. DONNELLY, Hon. Lorenzo F. Garcia, Hon. Bruce E. Kaufman, District Judges, Respondents.

STATE of New Mexico, Plaintiff-Appellee,

v.

Richard Nave CHAPMAN, et al., and Narciso Telles Flores, et al., Defendants-Appellants.

Nos. 13783, 13789.

Supreme Court of New Mexico.

Sept. 25, 1981.

Rehearing Denied Oct. 23, 1981.

Prison inmates, indicted for murdering other inmates, moved to dismiss the indictments on the ground that exculpatory evidence had been withheld from the grand jury. When the motions were denied, the inmates brought interlocutory appeals or sought writs of prohibition. The cases were consolidated on appeal. The Supreme Court, Easley, C. J., held that: (1) prosecutor properly withheld inmates' self-serving statements from grand jury since statements were not such evidence as would be admissible at trial; (2) prosecutor had no duty to submit to grand jury circumstantial exculpatory evidence bearing on credibility of witnesses who testified; and (3) failure of prosecutor to submit such exculpatory evidence to grand jury did not violate inmates' due process right to fair trial.

Affirmed and remanded.

Sosa, Senior Justice, and Wood, Senior Judge, Court of Appeals, dissented and filed opinion.

1. Grand Jury ⇐36.2

Statute requiring prosecutor to present to grand jury evidence that directly negates

not identified the same defendant in his prior statement.

3. A witness, who did not testify before the grand jury, said in a statement that the way a murder was carried out was different than what was described by other witnesses before the grand jury.

4. A witness, who testified before the grand jury, named other persons as participants but not the defendant.

5. A witness whose grand jury testimony implicated a defendant had given a previous statement in which he was confused as to the identity of the defendant.

6. Statements that the killers were masked.

7. Statements that a defendant was present for a while at a killing, but the witness did not see the defendant participate in the killing.

8. A witness, who testified before the grand jury, but changed his mind or made a mistake as to the identity of the perpetrator in his prior statement.

[3] Although this indirect or circumstantial evidence may be inconsistent with that presented to the grand jury, we inquire whether it directly negates guilt. Basic to the analysis of this issue is a determination of the legislative intent in specifying that evidence *directly* negating guilt should be furnished the grand jury. A most logical assumption is that the intent was also to proscribe the use of evidence *indirectly* negating guilt. When a statute uses terms of art, we interpret these terms in accordance with case law interpretation or statutory definition of those words, if any. *See State v. Aragon*, 55 N.M. 423, 234 P.2d 358 (1951); *State v. Grissom*, 35 N.M. 323, 298 P. 666 (1931); *Burch v. Ortiz*, 31 N.M. 427, 246 P.2d 908 (1926); *Bradley v. United States*, 410 U.S. 605, 93 S.Ct. 1151, 35 L.Ed.2d 528 (1973).

Neither the statutes nor case law give us any help with a specific definition of the term "directly negating" guilt. However, given the history of the statutes here, where hearsay and secondary evidence were specifically not allowed for 115 years and the fact that the law was then changed to allow any evidence that would be admissible at trial, we believe the Legislature was thinking in terms of the traditional categories of evidence. The only common sense explanation for the use of the words in question is that the Legislature intended to permit the use of *direct* evidence negating guilt and to prohibit the use of indirect, or circumstantial, evidence negating guilt.

[4] Direct evidence is evidence which, if believed, proves the existence of the fact without inference or presumption. *People v. Thomas*, 87 Cal.App.3d 1014, 151 Cal. Rptr. 483 (Ct.App.1979); *State v. Thompson*, 519 S.W.2d 789 (Tenn.1975); *Frazier v. State*, 576 S.W.2d 617 (Tex.Cr.App.1978). Direct evidence is actual knowledge gained through a witness' senses. *State v. Hubbard*, 351 Mo. 143, 171 S.W.2d 701 (1943); *see also State v. Farrington*, 411 A.2d 396 (Me.1980); *State v. Musgrove*, 178 Mont. 162, 582 P.2d 1246 (1978).

The court in *State v. Lewis*, 177 Neb. 173, 128 N.W.2d 610, 613 (1964), used the following definition: "Otherwise stated, direct evidence is proof of facts by witnesses who saw acts done or heard words spoken, while circumstantial evidence is proof of collateral facts and circumstances from which the mind infers the conclusion that the facts sought to be established in fact existed." *United Textile Workers v. Newberry Mills, Inc.*, 238 F.Supp. 366, 372 (W.D.S.C.1965).

[5] All of the withheld evidence in our case, other than the self-serving statements of defendants, is circumstantial in nature. It does not directly negate the guilt of the defendants. It must be aided by inferences or presumptions. The prosecutor had no duty under the statutes to submit this evidence to the grand jury.

Our decision on this issue differs in part with the theory expressed in dicta by the Court of Appeals in *State v. Herrera*, 93 N.M. 442, 601 P.2d 75 (N.M.App.1979), and followed in later cases, which holds that knowingly withholding *exculpatory* evidence from a grand jury denies the defendant due process. That Court obviously

considered the EPA's several responses to this argument, including its contention that any error was harmless. We are not persuaded by such arguments and cannot agree that the ALJ did not rely considerably on the letter in assessing the civil penalty. We conclude therefore that the penalty assessed of $21,000 must be vacated and that this penalty issue must be remanded to the agency for reconsideration, without consideration being given to the October 4, 1977, letter (Tr. Ex. C-1) as having afforded notice to Yaffe of the presence of PCBs.

CONCLUSION

In sum, we find no reversible error requiring that we set aside the findings by the EPA of the violations by Yaffe. However, the assessment of the civil penalty must be vacated for the reasons stated above and the cause is remanded to the agency for further proceedings to reconsider the civil penalty of $21,000 assessed against petitioner Yaffee.

IT IS SO ORDERED.

UNITED STATES of America, Plaintiff-Appellee,

v.

Charles E. MAYBERRY, Defendant-Appellant.

No. 85-1405.

United States Court of Appeals, Tenth Circuit.

Oct. 7, 1985.

Defendant was convicted before the United States District Court for the District of New Mexico, Howard C. Bratton, Chief Judge, of breaking and entering a dwelling located on a federal enclave, and he appealed. The Court of Appeals, John P. Moore, Circuit Judge, held that special assessments imposed upon defendant pursuant to statute providing for such assessments to generate income to offset cost of victim's assistance fund violated provision of Assimilative Crimes Act that an individual who commits an act on a federal reservation which is illegal under laws of the state where the enclave is located "shall be guilty of a like offense and subject to a like punishment" under the federal law, since the special assessments constituted a "punishment" within meaning of the Act, and state in which enclave was located had no similar punishment.

Reversed and remanded with instructions.

1. Criminal Law ⇐16

Purpose of Assimilative Crimes Act [18 U.S.C.A. § 13] providing that criminal law of surrounding jurisdiction is incorporated into federal law with regard to crimes committed in federal enclaves is to conform criminal law of federal enclaves to that of the local law except in cases of specific federal crimes.

2. Statutes ⇐188

Where a statute contains no definition of term in question, general rule is that word is to be interpreted in its ordinary, everyday sense.

3. Criminal Law ⇐16

Policy behind Assimilative Crimes Act [18 U.S.C.A. § 13] conforming criminal law of federal enclaves to that of local law is to assure that those persons alleged to have

edge with respect to the PCB content of its transformer oil indicates a lack of responsibility and concern. ... It should be stated in Respondent's behalf, however, that Respondent expended monies subsequent to the state and federal inspections to cure deficiencies. It demonstrated, after the inspections by Complainant's employees, a cooperative attitude and attempted to comply with the pertinent regulations issued under the act and, in large measure, was successful in such attempt.
I R.I.D. at 24-25; (Emphasis added).

in 1984 U.S.Code Cong. & Ad.News 3182, 3607, 3619.

The Assimilative Crimes Act, 18 U.S.C. § 13, states:

> Whoever within or upon any of the places now existing or hereafter reserved or acquired as provided in section 7 of this title, is guilty of any act or omission which, although not made punishable by any enactment of Congress, would be punishable if committed or omitted within the jurisdiction of the State, Territory, Possession, or District in which such place is situated, by the laws thereof in force at the time of such act or omission, shall be guilty of a like offense *and subject to a like punishment.*

(Emphasis added.) The purpose of this Act is to conform the criminal law of federal enclaves to that of local law except in cases of specific federal crimes. *United States v. Best*, 573 F.2d 1095 (9th Cir.1978). Essentially, the Act fills gaps in the federal law by providing a set of criminal laws for federal reservations. *United States v. Prejean*, 494 F.2d 495, 496 (5th Cir.1974). Since there is no express enactment of Congress providing punishment for breaking and entering, the Assimilative Crimes Act and New Mexico law were appropriately applied in this case.

The question we now face, whether the penalty assessment applies to assimilative crimes, has not yet been considered. As we view the problem, it is one of statutory construction. The assessment, by its terms, applies to "any person convicted of an offense against the United States." 18 U.S.C. § 3013. Clearly, persons convicted of assimilative crimes have been "convicted of an offense against the United States." This does not mean, however, that the assessment necessarily applies to assimilative crimes. Dependent upon the laws of the forum state, the terms of the Assimilative Crimes Act may preclude this result in some cases.

The Assimilative Crimes Act makes clear that an individual who commits an act on a federal reservation which is illegal under the laws of the state where the enclave is located "shall be guilty of a like offense *and subject to a like punishment*" under the federal law. (Emphasis added.) This language has consistently been construed to require punishment only in the way and to the extent that the same offense would have been punishable if the territory embraced by the federal reservation or enclave where the crime was committed remained subject to the jurisdiction of the state. *United States v. Press Publishing Co.*, 219 U.S. 1, 31 S.Ct. 212, 55 L.Ed. 65 (1911); *United States v. Dunn*, 545 F.2d 1281 (10th Cir.1976). Thus, if the special assessment is found to be a punishment, and New Mexico has no similar punishment, imposition of the assessment *in this case*, would be violative of the Assimilative Crimes Act.

Because the parties agree that New Mexico has no similar provision for collecting special assessments from convicted persons, the issue before us resolves to whether the special assessment is a "punishment" as that term is used in the Assimilative Crimes Act. As such, the issue is one of federal and not state law. *Johnson v. Yellow Cab Transit Co.*, 321 U.S. 383, 64 S.Ct. 622, 88 L.Ed. 814 (1944).

[2] The term "punishment" is not defined in the Assimilative Crimes Act. Where a statute contains no definition of the term in question, the general rule is that the word is to be interpreted in its ordinary, everyday sense. *First Nat. Bank & Trust Co. of Chickasha v. United States*, 462 F.2d 908 (10th Cir.1972). Accordingly, we adopt the definition of punishment set forth in Black's Law Dictionary 1398 (rev. 4th ed. 1968) as follows:

> Any pain, penalty, suffering, or confinement inflicted upon a person by the authority of the law and the judgment and sentence of a court, for some crime or offense committed by him, or for his omission of a duty enjoined by law.

Those cases which have considered the term in connection with the question of whether a specific statute can be incorporated into the federal law under the Assimilative Crimes Act have found the word to


16

ARTICLE 7

Statutory Unitization Act

70-7-1. Purpose of act.

The legislature finds and determines that it is desirable and necessary under the circumstances and for the purposes hereinafter set out to authorize and provide for the unitized management, operation and further development of the oil and gas properties to which the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978] is applicable, to the end that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners of mineral interests in each unitized area. It is the intention of the legislature that the Statutory Unitization Act apply to any type of operation that will substantially increase the recovery of oil above the amount that would be recovered by primary recovery alone and not to what the industry understands as exploratory units.

History: 1953 Comp., § 65-14-1, enacted by Laws 1975, ch. 293, § 1.

Law reviews. — For article, "On an Institutional Arrangement for Developing Oil and Gas in the Gulf of Mexico", see 26 Nat. Resources J. 717 (1986).

70-7-2. Short title.

This act [70-7-1 to 70-7-21 NMSA 1978] may be cited as the "Statutory Unitization Act."

History: 1953 Comp., § 65-14-2, enacted by Laws 1975, ch. 293, § 2.

70-7-3. Additional powers and duties of the oil conservation division.

Subject to the limitations of the Statutory Unitization Act [70-7-1 to 70-7-21 NMSA 1978], the oil conservation division of the energy, minerals and natural resources department, hereinafter referred to as the "division", is vested with jurisdiction, power and authority and it shall be its duty to make and enforce such orders and do such things as may be necessary or proper to carry out and effectuate the purposes of the Statutory Unitization Act.

History: 1953 Comp., § 65-14-3, enacted by Laws 1975, ch. 293, § 3; 1977, ch. 255, § 109; 1987, ch. 234, § 67.

The 1987 amendment, effective July 1, 1987, substituted "energy, minerals and natural resources" for "energy and minerals" and made minor changes in language.

Exhibit 16

number of claims are considered, it is clear that different procedures are necessary and this is a relevant fact in such a determination. *Crowder v. Salt Lake County*, 552 P.2d 646 (Utah 1976).

In this state, cities are clearly limited in their expenditures. See § 11–6–1, N.M.S.A. 1953 [Repl. Vol. 2, pt. 2 (Supp.1975)] and § 11–6–6, N.M.S.A.1953 [Repl. Vol. 2, pt. 2, 1974]. The ability of cities to raise money to meet such extraordinary expense is also restricted.

Therefore, it appears that some rational basis does exist for limiting the time period in which a suit may be brought against a city. This determination is sufficient to overcome respondents' contention that § 23–1–23 is unconstitutional. Therefore, the decision of the Court of Appeals is reversed and the order of the District Court of Rio Arriba County dismissing the complaint is hereby affirmed.

IT IS SO ORDERED.

SOSA, EASLEY and FEDERICI, JJ., concur.

PAYNE, J., respectfully dissents.

90 N.M. 790

STATE of New Mexico ex rel. Thomas Ray NEWSOME, Jr.,
Petitioner-Appellant,

v.

Phillip ALARID, Director of Personnel, University of New Mexico,
Respondent-Appellee.

No. 11207.

Supreme Court of New Mexico.

Sept. 26, 1977.

Student newspaper reporter at university sought alternative writ of mandamus permitting him to gain access to information within university's nonacademic staff personnel records. The District Court, Bernalillo County, James A. Maloney, D. J., quashed writ and dismissed petition, and reporter appealed. The Supreme Court, Easley, J., held that: (1) statutory provision exempts, from disclosure, State's public records consisting of doctor's opinions and other medical information in personnel files; (2) university's records, which pertained to illness, injury, disability, inability to perform a job task and sick leave, were confidential and not subject to release to public; (3) university's records, which pertained to letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be rehired or as to reason an applicant was not hired and other matters of opinion, were exempt from disclosure; (4) if required to determine whether to permit inspection of public record of State, trial judge should make a private examination of the record; (5) university's records regarding military discharges and arrest records were not necessarily exempt from disclosure, but such information would be immune to disclosure under certain circumstances; (6) request for inspection of records could not be denied merely on basis of contention that the request posed an extreme burden on university's personnel director's office, and (7) fact that reporter sought disclosure of all of university's nonacademic staff personnel records, but was only entitled to disclosure of such records which were not confidential, did not warrant a refusal to grant any relief to petitioner.

Cause remanded.

1. Appeal and Error ⇐766, 768

Where there is a failure to comply with rule, which provides that a statement of proceedings shall contain "[A] concise, chronological summary of such findings as are material to the review with appropriate references to the transcript. If any finding is challenged, it must be so indicated by a parenthetical note referring to the appropriate numbered point in the argument," reviewing court may assume the findings are correct and conclusive on appeal, court

C. letters or memorandums which are matters of opinion in personnel files or students' cumulative files; and

D. as otherwise provided by law.

The statute is not entirely clear in Section A as to whether all medical records are exempt from disclosure.

[3–6] A statute should be interpreted to mean what the Legislature intended it to mean, and to accomplish the ends sought to be accomplished by it. *Burroughs v. Board of County Comm'ners*, 88 N.M. 303, 540 P.2d 233 (1975). The entire statute is to be read as a whole so that each provision may be considered in its relation to every other part. *Winston v. New Mexico State Police Bd.*, 80 N.M. 310, 454 P.2d 967 (1969). A construction must be given which will not render the statute's application absurd or unreasonable and which will not defeat the object of the Legislature. *State v. Nance*, 77 N.M. 39, 419 P.2d 242 (1966), *cert. denied*, 386 U.S. 1039, 87 S.Ct. 1495, 18 L.Ed.2d 605 (1967). Moreover, enactments of the Legislature are to be interpreted to accord with common sense and reason. *Westland Development Co. v. Saavedra*, 80 N.M. 615, 459 P.2d 141 (1969).

[7] The intent of the Legislature to exempt doctors' opinions and other medical information in personnel files from disclosure is evident from an analysis of this statute, and the intent comports with common sense and reasoning as well as with good public policy.

Exemptions Under the Statute

[8] Most of the information in dispute clearly falls within the exemptions allowed by statute. We hold that the personnel records of the employees which pertain to illness, injury, disability, inability to perform a job task, and sick leave shall be considered confidential under the statute and not subject to release to the public, except, of course, by the consent or waiver of the particular employee.

[9] Letters of reference are specifically exempt from disclosure under Section B of the statute as are letters or memorandums which are matters of opinion as noted in Section C. The Legislature quite obviously anticipated that there would be critical material and adverse opinions in letters of reference, in documents concerning disciplinary action and promotions and in various other opinion information that might have no foundation in fact but, if released for public view, could be seriously damaging to an employee. We hold that letters of reference, documents concerning infractions and disciplinary action, personnel evaluations, opinions as to whether a person would be re-hired or as to why an applicant was not hired, and other matters of opinion are also exempt from disclosure under the statute.

Records Not Specifically Exempt

Alarid contends that in addition to those items which fall within the statutory exemptions, there are other matters of a personal or sensitive nature in the files that, for reasons of public policy, should be kept confidential and not be subject to disclosure. This argument is based on balancing the interests that favor disclosure against those interests that favor confidentiality.

Alarid claims that military discharge and arrest records are of a confidential nature but are not specifically exempted by statute. There is no New Mexico case which faces this issue squarely. Only three cases have mentioned this statute. *Ortiz v. Jaramillo*, 82 N.M. 445, 483 P.2d 500 (1971) (deciding that the county clerk's mag-card list of registered voters is a public record and must be made available on reasonable terms to persons demanding the list); *Sanchez v. Board of Regents of Eastern New Mexico University*, 82 N.M. 672, 486 P.2d 608 (1971) (holding that a preliminary list setting forth proposed faculty salaries which had not been submitted to or accepted by the faculty members was not a public record within the meaning of this statute); *State v. Harrison*, 81 N.M. 623, 471 P.2d 193 (Ct.App.1970), *cert. denied*, 81 N.M. 668, 472 P.2d 382 (1970) (assuming but declining to hold that there is an exemption under the statute permitting a criminal defendant to inspect police records during the investigation of a crime).


18

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2,3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2,3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

also ordered foreclosure of the respective liens.

[1] Counsel for the lienholders concede that the personal judgments entered against Research Park, Inc. are erroneous and require a reversal, since we held in Home Plumbing and Contracting Company v. Pruitt, 70 N.M. 182, 372 P.2d 378, and in Allison v. Schuler, 38 N.M. 506, 36 P.2d 519, that that personal judgment cannot be granted where there was no contractual relationship between the landowner and the lienors.

Because other questions argued will immediately arise upon remand, which we think will require our disposition, we consider them at this time.

The Contractors' License Law, §§ 67-16-1 through 67-16-20, N.M.S.A.1953, requires contractors to be licensed, and Section 14 not only provides a criminal penalty but also imposes a forfeiture of the right to invoke the aid of the courts in the collection of compensation for the performance of construction work by an unlicensed contractor. The pertinent portion of the forfeiture clause reads:

> "No contractor as defined by section 3 of this act shall act as agent or bring or maintain any action in any court of the state for the collection of compensation for the performance of any act for which a license is required by this act without alleging and proving that such contractor was a duly licensed contractor at the time the alleged cause of action arose."

Since neither Marco nor Roache alleged that they were licensed contractors, the landowner argues that their complaints fail to state a cause of action and, by reason thereof, challenges the jurisdiction of the trial court. The cross-complaint of Yucca cannot be questioned on the jurisdictional ground because he did allege a license.

[2,3] Clearly, foreclosure of a mechanic's lien arising out of a construction contract is an action seeking "collection of compensation for the performance" of such work. An allegation that the contractor was duly licensed is a statutory prerequisite to bringing such an action. It naturally follows that this allegation is essential in order to state a claim for relief, and we have consistently held that failure to state a cause of action is jurisdictional and may be raised for the first time on appeal. Campbell v. Smith, 68 N.M. 373, 362 P.2d 523.

Since the forfeiture clause only denies the right to bring an action to those contractors "defined by section 3 of this act" (§ 3, Ch. 197, Laws 1939) who were not licensed "at the time the alleged cause of action arose," it becomes necessary at the outset to determine whether Marco and Roache were such contractors. That determination depends upon what is meant by the term *"at the time the alleged cause of action arose."* If it means after breach by non-payment, it may well be that the forfeiture clause is unenforceable because of an express repeal of § 3, Ch. 197, Laws 1939 (§ 67-16-3, N.M.S.A. § 1953) by § 1, Ch. 222, Laws 1961, effective July 1, 1961. As an aid in arriving at what the legislature meant by such term, it is important to decide whether the legislature intended contractors to be licensed when the contract was entered into and the work performed, or only at the time a breach of the construction contract occurred because of non-payment by the owner.

[4-7] It is a familiar rule of statutory interpretation that statutes are to be interpreted with reference to their manifest object, and "if the language is susceptible of two constructions, one which will carry out and the other defeat such manifest object, it should receive the former construction." 2 Sutherland, Statutory Construction, § 4704. In applying this rule to a statute, the intention of the lawmaker will prevail over the literal sense of the terms, and its reason and intention will prevail over the strict letter. A statute should be construed, if possible, to give effect to all of its provisions and so that one part will not destroy another. 2 Sutherland,

E. a copy of a proposed operating plan covering the manner in which the unit will be supervised and managed and costs allocated and paid; and

F. an allegation of the facts required to be found by the division under Section 70-7-6 NMSA 1978.

History: 1953 Comp., § 65-14-5, enacted by Laws 1975, ch. 293, § 5; 1977, ch. 255, § 111.

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 164, 172.

Compulsory pooling or unitization statute or ordinance requiring owners or lessees of oil and gas lands to develop their holdings as a single drilling unit and the like, 37 A.L.R.2d 434.

70-7-6. Matters to be found by the division precedent to issuance of unitization order.

A. After an application for unitization has been filed with the division and after notice and hearing, all in the form and manner and in accordance with the procedural requirements of the division, and prior to reaching a decision on the petition, the division shall determine whether or not each of the following conditions exists:

(1) that the unitized management, operation and further development of the oil or gas pool or a portion thereof is reasonably necessary in order to effectively carry on pressure maintenance or secondary or tertiary recovery operations, to substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof;

(2) that one or more of the said unitized methods of operations as applied to such pool or portion thereof is feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil and gas from the pool or unitized portion thereof than would otherwise be recovered;

(3) that the estimated additional costs, if any, of conducting such operations will not exceed the estimated value of the additional oil and gas so recovered plus a reasonable profit;

(4) that such unitization and adoption of one or more of such unitized methods of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the pool or portion thereof directly affected;

(5) that the operator has made a good faith effort to secure voluntary unitization within the pool or portion thereof directly affected; and

(6) that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

B. If the division determines that the participation formula contained in the unitization agreement does not allocate unitized hydrocarbons on a fair, reasonable and equitable basis, the division shall determine the relative value, from evidence introduced at the hearing, taking into account the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the relative value of each tract so determined bears to the relative value of all tracts in the unit area.

C. When the division determines that the preceding conditions exist, it shall make findings to that effect and make an order creating the unit and providing for the unitization and unitized operation of the pool or portion thereof described in the order, all upon such terms and conditions as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect and safeguard the respective rights and obligations of the working interest owners and royalty owners.

History: 1953 Comp., § 65-14-6, enacted by Laws 1975, ch. 293, § 6; 1977, ch. 255, § 112.

Exhibit 19

§ 913.8 Provisions of compulsory unitization statutes: Inclusion of nonproductive lands in unit

It appears generally assumed in some unitization statutes that only lands proved to be productive shall be included in a compulsory unit. This is made explicit in several statutes in manner as follows:

> "Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual drilling operations may be so included within the unit area."[1]

§ 913.8 [1] 52 Okla. Stat. Ann. § 287.4.

In Manufacturers Nat'l Bank of Detroit v. Director, Dep't of Natural Resources, 85 Mich. App. 173, 270 N.W.2d 550, 62 *O.&G.R.* 79 (1978), plaintiffs complained of the determination by the Supervisor of Wells of a well-spacing and drilling unit on the ground it encompassed tracts of land not completely underlain by the pool. The court denied relief on the ground that plaintiffs had failed to exhaust their administrative remedy against any inequity created by the unit determination. On rehearing after remand, 115 Mich. App. 294, 320 N.W.2d 403, 74 *O.&G.R.* 479 (1982), the court concluded that the Supervisor of Wells erred in applying the allocation formula contained in the lease to a compulsory unit. The case was remanded to the Supervisor to adjust the allocation of royalties using the formula set forth in the court's original opinion, *viz.*, in the proportion to which the lease's acreage bears to the total drilling unit acreage underlain by the pool. On appeal the court held that the creation of a drilling unit by the Supervisor of Wells did not amount to a pooling of the legal interests of those whose lands were within the unit. — Mich. —, 362 N.W.2d 572, — *O.&G.R.* — (1984).

Exhibit 20