

DD-HOR. M3

Rec. 6/13/95
Susp. : 7/3/95
Released 10/13/95

OIL CONSERVATION DIVISION

October 13, 1995

Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499

Attention: George Sharpe

120

Administrative Order DD*(H)
High Angle/Horizontal

Dear Mr. Sharpe:

Reference is made to your application dated May 31, 1995 for authorization to initiate a high angle/horizontal directionally drilling project in the Media-Entrada Oil Pool on Merrion Oil & Gas Corporation's Media Entrada Unit which comprises the following described 580 acres of Federal lands in, Sandoval County, New Mexico:

TOWNSHIP 19 NORTH, RANGE 3 WEST, NMPM

Section 14: S/2 NW/4 and SW/4

Section 15: S/2 NE/4 and SE/4

Section 22: N/2 NE/4 NE/4

Section 23: N/2 NW/4.

The Division Director Finds That:

- (1) The application by Merrion Oil & Gas Corporation ("Merrion") has been duly filed under the provisions of Rule 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The Media-Entrada Oil Pool currently comprises all of said Sections 14 and 15, the NE/4 of said Section 22, and the N/2 of said Section 23 and is subject to the "*Special Rules and Regulations for the Media-Entrada Oil Pool*", as promulgated by Division Order No. R-4277, dated March 15, 1972, which provides for 160-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the proration unit or to any governmental quarter-quarter section line nor closer than 660 feet to the nearest well drilling to or capable of producing from the same pool;
- (3) A special depth bracket oil allowable of 750 barrels of oil per day per 160-acre unit was established for said pool by Division Order No. R-4713, as amended;
- (4) Development within the Media-Entrada Oil Pool has over the years been subject to numerous non-standard oil spacing and proration unit orders:
 - (a) Division Order No. R-4274, dated March 15, 1972, authorized

the formation of two 160-acre non-standard oil spacing and proration units comprising the S/2 NW/4 and N/2 SW/4 of Section 14 and the S/2 NE/4 and N/2 SE/4 of Section 14;

- (b) Division Order No. R-4287, dated April 17, 1972, also authorized the formation of two 160-acre non-standard oil spacing and proration units comprising the S/2 SW/4 of Section 14 and the N/2 NW/4 of Section 23 and the S/2 SE/4 of Section 15 and the N/2 NE/4 of Section 22; and,
- (c) Division Order No. R-5051, dated June 17, 1975, authorized the formation of an unusual 140-acre non-standard oil spacing and proration unit comprising the S/2 NE/4 NE/4, NW/4 NE/4, and S/2 NW/4 of Section 22.

Records on file with the New Mexico Oil Conservation Division show that the subject Media Entrada Unit was October 10, 1975 and made effective on November 1, 1975, however there is no reference in the Division records that a corresponding non-standard oil spacing and proration unit comprising the S/2 SE/4 of Section 15 and the N/2 NE/4 NE/4 of Section 22 (consisting of 100 acres) was ever formed, it can therefore be assumed that the provisions of said Unit Agreement provided for such development within the Unit Area.

- (5) The Entrada formation in this area was deposited as an eolian sand overlain by lacustrine limestones and anhydrites of the Todilto formation. The resulting "dune-like" structures, having porosity and permeability, act as the reservoir for trapping the accumulation of oil in the Entrada formation. The Media-Entrada Oil Pool is in contact with a large aquifer and hydrodynamically active fresh ground water flowing to the southwest beneath the oil accumulation. This strong drive acts to tilt the oil-water contact in the direction of flow; conventionally drilled (vertical) wells in this pool experience significant "water coning", whereby the water below the oil moves upward to the wellbore, a process that has left a significant amount of "attic" oil sidetracked or by-passed between wells; by drilling horizontally across the top of the structure, the applicant is attempting to drain this otherwise unrecoverable attic oil by alleviating this coning action; such horizontal drainhole will act to create a small pressure drop along the large area found in a long horizontal drainhole instead of a large pressure drop through a small area available to a vertical wellbore;
- (6) The "project area" proposed by Merrion is to correspond with the Unit Area as described above.
- (7) Within this project area Merrion seeks:
 - a) the ability to traverse section and quarter section lines within the project area in order to combine proration units in order to form non-standard oversized and irregular sized spacing and proration units to accommodate such wellbores;
 - b) drill the proposed horizontal wellbores to within 330 feet of the outer boundary of the "project area" or Unit Area; and,
 - c) the assignment of an allowable for a horizontally drilled

well based upon;

1. the number of standard 160-acre proration units which are developed or traversed by a horizontal wellbore; or,
 2. in the case of that portion of the Unit Area comprising the S/2 SE/4 of Section 15 and the N/2 NE/4 NE/4 of Section 22, a non-standard 100-acre oil spacing and proration unit can be formed to accommodate development of Entrada oil production.
- (8) Initially, it is Merrion's intent to utilize the existing wellbore on its previously plugged and abandoned Media Entrada Unit Well No. 2 (API No. 30-043-20087), located 1650 feet from the South line and 330 feet from the East line (Unit I), of said Section 15 to drill a short radius horizontal drainhole a lateral distance of 1,000 to 1,500 feet; and,
- (9) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The application of Merrion Oil and Gas Corporation ("Merrion") for high angle/horizontal directional drilling within a "project area", in the Media-Entrada Oil Pool on its Media Entrada Unit comprising the following described 580 acres in Sandoval County, New Mexico, is hereby approved:

TOWNSHIP 19 NORTH, RANGE 3 WEST, NMPM

Section 14: S/2 NW/4 and SW/4

Section 15: S/2 NE/4 and SE/4

Section 22: N/2 NE/4 NE/4

Section 23: N/2 NW/4.

(2) Merrion is further authorized to proceed with their initial plans to re-enter and recomplete its previously plugged and abandoned Media Entrada Unit Well No. 2 (API No. 30-043-20087), located 1650 feet from the South line and 330 feet from the East line (Unit I), of said Section 15 by plugging-back, milling a window in the existing production casing, kick-off from the vertical by drilling a short radius curve hole to approximately 90 degrees so as to encounter the upper portion of the oil bearing Entrada sand, and continue drilling horizontally a distance of 1,000 to 1,500 feet.

PROVIDED HOWEVER THAT any drainhole drilled within said Unit Area including one drilled from said Media Entrada Unit Well No. 2 may traverse section and quarter section lines within the project area provided that the horizontal or producing portion of any drainhole shall be located no closer than 330 feet from the outer

boundary of the above-described "project area" or Unit Area.

PROVIDED FURTHER THAT the applicant shall determine the actual location of the kick-off point in said well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of any horizontal wellbore during or after completion of drilling operations.

(3) The applicant shall notify the supervisor of the Aztec District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.

(4) The allowable assigned to the proration unit designated to each well in the Media-Entrada Oil Pool shall be assigned by the supervisor of the Division's Aztec district office and shall be equal to 750 barrels of oil per day times the number of standard or non-standard 160-acre tracts or within each designated proration unit that are developed/traversed by a horizontal drainhole.

(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured depths (MVD).

(7) 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

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington

File: Case 11328



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

October 13, 1995

Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499

Attention: George Sharpe

Administrative Order DD-120(H)
High Angle/Horizontal

Dear Mr. Sharpe:

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The Division Director Finds That:

- (1) The application by Merrion Oil & Gas Corporation ("Merrion") has been duly filed under the provisions of Rule 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The Media-Entrada Oil Pool currently comprises all of said Sections 14 and 15, the NE/4 of said Section 22, and the N/2 of said Section 23 and is subject to the "*Special Rules and Regulations for the Media-Entrada Oil Pool*", as promulgated by Division Order No. R-4277, dated March 15, 1972, which provides for 160-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the proration unit or to any governmental quarter-quarter section line nor closer than 660 feet to the nearest well drilling to or capable of producing from the same pool;
- (3) A special depth bracket oil allowable of 750 barrels of oil per day per 160-acre unit was established for said pool by Division Order No. R-4713, as amended;
- (4) Development within the Media-Entrada Oil Pool has over the years been subject to numerous non-standard oil spacing and proration unit orders:

- (a) Division Order No. R-4274, dated March 15, 1972, authorized the formation of two 160-acre non-standard oil spacing and proration units comprising the S/2 NW/4 and N/2 SW/4 of Section 14 and the S/2 NE/4 and N/2 SE/4 of Section 14;
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c) the assignment of an allowable for a horizontally drilled well based upon;

1. the number of standard 160-acre proration units which are developed or traversed by a horizontal wellbore; or,

2. in the case of that portion of the Unit Area comprising the S/2 SE/4 of Section 15 and the N/2 NE/4 NE/4 of Section 22, a non-standard 100-acre oil spacing and proration unit can be formed to accommodate development of Entrada oil production.

- (8) Initially, it is Merrion's intent to utilize the existing wellbore on its previously plugged and abandoned Media Entrada Unit Well No. 2 (API No. 30-043-20087), located 1650 feet from the South line and 330 feet from the East line (Unit I), of said Section 15 to drill a short radius horizontal drainhole a lateral distance of 1,000 to 1,500 feet; and,
- (9) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The application of Merrion Oil and Gas Corporation ("Merrion") for high angle/horizontal directional drilling within a "project area", in the Media-Entrada Oil Pool on its Media Entrada Unit comprising the following described 580 acres in Sandoval County, New Mexico, is hereby approved:

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PROVIDED HOWEVER THAT any drainhole drilled within said Unit Area including one drilled from said Media Entrada Unit Well No. 2 may traverse section and quarter section lines within the project area provided that the horizontal or producing portion of any drainhole shall be located no closer than 330 feet from the outer boundary

of the above-described "project area" or Unit Area.

PROVIDED FURTHER THAT the applicant shall determine the actual location of the kick-off point in said well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of any horizontal wellbore during or after completion of drilling operations.

(3) The applicant shall notify the supervisor of the Aztec District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.

(4) The allowable assigned to the proration unit designated to each well in the Media-Entrada Oil Pool shall be assigned by the supervisor of the Division's Aztec district office and shall be equal to 750 barrels of oil per day times the number of standard or non-standard 160-acre tracts or within each designated proration unit that are developed/traversed by a horizontal drainhole.

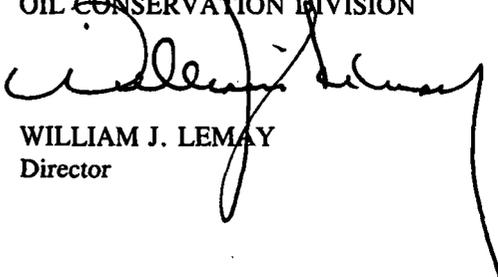
(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured depths (MVD).

(7) 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

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
File: Case 11328

MERRION

OIL & GAS

OIL CONSERVATION DIVISION
RECEIVED

'95 SEP 14 AM 8 52

September 8, 1995

Mr. Michael Stogner
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87503

**Re: Application for Administrative Approval - Special Pool Rules
Media Entrada Unit - Media Entrada Oil Pool
Sandoval County, New Mexico**

Dear Mr. Stogner:

By letter dated May 31, 1995, Merrion Oil & Gas Corporation requested special pool rules for the Media Entrada Unit to facilitate horizontal drilling in the project area. In that letter, we requested an allowable of 750 barrels of oil per day times the number of 40 acre tracts that are traversed by a horizontal drain hole. In view of your conclusion that the Media Entrada Unit is spaced on 160 acres, we request that the special allowable be changed as follows:

The allowable assigned to the Unit shall be a total of 2718 barrels of oil per day total from all wells in the Unit (580 acre Unit Area divided by 160 acre spacing times 750 barrels per day per spacing unit).

If that language is not acceptable, then we would propose the following:

The allowable assigned to the Unit shall be 750 barrels of oil per day times the number of 160 acre tracts either developed by conventionally drilled wells or traversed by a horizontal drain hole.

Please call me as soon as possible if you have any questions or problems.

Sincerely,


George F. Sharpe

cc: SSD/Field File, TGM, CW

pam/gfile

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

Docketed



OIL CONSERVATION DIVISION



June 27, 1995

DD-NOR. 113

Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499

Attention: George Sharpe

*RE: Division Case Nos. 11327, 11328, and 11329
Applications for high angle/horizontal directional drilling
projects in the San Juan Basin of Northwest New Mexico.*

Dear Mr. Sharpe:

Per our telephone conversation yesterday concerning the subject applications, all three will now be considered under the provisions of revised Division General Rule 111, as promulgated by Division Order No. R-10388, see copy attached. The three cases already docketed for hearing on June 29, 1995 will be continued to the hearing scheduled for July 13, 1995, this will assure that these matters will be handled in a quick and prompt manner should a protest be filed or a glitch arise so that an administrative order could not be issued.

Should you have any questions or comments concerning this matter, please call me in Santa Fe at (505) 827-8185.

Sincerely,

Michael E. Stogner
Chief Hearing Officer/Engineer

cc: OCD - Aztec
Files: Case No. 11327
Case No. 11328
Case No. 11329

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830

Park and Recreation Division
P.O. Box 1147 87504-1147
827-7485

2040 South Pacheco

Office of the Secretary
827-5950
Administrative Services
827-5925
Energy Conservation & Management
827-5900
Mining and Minerals
827-5970
Oil Conservation
827-7131

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

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

**CASE NO. 11274
Order No. R-10388**

**APPLICATION OF MERIDIAN OIL INC. TO
ESTABLISH A STATEWIDE ADMINISTRATIVE
PROCEDURE FOR APPROVAL OF DIRECTIONAL
DRILLING PROJECTS IN THE STATE OF
NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 27, 1995, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 13th day of June, 1995, the Commission, a quorum being present, having considered 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) There was a consensus among industry and government that there is a need for revision of Rule 111 to provide for administrative approval for directionally drilled wells under certain circumstances, in particular intentionally deviated directional wells which have been approved only after notice and hearing or in certain pools with special provision contained therein.

(3) Although Meridian Oil Inc. was the applicant and all present agreed to the concept of administrative approval for directionally drilled wells, additional testimony was provided by Amoco Production Company, Marathon Oil Company, Mobil Exploration and Production, Phillips Petroleum Company, Permian Basin Petroleum Association, New Mexico Oil and Gas Association, and New Mexico Oil Conservation Division. Differences of opinion centered around an expanded version of the proposed rule change incorporating more definitions and greater reporting requirements for applicants and a shorter version with condensed definitions and reduced reporting requirements.

(4) The more condensed rule changes provide for greater efficiencies without sacrificing clarity or important documentation.

(5) Meridian Oil Inc. recommended rule provisions which would address correlative rights within affected proration units. Marathon Oil Company and Amoco Production Company supported a simplified rule which allows for operator decisions concerning the need for additional wells.

(6) Operational decisions and equity issues should be addressed under provisions of the operating agreement that deal with "operations by less than all parties" and not by regulations.

(7) The rule changes incorporated in Exhibit "A", attached hereto and made a part hereof, will not affect wells deviated intentionally for mechanical and/or operational reasons and will make the process for application and approval of directionally drilled wells more efficient and less costly without causing waste or impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Division Rule 111 be amended to read as shown on Exhibit "A" attached to and made part of this Order.

(2) Revised Rule 111 shall be effective on the date of this Order.

(3) 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 hereinafter designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bill Weiss

WILLIAM R. WEISS, Member

Gary Carlson

GARY CARLSON, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

S E A L

EXHIBIT "A"
CASE NO. 11274
ORDER NO. R-10388

RULE 111-Deviation Tests/Deviated Wells and Directional Wells:

A. Definitions: The following definitions shall apply to this Rule:

(1) Deviated Well - means any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Rule 111-B and C.

(2) Directional Well - means a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Rule 111-D.

(3) Vertical Well - means a well that does not have an intentional departure or course deviation from the vertical.

(4) Drilling Unit - means the surface acreage assigned to a vertical wellbore in accordance with NMOCD Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the Division and all non-standard such units previously approved by the Division.

(5) Wellbore - means the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted.

(6) Project Well - means any well drilled, completed, produced or injected into as either a deviated well or as a directional well.

(7) Project Area - means one or more drilling units which are to be dedicated to the project well.

(8) Producing Area - means all points that lie along a rectangular or square window formed by plotting the measured distance from the North, South, East and West boundaries of a project area inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the applicable pool(s).

(9) Penetration Point - means the point where the wellbore penetrates the top of the pool from which it is intended to produce.

(10) Azimuth - means the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

(11) Kick-off Point - means the point at which the wellbore is intentionally deviated from vertical.

(12) **Terminus** - means the farthest point attained along the wellbore.

(13) **Producing Interval** - means that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus and within the producing area.

(14) **Lateral** - means any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical.

B. Deviation Tests:

Any well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole and the Division Director may require that a directional survey be run to establish the location of the producing interval(s). Upon request from the Division Director, any well which was deviated in an indeterminate direction or toward the vertical shall be directionally surveyed.

C. Deviated Wellbores:

(1) The Supervisor of the appropriate Division District may approve the written request of an operator to drill a deviated wellbore or to deviate an existing wellbore to:

- (a) straighten a crooked hole by deviating towards the vertical;
- (b) side track junk in the hole by deviating in an indeterminate direction (no intentional azimuth);
- (c) side track an existing wellbore by deviating in an indeterminate direction (no intentional azimuth) for the purpose of recompleting into an existing producing formation or plugging the originally completed formation and recompleting into a different formation.

(2) The Supervisor of the appropriate Division District may require any request for a deviated well to be submitted for administrative approval by the Division Director.

(3) Applications for administrative approval for a deviated well shall:

- (a) be filed in duplicate and shall be accompanied by plats showing both the surface location of the subject well, its spacing unit and all adjoining spacing units;
- (b) state the reason(s) for deviating the subject well; and
- (c) shall include a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(4) The bottomhole location of any deviated well shall be at an orthodox well location or an unorthodox location previously approved pursuant to Rule 104 and shall be considered acceptable if the actual subsurface location in the formation to be produced is orthodox or is no more than 50 feet from the approved subsurface location.

(5) The Division Director may approve the application for a deviated well upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

D. Directional Wellbore:

(1) The Division Director, shall have the authority without notice and hearing to administratively approve a directional wellbore project when:

- (a) the surface location of the proposed or existing project well is within the boundaries of the project area, consisting of a single or multiple drilling unit(s), substantially in the form of either a square or a rectangle, as applicable, being a legal subdivision of the U.S. Public Land Survey;
- (b) the producing interval of the wellbore(s) is totally confined to a producing area. The wellbore(s) may be re-oriented to any azimuth based upon a change in conditions either geologic or mechanical, which is encountered either before or after the commencement of a project, but only insofar as the producing interval(s) remains totally confined to the producing area;
- (c) the project area includes either a single drilling unit or multiple contiguous drilling units; and,

- (d) the project well includes either a single lateral or multiple laterals which conform to conditions (a) and (b) above.

(2) To obtain administrative approval to drill a directional well, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, which shall include:

- (a) a statement addressing the reason(s) for directionally drilling the subject well;
- (b) a plat indicating the section, township and range in which the well is to be drilled, the project area, the proposed surface location, the producing area for the project well, any existing wells in the applicable pool(s) in the proposed project area, all offsetting drilling units in the applicable pool(s) and their associated operator, and any wells in those units;
- (c) a vertically oriented plan view (cross-sectional view) for the subject well including the true vertical depth of the top and bottom of the subject pool, degree of angle to be built in the project wellbore(s), the true vertical and the measured depth of the estimated kickoff point, the estimated penetration point and the lateral length;
- (d) a horizontal plan view for the subject well and its spacing unit showing the drilling unit and drilling-producing window, including the estimated azimuth and maximum length of the lateral(s) to be drilled;
- (e) a type log section on which is identified the top and bottom of the subject pool; and,
- (f) a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in the applicable pool(s) in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(3) The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) for that pool any portion of which is within a distance of the producing lateral of the directional wellbore not greater than the footage setback distance for locating a vertical well from the outer boundary of a spacing unit for that pool.

E. Requirements/Conditions of Administrative Approval:

(1) The Division Director may approve the application upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

(2) Any order issued by the Director approving an application for a directional wellbore shall require that:

- (a) the applicant shall conduct a directional survey on the wellbore after directional drilling operations in order that the direction, extent and terminus of said wellbore may be determined to be in compliance with the provision of any order with copies submitted to the Santa Fe NMOCD and to the NMOCD-district office in which the well is located; and,
- (b) the Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.

F. Additional Matters:

(1) The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. The directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company and the survey may be witnessed by the Division and the operator.

(2) The Division Director, may, at his discretion, set any application for administrative approval for public hearing.

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and hearing.

MERRION

OIL & GAS

OIL CONSERVATION DIVISION
RECEIVED

'95 JUN 5 AM 8 52

Date received
by OCS 6/13/95

May 31, 1995

Mr. William Lemay
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87503

11328

**Re: Application for Administrative Approval - Special Pool Rules
For Unorthodox Locations, Non-Standard Spacing Units,
and Special Allowables
To Facilitate Horizontal Drilling
Media Entrada Unit - Media Entrada Oil Pool
Sandoval County, New Mexico**

Dear Mr. Lemay:

Merrion Oil & Gas requests administrative approval of special pool rules for the Media Entrada Oil Pool (see Exhibit 1 for land plat) to allow for horizontal drilling within the Media Entrada Unit. This application reviews the justification for horizontal drilling in the Entrada and outlines the pool rules we are requesting.

JUSTIFICATION FOR HORIZONTAL DRILLING

In the Entrada, oil trapped in the top of preserved dunes is underlain by a large aquifer. The strong water drive results in severe water coning around vertical wells, leaving significant "attic" oil undrained between wells at the top of the dune. The use of horizontal wells to tap into that attic oil has proven effective at the Papers Wash Entrada Oil Pool, and again recently at the Eagle Mesa Entrada Oil Pool. We feel this technology could also be successfully applied at the Media Entrada Oil Pool (see Exhibit 2 for remaining net pay map).

REQUESTED SPECIAL POOL RULES

Merrion requests that provisions similar to those approved for the Eagle Mesa Entrada Secondary Unit (Order R-10213 attached as Exhibit 3) be approved for the Media Entrada Unit. In summary, those provisions state the following:

- 1.) Merrion is authorized to institute a short radius drilling pilot project, hereinafter referred to as the "project area", in the Media Entrada Oil Pool within the Media Entrada Unit comprising the following described 580 acres in Sandoval County, New Mexico:

TOWNSHIP 19N, RANGE 3W, NMPM

Section 14: S/2 NW/4 and SW/4

~~Section 15: S/2 NE/4 and SE/4~~

Section 22: N/2 NE/4 NE/4

Section 23: N/2 NW/4

1

- 2.) Special operating provisions for additional horizontal or vertical wells within the Media Entrada Unit will be promulgated that allow for:
 - a.) No vertical well or any portion of a horizontal well shall be closer than 330 feet to the outer boundary of the Unit;
 - b.) No surface well location shall be closer than 10 feet to an interior quarter quarter section line;
 - c.) The allowable assigned to the Unit shall be 750 barrels of oil per day times the number of 40 acre tracts that are either developed by conventionally drilled wells or traversed by a horizontal drain hole.

SUPPORTING INFORMATION

The following information is provided in support of this request:

- 1.) All of the lands within the project area are unitized. The Unit Agreement covering these lands is attached as Exhibit 4. Ownership within the Unit is common, so all interest owners will benefit proportionately from any well drilled.
- 2.) The proposed rules will protect correlative rights by providing additional drilling, which will benefit the royalty owners.
- 3.) Copies of this application were sent certified mail to the following offset lease owners (see Exhibit 1):

Energy Development Corp.
1000 Louisiana, Suite 2900
Houston, Texas 77002

Bureau of Land Management
Attn: Hector Violobos
435 Montano NE
Albuquerque, New Mexico 87107

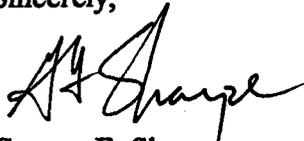
Page 3
May 31, 1995

SUMMARY

These proposed rules are needed to allow horizontal wells to be drilled in the Media Entrada Unit. This will protect correlative rights through increased royalty payments. Therefore, we request your prompt attention to this matter.

Please call me at (505) 327-9801 with questions or comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. Sharpe".

George F. Sharpe
Manager - Oil & Gas Investments

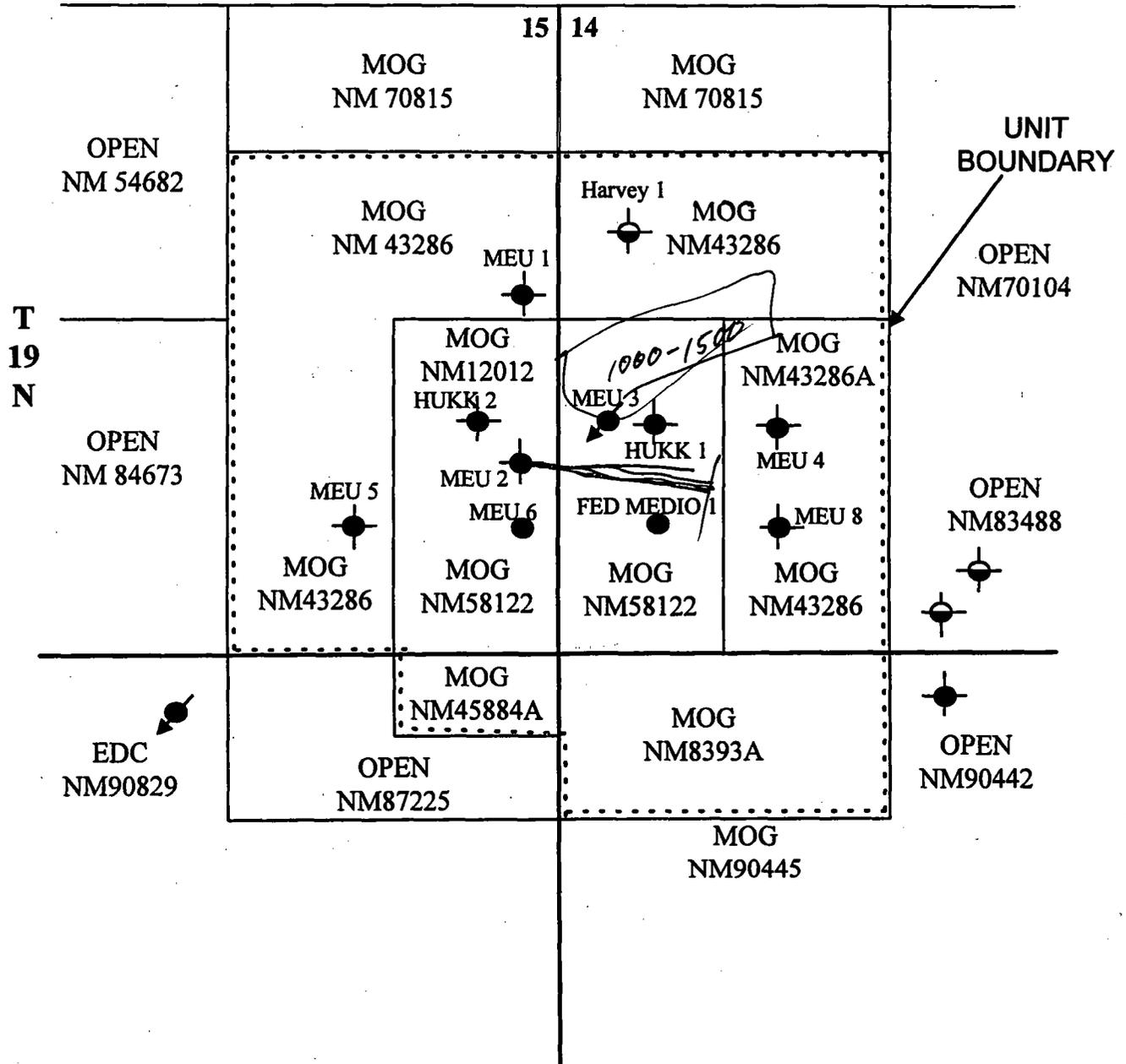
xc: Unit File
Jim Johnson

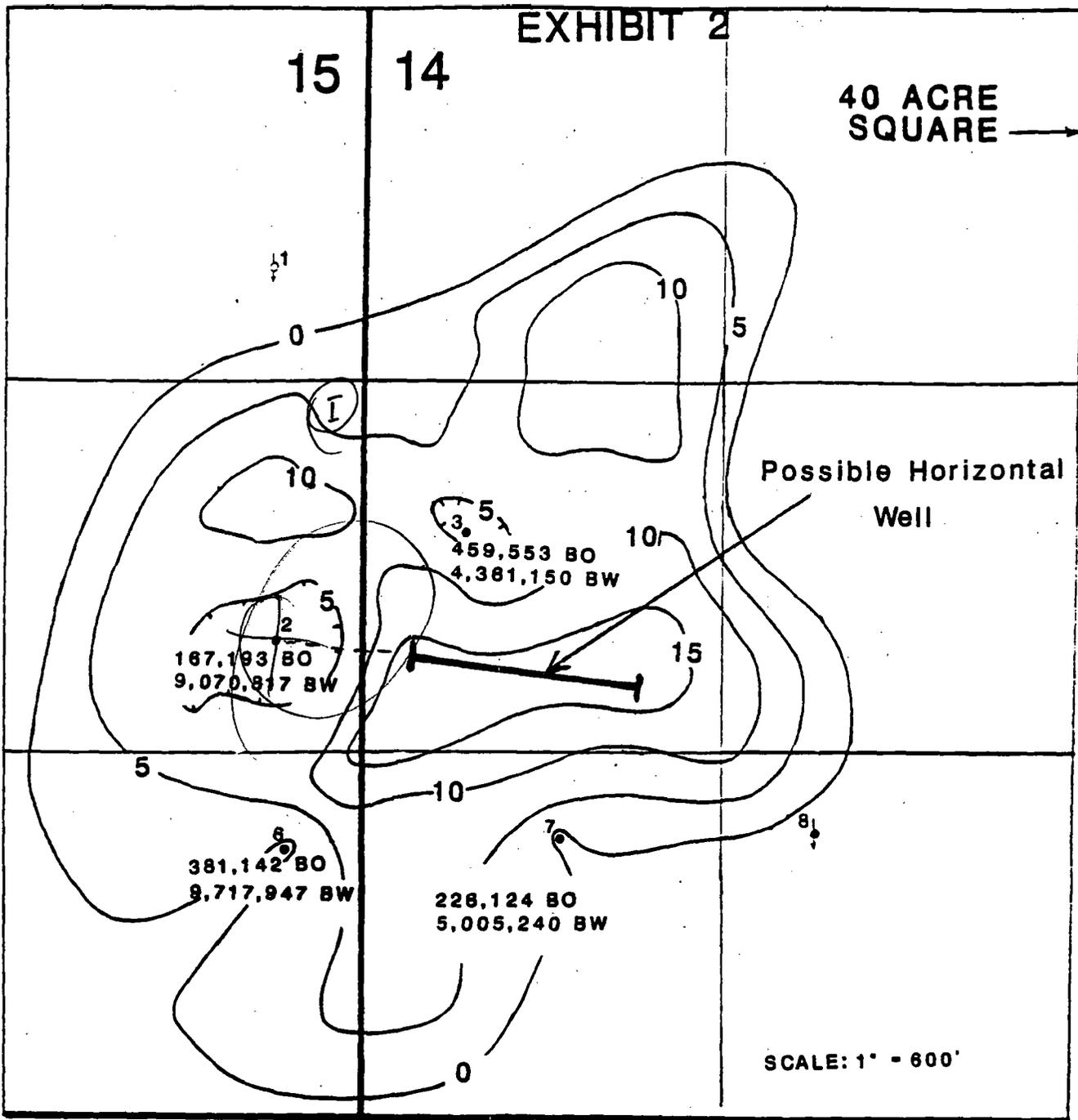
EXHIBITS

- 1 Land Plat
- 2 Remaining Net Pay Map
- 3 Order R-10213 - Special Operating Rules for the Eagle Mesa Secondary Unit
- 4 Unit Agreement for the Operation of the Media Entrada Unit

EXHIBIT 1 MEDIA ENTRADA UNIT LAND PLAT

R 3 W





MERRION OIL & GAS
MEDIA ENTRADA FIELD
T 19 N R 3 W
SANDOVAL COUNTY, NEW MEXICO
REMAINING NET PAY

OOIP = 3,160,000 Bbls
FIELD CUM = 1,234,012 Bbls
HORIZ RESERVES
= 142,200 Bbls

EXHIBIT 3

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. 10971
ORDER NO. R-10213

APPLICATION OF MERRION OIL & GAS CORPORATION FOR A HIGH
ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT AND THE
PROMULGATION OF SPECIAL OPERATING RULES THEREFOR, SANDOVAL
COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 12, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 30th day of September, 1994 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 in this matter, Merrion Oil and Gas Corporation ("Merrion"), seeks authority to institute a short radius high angle/horizontal directional drilling pilot project, hereinafter referred to as the "project area", in the designated and Undesignated Eagle Mesa-Entrada Oil Pool on its Eagle Mesa Entrada Secondary (Federal) Unit comprising the following described 280 acres in Sandoval County, New Mexico:

TOWNSHIP 19 NORTH, RANGE 4 WEST, NMPM

Section 11:	SE/4 SE/4
Section 12:	SW/4 SW/4
Section 13:	W/2 NW/4
Section 14:	N/2 NE/4 and SE/4 NE/4.

- (3) Within the project area the applicant seeks authority to:
- (a) utilize the existing wellbores on its Federal "12" Well No. 1 (API No. 30-043-20175), located 460 feet from the South line and 330 feet from the West line (Unit M), of said Section 12 and its Navajo 13 "C" Well No. 1 (API No. 30-043-20181), located 430 feet from the North line and 330 feet from the West line (Unit D), of said Section 13 to drill short radius horizontal drainholes a lateral distance of 800 to 1,000 feet;
 - (b) the ability to traverse section, quarter section and quarter-quarter section lines within the project area in order to form non-standard oversized and irregular sized spacing and proration units to accommodate such wellbores;
 - (c) drill the proposed horizontal wellbores to within 330 feet of the outer boundary of the project area; and,
 - (d) the assignment of an allowable for a horizontally drilled well based upon the number of standard 40-acre proration units which are developed or traversed by a horizontal wellbore.

(4) The applicant further seeks the promulgation of special operating rules and procedures within the project area including provisions for administrative authorization of further horizontal wellbores, and the assignment of a special oil allowable or formula for the project area.

(5) The proposed project area is located within the governing limits of the Eagle Mesa-Entrada Oil Pool which is currently administered under the Statewide Rules and Regulations which require standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the spacing unit. A special oil allowable of 750 barrels of oil per day and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil exists for said pool, as promulgated by Division Order No. R-5118, as amended.

(6) The Entrada formation in this area was deposited as an eolian sand overlain by lacustrine limestones and anhydrites of the Todilto formation. The resulting "dune-like" structures, having porosity and permeability, act as the reservoir for trapping the accumulation of oil in the Entrada formation. The Eagle Mesa-Entrada Pool is in contact with a large aquifer and hydrodynamically active fresh ground water flowing to the southwest beneath the oil accumulation. This strong drive acts to tilt the oil-water contact in the direction of flow.

(3) Within the project area the applicant seeks authority to:

- (a) utilize the existing wellbores on its Federal "12" Well No. 1 (API No. 30-043-20175), located 460 feet from the South line and 330 feet from the West line (Unit M), of said Section 12 and its Navajo 13 "C" Well No. 1 (API No. 30-043-20181), located 430 feet from the North line and 330 feet from the West line (Unit D), of said Section 13 to drill short radius horizontal drainholes a lateral distance of 800 to 1,000 feet;
- (b) the ability to traverse section, quarter section and quarter-quarter section lines within the project area in order to form non-standard oversized and irregular sized spacing and proration units to accommodate such wellbores;
- (c) drill the proposed horizontal wellbores to within 330 feet of the outer boundary of the project area; and,
- (d) the assignment of an allowable for a horizontally drilled well based upon the number of standard 40-acre proration units which are developed or traversed by a horizontal wellbore.

(4) The applicant further seeks the promulgation of special operating rules and procedures within the project area including provisions for administrative authorization of further horizontal wellbores, and the assignment of a special oil allowable or formula for the project area.

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(6) The Entrada formation in this area was deposited as an eolian sand overlain by lacustrine limestones and anhydrites of the Todilto formation. The resulting "dune-like" structures, having porosity and permeability, act as the reservoir for trapping the accumulation of oil in the Entrada formation. The Eagle Mesa-Entrada Pool is in contact with a large aquifer and hydrodynamically active fresh ground water flowing to the southwest beneath the oil accumulation. This strong drive acts to tilt the oil-water contact in the direction of flow.

- (3) Within the project area the applicant seeks authority to:
- (a) utilize the existing wellbores on its Federal "12" Well No. 1 (API No. 30-043-20175), located 460 feet from the South line and 330 feet from the West line (Unit M), of said Section 12 and its Navajo 13 "C" Well No. 1 (API No. 30-043-20181), located 430 feet from the North line and 330 feet from the West line (Unit D), of said Section 13 to drill short radius horizontal drainholes a lateral distance of 800 to 1,000 feet;
 - (b) the ability to traverse section, quarter section and quarter-quarter section lines within the project area in order to form non-standard oversized and irregular sized spacing and proration units to accommodate such wellbores;
 - (c) drill the proposed horizontal wellbores to within 330 feet of the outer boundary of the project area; and,
 - (d) the assignment of an allowable for a horizontally drilled well based upon the number of standard 40-acre proration units which are developed or traversed by a horizontal wellbore.

(4) The applicant further seeks the promulgation of special operating rules and procedures within the project area including provisions for administrative authorization of further horizontal wellbores, and the assignment of a special oil allowable or formula for the project area.

(5) The proposed project area is located within the governing limits of the Eagle Mesa-Entrada Oil Pool which is currently administered under the Statewide Rules and Regulations which require standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the spacing unit. A special oil allowable of 750 barrels of oil per day and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil exists for said pool, as promulgated by Division Order No. R-5118, as amended.

(6) The Entrada formation in this area was deposited as an eolian sand overlain by lacustrine limestones and anhydrites of the Todilto formation. The resulting "dune-like" structures, having porosity and permeability, act as the reservoir for trapping the accumulation of oil in the Entrada formation. The Eagle Mesa-Entrada Pool is in contact with a large aquifer and hydrodynamically active fresh ground water flowing to the southwest beneath the oil accumulation. This strong drive acts to tilt the oil-water contact in the direction of flow.

(7) According to the testimony presented by the applicant conventionally drilled (vertical) wells in this pool experience significant "water coning", whereby the water below the oil moves upward to the wellbore, a process that has left a significant amount of "attic" oil sidetracked or by-passed between wells. By drilling horizontally across the top of the structure, the applicant is attempting to drain this otherwise unrecoverable attic oil by alleviating this coning action. Such horizontal drainhole will act to create a small pressure drop along the large area found in a long horizontal drainhole instead of a large pressure drop through a small area available to a vertical wellbore.

(8) Evidence further indicates that once water breakthrough has occurred in a conventionally drilled vertical wellbore, water volume increases dramatically and oil production decreases substantially, resulting in high operating costs. With horizontal drainholes, the poolwide volume of produced water should decrease, thereby lowering operating costs.

(9) Approval of this application is in the best interest of conservation, exhibits sound engineering practices, will serve to prevent the waste of otherwise unrecoverable reserves, and with the formation of a Unit will further serve to protect correlative rights.

(10) Adoption of special procedures allowing for administrative approval of additional horizontal drainholes in the Entrada formation within the Eagle Mesa Entrada Secondary (Federal) Unit will serve to promote such supplemental drilling activity in fields nearing depletion and should aid in expediting any further request to drill drainholes in this Unit without the necessity for additional hearings.

(11) The allowable assigned to either a single proration unit or the project area should be assigned by the supervisor of the Aztec district office of the Division and should be based upon the number of standard 40-acre proration units within the project area which are developed or traversed by a horizontal wellbore.

(12) No offset operator and/or interest owner appeared at the hearing in opposition to the subject application.

(13) The applicant initially proposes to recomplete its Federal "12" Well No. 1 and Navajo 13 "C" Well No. 1 by plugging-back, milling a window in the existing production casing, kick-off from the vertical by milling a window in the existing production casing, drill a short radius curve hole to approximately 90 degrees so as to encounter the upper portion of the oil bearing Entrada sand and continue drilling horizontally a distance of 800 to 1,000 feet.

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(14) Certain provisions should be included within this approval to assure orderly development and depletion of this reservoir with horizontal drainholes and the continued protection of correlative rights within the area of this Unit:

- (a) no portion of a wellbore, either vertical or horizontal should be closer than 330 feet to the outer boundary of the Eagle Mesa Entrada Secondary (Federal) Unit;
- (b) the applicant should be required to conduct a directional survey on the vertical portion of a wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of directional drilling operations in order that direction, extent and terminus of said wellbore may be determined to be in compliance with the terms of this order;
- (c) the applicant should further be required to submit copies of said directional surveys to the Santa Fe and Aztec offices of the Division; and,
- (d) the applicant should notify the supervisor of the Aztec District Office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The application of Merrion Oil and Gas Corporation ("Merrion") to institute a short radius high angle/horizontal directional drilling pilot project, hereinafter referred to as the "project area", in the designated and Undesignated Eagle Mesa-Entrada Oil Pool on its Eagle Mesa Entrada Secondary (Federal) Unit comprising the following described 280 acres in Sandoval County, New Mexico, is hereby approved:

TOWNSHIP 19 NORTH, RANGE 4 WEST, NMPM

Section 11:	SE/4 SE/4
Section 12:	SW/4 SW/4
Section 13:	W/2 NW/4
Section 14:	N/2 NE/4 and SE/4 NE/4.

(2) Merrion is further authorized to proceed with their initial plans to recomplete its existing Federal "12" Well No. 1 (API No. 30-043-20175), located 460 feet from the South line and 330 feet from the West line (Unit M), of said Section 12 and its Navajo "13" Well No. 1 (API No. 30-043-20181), located 430 feet from the North line and 330 feet

from the West line (Unit D), of said Section 13 by plugging-back, milling a window in the existing production casing, kick-off from the vertical by milling a window in the existing production casing, drill a short radius curve hole to approximately 90 degrees so as to encounter the upper portion of the oil bearing Entrada sand and continue drilling horizontally a distance of 800 to 1,000 feet. Provided however that:

- 2500
6400
5208
- (a) any drainhole drilled from either of said wellbores may traverse section, quarter section and quarter-quarter section lines within the project area provided that the horizontal or producing portion of any drainhole shall be located no closer than 330 feet from the outer boundary of the project area;
 - (b) the applicant shall determine the actual location of the kick-off points in each well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of any horizontal wellbore during or after completion of drilling operations;
 - (c) the applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed;
 - (d) the applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division; and,
 - (e) the allowable assigned to the proration units designated to each well in the Eagle Mesa-Entrada Oil Pool shall be assigned by the supervisor of the Division's Aztec district office and shall be equal to 750 barrels of oil per day times the number of standard 40-acre tracts within each designated proration unit that are developed/traversed by a horizontal drainhole.

(3) Special operating provisions for additional horizontal/high angle wellbores within said Eagle Mesa Entrada Secondary (Federal) Unit are hereby promulgated as follows:

**SPECIAL OPERATING RULES AND REGULATIONS
FOR THE
EAGLE MESA ENTRADA SECONDARY (FEDERAL) UNIT**

RULE 1. The surface location of any well within said Unit Area shall be located no closer than 330 feet to the outer boundary of the unitized area, nor closer than 10 feet to any section, quarter section, or quarter-quarter section lines or subdivision inner boundary.

RULE 2. The Director of the Division may grant an exception to the surface well location requirements of Rule 2 without notice and hearing when an application has been filed for an unorthodox surface well location necessitated by topographic conditions or the recompletion of a well previously drilled to a deeper horizon. All operators and/or owners of undrilled tracts or unleased mineral interests offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators and/or owners of undrilled tracts or unleased mineral interests offsetting the proposed surface location or if no objection to the unorthodox surface location has been entered within twenty days after the Director has received the application.

RULE 3.

- (A). The Director of the Division is hereby authorized to administratively approve intentionally deviated wells in the Eagle Mesa Entrada Secondary (Federal) Unit for the purpose of penetrating the Entrada formation by means of a wellbore drilled horizontally, provided the following conditions are complied with:
- (1) the surface location of the proposed well is a standard location or the applicant has obtained approval of an unorthodox surface oil well location as provided for in Rule (2), above: and,
 - (2) no producing portion of a horizontal wellbore shall enter or exit the Entrada formation outside of a "drilling window" which is not in accordance with the setback requirements of Rule (1), above, provided however, that the aforementioned 10 foot setback distance requirement from any internal subdivision boundary within said Unit Area shall not apply to horizontal drainholes.

- (B). To obtain administrative approval for additional deviated horizontal drainholes within the Unit, the applicant shall file such request in writing with the Aztec and Santa Fe offices of the Division and shall further provide a copy of such application to all operators and/or owners of undrilled tracts or unleased mineral interests offsetting the proposed proration unit for said well by registered or certified mail, and the application shall state that such notice has been furnished. The application shall include the following information:
- (1) a copy of Division Form C-102 identifying the proposed proration unit to be dedicated to the well and any other wells within this proposed unit;
 - (2) a land plat that identifies the ownership of all offsetting tracts to the proposed proration unit; and,
 - (3) schematic drawings of the proposed well completion or recompletion which fully describe the casing, tubing, perforated or openhole interval, kick-off point, and proposed trajectory of the drainhole section.
- (C). The Division Director may approve the application upon receipt of written waivers from all parties described above or if no objection to the intentionally deviated horizontal wellbore has been entered within twenty days after the Director has received the application. If any objection to the proposed intentionally deviated horizontal well is received within the prescribed time limit as described above, the Director shall, at the applicant's request, set said application for public hearing before a Division Hearing Examiner.
- (D). During or upon completion of drilling operations the operator shall further be required to conduct an acceptable directional survey on the vertical and lateral portions of the wellbore and shall submit a copy of said survey to the Santa Fe and Aztec offices of the Division.
- (E). The operator shall notify the supervisor of the Aztec District Office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

- (F). The Director, at his discretion, may set any application for intentionally deviated horizontal wellbores for public hearing before a Division Hearing Examiner.

RULE 4. Allowables shall be assigned in the following manner

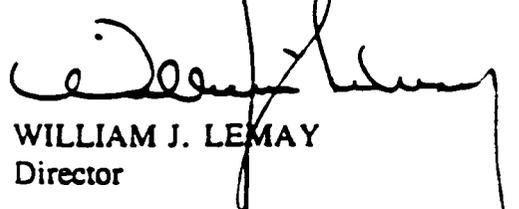
- (A). The allowable assigned to the proration units designated to the Eagle Mesa-Entrada Oil Pool within the Unit Area shall be assigned by the supervisor of the Division's Aztec district office and shall be equal to 750 barrels of oil per day times the number of standard 40-acre tracts within each designated proration unit that are developed/traversed by a horizontal drainhole; or,
- (B). The supervisor of the Division's Aztec district office may assign a "project allowable" based on the number of 40-acre tracts that are either developed by conventionally drilled wells or traversed by a horizontal drainhole. The operator may produce the assigned project allowable from the wells within the project area in any proportion.

RULE 5. The Director of the Division may rescind the authority for any horizontal drainhole if the perforated or openhole portion of such wellbore is located closer to the Unit Area boundary than permitted by these rules or if it should appear that such rescission is necessary to prevent waste or protect correlative rights.

- (4) 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

EXHIBIT 4

UNIT AGREEMENT FOR THE OPERATION OF
THE MEDIA ENTRADA UNIT
SANDOVAL COUNTY, NEW MEXICO

PETRO-LEWIS CORPORATION
DENVER, COLORADO

U N I T A G R E E M E N T

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UNIT AGREEMENT FOR THE OPERATION OF
THE MEDIA ENTRADA UNIT
SANDOVAL COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of
August, 1975, by and between the parties
subscribing, ratifying or consenting hereto, and herein
referred to as the "parties hereto",

W I T N E S S E T H :

WHEREAS, the parties hereto are the owners of working,
royalty, or other oil interests in the Unit Area subject to
this Agreement; and

WHEREAS, the term "Working Interest" as used herein
shall mean the interest held in Unitized Substances or in
lands containing Unitized Substances by virtue of a lease,
operating agreement, fee title, or otherwise, which is
chargeable with and obligated to pay or bear all or a portion
of the costs of drilling, developing, producing, and operating
the land under the unit or cooperative agreement. "Royalty
Interest" as used herein shall mean a right to or interest in
any portion of the Unitized Substances or proceeds thereof
other than a Working Interest; and

WHEREAS, the Mineral Leasing Act of February 25, 1920,
41 Stat. 437, as amended, 30 U. S. C. Sections 181 et seq.,
authorizes Federal Lessees and their representatives to unite
with each other, or jointly or separately with others, in

collectively adopting and operating a cooperative or unit plan of development or operation of any oil or gas pool, field or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico hereinafter referred to as "Commission" is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941, and Chap. 168, Laws of 1949, Chap. 65, Art. 3, Sec. 14, N.M.S.A., 1953 anno) to approve this Agreement, and the conservation provisions hereof, and

WHEREAS, the parties hereto hold sufficient interests in the Media Entrada Unit Area covering the land hereinafter described to give reasonably effective control of operations herein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through operation of the Area subject to this Agreement under the terms, conditions and limitations herein set forth;

NOW THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this Agreement their respective interests in the below-defined Unit Area, and agree severally among themselves as follows:

SECTION 1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid, pertinent regulations, including operating and unit plan regulations heretofore issued thereunder, or valid, pertinent and reasonable regulations hereafter issued thereunder, are accepted and made a part of this Agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this Agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this Agreement.

SECTION 2. UNIT AREA. The area specified on the plat attached hereto marked Exhibit "A" is hereby designated and recognized as constituting the Unit Area, containing 580 acres, more or less.

Exhibit "A" shows, in addition to the boundary of the Unit Area, the boundaries and identity of tracts and leases in said Area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage and kind of ownership of oil interests in all land in the Unit Area. Exhibit "C" attached hereto, is a schedule showing the percentage of participation credited to each Tract in the Unit Area based upon a presumed one hundred percent (100%) commitment. (Tract means each parcel of land described as

such and given a Tract Number on Exhibit "B". Tracts are based on Communitization Agreements as described in Exhibit "D", heretofore approved by the Supervisor as hereinafter defined, as contracted by amendment of Communitization Agreement - SW-662, and as approved as non-standard drilling and proration units by the Oil Conservation Commission of New Mexico.) However, nothing herein or in said schedule or map shall be construed as a representation by any party as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the Unit Area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", and not less than four (4) copies of the revised exhibits shall be filed with the Supervisor.

SECTION 3. EXPANSION OF UNIT AREA. It is recognized that at some time or times in the future it might be desirable and beneficial to expand the Unit Area to include therein additional Tracts of land. The Unit Area may, therefore, with the approval of the Director of the United States Geological Survey, hereinafter referred to as "Director", be expanded to include therein any additional lands whenever such expansion is necessary or advisable to conform with the purposes of this Agreement, and with prior consent of the Director and Unit Operator, acting on behalf of the Working Interest Owners collectively, after being duly authorized by them as provided for in the

Unit Operating Agreement, has negotiated an agreement or agreements with the owners of such lands fixing the tract participation of each Tract providing for the commitment of the interests of such owners to this Agreement and to the Unit Operating Agreement. Whenever the Unit Area is enlarged so as to admit additional land, qualified for participation, Exhibit "C" shall be revised as set forth in Section 12, Participation and Allocation of Production. Any such expansion shall be effected in the following manner:

- (a) Unit Operator, on its own motion, after preliminary concurrence by the Director, shall prepare a notice of proposed expansion describing the contemplated changes in the boundaries of the Unit Area, the reasons therefore, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.
- (b) Said notice shall be delivered to the Supervisor, and copies thereof mailed to the last known address of each Working Interest Owner, Lessee, and Lessor whose interests are affected, advising that thirty (30) days will be allowed for submission to the Unit Operator of any objections.
- (c) Upon expiration of the thirty (30) day period provided in the preceding item (b) hereof, Unit Operator shall file with the Supervisor evidence of mailing of the notice of expansion and a copy of any objections thereto which have been filed with the Unit Operator, together with an application (with appropriate joinders in sufficient number) for approval of such expansion.

(d) After due consideration of all pertinent information, the expansion shall, upon approval by the Supervisor and Commissioner become effective as of the date prescribed in the notice thereof.

SECTION 4. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to this Agreement as provided in Section 5, Tracts Qualified for Participation, as to the Unitized formation defined immediately below, shall constitute land referred to herein as "Unitized Land" or "land subject to this Agreement". All oil, gas, gaseous substances, sulphur contained in gas, condensate, and all associated and constituent liquid or liquefiable hydrocarbons in the Unitized Formation are unitized under the terms of this Agreement and herein are called "Unitized Substances".

"Unitized Formation" is defined as the Entrada formation found between the depths of 5218' and 5264' in the Fluid Power Pump well No. 1, located 1980' FSL and 330' FWL, Section 14, Township 19 North, Range 3 West, N.M.P.M., on the electric log of said well run on October 22, 1971.

SECTION 5. TRACTS QUALIFIED FOR PARTICIPATION. Inasmuch as the objective of this Agreement is to have lands in the Unit Area operated and entitled to participation under the terms hereof, no joinder shall be considered a commitment to this Agreement unless the Tract involved is qualified under this Section. On or after the effective date hereof, the Tracts within the Unit Area which shall be entitled to participation in the production of Unitized Substances therefrom shall be those Tracts within the Unit Area more particularly described in Exhibit "B" that are qualified as

follows (for the purposes of this section, the record interest shall replace the royalty interest as to Federal land):

(a) Each Tract as to which Working Interest Owners owning one hundred percent (100%) of the Working Interest have signed or ratified this Agreement and the Unit Operating Agreement, and Royalty Owners owning seventy-five percent (75%) or more of the royalty created by the basic leases have signed or ratified this Agreement;

(b) Each Tract as to which Working Interest Owners owning one hundred percent (100%) of the Working Interest have signed or ratified this Agreement and the Unit Operating Agreement, and Royalty Owners owning less than seventy-five percent (75%) of the royalty interests created by the basic leases have signed or ratified this agreement, and as to which (1) all Working Interest Owners in such Tract join in a request for inclusion of such Tract in Unit Participation upon the basis of such commitment status, and further as to which (2) seventy-five percent (75%) or more of the combined voting interest of Working Interest Owners in all Tracts which meet the requirements of Subsection 5(a) vote in favor of the acceptance of such Tract as qualified. For the purpose of this Subsection 5(b), the voting interest of each Working Interest Owner shall be equal to the ratio

(expressed in percentage) which the total of such Working Interest Owner's percentage participation in all Tracts which qualify under Subsection 5(a), bears to the total percentage participation of all Working Interest Owners in all Tracts which qualify under said Subsection 5(a) as such percentages are shown on Exhibit "C";

(c) Each Tract as to which Working Interest Owners owning less than one hundred percent (100%) of the Working Interest have signed or ratified this Agreement and the Unit Operating Agreement, regardless of the percentage of royalty interest therein that is committed hereto, and as to which (1) the Working Interest Owners who operate the Tract and all of the other subscribing Working Interest Owners in such Tract have joined in a request for inclusion of such Tract in Unit participation upon the basis of such commitment status and have tendered and executed and delivered an indemnity agreement, indemnifying and agreeing to hold the owners of the working interests in the other qualified Tracts harmless from and against any and all claims and demands that may be made by the non-subscribing Working Interest Owners in such Tract on account of the inclusion of the same in Unit participation, and further as to which (2) seventy-five percent (75%) or more of the combined voting interests of the Working Interest Owners in all Tracts which meet the requirements of Subsections 5(a) and 5(b) above, vote in favor of the inclusion of such Tract. For the purpose of this Subsection 5(c), the voting interest of each Working

Interest Owner shall be equal to the ratio (expressed in percentage) which the total of such Working Interest Owner's percentage participation attributed to Tracts which qualify under Subsections 5(a) and 5(b) bears to the total percentage of all Working Interest Owners attributed to all Tracts which qualify under Subsections 5(a) and 5(b), as such percentages are set out in Exhibit "C".

SECTION 6. UNIT OPERATOR. Petro-Lewis Corporation is hereby designated as Unit Operator, and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the development and production of Unitized Substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in Unitized Substances, and the term "Working Interest Owner" when used herein shall include or refer to Unit Operator as the Owner of a Working Interest when such an interest is owned by it.

SECTION 7. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate that Operator's rights as such for a period of six (6) months after notice of intention to resign has been served by Unit Operator on all Working Interest Owners, the Supervisor, and until all wells are placed in a satisfactory

condition for suspension or abandonment whichever is required by the Supervisor, unless a new Unit Operator shall have been selected and accepted and shall have taken over and assumed the duties and obligations of Unit Operator prior to the Expiration of said period.

The resignation of Unit Operator shall not release the Unit Operator from any liability for default by it hereunder occurring prior to the effective date of its resignation.

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by an affirmative vote of Working Interest Owners representing at least ninety percent (90%) of the voting interest remaining after excluding the voting interest of the Unit Operator. Such removal shall be effective upon notice thereof to the Supervisor. In all such instances of resignation or removal, until a successor Unit Operator is selected and accepted as hereinafter provided, the Working Interest Owners shall be jointly responsible for performance of the duties of Unit Operator and shall, not later than thirty (30) days before such resignation or removal becomes effective, appoint a common agent to represent them in any action to be taken hereunder.

The resignation or removal of Unit Operator under this Agreement shall not terminate its rights, title or interest as the owner of a working interest or other interest in Unitized Substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all wells, equipment, materials

and appurtenances used in conducting the Unit operations and owned by the Working Interest Owners to the new duly qualified successor Unit Operator or to the owners thereof if no such new Unit Operator is elected, to be used for the purpose of conducting Unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material equipment and appurtenances needed for the preservation of any wells.

SECTION 8. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by Working Interest Owners, a successor Unit Operator shall be selected by Working Interest Owners voting according to their respective Tract participation in all unitized land by a majority vote, provided, that, if a majority but less than 80 percent of the Working Interests qualified to vote are owned by one party to this Agreement, a concurring vote of one or more additional Working Interest Owners shall be required to select a new Operator. Such selection shall not become effective until:

- (a) A Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator; and
- (b) The selection shall have been approved by the Supervisor.

If no successor Unit Operator is selected and qualified as herein provided, the Director at his election may declare this Agreement terminated.

SECTION 9. ACCOUNTING PROVISIONS AND UNIT OPERATING

AGREEMENT. If the Unit Operator is not the sole owner of Working Interest, costs and expenses incurred by Unit Operator in conducting Unit Operations hereunder shall be paid and apportioned among and borne by the owners of Working Interests, all in accordance with the agreement or agreements, whether one or more, separately or collectively, entered into by and between the Unit Operator and the owners of Working Interests. Any agreement or agreements, whether one or more, entered into between the Working Interest Owners and the Unit Operator as provided in this section are herein referred to as the "Unit Operating Agreement".

Such Unit Operating Agreement shall also set forth such other rights and obligations as between Unit Operator and the Working Interest Owners as may be agreed upon by Unit Operator and the Working Interest Owners; however, no such Unit Operating Agreement shall be deemed either to modify any of the terms and conditions of this Agreement or to relieve the Unit Operator of any right or obligation established under this Agreement, and in case of any inconsistency or conflict between this Agreement and the Unit Operating Agreement, this Agreement shall prevail. Two (2) true copies of any Unit Operating Agreement executed pursuant to this section shall be filed with the Supervisor prior to approval of this Agreement, and thereafter promptly after any revision or amendment.

SECTION 10. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR.

Except as otherwise specifically provided herein, the exclusive right, privilege, and duty of exercising any and all rights

of the parties hereto, including surface rights, which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the Unitized Substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator upon his request and, together with this Agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this Agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purpose herein specified.

SECTION 11. PLAN OF OPERATION. It is recognized and agreed by the parties hereto that the Unit Area is developed and productive, and only such drilling as is incidental to a secondary recovery or pressure maintenance program is contemplated.

Inasmuch as the primary purpose of this Agreement is to permit the institution and consummation of a secondary recovery or pressure maintenance program for the maximum economic production of Unitized Substances consistent with good engineering and conservation practices, Unit Operator, concurrently with the filing of this Agreement for approval shall submit to the Supervisor, a Plan of Operation for the Unitized Land, and upon approval thereof by the Supervisor, such plan shall constitute the future operating

obligations of the Unit Operator under this Agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for like approval a plan for an additional specified period of operation; said plan or plans shall be modified or supplemented when necessary to meet changed conditions, or to protect the interest of all parties to this Agreement. Reasonable diligence shall be exercised in complying with the obligations of any approved Plan of Operation.

Unit Operator shall have the right to inject into the Unitized Formation any substances for secondary recovery or pressure maintenance purposes in accordance with a Plan of Operation approved by the Supervisor, including the right to drill and maintain injection wells on the Unitized Land and completed in the Unitized Formation, and to use abandoned well or wells producing from the Unitized Formation for said purpose, and the parties hereto, to the extent of their rights and interests, hereby grant to the Unit Operator the right to use as much of the surface of the land within the Unit Area as may be reasonably necessary for the operation and the development of the Unit Area hereunder. Unit operator shall have free use of water from the Unitized Land for operations hereunder and for operations on adjacent lands except water from Surface Owner's and Royalty Owner's fresh water wells, private lakes, ponds or irrigation ditches.

SECTION 12. TRACT PARTICIPATION. In Exhibit "C" attached hereto there are listed and numbered the various Tracts within the Unit Area, and set forth opposite each

Tract are figures which represent the Tract Participation if all Tracts in the Unit Area qualify as provided herein. The Tract Participations of each Tract as shown in Exhibit "C" were determined in accordance with the following formula:

A single phase formula based on:

- 30% Floodable Acre Feet
- 25% Present Productive Acres
- 25% Production Prior to Installation of High Volume Lift Equipment
- 20% Cumulative Production

the terms utilized in the formula being defined as follows:

"Floodable Acre Feet" - The volume of reservoir which has not been affected by water influx as of June 1, 1974.

"Present Productive Acres" - The area within the ten-foot isopach contour as shown on the isopach maps contained in the Engineering Report, Exhibit "E".

"Production Prior to Installation of High Volume Lift Equipment" - Production for the months of May, June and July, 1973.

"Cumulative Production" - All production from the Pool prior to May 31, 1974.

Promptly after approval of this Agreement, if all Tracts are not qualified hereto, Unit Operator shall revise Exhibit "C" to show all Tracts qualified for participation under this Agreement by setting forth opposite each Tract a revised Tract Participation therefor, which shall be calculated by using the same Tract factors and formulas which were used to arrive at the Tract Participation of each Tract as set out in the original Exhibit "C" but applying the same only to those Tracts which are qualified for participation as of the effective date of this Agreement. Said revised Exhibit "C" shall be subject to approval by the Supervisor and shall be effective as of the effective date of this Agreement.

If after the effective date of this Agreement any Tract or Tracts are subsequently committed hereto and qualified because of expansion of the Unit Area under Section 3, Expansion of Unit Area, or any tract or tracts are subsequently qualified under the provisions of Section 5, Tracts Qualified for Participation or under the provisions of Section 30, Subsequent Joinder, or if any Tract is eliminated from this Agreement as provided in Section 29, Loss of Title, the schedule of participation as shown in Exhibit "C" shall be revised by the Unit Operator to show the new Tract Participation of all the then qualified Tracts, and the revised Exhibit "C", upon approval by the Supervisor, shall govern the allocation of production from the effective date thereof until a new schedule is so approved. In any such revised Exhibit "C", pursuant to this paragraph, the Tract Participation of the previously qualified Tracts shall remain in the same ratio one to the other.

On the effective date of this Agreement, and thereafter, all Unitized Substances produced hereunder (except any part thereof used in conformity with good operating practices for drilling, operating, camp and other production or development purposes, for pressure maintenance or secondary recovery operations in accordance with a plan of operation approved by the Supervisor, or unavoidably lost), shall be deemed to be produced from the several Tracts of Unitized Land, and for the purpose of determining any benefits accruing under this Agreement each such Tract shall have allocated to it that percentage

of said production equal to its Tract Participation effective hereunder during the respective period such Unitized Substances were produced, as set out in Exhibit "C".

The amount of Unitized Substances allocated to each Tract shall be deemed to be produced from such Tract irrespective of the location of the wells from which the same is produced and regardless of depletion of wells or Tracts. In the absence of a controlling contract or agreement to the contrary, when two or more leases, or part or parts thereof, have been combined into a single Tract, the percentage participation assigned to such Tract shall for all purposes be divided among the separate leases, or part or parts thereof which has been put into such Tract, in proportion to the number of surface acres of the leases, or part or parts thereof contained in such Tract, to the total surface acres contained in said Tract.

SECTION 13. ROYALTY SETTLEMENT. The State of New Mexico, the United States and all Royalty Owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the Unitized Substances allocated to such tract, and Unit Operator shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Royalty Interest not taken in kind shall be made by Working Interest Owners responsible therefore under existing contracts, laws and regulations on or before the last day of each month for

Unitized Substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands or formations not subject to this Agreement is introduced into the Unitized Formation hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, a like amount of gas less appropriate deduction for loss or depletion from any cause, may be withdrawn from the Unitized Formation, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal, shall be at such time as may be provided in the approved Plan of Operation or as may otherwise be consented to by the Supervisor as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this Agreement.

If natural gasoline, liquid petroleum gas fractions or other liquid hydrocarbon substances (herein collectively called "LPG's") which were not extracted from gas produced from the Unitized Formation are injected into the Unitized Formation, which shall be in conformity with a plan of Operation first approved by the Supervisor, Working Interest Owners shall be entitled to recover, royalty free, part or all of such "LPG's" pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all Unitized Substances on the Basis of the amounts thereof allocated to unitized Federal land as provided herein at the rate specified in the respective Federal leases, or at such lower rates as may be authorized by law or regulations; provided that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though the Unitized Lands were a single consolidated lease.

SECTION 14. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by Working Interest Owners responsible therefore under existing contracts, laws and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental and minimum royalty for lands of the United States subject to this Agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended or reduced by law or by approval of the Secretary of the Interior of the United States hereinafter referred to as "Secretary", or his duly authorized representative.

SECTION 15. CONSERVATION. Operations hereunder and production of Unitized Substances shall be conducted to

provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulation.

SECTION 16. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from Unitized Land by wells on land not subject to this Agreement or, with prior consent of the Director pursuant to applicable regulations, pay a fair and reasonable compensatory royalty as determined by the Supervisor. In the event compensatory royalty is so paid, it shall be treated in the same manner as Unitized Substances.

SECTION 17. GAUGE OR MERCHANTABLE OIL. Unit Operator shall make a proper and timely gauge of all leases and other tanks within the Unit Area and associated with the operation of Unitized Land in order to ascertain the amount of merchantable oil above the pipeline connections in such tanks on the effective date hereof. All such oil shall be and remain the property of the parties entitled thereto the same as if this Agreement had not been made effective; and such parties shall promptly remove said oil from said tanks. Any such oil not so removed shall be sold by Unit Operator for the account of parties entitled thereto, subject to the payment of all royalties, overriding royalties, production payments, and all other payments under the terms and provisions of the applicable lease, leases, or other contracts. If, as of the effective date hereof, any Tract of Unitized Land is overproduced with respect to the allowable of the

wells on such Tract and the amount of overproduction has been sold or otherwise disposed of, such overproduction shall be regarded as a part of the Unitized Substances produced after the effective date hereof and shall be charged to such Tract as having been delivered to the parties entitled to Unitized Substances allocated to such Tract.

SECTION 18. LEASE AND CONTRACTS CONFORMED AND EXTENDED.

The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas of lands committed to this Agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary shall and by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change, or revoke the drilling, producing rental, minimum royalty, and royalty requirements of Federal leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this Agreement. Without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

- (a) The development and operation of lands subject to this Agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned Tract subject to this Agreement, regardless of whether there is any develop-

ment of any particular part or Tract of the Unitized Land, notwithstanding anything to the contrary in any lease, operating agreement, communitization agreement, or other contracts by and between the parties hereto, or their respective predecessors in interest, or any of them.

(b) Drilling and producing operations performed hereunder upon any Tract of Unitized Land will be accepted and deemed to be performed upon and for the benefit of each and every Tract of Unitized Land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all Unitized Land pursuant to direction or consent of the Secretary or his duly authorized representative shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every Tract of Unitized Land.

(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands committed to this Agreement which, by its terms might expire prior to the termination of this Agreement, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of this Agreement.

(e) Termination of this Agreement shall not affect any lease which, pursuant to the terms thereof or any

applicable laws, shall continue in force and effect thereafter.

(f) The segregation of any Federal lease committed to this Agreement is governed by the following provision in the fourth paragraph of Section 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "Any (federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization; Provided, however, that any such lease as to the non-unitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

SECTION 19. COVENANTS RUN WITH LAND. The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this Agreement terminates and any grant, transfer, or conveyance, of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee, or other successor in interest. No assignment or transfer of any Working Interest shall be binding upon Unit Operator nor shall any transfer

of any Royalty Interest or other interest be binding on the Working Interest Owners responsible for payment or settlement thereof, until the first day of the calendar month after Unit Operator or the responsible Working Interest Owner, as the case may be, is furnished with the original, photostat or certified copy of the instrument of transfer.

SECTION 20. EFFECTIVE DATE. This Agreement shall become binding upon each party who executes or ratifies it as of date of execution or ratification by such party and shall become effective the first day of the calendar month next following the approval of this Agreement by the Secretary or his duly authorized delegate; and provided further, that if this Agreement is not filed for approval on or before _____, this Agreement shall ipso facto expire on said date (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this Agreement has been executed or ratified by Working Interest Owners whose voting interest as provided in Section 4.3.1 of the Unit Operating Agreement aggregate at least sixty percent (60%) and Working Interest Owners whose voting interest as above defined aggregate at least sixty percent (60%) of the Unit Area then committed to this Agreement have voted to extend such expiration date for a period not to exceed six (6) months. If said expiration date is so extended and this Agreement is not filed for approval by the Supervisor on or before said extended expiration date this Agreement shall ipso facto expire and thereafter be of no further force or effect.

Unit Operator shall within thirty (30) days after the effective date of this Agreement file for record in the office or offices where a counterpart of this Agreement is recorded, a certificate to the effect that this Agreement has become effective according to its terms and stating further the effective date.

SECTION 21. TERM. The term of this Agreement shall be for and during the time that Unitized Substances can be produced in quantities sufficient to pay for the cost of producing same from wells on Unitized Land and for as long thereafter as drilling, reworking or other operations are prosecuted on Unitized Land without cessation of more than ninety (90) consecutive days, and so long thereafter as Unitized Substances can be produced as aforesaid, unless sooner terminated by the Director as provided in Section 8, Successor Unit Operator, or by Working Interest Owners as provided in Section 22, Termination by Working Interest Owners.

SECTION 22: TERMINATION BY WORKING INTEREST OWNERS:
This Agreement may be terminated at any time by Working Interest Owners owning ninety percent (90%) or more of the participation percentage in the Unitized Land with the approval of the Supervisor and Commissioner. Notice of any such termination shall be given by the Unit Operator to all parties hereto.

Upon termination of this Agreement, the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate Tracts.

If not specified otherwise by the leases unitized

under this Agreement, basic Royalty Owners hereby grant Working Interest Owners a period of six (6) months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with Unit operations.

Unit Operator shall, within thirty (30) days after the termination of this Agreement has been determined, pursuant to Section 8 or 22 hereof, file for record in the office or offices where a counterpart of this Agreement is recorded, a certificate setting forth the fact of such termination and the date thereof.

SECTION 23. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director is hereby vested with authority to alter or modify from time to time in his discretion the quantity and rate of production under this Agreement when such quantity and rate is not fixed pursuant to Federal or State law or does not conform to any statewide voluntary conservation or allocation program, which is established, recognized and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time in his discretion the rate of prospecting and development and the quantity and rate of production under this Agreement when such alteration or

modification is in the interest of attaining the conservation objectives stated in this Agreement and is not in violation of any applicable Federal or State law.

Powers in this section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held no less than fifteen (15) days from notice.

SECTION 24. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interest affected hereby before the Department of the Interior and to appeal from orders issued under the regulations of said Department or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

SECTION 25. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given, if given in writing or personally delivered to the party or sent by postpaid registered or certified mail, addressed to such party at the address such party has furnished to the party sending the notice, demand or statement.

SECTION 26. NO WAIVER OR CERTAIN RIGHTS. Nothing in this Agreement contained shall be construed as a waiver by

any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State of New Mexico, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive; provided, however, each party hereto except the United States covenants that during the existence of this Agreement, such party shall not resort to any action at law or in equity to partition the Unitized Land or the facilities used in the development or operation thereof and to that extent waives the benefits of all laws authorizing such partition.

SECTION 27. UNAVOIDABLE DELAY. All obligations under this Agreement, except the payment of money, shall be suspended while, but only so long as, the Unit Operator despite the exercise of due care and diligence is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Federal, State or municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

SECTION 28. NON-DISCRIMINATION. In connection with the performance of work under this Agreement, the Unit Operator agrees to comply with all the provisions of Section 202 (1) to (7) inclusive, of Executive Order 11246,

30 F.R. 12319, as amended, which are hereby incorporated by reference in this Agreement.

SECTION 29. LOSS OF TITLE. In the event title to a Tract of Unitized Land shall fail so as to render the Tract inoperable under this Agreement and the true owner cannot be induced to join this Agreement, such Tract shall be automatically regarded as not committed hereto effective the first day of the calendar month in which such title failure is determined, and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any Royalty, Working Interest or other interest subject thereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled; provided that, as to State and Federal land or leases, no payment of funds due the State of New Mexico or the United States of America shall be withheld, but such funds shall be deposited as directed by the Supervisor, to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Each Royalty Owner (other than the United States of America) that executes this Agreement represents that it is the owner of a Royalty Interest in the Tract or Tracts within the Unit Area as its interest appears in Exhibit "B" attached hereto. If any Royalty Interest in a Tract or Tracts should be lost by title failure or otherwise, in whole or in part, during the term of this Agreement, then the Royalty Interest of the party representing himself to

be the owner thereof shall be reduced proportionately and the interest of all parties in the affected Tract or Tracts shall be adjusted accordingly.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

SECTION 30. SUBSEQUENT JOINDER. After the effective date of this Agreement, the commitment of any interest in any Tract within the Unit Area shall be upon such equitable terms as may be negotiated by Working Interest Owners and the owner of such interest. After the effective date hereof, joinder by a Royalty Owner must be consented to in writing by the Working Interest Owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such Royalty Interest. Joinder by any Royalty Owner at any time must be accompanied or preceded by appropriate joinder by the Owner of the corresponding Working Interest in order for the interest to be regarded as effectively committed. Joinder to this Agreement by a Working Interest Owner at any time must be accompanied by appropriate joinder to the Unit Operating Agreement in order for the interest to be regarded as committed to this Agreement. Except as may otherwise herein be provided, subsequent joinders to this Agreement shall be effective as of the first day of the month following the filing with the Supervisor and Commissioner of duly executed counterparts of all or any papers necessary to establish

commitment of any Tract to this Agreement unless objection to such joinder is made within sixty (60) days by the Supervisor.

SECTION 31: COUNTERPARTS. This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the land within the above-described Unit Area.

In the event any of the parties hereto own both Working Interests and Royalty Interests, as such interests are shown on Exhibit "B", it shall not be necessary for such party to execute this Agreement in both capacities in order to commit both classes of interest. Execution hereof by any such party in one capacity shall also constitute execution in the other capacity, provided said party also executes the Unit Operating Agreement as a Working Interest Owner.

SECTION 32. ROYALTY OWNERS TAXES. Each party hereto shall, for its own account, render and pay its share of any taxes levied against or measured by the amount or value of the Unitized Substances produced from the Unitized Land; provided, however, that, if it is required or if it be

determined that the Unit Operator or the several Working Interest Owners must pay or advance said taxes for the account of the parties hereto, it is hereby expressly agreed that the parties so paying or advancing said taxes shall be reimbursed therefor by the parties hereto, including Royalty Owners, who may be responsible for the taxes on their respective allocated share of said Unitized Substances. No taxes shall be charged to the United States, the State of New Mexico, or to any lessor who has a contract with a lessee which requires his lessee to pay such taxes.

SECTION 33. NO PARTNERSHIP. It is expressly agreed that the relation of the parties hereto is that of independent contractors and nothing in this Agreement contained, expressed or implied, nor any operations conducted hereunder, shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

SECTION 34. BORDER AGREEMENTS. Unit Operator, with concurrence of Working Interest Owners having a combined Unit Participation of seventy-five (75) percent or more, may, subject to approval of the Supervisor, enter into an agreement or agreements with the Working Interest Owners of adjacent lands with respect to the operations designed to increase ultimate recovery of oil and/or gas from the Unitized Formation, conserve natural resources, prevent waste, and protect the correlative rights of the parties.

SECTION 35: CORRECTION OF ERRORS. It is hereby agreed by all parties to this Agreement that Unit Operator is empowered to correct any mathematical or clerical errors which may exist in the pertinent exhibits to this Agreement;

provided, however, that correction of any error other than mathematical or clerical shall be made by Unit Operator only after first having obtained approval of Working Interest Owners and the Supervisor. If any such corrections are made, Unit Operator shall file the required number of copies of the corrected pages of this Agreement or of the Exhibits hereto with the Supervisor. Unit Operator shall also provide, in conformance with Section 26, Notices, and such corrected pages to the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and have set opposite their respective names the date of execution.

PETRO-LEWIS CORPORATION
Unit Operator

By *M. J. [Signature]*
Vice President

ATTEST:

J. Kenney Sherman
Secretary

DATED: _____

PARTNERSHIP PROPERTIES COMPANY
Working Interest Owner

By *David G. Hawley*
General Partner *DFK*

DATED: _____

FLUID POWER PUMP COMPANY
Working Interest Owner

By *George J. Slaughter*
President

ATTEST:

Helma L. McCuskey
Secretary

DATED: 8-12-75

STATE OF Colorado)
COUNTY OF Denver) ss.

The foregoing instrument was acknowledged before me this 15th day of August, 1975, by William C. Lehren, II - P of Colorado PETRO LEWIS CORPORATION, a Corporation, on behalf of said Corporation.

(SEAL)

Carol L. McLehee
NOTARY PUBLIC

My Commission Expires:

My Commission Expires Oct. 1, 1977

STATE OF Colorado)
COUNTY OF Denver) ss.

The foregoing instrument was acknowledged before me this 15th day of August, 1975, by David C. Hawley a General Partner on behalf of PARTNERSHIP PROPERTIES COMPANY, a limited partnership.

(SEAL)

Carol L. McLehee
NOTARY PUBLIC

My Commission Expires:

My Commission Expires Oct. 1, 1977

STATE OF Tennessee)
COUNTY OF Shelby) ss.

The foregoing instrument was acknowledged before me this 15th day of August, 1975, by George H. Houghton of Tennessee FLUID POWER PUMP COMPANY, a Corporation, on behalf of said Corporation.

(SEAL)

Carroll L. McLehee
NOTARY PUBLIC

My Commission Expires:

May 1, 1979

EXHIBIT "C" TO UNIT AGREEMENT

MEDIA ENTRADA UNIT

<u>TRACT NO.</u>	<u>DESCRIPTION</u>	<u>PARTICIPATION (%)</u>
1	Sec. 15, T19N, R3W S/2 NE/4 & N/2 SE/4	18.4592
2	Sec. 14, T19N, R3W S/2 NW/4 & N/2 SW/4	35.3247
3	Sec. 15, T19N, R3W S/2 SE/4 & Sec. 22, T19N, R3W N/2 NE/4 NE/4	24.2523
4	Sec. 14, T19N, R3W S/2 SW/4 & Sec. 23, T19N, R3W N/2 NW/4	21.9638
		<u>100.0000</u> ✓

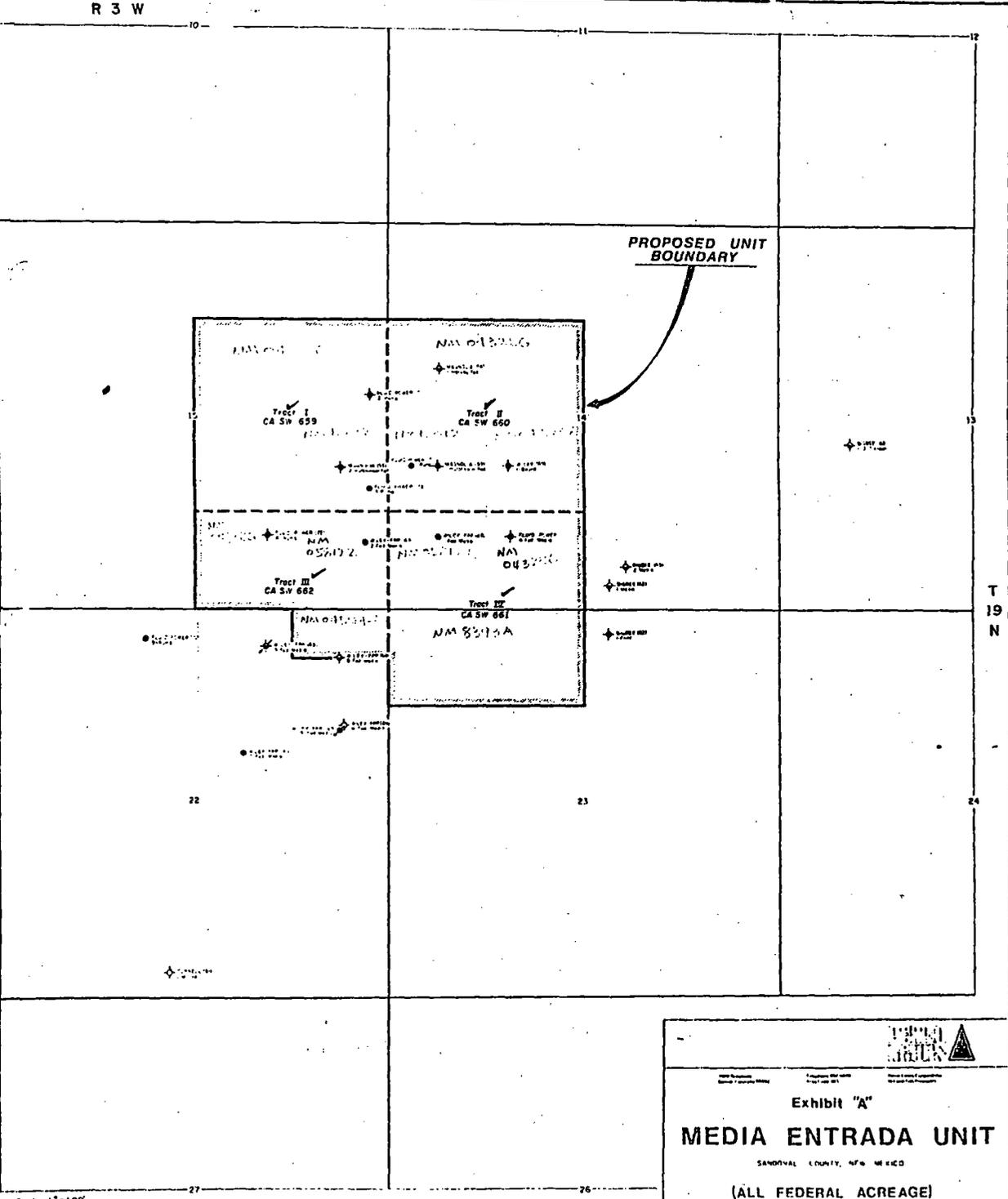
EXHIBIT "D" TO UNIT AGREEMENT

MEDIA ENTRADA UNIT

COMMUNITIZATION AGREEMENTS
AND DESCRIPTION

Communitization Agreement Com. Agr. - SW-659, dated 7/28/72 S/2 NE/4 & N/2 SE/4 Sec. 15, T19N, R3W, NMPM	18.4592
Communitization Agreement Com. Agr. - SW-660, dated 7/28/72 S/2 SW/4 & N/2 SW/4 Sec. 14, T19N, R3W, NMPM	35.3247
Communitization Agreement Com. Agr. - SW-662, dated 8/1/72 (as amended) S/2 SE/4 Sec. 15 & N/2 NE/4 NE/4 Sec. 22, T19N, R3W, NMPM	24.2523
Communitization Agreement Com. Agr. - SW-661 dated 7/28/72 S/2 SW/4 Sec. 14 & N/2 NW/4 Sec. 23, T19N, R3W, NMPM	21.9638
	<u>100.0000%</u>

R 3 W



PROPOSED UNIT BOUNDARY

T 19 N



Exhibit "A"
MEDIA ENTRADA UNIT
 SANDOVAL COUNTY, N.M. MEXICO
 (ALL FEDERAL ACREAGE)

Date: May 29, 1975

Scale 1"=600'

<u>TRACT NO.</u>	<u>DESCRIPTION OF LAND</u>	<u>NO. OF ACRES</u>	<u>SERIAL NUMBER</u>	<u>BASIC ROYALTY & PERCENTAGE</u>	<u>RECORD LESSEE & PERCENTAGE</u>	<u>OVERRIDING ROYALTY & PERCENTAGE</u>	<u>WORKING INTEREST OWNER & PERCENTAGE</u>
2*	T-19-N-R3W Sec. 14; S/2 NW/4	80	NM-043286 9/1/59 HBP	USA-All 12.5%	Partnership Properties Co. 50% Fluid Power Pump Company 50%	Butler & Colberg Val R. Reese .50000 2.00000 Partnership Properties Co. 12.60000 Texas Northeast Oil & Gas Company 1.40000 F. H. Hartman .06250 John M. Beard 1.54690 Beard Oil Company 4.64060 Bruce Anderson 6.25000 Val R. Reese 1.75000 Butler & Colberg .25000 Partnership Properties Co. 2.70000 Texas Northeast Oil & Gas Co. .30000	Partnership Properties Co. 50% Fluid Power Pump Co. 50%
	Sec. 14; NE/4 SW/4	40	NM-043286-A 9/1/59 HBP	USA-All 12.5%	F. H. Hartman .12500 John M. Beard 2.09370 Beard Oil Company 6.28120 Bruce Anderson 4.00000 Val R. Reese 1.00000 Butler & Colberg .25000 Partnership Properties Co. 2.47500 Texas Northeast Oil & Gas Company .27500		
	Sec. 14; NW/4 SW/4	40	NM-12012 10/1/70 HBP	USA-All Sliding Scale 12.5% - 25% oil 12.5% - 16.75% gas	Butler & Colberg .50000 Val R. Reese 2.00000 Partnership Properties Co. 12.00000 Texas Northeast Oil & Gas Company 1.40000		

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<u>TRACT NO.</u>	<u>DESCRIPTION OF LAND</u>	<u>NO. OF ACRES</u>	<u>SERIAL NUMBER</u>	<u>BASIC ROYALTY & PERCENTAGE</u>	<u>RECORD LESSEE & PERCENTAGE</u>	<u>OVERRIDE ROYALTY & PERCENTAGE</u>	<u>RECORD LESSEE & PERCENTAGE</u>
3*	T-19-N-R-3W	40 ✓	NM-043286	USA-All	Partnership	F. H. Hartman	.0625%
CA SW 66Z	Sec. 15: SW/4 SE/4 ✓		9/1/59 ✓	12.5% ✓	Properties Co. 50%	John M. Beard	1.5469%
			HBP		Fluid Power Pump Company 50%	Beard Oil Co.	4.6406%
						Bruce Anderson	6.2500%
						Val R. Reese	1.7500%
						Butler & Colberg	.2500%
						Partnership Properties Co.	2.7000%
						Texas Northeast Oil & Gas Co.	.3000%
	Sec. 15: SE/4 SE/4	40 ✓	NM-058122 ✓	USA-All		R. E. McKenzie Jr. and	
			2/1/60	12.5% ✓		Agatha P. McKenzie	1.0000%
			HBP			Eugenia Bate	.5000%
						Barbara Talento	.5000%
						John K. Reimer and	
						Geraldine P. Reimer	5.0000%
						Val R. Reese	1.0000%
						Butler & Colberg	.2500%
						Partnership Properties Co.	7.4250%
						Texas Northeast Oil & Gas Co.	.8250%
	Sec. 22: N/2 NE/4 NE/4	20 ✓	NM-045884 ✓	USA-All		Duncan Miller	5.0000%
			12/1/59 ✓	12.5% ✓		R. O. Burbridge	3.0000%
			HBP			Partnership Properties Co.	5.9250%
						Val R. Reese	1.7500%
						Butler & Colberg	.2500%
						Texas Northeast Oil & Gas Co.	.5750%
						Partnership Properties Co. 50%	
						Fluid Power Pump Co. 50%	

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TRACT NO.	DESCRIPTION OF LAND	ACRES	SERIAL NUMBER	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE	
4*	T-19-N-RJW Sec. 14: SE/4 SW/4 ✓	40 ✓	NM-043286 ✓ 9/1/59 HBP	USA-All 12.5% ✓	Partnership Properties Co. 50% Fluid Power Pump Company 50%	P. W. Hartman John M. Beard Beard Oil Co. Bruce Anderson Val R. Reese Butler & Colberg Partnership Properties Co. Texas Northeast Oil & Gas Co.	.0625% 1.5469% 4.6406% 6.2500% 1.7500% .2500% 2.7000% .3000%	Partnership Properties Co. 50% Fluid Power Pump Co. 50%
	Sec. 14: SW/4 SW/4 ✓	40 ✓	NM-058122 ✓ 2/1/60 HBP	USA-All 12.5% ✓		R. E. McKenzie Jr. and Agatha McKenzie Eugenia Uate Barbara Talento John K. Reiner and Geraldine P. Reimer Val R. Reese Butler & Colberg Partnership Properties Co. Texas Northeast Oil & Gas Co.	1.0000% .5000% .5000% 5.0000% 1.0000% .2500% 7.4250% .8250%	
	Sec. 23: N/2 NW/4 ✓	80 ✓	NM-8393A ✓ 1/1/69 HBP	USA-All 12.5% ✓		Billie Robinson Partnership Properties Co. Val R. Reese Butler & Colberg Texas Northeast Oil & Gas Company	2.7500% 10.8500% 1.0000% 1.0000% .9000%	

*The individual leases in Tracts 1, 2, 3 and 4 have been communitized as to each individual tract, as shown on Exhibit "D" attached to the Unit Agreement.

LEASE	ACRES IN LEASE	ACRES IN UNIT	SEGREGATION REQUIRED
NM 043286	40	280	YES
NM 043286-A	40	40	NO
NM 045884-A	320	20	YES
NM 058122	80	80	NO
NM 8393-A	1360	80	YES
NM 12012	80	80	NO

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Exhibit "A"
Media Entrada Field
Sandoval County, New Mexico
Federal Media #7
Property Number NM-BE-01-062-01
Federal Miller #7-22
Property Number NM-BE-01-062-03
Federal Media #8
Property Number NM-BE-01-062-04

A 100.00% interest in and to the leasehold estate created by:

NM-BE-01-073 - United States of America Lease No. NM28241 (segregated out of NMO45884-A), dated effective December 1, 1959, issued to Duncan Miller.

INSOFAR AND ONLY INSOFAR as said lease covers and pertains to the following described land:

Township 19 North, Range 3 West, NMPM

Section 22: S/2 NE/4 NE/4, NW/4 NE/4,
S/2 NE/4, SE/4

SUBJECT TO THE FOLLOWING:

1. A proportionate part of all lessor's royalty, overriding royalties and other burdens on production.
2. Contract Number: 344NMO1A, Operating Agreement, dated May 29, 1973, by and between Petro-Lewis Corporation, Operator, and Partnership Properties Co. and Fluid Power Pump Company, Non-Operator.
3. Crude Oil Purchase Contract 00030, between Petro-Lewis Corporation, as Seller, and Permian Corporation, as Purchaser, effective 3/1/84 (NMBE0106204, Federal Media #8).
4. Preferential Right to Production dated April 18, 1978, between Petro-Lewis Corporation and Continental Oil Company (NMBE0106203, Federal Miller 7-22).

OPERATING INTEREST.....	100.000000X
FEDERAL MILLER 7-22	
NET REVENUE INTEREST.....	76.772136X
FEDERAL MEDIA #7	
FEDERAL MEDIA #8	
NET REVENUE INTEREST.....	76.690941X

CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of Interior, under the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. secs. 181, et seq., and delegated to the Area Oil and Gas Supervisors of the Geological Survey, I do hereby:

A. Approve the attached agreement for the development and operation of the Media Entrada Unit Area, State of New Mexico

B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Dated October 10, 1975.


Acting Area Oil and Gas Supervisor
United States Geological Survey

Contract Number 14-08-0001-14269

**(VADA-PENNSYLVANIAN (GAS-OIL RATIO) POOL -
Cont'd.)**

(3) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of liquid hydrocarbons.

(4) That an additional volume of 10,800 MCF per day of casinghead gas production is anticipated to be produced from the Vada-Pennsylvanian Pool at a gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(5) That the anticipated volume of additional casinghead gas may be produced from the Vada-Pennsylvanian Pool without waste.

(6) That in order to afford to the owner of each property in the Vada-Pennsylvanian Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the subject pool.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That, effective March 1, 1972, the limiting gas-oil ratio in the Vada-Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of oil produced.

(2) 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.

MEDIA-ENTRADA OIL POOL
(Rules and Pressure Maintenance)
Sandoval County, New Mexico

Order No. R-4277, Adopting Operating Rules for and Authorizing Fluid Power Pump Company to Institute a Pressure Maintenance Project in the Media-Entrada Oil Pool, Sandoval County, New Mexico, March 10, 1972.

Application of Fluid Power Pump Company for Special Pool Rules and a Pressure Maintenance Project, Sandoval County, New Mexico.

CASE NO. 4642
Order No. R-4277

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on January 19, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of March, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Fluid Power Pump Company, seeks the promulgation of special rules and regulations for the Media-Entrada Oil Pool, Sandoval County, New Mexico, including a provision for 160-acre spacing and proration units.

(3) That the applicant has established that one well in the Media-Entrada Oil Pool can efficiently and economically drain and develop 160 acres.

(4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 160-acre spacing units should be promulgated for the Media-Entrada Oil Pool.

(5) That the special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That the applicant further seeks authority to institute a pressure maintenance project in the Media-Entrada Oil Pool by the injection of water into the Entrada formation through certain wells yet to be determined.

(7) That a pressure maintenance project in the Media-Entrada Oil Pool should result in greater ultimate recovery of oil, thereby preventing waste.

(8) That the applicant should be authorized to institute a pressure maintenance project in the Media-Entrada Oil Pool to be designated the Media-Entrada Pressure Maintenance Project.

(9) That special rules and regulations for the operation of the Media-Entrada Pressure Maintenance Project should be promulgated and said rules and regulations should include a procedure whereby the Secretary-Director of the Commission may approve the project area and production and injection wells for the project at orthodox and unorthodox locations as may be necessary to establish and maintain an efficient production and injection pattern.

IT IS THEREFORE ORDERED:

That, effective March 10, 1972, Special Rules and Regulations for the Media-Entrada Oil Pool, Sandoval County, New Mexico, are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE
MEDIA-ENTRADA OIL POOL**

RULE 1. Each well completed or recompleted in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof, and not nearer to nor within the limits of another designated Entrada oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

(MEDIA-ENTRADA OIL (RULES AND PRESSURE MAINTENANCE) POOL - Cont'd.)

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 330 feet to the outer boundary of the proration unit or to any governmental quarter-quarter section line nor nearer than 660 feet to the nearest well drilling to or capable of producing from the same pool.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 4.33 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before April 1, 1972.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Media-Entrada Oil Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

IT IS FURTHER ORDERED:

(1) That the applicant, Fluid Power Pump Company, is hereby authorized to institute a pressure maintenance project in the Media-Entrada Oil Pool, Sandoval County, New Mexico, to be designated the Media-Entrada Pressure Maintenance Project, by the injection of water into the Entrada formation through certain wells to be approved in accordance with the Special Rules and Regulations for the project as set forth below.

(2) That Special Rules and Regulations governing the operation of the Media-Entrada Pressure Maintenance Project, Sandoval County, New Mexico, are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE****MEDIA-ENTRADA PRESSURE MAINTENANCE PROJECT**

RULE 1. The project area of the Media-Entrada Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the proration units upon which are located injection wells and production wells approved by the Secretary-Director of the Commission as injection wells and production wells for the Project.

RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowable for producing wells which, in the interest of more efficient operations of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3, which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

RULE 5. The allowable assigned to any injection well on 160-acre proration unit shall be top unit allowable for the Media-Entrada Oil Pool.

RULE 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by 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 I (a) and the limiting gas-oil ratio (2000 to 1) for the

(MEDIA-ENTRADA OIL (RULES AND PRESSURE MAINTENANCE) POOL - Cont'd.)

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 basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2000 to 1) for the pool.

RULE 8. By the 25th day of each month the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well outside the project area and producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

RULE 10. The Secretary-Director of the Commission is hereby authorized to approve a project area and such producing wells and injection wells at orthodox and unorthodox locations as may be necessary to establish and maintain an efficient production and injection pattern; provided said wells are drilled no closer than 330 feet to the outer boundary of the project area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that the application therefor has been filed in accordance with the following:

(1) A plat showing the proposed project area, proposed production and injection wells for the Project, and wells and operators that offset the proposed Project.

(2) A schematic drawing of the proposed injection wells which fully describes the casing, tubing, perforated interval, and depth showing that the injection of water will be confined to the Entrada formation.

(3) A letter stating that all offset operators to the proposed Project have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed project area and production and injection wells if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

IT IS FURTHER ORDERED:

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.

WEST TRES PAPANOTES-PENNSYLVANIAN POOL
Lea County, New Mexico

Order No. R-4286, Creating and Adopting Temporary Operating Rules for the West Tres Papanotes-Pennsylvanian Pool, Lea County, New Mexico, April 17, 1972.

Order No. R-4286-A, June 8, 1973, makes permanent the rules adopted in Order No. R-4286.

Application of Mark Production Company for the Creation of a New Oil Pool and Special Pool Rules, Lea County, New Mexico.

CASE NO. 4683
Order No. R-4286

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of April, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Mark Production Company, seeks the creation of a new oil pool for Pennsylvanian production in Lea County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 160-acre spacing units.

(3) That the Mark Production Company Etcheverry Well No. 1 located in Unit L of Section 29, Township 14 South, Range 34 East, NMPM, Lea County, New Mexico, having its top perforations at 10,400 feet has discovered a separate common source of supply which should be designated the West Tres Papanotes-Pennsylvanian Pool; that the vertical limits of said pool should be the Pennsylvanian formation as found in the interval from 10,378 feet to 10,512 feet on the log of said well; and that the horizontal limits of said pool should be the SW/4 of Section 29, SE/4 of Section 30, E/2 of Section 31, and NW/4 of Section 32, said Township and Range.

CASE 11328: Application of Merrion Oil & Gas Corporation for a high angle/horizontal directional drilling pilot project and for the promulgation of special operating rules therefor, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks to initiate a high angle/horizontal directional drilling pilot project in the Media-Entrada Oil Pool within its proposed Media Entrada Secondary (Federal) Unit comprising portions of Sections 14, 15, 22, and 23, Township 19 North, Range 3 West. Further, the applicant seeks the promulgation of special operating rules and procedures for wells within said Unit Area including provisions for administrative authorization for horizontal wells, the formation of oversized and irregular shaped spacing and proration units to accommodate such wellbores, the assignment of a special oil allowable or formula for the project area and the designation of a target window such that horizontal or producing portions of such a wellbore shall be no closer than 330 feet to the outer boundary of the project area. Said area is located approximately 14 miles southwest of Cuba, New Mexico.

CASE 11329: Application of Merrion Oil & Gas Corporation to amend Division Order No. R-9079, to extend the horizontal limits of the existing high angle/horizontal directional drilling pilot project area, and to adopt additional special operating rules therefor, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks to amend Division Order No. R-9079 by extending the project area approved therein to include the N/2 NW/4, SE/4 NW/4, NE/4 SW/4, and S/2 SW/4 of Section 15 and the SE/4 NE/4 and NE/4 SE/4 of Section 16, of Township 19 North, Range 5 West. Further, the applicant seeks the promulgation of special operating rules and procedures for wells within said Cooperative Area including provisions for administrative authorization for horizontal wells, the formation of oversized and irregular shaped spacing and proration units to accommodate such wellbores, the assignment of a special oil allowable or formula for the project area and the designation of a target window such that horizontal or producing portions of such a wellbore shall be no closer than 330 feet to the outer boundary of the project area. Said area is located approximately 22 miles northwest of San Luis, New Mexico.

CASE 11270: (Continued from June 15, 1995, Examiner Hearing.)

Application of Maralo, Inc. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying Lots 3 and 4, the S/2 NW/4, and the SW/4 (W/2 equivalent) of Section 3, Township 19 South, Range 28 East, thereby forming a 320.90-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Millman-Wolfcamp Gas Pool, Undesignated Millman-Atoka Gas Pool, Undesignated North Turkey Track-Atoka Gas Pool, and Undesignated Millman-Morrow Gas Pool. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and unit, and a charge for risk involved in drilling and completing said well. Said unit is located approximately 3 miles east-southeast of the old Illinois Oil Camp.

CASE 11330: Application of Meridian Oil Inc. for downhole commingling, a non-standard gas proration unit, dual completion, and an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval to downhole commingle conventional East Blanco-Pictured Cliffs Pool gas production with coal gas production from the Basin-Fruitland Coal (Gas) Pool and to dual said commingled production with gas production from the Blanco-Mesaverde Pool within the wellbore of its San Juan "30-4" Unit Well No. 40 to be drilled at an unorthodox gas well location for all three zones 2450 feet from the South line and 2270 feet from the East line (Unit J) of Section 21, Township 30 North, Range 4 West. The E/2 of said Section 21 is to be dedicated to said well in all three zones thereby forming a standard 320-acre gas spacing and proration unit in the Basin-Fruitland Coal (Gas) Pool and Blanco-Mesaverde Pool and a non-standard unit for the East Blanco-Mesaverde Pool. Said unit is located approximately 18 miles southwest of Dulce, New Mexico.

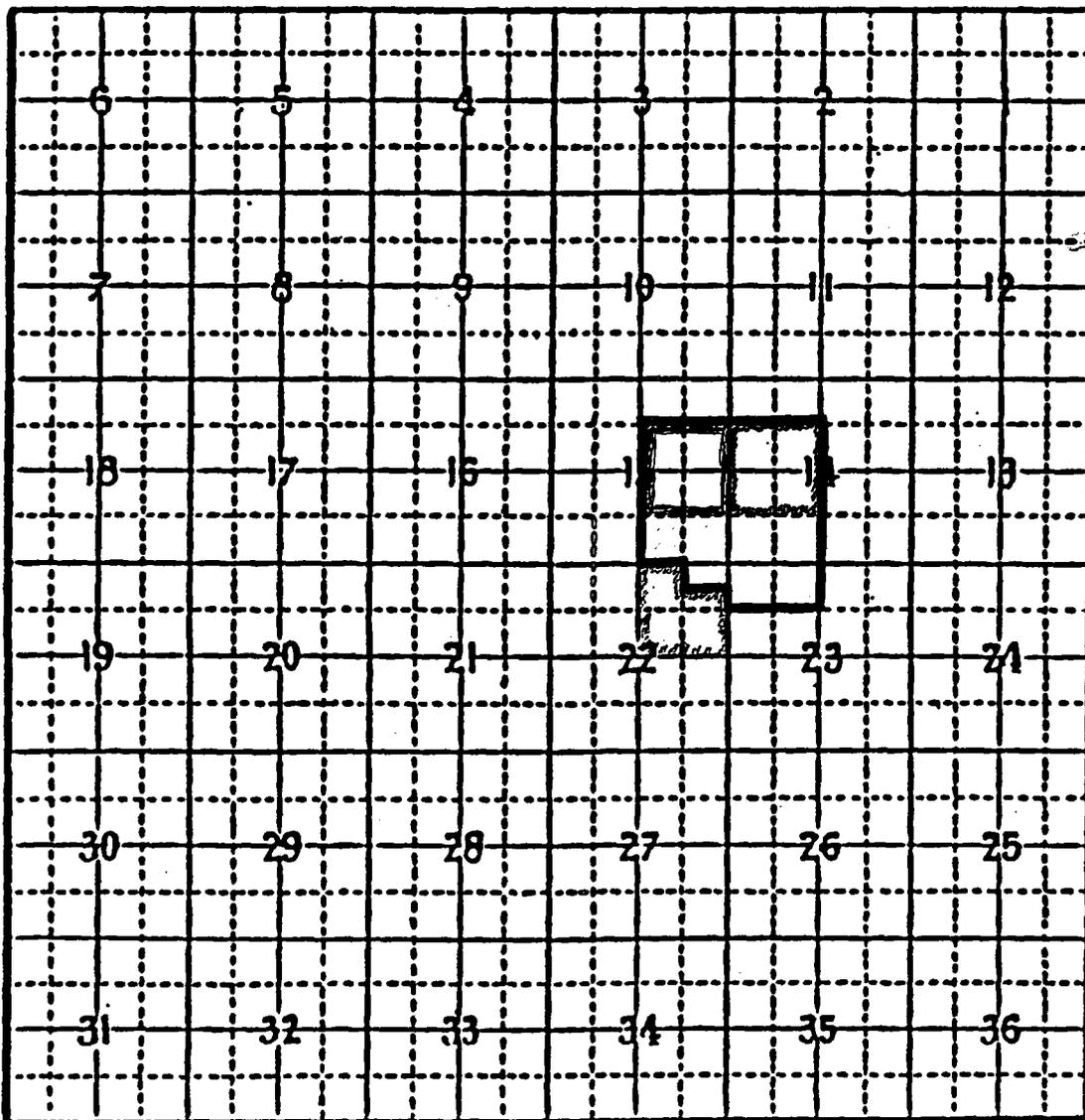
CASE 11297: (Continued from June 15, 1995, Examiner Hearing.)

Application of Exxon Corporation for a waterflood project, qualification for the recovered oil tax rate pursuant to the "New Mexico Enhanced Oil Recovery Act" for said project, and for 18 non-standard oil well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval to institute a waterflood project in the designated and Undesignated Avalon-Delaware Pool within its proposed Avalon Delaware Unit Area (being the subject of Case No. 11298) located in portions of Townships 20 and 21 South, Ranges 27 and 28 East, by the injection of water through 18 new wells to be drilled as injection wells and one well to be converted from a producing oil well to an injection well. Applicant further seeks to qualify this project for the recovered oil tax rate pursuant to the "New Mexico Enhanced Oil Recovery Act" (Law 1992, Chapter 38, Sections 1 through 5). Applicant further seeks approval to drill 18 new producing wells throughout the project area at locations considered to be unorthodox. The proposed unit area is centered approximately 8 miles north of Carlsbad, New Mexico.

SANDOVAL COUNTY
NEW MEXICO

No. 14-08-0001-14269

EFFECTIVE 11-1-75



□ R-4274

□ R-4274

R-4287

19 N

R-4730

160-acres
subject to
forced pooling

○ R-5051

3 W



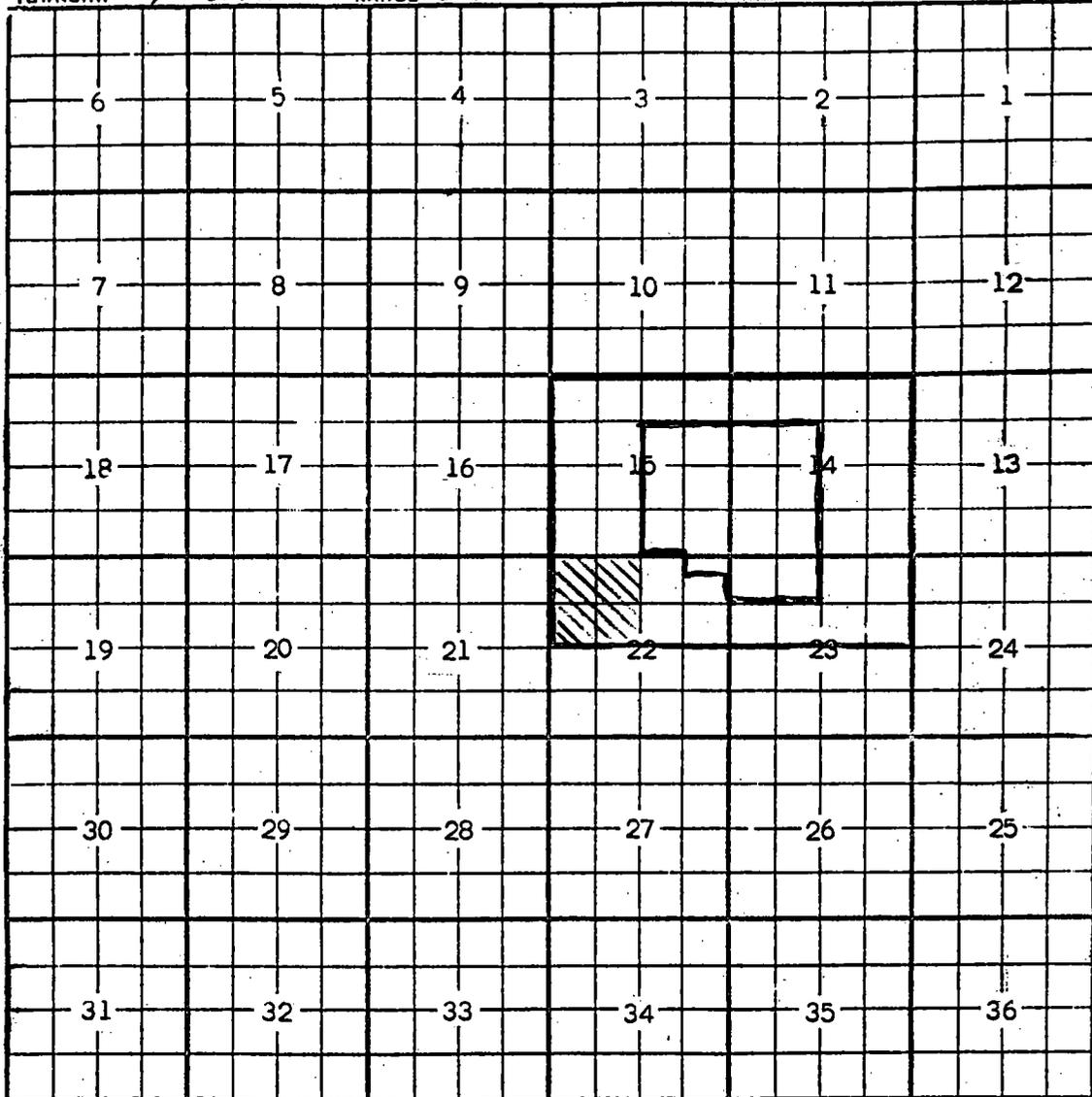
County Sandoval

Pool Media-Entrada Oil

TOWNSHIP 19 North

RANGE 3 West

NEW MEXICO PRINCIPAL MERIDIAN



Description: All Sec. 14 & 15; $\frac{1}{2}$ Sec. 22; $\frac{1}{2}$ Sec. 23 (R-466, 5-19-54)

Deletion: $\frac{NW}{4}$ Sec 22 (R-4822-A, 9-3-74)

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. 5511
Order No. R-5051

APPLICATION OF PETRO LEWIS
CORPORATION FOR A NON-STANDARD
OIL PRORATION UNIT, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 10, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of June, 1975, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Petro Lewis Corporation, seeks approval of a 140-acre non-standard oil proration unit in the Southwest Media-Entrada Oil Pool, comprising the S/2 NE/4, NW/4 NE/4, and S/2 NE/4 NE/4 of Section 22, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, to be dedicated to a well to be drilled on said unit.

(3) That the proposed non-standard proration unit can be efficiently and economically drained and developed by said well.

(4) That approval of the subject application will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.

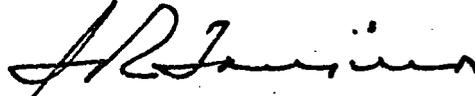
IT IS THEREFORE ORDERED:

(1) That a 140-acre non-standard oil proration unit in the Southwest Media-Entrada Oil Pool comprising the S/2 NE/4, NW/4 NE/4, and S/2 NE/4 NE/4 of Section 22, Township 19 North, Range 3 West, to be dedicated to a well to be drilled on said unit.

(2) 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.

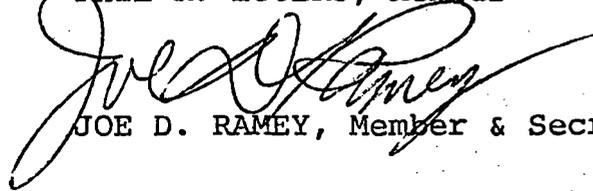
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



I. R. TRUJILLO, Chairman



PHIL R. LUCERO, Member



JOE D. RAMEY, Member & 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. 5167
Order No. R-4730

APPLICATION OF FLUID POWER PUMP
COMPANY AND PETRO-LEWIS CORPORATION
FOR COMPULSORY POOLING, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 13, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 21st day of February, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 applicants, Fluid Power Pump Company and Petro-Lewis Corporation, seek an order pooling all mineral interests in the Entrada formation underlying two non-standard proration units approved by Commission Order No. R-4287 in Township 19 North, Range 3 West, NMPM, Media-Entrada Oil Pool, Sandoval County, New Mexico, described as follows:

Unit No. 1, the S/2 SW/4 of Section 14 and N/2 NW/4 of Section 23, dedicated to applicants' Federal Media Well No. 1 located in Unit M of said Section 14; and

Unit No. 2, the S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, to be dedicated to applicants' Federal Media Well No. 2 located in Unit P of said Section 15.

(3) That said Federal Media Wells No. 1 and 2 are producing oil wells.

(4) That there are royalty interest owners in said two non-standard proration units who have not agreed to pool their interests.

(5) That to avoid the drilling of unnecessary wells, to

protect correlative rights, and to afford to the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas in said pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said units.

(6) That Petro-Lewis Corporation should be designated the operator of the subject wells and units.

(7) That all proceeds from production from the subject wells which are not and have not been disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, in the Entrada formation underlying the two non-standard gas production units authorized by Commission Order No. R-4287 in Township 19 North, Range 3 West, NMPM, Media-Entrada Pool, Sandoval County, New Mexico, as described below are hereby pooled and dedicated to the following described producing oil wells:

Unit No. 1, the S/2 SW/4 of Section 14 and N/2 NW/4 of Section 23, dedicated to applicants' Federal Media Well No. 1 located in Unit M of said Section 14; and

Unit No. 2, the S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, to be dedicated to applicants' Federal Media Well No. 2 located in Unit P of said Section 15.

(2) That Petro-Lewis Corporation is hereby designated the operator of the subject wells and units.

(3) That all proceeds from production from the subject wells which are not and have not been disbursed for any reason shall be placed in escrow in Sandoval County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Commission of the name and address of said escrow agent within 90 days from the date of this order.

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

-3-
CASE NO. 5167
Order No. R-4730

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman



Alex J. Armiño
ALEX J. ARMIÑO, Member

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

S E A L

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CASE NO. 5167
Order No. R-4730-A

APPLICATION OF FLUID POWER PUMP
COMPANY AND PETRO-LEWIS CORPORATION
FOR COMPULSORY POOLING, SANDOVAL
COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to clerical error and inadvertence Order No. R-4730, dated February 21, 1974, does not state the intended order of the Commission,

IT IS THEREFORE ORDERED:

(1) That Paragraph (5) on Page 1 of Order No. R-4730, be and the same is hereby corrected to read in its entirety as follows:

"(5) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said units the opportunity to recover or receive without unnecessary expense his just and fair share of the oil and gas in said pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said units."

(2) That Order No. (1) on Page 2 of Order No. R-4730, be and the same is hereby corrected to read in its entirety as follows:

"(1) That all mineral interests, whatever they may be, in the Entrada formation underlying the two non-standard oil proration units authorized by Commission Order No. R-4287 in Township 19 North, Range 3 West, NMPM, Media-Entrada Pool, Sandoval County, New Mexico, as described below are hereby pooled and dedicated to the following described producing oil wells:"

(3) That the corrections as set forth in this order be entered nunc pro tunc as of February 21, 1974.

-2-

Case No. 5167

Order No. R-4730-A

DONE at Santa Fe, New Mexico, on this 6th day of March,
1974.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member


A. L. PORTER, Jr., Member & 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. 5167 DE NOVO
Order No. R-4730-B

APPLICATION OF FLUID POWER PUMP
COMPANY AND PETRO-LEWIS CORPORA-
TION FOR COMPULSORY POOLING,
SANDOVAL COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 23, 1974, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 21st day of May, 1974, 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 applicants, Fluid Power Pump Company and Petro-Lewis Corporation seek an order pooling all mineral interests in the Entrada formation underlying two non-standard proration units approved by the Commission's Order No. R-4287 in Township 19 North, Range 3 West, NMPM, Media-Entrada Oil Pool, Sandoval County, New Mexico, described as follows:

Unit No. 1, the S/2 SW/4 of Section 14 and the N/2 NW/4 of Section 23, dedicated to applicants' Federal Media Well No. 1, located in Unit M of said Section 14; and Unit No. 2, the S/2 SE/4 of Section 15 and the N/2 NE/4 of Section 22, to be dedicated to applicants' Federal Media Well No. 2, located in Unit P of said Section 15.

(3) That the matter came on for hearing at 9:00 a.m. on February 13, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets, and, pursuant to this hearing, Order No. R-4730 (as corrected by Order No. R-4730-A) was issued on February 21, 1974, which granted Fluid Power Pump Company and Petro-Lewis Corporations' application and compulsorily pooled all mineral interests in the Entrada formation underlying the above-described units.

Case No. 5167 De Novo
Order No. R-4730-B

(4) That on March 18, 1974, application for Hearing De Novo was made by John K. Reimer and R. E. McKenzie Jr. and the matter was set for hearing before the Commission.

(5) That the matter came on for hearing De Novo on April 23, 1974.

(6) That the evidence adduced at said hearing indicates that Commission Order No. R-4730 (as corrected by Order No. R-4730-A), entered February 21, 1974, should be affirmed.

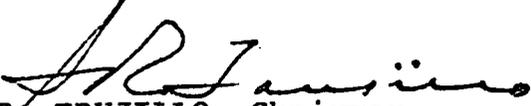
IT IS THEREFORE ORDERED:

(1) That Commission Order No. R-4730 (as corrected by Order No. R-4730-A), entered February 21, 1974, is hereby affirmed.

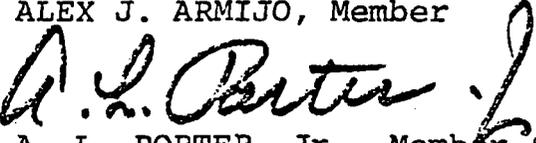
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member


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

S E A L

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. 5225
Order No. R-4780

APPLICATION OF FLUID POWER PUMP
COMPANY, PETRO-LEWIS CORPORATION,
AND PARTNERSHIP PROPERTIES COMPANY
FOR COMPULSORY POOLING, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 25, 1974, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of May, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 applicants, Fluid Power Pump Company, Petro-Lewis Corporation and Partnership Properties Company, seek an order pooling all mineral interests in the Entrada formation underlying a standard 160-acre proration unit consisting of the NW/4 of Section 22, Township 19 North, Range 3 West, NMPM, Media-Entrada Oil Pool, Sandoval County, New Mexico.

(3) That said NW/4 of Section 22 is to be dedicated to applicants' Fluid Power Pump Company No. 5 Well, a producing oil well located in Unit C of said Section 22.

(4) That there are overriding royalty interest owners in said unit who have not agreed to pool their interests.

(5) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the oil in said pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit.

(6) That Petro-Lewis Corporation should be designated the operator of the subject well and unit.

(7) That all proceeds from production from the subject well which are not and have not been disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, in the Entrada formation underlying the standard 160-acre proration unit consisting of the NW/4 of Section 22, Township 19 North, Range 3 West, NMPM, Media-Entrada Oil Pool, Sandoval County, New Mexico, are hereby pooled and dedicated to applicants' Fluid Power Pump Company No. 5 Well, located in Unit C of said Section 22.

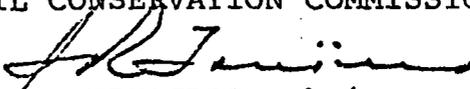
(2) That Petro-Lewis Corporation is hereby designated the operator of the subject well and unit.

(3) That all proceeds from production from the subject well which are not and have not been disbursed for any reason shall be placed in escrow in Sandoval County, New Mexico to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Commission of the name and address of said escrow agent within 90 days from the date of this order.

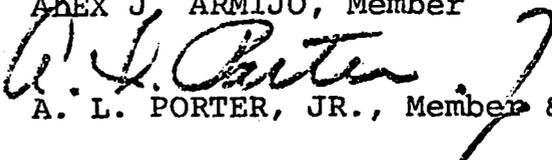
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member


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

S E A L

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. 4642
Order No. R-4277

APPLICATION OF FLUID POWER PUMP COMPANY
FOR SPECIAL POOL RULES AND A PRESSURE
MAINTENANCE PROJECT, SANDOVAL COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 19, 1972,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of March, 1972, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, 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, Fluid Power Pump Company, seeks
the promulgation of special rules and regulations for the Media-
Entrada Oil Pool, Sandoval County, New Mexico, including a pro-
vision for 160-acre spacing and proration units.

(3) That the applicant has established that one well in
the Media-Entrada Oil Pool can efficiently and economically
drain and develop 160 acres.

(4) That in order to prevent the economic loss caused by
the drilling of unnecessary wells, to avoid the augmentation of
risk arising from the drilling of an excessive number of wells,
to prevent reduced recovery which might result from the drilling
of too few wells, and to otherwise prevent waste and protect

correlative rights, special rules and regulations providing for 160-acre spacing units should be promulgated for the Media-Entrada Oil Pool.

(5) That the special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That the applicant further seeks authority to institute a pressure maintenance project in the Media-Entrada Oil Pool by the injection of water into the Entrada formation through certain wells yet to be determined.

(7) That a pressure maintenance project in the Media-Entrada Oil Pool should result in greater ultimate recovery of oil, thereby preventing waste.

(8) That the applicant should be authorized to institute a pressure maintenance project in the Media-Entrada Oil Pool to be designated the Media-Entrada Pressure Maintenance Project.

(9) That special rules and regulations for the operation of the Media-Entrada Pressure Maintenance Project should be promulgated and said rules and regulations should include a procedure whereby the Secretary-Director of the Commission may approve the project area and production and injection wells for the project at orthodox and unorthodox locations as may be necessary to establish and maintain an efficient production and injection pattern.

IT IS THEREFORE ORDERED:

That, effective March 10, 1972, Special Rules and Regulations for the Media-Entrada Oil Pool, Sandoval County, New Mexico, are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE
MEDIA-ENTRADA OIL POOL**

RULE 1. Each well completed or recompleted in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof, and not nearer to nor within the limits of another designated Entrada oil pool, shall be spaced, drilled, operated,

and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 330 feet to the outer boundary of the proration unit or to any governmental quarter-quarter section line nor nearer than 660 feet to the nearest well drilling to or capable of producing from the same pool.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 4.33 for allowable purposes, and in the event there is more than one well

on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before April 1, 1972.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Media-Entrada Oil Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Media-Entrada Oil Pool or in the Entrada formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

IT IS FURTHER ORDERED:

(1) That the applicant, Fluid Power Pump Company, is hereby authorized to institute a pressure maintenance project in the Media-Entrada Oil Pool, Sandoval County, New Mexico, to be designated the Media-Entrada Pressure Maintenance Project, by the injection of water into the Entrada formation through certain wells to be approved in accordance with the Special Rules and Regulations for the project as set forth below.

(2) That Special Rules and Regulations governing the operation of the Media-Entrada Pressure Maintenance Project, Sandoval County, New Mexico, are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE
MEDIA-ENTRADA PRESSURE MAINTENANCE PROJECT**

RULE 1. The project area of the Media-Entrada Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the proration units upon which are located injection wells and production wells approved by the Secretary-Director of the Commission as injection wells and production wells for the Project.

RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

RULE 5. The allowable assigned to any injection well on a 160-acre proration unit shall be top unit allowable for the Media-Entrada Oil Pool.

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

CASE No. 4642
Order No. R-4277

well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2,000 to 1) for the 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 basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the pool.

RULE 8. By the 25th day of each month the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well outside the project area and producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

RULE 10. The Secretary-Director of the Commission is hereby authorized to approve a project area and such producing wells and injection wells at orthodox and unorthodox locations as may be necessary to establish and maintain an efficient production and injection pattern; provided said wells are drilled no closer

than 330 feet to the outer boundary of the project area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that the application therefor has been filed in accordance with the following:

(1) A plat showing the proposed project area, proposed production and injection wells for the Project, and wells and operators that offset the proposed Project.

(2) A schematic drawing of the proposed injection wells which fully describes the casing, tubing, perforated interval, and depth showing that the injection of water will be confined to the Entrada formation.

(3) A letter stating that all offset operators to the proposed Project have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed project area and production and injection wells if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

IT IS FURTHER ORDERED:

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

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

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. 4673
Order No. R-4274

APPLICATION OF FLUID POWER PUMP
COMPANY FOR TWO NON-STANDARD OIL
PRORATION UNITS, SANDOVAL COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 1, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Fluid Power Pump Company, seeks the establishment of two non-standard oil proration units in the Media-Entrada Oil Pool, described as follows:

- (a) S/2 NW/4 and N/2 SW/4 of Section 14, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, comprising 160 acres, to be dedicated initially to its Fluid Power Well No. 1, located 1980 feet from the South line and 330 feet from the West line of said Section 14.

CASE No. 4673
Order No. R-4274

(b) S/2 NE/4 and N/2 SE/4 of Section 15, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, comprising 160 acres, to be dedicated initially to its Fluid Power Well No. 3, located 1650 feet from the South line and 330 feet from the East line of said Section 15.

(3) That each of the proposed non-standard proration units described above can be efficiently and economically drained and developed by said wells.

(4) That the applicant has filed an application for two companion 160-acre non-standard proration units described as follows:

(a) S/2 SW/4 of Section 14 and N/2 NW/4 of Section 23, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, which it proposes to dedicate to its Federal Media Well No. 1, located 990 feet from the South line and 660 feet from the West line of said Section 14.

(b) S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, which it proposes to dedicate to its Federal Media Well No. 2, located 940 feet from the South line and 330 feet from the East line of said Section 15.

(5) That approval of the subject application will not cause waste and will not impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the following-described non-standard oil proration units in the Media-Entrada Oil Pool, Sandoval County, New Mexico, are hereby established:

(a) S/2 NW/4 and N/2 SW/4 of Section 14, Township 19 North, Range 3 West, NMPM,

Sandoval County, New Mexico, comprising 160 acres, dedicated initially to the Fluid Power Pump Company Well No. 1, located 1980 feet from the South line and 330 feet from the West line of said Section 14.

- (b) S/2 NE/4 and N/2 SE/4 of Section 15, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, comprising 160 acres, dedicated initially to the Fluid Power Pump Company Well No. 3, located 1650 feet from the South line and 330 feet from the West line of said Section 15.

(2) 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

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

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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. 4685
Order No. R-4287

APPLICATION OF FLUID POWER PUMP
COMPANY FOR TWO NON-STANDARD OIL
PRORATION UNITS, SANDOVAL COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of April, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Fluid Power Pump Company, seeks approval of two 160-acre non-standard oil proration units in the Media-Entrada Oil Pool, comprising the S/2 SW/4 of Section 14 and the N/2 NW/4 of Section 23; and the S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, all in Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(3) That each of the proposed non-standard proration units can reasonably be presumed to be productive of oil and can be efficiently and economically drained and developed by the wells to which the units are to be dedicated.

(4) That approval of the subject application will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That a 160-acre non-standard oil proration unit comprising the S/2 SW/4 of Section 14 and the N/2 NW/4 of Section 23 and a 160-acre non-standard oil proration unit

CASE NO. 4685
Order No. R-4287

comprising the S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, all in Township 19 North, Range 3 West, NMPM, Media-Entrada Oil Pool, Sandoval County, New Mexico, are hereby established.

(2) 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

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

**(LANGLIE-MATTIX (QUEEN FORMATION -
WATER INJECTION LIMITED) FIELD - Cont'd.)**

(23) That this case shall be reopened at public hearing in November, 1975, at which time all aspects of the case will be reconsidered, including the possible curtailment or prohibition of underground water disposal in any or all of the three disposal wells described in Orders Nos. (11), (12), and (13) above.

(24) That this order shall remain in full force and effect until further order of the Commission.

(25) That Commission Order No. R-4936, dated December 5, 1974, is hereby superseded.

(26) That jurisdiction of this cause is retained by the Commission 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.

**MEDIA-ENTRADA POOL
(Petro-Lewis Media Entrada Unit Pressure Maintenance)
Sandoval County, New Mexico**

Order No. R-5017, Authorizing Petro-Lewis Corporation to Institute a Pressure Maintenance Project in the Media-Entrada Pool, New Mexico, May 22, 1975.

Application of Petro-Lewis Corporation for a Pressure Maintenance Project, Sandoval County, New Mexico.

CASE NO. 5465
Order No. R-5017

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 30, 1975, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 22nd day of May, 1975, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Petro-Lewis Corporation, seeks authority to institute a pressure maintenance project on its Media Entrada Unit, Media-Entrada Pool, by the injection of water into the Entrada formation through three injection wells in Sections 14 and 15, Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(3) That the wells in the project area are experiencing a decline in reservoir pressure.

(4) That the proposed pressure maintenance project should result in the recovery of a greater volume of oil from the reservoir than would otherwise be recovered, thereby preventing waste.

(5) That the applicant does not seek authority for allowable credit or transfer nor special well allowables within the project.

(6) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(7) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Petro-Lewis Corporation, is hereby authorized to institute a pressure maintenance project on its Media Entrada Unit, Media-Entrada Pool, by the injection of water into the Entrada formation through the following-described wells in Township 19 North, Range 3 West, NMPM, Sandoval County, New Mexico:

WELL NAME	NO.	UNIT LETTER	SECTION
Media Entrada Unit	1	H	15
Media Entrada Unit	5	O	15
Media Entrada Unit	8	N	14

(2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved attention-attracting leak detection device.

(3) That the operator shall immediately notify the supervisor of the Commission's Aztec district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(4) That the subject project is hereby designated the Petro-Lewis Media Entrada Unit Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(5) That monthly progress reports of the project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(6) 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.

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. 5152
Order No. R-4713

APPLICATION OF PETRO-LEWIS CORPORATION
FOR A SPECIAL DEPTH BRACKET ALLOWABLE,
SANDOVAL COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 16, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 24th day of January, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Petro-Lewis Corporation, is the sole operator in the Media-Entrada Oil Pool, Sandoval County, New Mexico.

(3) That the applicant seeks the assignment of a special depth bracket allowable of 750 barrels of oil per day for the Media-Entrada Pool to replace the current regular depth bracket allowable for said pool of 347 barrels per day.

(4) That the evidence presently available indicates that the assignment of a special depth bracket allowable to wells in the subject pool will not result in damage to the reservoir or cause waste, and will be in the interest of protection of correlative rights.

(5) That the applicant should install production equipment at each of the existing 160 acre non-standard spacing units to produce these units in such a manner as to minimize the fluid head differential between said units to eliminate, insofar as may be practicable, drainage which may not be offset by counter drainage.

(6) That the special depth bracket allowable should be assigned for a temporary period to expire six months from the date of this order; that during this period all operators in the subject pool should gather all available information relative to the effects on said reservoir.

(7) That this case should be reopened at an examiner hearing in July, 1974, at which time the operators in the subject pool should appear and show cause why the temporary special depth bracket allowables should be made permanent.

IT IS THEREFORE ORDERED:

(1) That a temporary special depth bracket allowable of 750 barrels of oil per day is hereby established for the Media-Entrada Oil Pool, Sandoval County, New Mexico.

(2) That this case shall be reopened at an examiner hearing in July, 1974, at which time the operators in the subject pool may appear and show cause why the temporary special depth bracket allowable should not be rescinded.

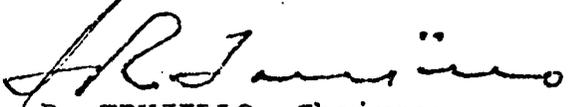
(3) That the Secretary-Director of the Commission may, at any time it appears that premature water encroachment or water coning is occurring, or other evidence of reservoir damage is apparent, rescind the provisions of this order and cause the top unit allowable for the Media-Entrada Oil Pool to revert to 347 barrels of oil per day.

(4) That each month the applicant shall take production fluid level tests on each producing well in the pool and shall report the results of these tests along with other pertinent monthly well production data to the Aztec district office of the Commission.

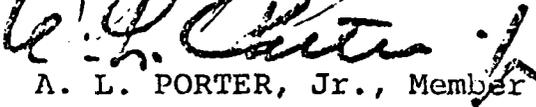
(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman


ALEX. J. ARMILLO, Member


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

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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. 5152
Order No. R-4713-A

IN THE MATTER OF CASE NO. 5152 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-4713, WHICH ORDER
ESTABLISHED A SPECIAL DEPTH BRACKET
ALLOWABLE FOR THE MEDIA-ENTRADA OIL
POOL, SANDOVAL COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 19, 1974, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 3rd day of September, 1974, 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 by Order No. R-4713, dated January 24, 1974, a temporary special depth bracket allowable of 750 barrels of oil per day was established for the Media-Entrada Oil Pool, Sandoval County, New Mexico, for a period of six months.
- (3) That pursuant to the provisions of Order No. R-4713, this case was reopened to allow the operators in the subject pool to appear and show cause why said special depth bracket allowable should remain in effect.
- (4) That the evidence presented indicates that the temporary special depth bracket allowable should be continued in effect for an additional one year.
- (5) That this case should be reopened at an examiner hearing during August, 1975, at which time the operators in the subject pool should appear and show cause why the temporary special depth bracket allowable should remain in effect.

IT IS THEREFORE ORDERED:

(1) That the temporary special depth bracket allowable of 750 barrels of oil per day for the Media-Entrada Oil Pool, Sandoval County, New Mexico, shall remain in full force and effect.

(2) That this case shall be reopened at an examiner hearing during the month of August, 1975, at which time operators in said pool may appear and show cause why said special depth bracket allowable should not be rescinded.

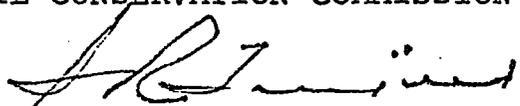
(3) That the Secretary-Director of the Commission may, at any time that it appears that premature water encroachment or water coning is occurring, or other evidence of reservoir damage is apparent, rescind the provisions of this order and cause the top unit allowable for the Media-Entrada Oil Pool to revert to 347 barrels of oil per day.

(4) That each month the applicant shall take production fluid level tests on each producing well in the pool and shall report the results of these tests along with other pertinent monthly well production data to the Aztec District Office of the Commission.

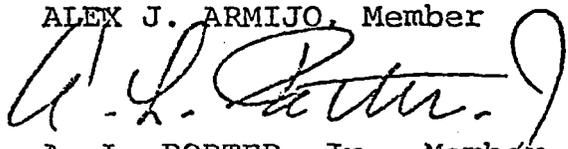
(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member


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

S E A L

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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. 5152
Order No. R-4713-B

IN THE MATTER OF CASE NO. 5152 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-4713-A, WHICH ORDER
EXTENDED ORDER NO. R-4713, WHICH ORDER
ESTABLISHED A SPECIAL DEPTH BRACKET ALLOW-
ABLE FOR THE MEDIA-ENTRADA OIL POOL,
SANDOVAL COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 13, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 23rd day of September, 1975, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 by Order No. R-4713, dated January 24, 1974, a temporary special depth bracket allowable of 750 barrels of oil per day was established for the Media-Entrada Oil Pool, Sandoval County, New Mexico.

(3) That by Order No. R-4713-A, dated September 3, 1974, the aforesaid temporary special depth bracket allowable was extended for a one-year period.

(4) That pursuant to the provisions of Order No. R-4713-A, this case was reopened to permit all interested parties to appear and show cause why said special depth bracket allowable should remain in effect.

(5) That the evidence presented at the hearing indicates that high volume pumping of oil wells in the Media-Entrada Oil Pool generally results in a lower water-oil cut, thereby improving the producing efficiency of the reservoir.

(6) That the evidence further indicates that the original applicant in this case, Petro-Lewis Corporation, has unitized the Media-Entrada Oil Pool for the purpose of instituting a pressure maintenance project therein, and that upon initiation of said project, even greater volumes of fluid will be produced than have been produced to date.

(7) That should the previously established trend of a greater percentage of oil per barrel of fluid produced, when producing the wells in the subject pool at high volumes, continue, the water-oil cut would be further reduced, and producing efficiency for the reservoir further improved.

(8) That retention of the special depth bracket allowable for wells in the subject pool should improve reservoir producing efficiency and result in the ultimate recovery of additional oil, thereby preventing waste.

(9) That retention of the special depth bracket allowable for wells in the subject pool will not cause waste nor impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the special depth bracket allowable of 750 barrels of oil per day for the Media-Entrada Oil Pool, Sandoval County, New Mexico, shall remain in full force and effect until further order of the Commission.

(2) That the operator of the Media-Entrada Unit Area shall report monthly to the Aztec District Office of the Commission the previous month's water-oil cut for each producing well in the Media-Entrada Oil Pool.

(3) That the Secretary-Director of the Commission may, at any time that it appears that premature water encroachment or water coning is occurring, or other evidence of reservoir damage is apparent, rescind the provisions of this order and cause the top unit allowable for the Media-Entrada Oil Pool to revert to 347 barrels of oil per day.

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

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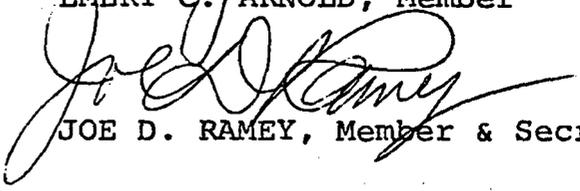
Case No. 5152
Order No. R-4713-B

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

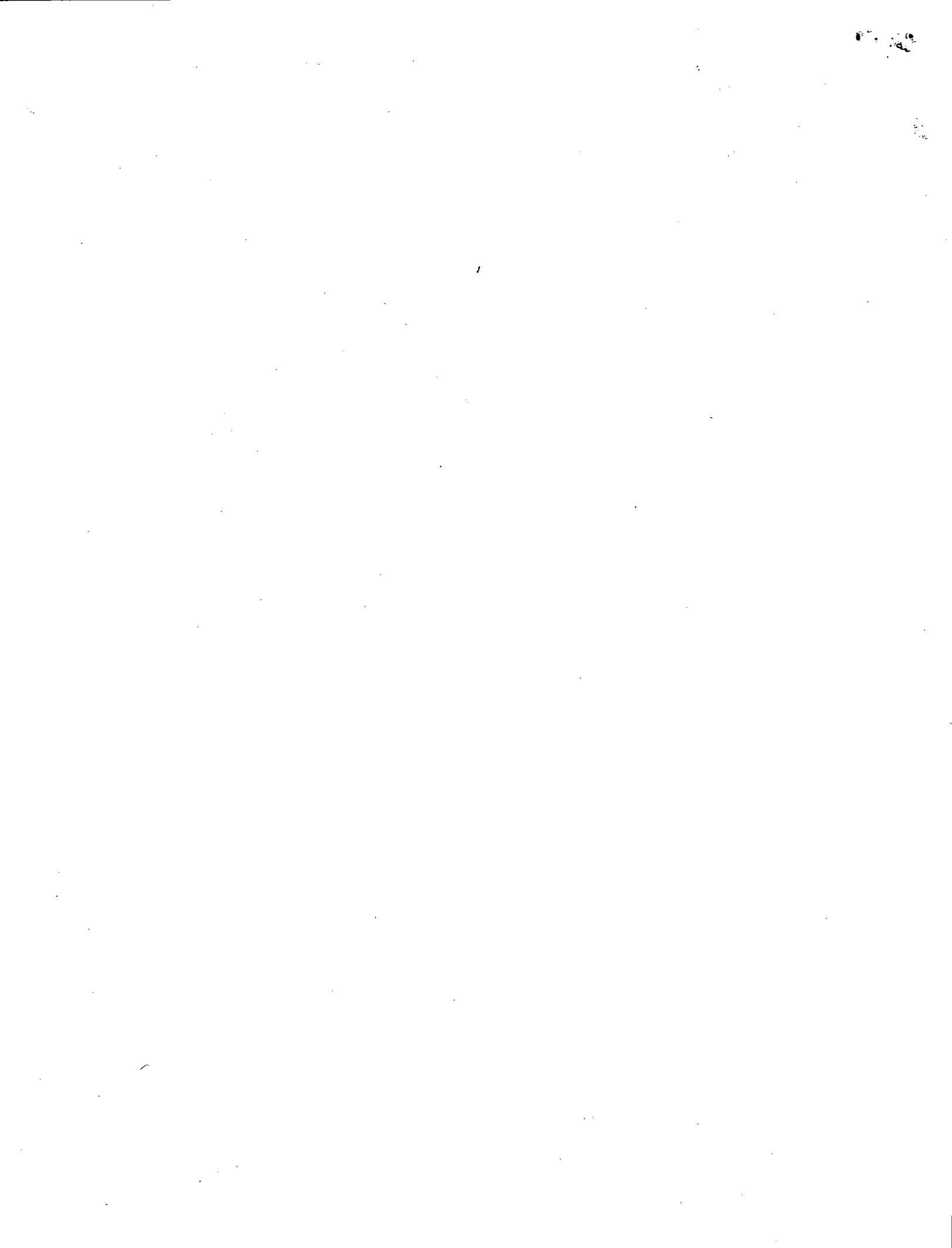
PHIL R. LUCERO, Chairman


EMERY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

S E A L

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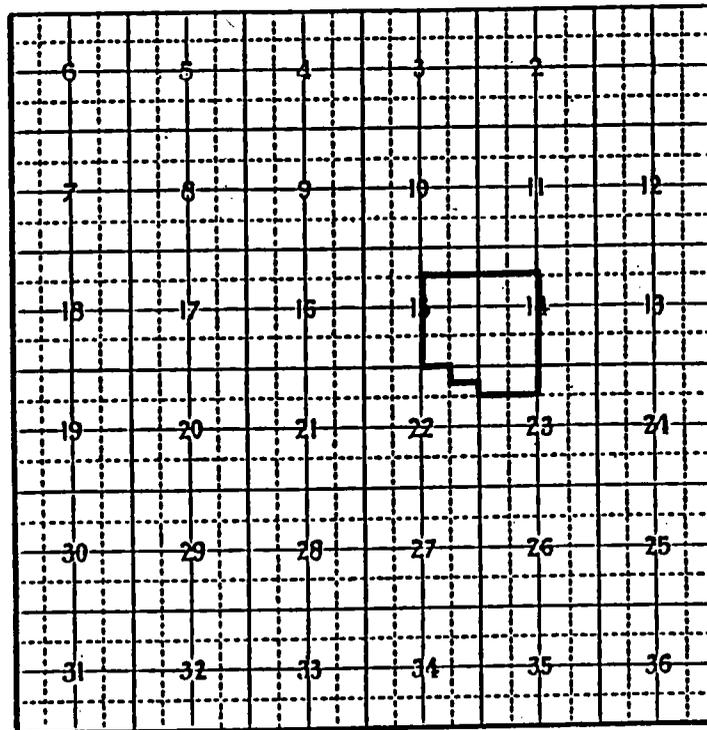


MEDIA ENTRADA

SANDOVAL COUNTY
NEW MEXICO

No. 14-08-0001-14269

EFFECTIVE 11-1-75



gulram, inc.

petroleum engineering and government regulation consultants



gulram, inc.

petroleum engineering and government regulation consultants

UNIT NAME: MEDIA ENTRADA UNIT AREA
CONTRACT NUMBER: 14-08-0001-14269
APPROVAL DATE: 10-10-75
EFFECTIVE DATE: 11-1-75
ACREAGE TOTAL: 580.00 (580.00 FEDERAL)
TYPE: WATERFLOOD
UNITIZED FORMATION: ENTRADA
AUTOMATIC ELIMINATION DATE: NONE
OPERATOR: KIRBY EXPLORATION COMPANY OF TEXAS

PARTICIPATING AREAS

Name: INITIAL (ALL UNIT)
Effective Date: 11-1-75
Legal Description: T.19N.,R.3W.:
S/2NW/4,SW/4 sec. 14; S/2NE/4,SE/4 sec.
15; N/2NE/4NE/4 sec. 22; N/2NW/4 sec.
23.

"	(1)	10	I-07-31-16	M	TSTM
"		12	K-08-31-16		S.I.
"		13	N-07-31-16		S.I.
"	(5)	14	O-07-31-16	M	TSTM
"		16	A-18-31-16		S.I.
"	(5)	17	D-17-31-16	M	TSTM
"		18	C-17-31-16		S.I.
"		19	E-17-31-16		S.I.
"	(4)	20	F-17-31-16	M	TSTM
"		21	G-17-31-16		S.I.
"		22	K-17-31-16		S.I.
"		23	J-17-31-16		S.I.
"		26	P-17-31-16		S.I.

**HARRISON PETROLEUM
MANY ROCKS GALLUP WATERFLOOD #4**

Navajo	(1)	1	A-28-32-17	M	TSTM
"	(2)	2,15	N-27-32-17	M	TSTM
"	(5)	4	P-27-32-17	M	TSTM
"	(2)	7,16	L-27-32-17	M	TSTM
"		8	E-27-31-17		S.I.
"		10	J-27-32-17		S.I.
"	(8)	13	K-27-32-17	M	TSTM
"	(5)	14	O-27-32-17	M	TSTM
"		3X	O-27-32-17		S.I.
"		6	K-27-32-17		S.I.
"		12	I-25-32-17		S.I.
Navajo A					
"		1	M-27-32-17		S.I.

**HART OIL & GAS INC.
MANY ROCKS GALLUP PROJECT #1**

Navajo Tr. Ind. G	(2)	207	A-12-31-17	M	TSTM
"	(3)	209	K-01-31-17	M	TSTM
"	(10)	210	E-01-31-17	M	TSTM
"	(3)	214	F-01-31-17	M	TSTM
"	(8)	220,225	N-01-31-17	M	TSTM
"	(6)	224	B-12-31-17	M	TSTM
"	(3)	222	C-12-31-17	M	TSTM
"		215	B-02-31-17		Input
"		216	F-01-31-17		"
"		217	H-12-31-17		"
"		218	H-02-31-17		"
"		221	J-01-31-17		"
"		223	L-01-31-17		"

**MANY ROCK-GALLUP, NORTH
(40 Acre Spacing)**

Top Allowable 80 GOR Limit 2,000

HARRISON PETROLEUM

Navajo	18	L-21-32-17		S.I.
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21ST CENTURY INVESTMENT CO

Navajo AA					
"		2	H-18-32-17		S.I.
"		3	G-18-32-17		S.I.
"		4	E-17-32-17		S.I.
"		5	B-18-32-17		S.I.
"	(2)	6	C-18-32-17	M	TSTM
"	(5)	7,24	L-17-32-17	M	TSTM
"	(6)	8,87	M-17-32-17	M	TSTM
"		9,23,22	N-17-32-17		S.I.
"	(2)	10	K-17-32-17	M	TSTM
"		12	J-17-32-17		S.I.
"		13	B-20-32-17		S.I.
"		18	I-18-32-17		S.I.
"	(3)	19	B-19-32-17	M	TSTM

MARCELINA-DAKOTA

(40 Acre Spacing)
Top Allowable 80 GOR 2000

NERDLICH CO., INC.

Bullseye					
"	(03)	1Y	C-19-16-09	M	TSTM
"	(02)	3	N-18-16-09	M	TSTM
"		7	D-19-16-09		S.I.
"	(10)	10	O-18-16-09		S.I.
"	(03)	12	M-18-16-09	M	TSTM
"	(3)	13	O-13-16-10	M	TSTM
"	(3)	15	P-13-16-10	M	TSTM
Marcelina					
"		1,5	A-24-16-10		S.I.
"		6	H-24-16-10		S.I.

MEADOWS-GALLUP

(40 Acre Spacing)
Top Allowable 80 GOR Limit 2,000

DUGAN PRODUCTION CORP.

Bonnie & Ed	(8)	1	J-04-29-15	M	4619
Frank W. Pyle Estate	(2)	2	N-34-30-15	M	20476
Gary C	(1)	1	D-11-29-15	M	20476
My Place		1	L-03-29-15		S.I.

W.M. GALLAWAY

Jess Brown	(2)	1	N-05-29-15	M	TSTM
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HEADINGTON OIL

Fruitland					
"	(1)	1	I-03-29-15	M	9678
"	(0)	2	F-03-29-15		
"	(3)	3	J-03-29-15	M	4803

PETRO ENERGY, INC.

Horseshoe		1	K-02-29-15		S.I.
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S & I OIL COMPANY

Davies		1	M-02-29-15		S.I.
Neilson	(2)	1	P-03-29-15		S.I.

SOUTHLAND ROYALTY CO.

Holly Federal	(09)	1	P-29-30-15	M	5000
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MEDIA-ENTRADA

(160 Acre Spacing)
Top Allowable 750 GOR Limit 2,000

MERRION OIL & GAS CORP.

Media Entrada Unit					
"		3	L-14-19-03		S.I.
"	(28)	6	P-15-19-03	M	TSTM
"		1	M-15-19-03		SWD
"		5	C-22-19-03		SWD

MEDIA-GALLUP

(40 Acre Spacing)
Top Allowable 80 GOR Limit 2,000

MERRION OIL & GAS CORP.

Boling Federal	5	C-22-19-03		SWD
Federal Media	7	G-22-19-03		T.A.

MESA-GALLUP

(40 Acre Spacing)
Top Allowable 80 GOR Limit 2,000

ARI-MEX EXPLORATION, INC.

Navajo	(4)	1,6	H-15-32-18	M	TSTM
"	(1)	3	A-15-32-18	M	TSTM
"		5	O-10-32-18		S.I.
Navajo B	(1)	2	I-15-32-18	M	TSTM
"	(2)	3	B-15-32-18	M	TSTM

MESA GALLUP UNIT WATERFLOOD PROJECT

Navajo	(4)	3	N-24-32-18	M	TSTM
"		4	J-14-32-18		S.I.
"	(4)	11	B-23-32-18	M	TSTM

DUGAN PRODUCTION CORP.

Horseshoe		1	B-31-32-17		S.I.
"	(2)	2	E-30-32-17	M	503

21ST CENTURY INVESTMENT

Aztec Navajo A	(2)	4	B-25-32-18	M	TSTM
"	(5)	5	C-25-32-18	M	TSTM
Navajo	(7)	7	E-24-32-18	M	TSTM
"	(3)	8	A-23-32-18	M	TSTM
"	(2)	12	F-24-32-18	M	TSTM
Navajo Tr. C	(3)	1	L-24-32-18	M	TSTM
"	(3)	2	H-23-32-18	M	TSTM
"	(2)	3	O-14-32-18	M	TSTM
"	(2)	4	K-24-32-18	M	TSTM
"	(4)	5	L-14-32-18	M	TSTM
"	(3)	6	B-14-32-18	M	TSTM

MIGUEL CREEK-GALLUP

(40 Acre Spacing)
Top Allowable 80 GOR Limit 2,000

ROBERT L. BAYLESS

NORTHERN MINERALS MCKINLEY GA. WATERFLOOD					
SSFPRR		8,11	G-29-16-06		S.I.
"		21	H-29-16-06		S.I.
"	(12)	23,24,25	A-29-16-06	M	TSTM
"		26,44			
"		27,28,30	P-20-16-06		S.I.
"		38,41			
"		29	I-20-16-06		S.I.
"		32,33,34,35	B-29-16-06		S.I.
"	(5)	42,43	M-21-16-06	M	TSTM
"		31,39,40,45	D-28-16-06		S.I.
"	(20)	37,47	L-21-16-06	M	TSTM
"		48,49,56			
"		52,53,54,81	K-21-16-06		S.I.
"		46	E-28-16-06		S.I.
"		15	F-29-16-06		S.I.
"		6Y	G-29-16-06		S.I.
T. Drought		2	P-33-16-06		S.I.