BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

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

CASE NUMBER EXHIBIT NUMBER 2A

CASE No. 2691 Order No. R-2373

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR THE CREATION OF A NEW GAS POOL AND ESTABLISHMENT OF SPECIAL RULES AND REGULATIONS, LEA COUNTY, NEW MEXICO.

See Also Order Nos A-2373-A

R-2373-B

R-6197 R-2373-C

R-2373-C(1) R-Z373-D

ORDER OF THE COMMISSION

BY THE COMMISSION:

l-2373-E This cause came on for hearing at 9 o'clock a.m. November 8, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 21st day of November, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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 a new gas pool for Morrow production should be created and designated the Lusk-Morrow Gas Pool.
- (3) That since March, 1961, the date of the first completion in the Morrow formation in the proposed pool, several wells have subsequently been completed in the Morrow formation and are capable of producing gas therefrom.
- (4) That El Paso Natural Gas Company seeks the promulgation of temporary special rules and regulations for the Lusk-Morrow Gas Pool to provide for 640-acre gas proration units and the allocation of allowables to non-marginal wells in the proportion that each well's acreage factor bears to the total of the acreage factors for all non-marginal wells in the subject pool.
- (5) That the evidence presented concerning the economic loss that will occur as a result of drilling of unnecessary wells

justifies the establishment of 640-acre gas proration units in the subject pool for a temporary period of 18 months.

- (6) That during the 18-month period in which this order will be in effect, all operators in the subject pool should gather all available information relative to drainage and recoverable reserves in said pool.
- (7) That this case should be reopened at an examiner hearing in May, 1964, at which time the operators in the subject pool should be prepared to appear and show cause why the Lusk-Morrow Gas pool should not be developed on 160-acre gas proration units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production is hereby created and designated as the Lusk-Morrow Gas Pool consisting of the following-described area:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Section 18: All Section 19: All Section 20: All Section 29: All

(2) That Special Rules and Regulations for the Lusk-Morrow Gas Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE LUSK-MORROW GAS POOL

- RULE 1. Each well complated or recompleted in the Lusk-Morrow Gas Pool or in the Morrow formation within one mile of the Lusk-Morrow Gas Pool, and not nearer to or within the limits of another designated Morrow pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. Each well completed or recompleted in the Lusk-Morrow Gas Pool shall be located on a standard proration unit consisting of approximately 640 contiguous surface acres substantially in the form of a square which is a legal section of the United States Public Lands Survey. For purposes of these rules, a unit containing 632 through 648 acres shall be considered a standard unit.
- RULE 3. Each well completed or recompleted in said pool shall be located not closer than 330 feet to the outer boundary

of the SW/4 NE/4, NW/4 SE/4, NE/4 SW/4, or SE/4 NW/4 of the section. Any well drilling to or completed in the Strawn or Morrow formations on the date of this order is hereby granted an exception to the well location requirements of this rule.

RULE 4. For good cause shown, the Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 640 acres. 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 of the Commission may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The acreage factor assigned to any such non-standard unit shall bear the same ratio to a standard acreage factor in the Lusk-Morrow Gas Pool as the acreage in such non-standard unit bears to 640 acres.

RULE 5. In the event of subsequent prorationing of the Lusk-Morrow Gas Pool, the allowable assigned to a non-marginal well shall be in the same ratio that its acreage factor bears to the total of the acreage factors for all non-marginal wells in the pool.

<u>RULE 6.</u> The vertical limits of the Lusk-Morrow Gas Pool shall be the Morrow formation.

- (3) That this case shall be reopened at an examiner hearing in May, 1964, at which time the operators in the subject pool may appear and show cause why the Lusk-Morrow Gas Pool should not be developed on 160-acre gas proration units.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

SEAL

E. S. WALKER, Member

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

BEFORE THE OIL COESENVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION CONSISSION OF NEW MEXICO FOR THE FURPOSE OF CONSIDERING:

> CASE No. 2691 Order No. B-2373-A

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR THE CREATICM OF A NEW GAS POOL AND RETABLISHMENT OF SPECIAL NULES AND RESULATIONS, LEA COUNTY, WEN NEXICO. See Also Order Nos.

R-2373

R-2373-B

R-6197

R-2373-C

R-2373-C(1)

OFDER OF THE COMMISSION

12-2373-E

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 7. 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Butter.

NOW, on this 132k day of May, 1964, 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,

PINDS:

- (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-2373, dated Hovember 21, 1952, tender the Popular Rules and Regulations were promulgated for the Lunder new Con Pool.
- (3) That pursuant to the provisions of Order No. R-2373, this to was reopened to allow the operators in the subject pool to of the and show cause the Lusk-Morrow Gas Pool should not be developed on 160-acre proration units.
- (4) That the temperary Special Rules and Regulations for the Luck-Morrow Gas Pool, promulgated by Order No. R-2373, should be continued in affect for an additional one-year period in order

-2-CASE BO. 2691 Order No. R-2373-A

to allow the operators in the subject pool sufficient time to gather additional information concerning the reservoir characteristics of the pool.

(5) That this case should be reopened at an examiner hearing in May, 1965, at which time the applicant and all interested parties should appear and show cause why the Eusk-Morrow Gas Pool should not be developed on 160-acre provation units.

IT IS THEREFORE CROERED:

- (1) That the temporary Special Rules and Regulations for the lunk-Morrow Gas Pool promulgated by Order No. R-2373 shall be continued in full force and effect for an additional one-year period.
- (2) That this case shall be recreated at an examiner hearing in May, 1965, at which time the applicant and all interested parties may appear and show cause why the Lusk-Morrow Gas Pool should not be developed on 168-acre provation units.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may does necessary.

DONS at Santa Fe, New Maxico, on the day and year hereinabove designated.

> STATE OF SEM MEXICO OLL CL., SEMETOR COMISSION

JACK M. CAMPBELL. Chairman

E. S. WALKER, Newbor

BEAL

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. 2691 Order No. R-2373-B

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR THE CREATION OF A NEW GAS POOL AND ESTABLISHMENT OF SPECIAL RULES AND REGULATIONS, LEA COUNTY, NEW MEXICO. See Also Order Nos. R-2373 R-2373-A R-2377-L

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 12, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 19th day of May, 1965, 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-2373, dated November 21, 1962, temporary Special Rules and Regulations were promulgated for the Lusk-Morrow Gas Pool, Lea County, New Mexico.
- (3) That by Order No. R-2373-A, dated May 13, 1964, said temporary Special Rules and Regulations were continued in full force and effect for an additional one-year period.
- (4) That pursuant to the provisions of Order No. R-2373-A, this case was reopened to allow the operators in the subject pool to appear and show cause why the Lusk-Morrow Gas Pool should not be developed on 160-acre provation units.



- (5) That the evidence establishes that one well in the Lusk-Morrow Gas Pool can efficiently and economically drain and develop 640 acres.
- (6) That the Special Rules and Regulations promulgated by Orders Nos. R-2373 and R-2373-A have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in the pool.
- (7) That 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, the Special Rules and Regulations promulgated by Orders Nos. R-2373 and R-2373-A should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Lusk-Morrow Gas Pool promulgated by Orders Nos. R-2373 and R-2373-A are hereby continued in full force and effect until further order of the Commission.
- (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

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

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

SEAL

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: See Also Order Nos.

R-2373

R-2373-A

R-2373-B

R-6197

CASE NO. 12076

R-2373-L/1)ORDER NO. R-2373-C

R-2373-O

APPLICATION OF MARBOB ENERGY CORPORATION FOR AN UNORTHODOX INFILL GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on December 3, 1998, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 15 Hz day of January, 1999 the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Marbob Energy Corporation ("Marbob"), seeks an exception to Division Rule 104.D(3) to continuously and concurrently produce gas from the Lusk-Morrow Gas Pool from its: (i) proposed Lusk Deep Unit Well No. 14, to be drilled at an unorthodox infill gas well location 1650 feet from the North line and 990 feet from the West line (Unit E) of Section 19, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico; (ii) existing Lusk Deep Unit "A" Com. Well No. 1 (API No. 30-025-00905), located at an unorthodox gas well location 660 feet from the North and East lines (Unit A) of Section 19 (approved by Division Orders No. R-2373, issued in Case No. 2691 and dated November 21, 1962 and R-5028, issued in Case No. 5482 and dated May 22, 1975); and (iii) existing Lusk Deep Unit "A" Well No. 5 (API No. 30-025-20122), located at an unorthodox infill gas well location 1980 feet from the South and East lines (Unit J) of Section 19. All three wells are to be simultaneously dedicated to the existing standard 643.58-acre gas spacing and proration unit comprising all of Section 19.
- (3) Division Order No. R-2373 also created and defined the Lusk-Morrow Gas Pool for the production of gas from the Morrow formation. The horizontal limits for this

pool currently include the following described lands in Lea and Eddy Counties, New Mexico:

EDDY COUNTY

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM

Section 1:

All

Sections 24 and 25:

All

LEA COUNTY

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Sections 9 and 10:

All

Sections 15 and 16:

All All

Sections 18 through 21:

All

Sections 27 through 30: Section 32:

All.

- (4) The Lusk-Morrow Gas Pool is an "unprorated gas pool" not subject to the "General Rules for the Prorated Gas Pools of New Mexico," as established by Division Order Nos. R-8170, as amended, and R-10987. However, this pool is subject to: (i) the "Special Rules and Regulations for the Lusk-Morrow Gas Pool," as established by Division Order No. R-2373, as amended by Order Nos. R-2373-A, R-2373-B, and R-6197, which require standard 640-acre gas spacing and proration units, with wells to be located no closer than 330 feet to the outer boundary of the SW/4 NE/4, SE/4 NW/4, NE/4 SW/4, and NW/4 SE/4 of the section; and (ii) Division Rule 104.D(3), which restricts the number of producing wells within a single gas spacing unit within non-prorated pools to only one. Producing wells within this pool are allowed to produce at capacity.
- (5) Section 19 is within the boundaries of the Lusk Deep Unit which is a Federal exploratory unit operated by Marbob.
- (6) Division Order No. R-5028 also authorized the simultaneous dedication of Morrow gas production from both the Lusk Deep Unit "A" Com. Well No 1 and the Lusk Deep Unit "A" Well No. 5 to the 643.58-acre unit.
 - (7) Marbob presented testimony and evidence indicating that:
 - (a) there are numerous productive formations underlying Section 19 and the potential for hydrocarbon production from formations in addition to the Morrow formation is necessary to economically justify the drilling of an additional well in Section 19;

- (b) wells drilled to the Lusk-Morrow Gas Pool are typically multiple-completed with other gas bearing pools or formations;
- (c) current low drilling costs make it economically possible to drill an additional well in Section 19 and, if a Morrow well is not drilled at this time, it may never be drilled and recoverable reserves may be left in the ground and wasted;
- (d) there are recoverable gas reserves under Section 19 in the Morrow pay zone that cannot be produced by any well currently producing from this section;
- (e) the main gas-bearing intervals within the Morrow formation under Section 19 consists of three distinct northwest-southeast trending channels (upper, middle, and lower), each being a narrow lenticular sand of limited extent and continuity;
- (f) the middle and lower Morrow sands are thicker at the proposed unorthodox well location than at any standard location in Section 19; and
- (g) a well at the proposed unorthodox location will be better able to efficiently produce the remaining Morrow reserves under Section 19 than a well at a standard location.
- (8) Requiring Marbob to shut in existing Morrow gas wells in Section 19, if the proposed Lusk Deep Unit Well No. 14 is successful, would not only delay the recovery of the reserves from the Lusk Deep Unit "A" Com. Well No. 1 and the Lusk Deep Unit "A" Well No. 5 but also could result in water damage to the Morrow formation resulting in the waste of hydrocarbons.
- (9) The proposed Lusk Deep Unit Well No. 14 is necessary to produce the recoverable reserves in the Morrow formation under Section 19 thereby preventing waste.
- (10) The simultaneous dedication of Section 19 to these three wells will result in the recovery of hydrocarbons that otherwise will be wasted.

- (11) The proposed unorthodox well location for the Lusk Deep Unit Well No. 14 at a point 1650 feet from the North line and 990 feet from the West line of Section 19, Township 19 South, Range 32 East, NMPM, is necessary to efficiently produce the recoverable reserves from the Morrow B and C zones under Section 19.
- (12) Approval of an unorthodox well location for the Lusk Deep Unit Well No. 14 and the simultaneous dedication of Section 19 to the three wells will afford Marbob the opportunity to produce the recoverable reserves under Section 19 thereby protecting its correlative rights.
- (13) The Lusk-Morrow Gas Pool appears to have reached maturity and is in its final stages of depletion.
- (14) Current technical information regarding the Lusk-Morrow Gas Pool is limited and data acquired from the Lusk Deep Unit. Well No. 14 may encourage the drilling of additional wells in the Lusk Morrow-Pool.
- (15) Other operators in this area have expressed support for this application; no operator of a tract offsetting Section 19 opposed this application; and Yates Petroleum Corporation, operator of the offsetting Section 31, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico to the south, provided written support for increased development density in this pool through allowing multiple wells in a spacing unit where offsetting correlative rights will not be impaired.
- (16) The evidence shows that an additional well is necessary to produce the remaining recoverable gas reserves in the Morrow formation in Section 19 thereby preventing waste. Approval of the unorthodox well location for the proposed Lusk Deep Unit Well No. 14 and the simultaneous dedication of Section 19 to this well and the Lusk Deep Unit "A" Com. Well No. 1 and Lusk Deep Unit "A" Well No. 5 will afford Marbob the opportunity to produce the recoverable Morrow reserves under this section thereby protecting its correlative rights. Marbob Energy Corporation has therefore produced compelling evidence in support of its application for the simultaneous dedication of the Lusk Deep Unit "A" Com. Well No. 1, Lusk Deep Unit "A" Well No. 5, and Lusk Deep Unit Well No. 14 and its application should be granted.
- (17) An opinion expressed by the applicant at the time of the hearing indicates that 640-acre spacing and the current set-back requirements (both internal and external) for wells within the Lusk-Morrow Gas Pool: (i) may be too restrictive for this mature pool; and (ii) are inhibiting the depletion of this pool by restricting production of its remaining reserves. The applicant further expressed an interest in taking the lead on behalf of all operators in this pool to: (i) evaluate the technical data to be collected on this well; (ii) organize this pool's historical data for the purpose of preparing a reservoir study; and (iii)

Page 5

collect pressure and drainage data in order to amend the Lusk-Morrow Gas Pool rules to include:

- (a) infill drilling provisions that allow for up to four wells on each 640-acre unit (one well in each quarter section, or effective 160-acre spacing); and
- (b) the relaxation of the setback requirements for wells, such that wells can be located no closer than 660 feet to a quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

IT IS THEREFORE ORDERED THAT:

(1) The application of Marbob Energy Corporation ("Marbob") for an exception to Division Rule 104.D(3) to continuously and concurrently produce gas from the Lusk-Morrow Gas Pool from its: (i) proposed Lusk Deep Unit Well No. 14, to be drilled at an unorthodox infill gas well location 1650 feet from the North line and 990 feet from the West line (Unit E) of Section 19, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico; (ii) existing Lusk Deep Unit "A" Com. Well No. 1 (API No. 30-025-00905), located at an unorthodox gas well location 660 feet from the North and East lines (Unit A) of Section 19 (approved by Division Order No. R-2373, issued in Case No. 2691 and dated November 21, 1962); and (iii) existing Lusk Deep Unit "A" Well No. 5 (API No. 30-025-20122), located at an unorthodox infill gas well location 1980 feet from the South and East lines (Unit J) of Section 19 is hereby approved. All three wells shall be simultaneously dedicated to the existing standard 643.58-acre gas spacing and proration unit comprising all of Section 19.

PROVIDED HOWEVER THAT, within one year following the completion of the Lusk Deep Unit Well No. 14, Marbob shall file an application with the Division to amend the "Special Pool Rules and Regulations for the Lusk-Morrow Gas Pool," as established by Division Order No. R-2373, as amended by Order Nos. R-2373-A, R-2373-B, and R-6197, to include:

- (a) infill drilling provisions that allow for up to four wells on each 640-acre unit (one well in each quarter section, or effective 160-acre spacing); and
- (b) the relaxation of the setback requirements for wells, such that wells can be located no closer than 660 feet to a quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

At the hearing held on the application, Marbob shall present geological and engineering data in support of the application, which data shall include the information acquired from the drilling and successful completion of the Lusk Deep Unit Well No. 14.

PROVIDED FURTHER THAT, if these proposed amendments to the Lusk-Morrow Gas Pool are not adopted by the Division, Marbob shall immediately file an application to reopen this case for the entry of such further orders as may be required by the data acquired from the drilling of the Lusk Deep Unit Well No. 14.

(2) Jurisdiction is hereby 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

LORI WROTENBERY

Director

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

CASE NO. 12076 ORDER NO. R-2373-C (1)

APPLICATION OF MARBOB ENERGY CORPORATION FOR AN UNORTHODOX INFILL GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO.

See Also Onders

AMENDED ORDER

R-2373 R-2373-A

R - 2373-13 R - 6197

BY THE DIVISION:

It appearing to the New Mexico Oil Conservation Division ("Division") that Order No. R-2373-C, dated January 15, 1999, does not correctly state the intended order of the Division.

IT IS THEREFORE ORDERED THAT:

- (1) Finding Paragraph No. (3) on pages 1 and 2 of Order No. R-2373-C is hereby amended to read in its entirety as follows:
 - (3) Division Order No. R-2373 also created and defined the Lusk-Morrow Gas Pool for the production of gas from the Morrow formation. The horizontal limits for this pool currently include the following described lands in Lea and Eddy Counties, New Mexico:

EDDY COUNTY

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM

Section 13:

All

Sections 24 and 25:

All

LEA COUNTY

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Sections 9 and 10:

All

Sections 15 and 16:

All

Sections 18 through 21:

All

Sections 27 through 30:

All

Section 32:

All.

(2) The corrections set forth in this order shall be entered retroactively as of January 15, 1999.

DONE at Santa Fe, New Mexico, on this 12th day of September, 2000.

STATE OF NEW MEXICO
OUT CONSERVATION DIVISION

LORI WROTENBERY Director

SEAL

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION See DISO Ordans No.

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

1-2373 R-2373-A R-2373-B 3-6612 CASE NO. 12444 ORDER NO. R-2373-D

APPLICATION OF MARBOB ENERGY CORPORATION TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE LUSK-MORROW GAS POOL, LEA AND EDDY COUNTIES, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 29, 2000, at Santa Fe. New Mexico, before Examiner Michael E. Stogner.

NOW, on this 12th day of September, 2000, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner.

FINDS THAT:

- Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- Division Order No. R-2373, issued in Case No. 2691 and dated November 21, 1962, created and defined the Lusk-Morrow Gas Pool for the production of gas from the Morrow formation. The horizontal limits for this pool currently include the following described lands in Lea and Eddy Counties, New Mexico:

EDDY COUNTY

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM

Section 13:

Sections 24 and 25:

All

LEA COUNTY

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Sections 9 and 10:

All

Sections 15 and 16:

All

.All

Sections 18 through 21: Sections 27 through 30:

All

Section 32:

All.

- (3) The Lusk-Morrow Gas Pool is an "unprorated gas pool" not subject to Part H of the Division's statewide rules and regulations entitled "Gas Proration and Allocation" (Rules 601 through 605). However, the Lusk-Morrow Gas Pool is subject to: (i) the "Special Rules and Regulations for the Lusk-Morrow Gas Pool," as established by Division Order No. R-2373, as amended by Orders No. R-2373-A, R-2373-B, and R-6197, which require standard 640-acre gas spacing and proration units, with wells to be located no closer than 330 feet to the outer boundary of the SW/4 NE/4, SE/4 NW/4, NE/4 SW/4, and NW/4 SE/4 of the section; and (ii) Division Rule 104.D (3), which restricts the number of producing wells within a single gas spacing unit within non-prorated pools to only one (see official notice to all operators submitted by the Division Director on October 25, 1999). Producing wells within this pool are allowed to produce at capacity.
- (4) As directed by Division Order No. R-2373-C, issued in Case No. 12076 and dated January 15, 1999, as amended by Division Order No. R-2373-C (1), the applicant, Marbob Energy Corporation ("Marbob"), seeks to amend the rules and regulations currently governing the Lusk-Morrow Gas Pool to provide:
 - (a) the option to drill on each quarter section within a standard 640-acre gas spacing and proration unit; and
 - (b) the relaxation of the setback requirements for wells, such that wells can be located no closer than 660 feet to a quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.
- (5) By Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, Division Rule 104 was amended for deep gas development (Wolfcamp and older) in southeast New Mexico (Lea, Chaves, Eddy, and Roosevelt Counties) to provide for: (i) one optional infill well within a standard 320-acre gas spacing and proration unit; (ii) relaxed setback requirements to the outer boundary line of a spacing and proration unit; and (iii) a larger geographical area within each quarter section of a single unit in which to drill a well at a location that is standard by reducing the 330-foot setback requirements to an interior quarter-quarter section line to 10 feet.
- (6) Marbob presented evidence that demonstrates there are currently nine producing wells within the Lusk-Morrow Gas Pool, three of which are operated by Marbob.

- (7) The applicant presented geologic evidence that demonstrates:
 - (a) the producing intervals of the Morrow formation in this area are divided into three zones, the "A," "B," and "C" sands (upper, middle, and lower, respectively);
 - (b) all three intervals are present within the Lusk-Morrow Gas Pool boundary, however, there is no predominate producing interval;
 - (c) the "A" and "B" sands in this area are deposited in a continuous manner while the "C" sand is lenticular and channel-like; and
 - (d) even though all three sands can be correlated across the reservoir, the quality and sand thickness in each varies considerably.
- (8) From Marbob's infill project in Section 19, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico, which was the result of Division Order No. R-2373-C, as amended, the applicant presented engineering evidence demonstrating that one well per 640 acres is insufficient to adequately deplete the remaining gas reserves underlying this pool.
- (9) Further, the geologic and engineering evidence presented demonstrates that approval of infill drilling within the Lusk-Morrow Gas Pool will provide the operators in the pool the opportunity to recover additional gas reserves, which may otherwise not be recovered by the existing wells, thereby preventing waste.
- (10) The applicant's proposal to allow up to four wells per section is supported by its geologic and engineering evidence, and is consistent with current Division rules governing Morrow gas development in southeast New Mexico. However, certain provisions should be included in these proposed rule changes in order to ensure consistency with the rules currently governing deep gas pools in southeast New Mexico on 320-acre spacing.
- (11) The proposed well setback requirements will allow for greater flexibility in locating infill gas wells.

- (12) The applicant notified all operators and interest owners within the area affected by this application. No operator or interest owner appeared at the hearing in opposition to the application.
- (13) Approval of the application is in the best interest of conservation, prevention of waste and protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Marbob to amend the "Special Rules and Regulations for the Lusk-Morrow Gas Pool," currently comprising Sections 13, 24, and 25, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico and Sections 9, 10, 15, 16, 18, 19, 20, 21, 27, 28, 29, 30, and 32, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby approved.
- (2) Rule 3 of the "Special Rules and Regulations for the Lusk-Morrow Gas Pool," is hereby amended to read in its entirety as follows:
 - RULE 3 (a): The initial well within a gas spacing and proration unit shall be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. Each infill well within an existing gas spacing and proration unit shall be located in a quarter section that does not contain a producing Morrow gas well and shall be located with respect to the assigned unit boundaries as described above.
 - RULE 3 (b): The Division Director may grant an exception to the footage requirements for a Morrow gas well of Rule 3 (a) above without hearing when an application has been duly filed under the provisions of Division Rule 104.F.
 - RULE 3 (c): No more than one Morrow gas well shall be located within a single governmental quarter section. Any deviation from this well density requirement shall be authorized only after hearing.
 - RULE 3 (d): The land plat (NMOCD Form C-102) accompanying the "Application for Permit to Drill"

(NMOCD Form C-101 or federal equivalent) for subsequent wells on an existing gas spacing and proration unit shall have outlined the boundary of the unit and shall show the location (well name, footage location, API number) of all existing Morrow gas wells on the unit plus the proposed new well.

(3) Jurisdiction is hereby 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

LORI WROTENBERY
Director

SEAL

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION See A/50 Orders No.

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

R-2373-1 R-2373-A A-2373-B NOMENCLATURE **CASE NO. 12493** ORDER NO. R-2373-E

APPLICATION OF MARBOB ENERGY CORPORATION FOR POOL CONTRACTION, LEA AND EDDY COUNTIES, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 21 and October 19, 2000, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 5th day of February, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- Due public notice has been given and the Division has jurisdiction of this (1)case and its subject matter.
- Division Order No. R-2373, issued in Case No. 2691 and dated November 21, 1962, created and defined the Lusk-Morrow Gas Pool for the production of gas from the Morrow formation. The horizontal limits for this pool currently include the following described lands in Lea and Eddy Counties, New Mexico:

EDDY COUNTY TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM

Section 13:

Sections 24 and 25:

All

LEA COUNTY

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Sections 9 and 10:

All

Sections 15 and 16:

All

Sections 18 through 21:

All

Sections 27 through 30:

All

Section 32:

All.

- The Lusk-Morrow Gas Pool is an "unprorated gas pool" not subject to Part (3) H of the Division's statewide rules entitled "Gas Proration and Allocation" (Rules 601 through 605); as such producing wells within this pool are allowed to produce at capacity. However, the Lusk-Morrow Gas Pool is subject to the "Special Rules and Regulations for the Lusk-Morrow Gas Pool," as established by Division Order No. R-2373 issued in Case No. 2691 on November 21, 1962, as amended by Division Orders No.: (i) R-2373-A issued in Reopened Case No. 2691 on May 13, 1964; (ii) R-2373-B issued in Reopened Case No. 2691 on May 19, 1965; (iii) R-6197 issued in Case No. 6730 on November 28, 1979; (iv) R-2373-C issued in Case No. 12076 on January 15, 1999; (v) R-2373-C (1) issued on September 12, 2000 as an amendment to Order No. R-2373-C; and (vi) R-2373-D issued in Case No. 12444 on September 12, 2000. These special pool rules require standard 640-acre gas spacing and proration units, with wells to be located no closer than 660 feet to the outer boundary of a quarter section on which the well is located and no closer than 10 to any quarter-quarter section line or subdivision inner boundary; further, optional infill wells are allowed provided there is no more than one well per quarter section.
- (4) Also, the special rules governing the Lusk-Morrow Gas Pool apply only to that area encompassed by its pool boundaries; therefore, operations within one-mile of this pool are exempt from Division Rule 104.A (2) (b) [see Division Order No. R-6197]. All wells drilled to the Morrow formation that are outside of this pool's boundaries are therefore subject to the Division's statewide rules and regulations for deep wells in southeast New Mexico [see Division Rule 104.C (2)].
- (5) The applicant, Marbob Energy Corporation, seeks the contraction of the Lusk-Morrow Gas Pool by deleting therefrom: (i) Section 24, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico; and (ii) Section 21, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico.
- (6) Since the pool's inception almost 40 years ago, not all 640-acre tracts (sections) within the current pool boundaries have had development. The undeveloped tracts include the two above-described sections.
- (7) With exception of the 640-acre spacing, the rules governing the Lusk-Morrow gas pool now mirror the current statewide rules applicable to well locations for deep wells in southeast New Mexico [see Division Rule 104.C (2)].
- (8) The Lusk-Morrow Gas Pool has been in a state of depletion for some time now and exploration of any undeveloped acreage within the pool boundaries is hampered by this 640-acre spacing rule.



- (9) Eliminating Section 21, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico from the pool will cause Sections 9, 10, 15, and 16 of Township 19 South, Range 32 East, NMPM, Lea County, New Mexico to be detached from the remaining body of the pool, thereby causing acreage within a pool boundary to be non-contiguous (see Division Rule 7.C). Section 21, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico should therefore remain within the pool boundaries.
- (10) Rule 4 of the special Lusk-Morrow Gas Pool rules allows the Division Director to issue an exception to the 640-acre spacing provision administratively. Special consideration should be given to any operator within Section 21 seeking to form a non-standard 320-acre unit for a Morrow gas test provided such request is for a half section that comprises the N/2, S/2, E/2 or W/2 of Section 21.
- (11) Approval of this application with respect to Section 24, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico will enable operators of that acreage eliminated from these pool rules to develop these properties in accordance with Division Rule 104.C (2), thereby protecting correlative rights and preventing waste.
- (12) Approval of the application is in the best interest of conservation, prevention of waste and protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) That portion of the application of Marbob Energy Corporation seeking to contract the Lusk-Morrow Gas Pool by deleting therefrom Section 21, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby denied.
- (2) The Lusk-Morrow Gas Pool in Eddy County, New Mexico is hereby contracted by deleting the following area:

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM Section 24: All.

(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.



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



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LÓRI WROTENBERY

Director