

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

IN THE MATTER OF THE APPLICATION  
OF SHELL WESTERN E&P INC. FOR CREATION  
OF A NEW POOL, FOR CONTRACTION OF  
POOL BOUNDARIES AND FOR SPECIAL  
POOL RULES, LEA COUNTY, NEW MEXICO.

Case No. 9230

APPLICATION

COMES NOW the Applicant, Shell Western E&P Inc. (Shell Western) and requests that the Division create a new pool, the North Eunice Blinebry-Tubb-Drinkard Pool Oil and Gas Pool, Lea County, New Mexico.

Applicant requests that the horizontal boundaries of this pool include:

TOWNSHIP 21 SOUTH, RANGE 37 EAST

All Lots	Sections 2, 3, 10, 15, 22, 23
Lots A,H,I,P	Section 4
Lots K,L,M,N	Section 11
Lots C,D,E,F	Section 14
Lots L,M	Section 24

Applicant further requests that the vertical limits of this pool include all of the Blinebry, Tubb, and Drinkard formations. In support of this application, Shell Western states:

1. The acreage underlying the proposed pool boundaries or portions thereof are presently within the boundaries of the Blinebry Oil and Gas Pool, Tubb Oil and Gas Pool and Drinkard Pool, previously established by the Division. During the course

Northeast Drinkard Unit  
Exhibit Thirty-Three  
Cases 9230  
9231  
9232

of operations within this area in these three pools the Division has allowed liberal commingling of these three zones and the three zones are now in effective communication with each other so as to constitute one common source of supply.

2. Applicant believes that the communication between the zones affected by operations in this area have effectively created a single common source of supply and believes that the formation of a common pool within this area will operate to prevent waste of natural resources and will better protect the correlative rights of interest owners within this area.

3. Applicant believes that in order to prevent waste and protect correlative rights of interest owners within this area that special pool rules should be adopted for the proposed North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool as set forth in Exhibit A hereto.

4. In order to allow for the orderly continuation of the proration of natural gas produced from the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool (present prorated gas pools), it is necessary to designate appropriate wells as gas wells subject to proration under the provisions of Order R-8170 as amended.

5. In order to accomplish this pool creation it will be necessary to contract the present boundaries of the Blinebry Oil and Gas Pool, Tubb Oil and Gas Pool, and Drinkard Pool by eliminating from those pools the acreage to be included within the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool.

WHEREFORE, Applicant prays that the Division enter its order creating a new pool named the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, contracting the present boundaries of the Blinebry Oil and Gas Pool, the Tubb Oil and Gas Pool, and the Drinkard Pool to allow acreage presently in those pools to be included within the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, designating certain wells as gas wells, and adopting the special pool rules attached hereto as Exhibit A as the rules governing the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool , all for the purpose of preventing waste of natural resources and protecting the correlative rights of interest owners within the area of the proposed North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

By 

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wpp/3

**SPECIAL RULES AND REGULATIONS  
FOR THE  
NORTH EUNICE BLINEBRY-TUBB-DRINKARD  
OIL AND GAS POOL**

**RULE 1.**

A standard gas proration unit in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be 160 acres.

**RULE 2.**

A standard oil proration unit in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be 40 acres.

**RULE 3.**

Acreage may be simultaneously dedicated to a gas well and an oil well in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, thereby receiving separate oil and gas allowables.

**RULE 4.**

Any acreage within the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall not be assigned to a gas well proration unit if the acreage is: 1) located within 1320' of the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool boundary, and 2) such acreage is not contiguous to offset non-unit gas proration unit.

**RULE 5.**

Any well within the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool designated as a gas well shall be subject to the gas proration rules set forth in Commission Order No. R-8170, as amended for the Blinebry Oil and Gas Pool or Tubb Oil and Gas Pool or both as appropriate.

The District Supervisor shall have authority to classify any well in the pool as a gas well or an oil well upon appropriate showing by the operator.

**RULE 6.**

An oil well in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be a well producing from the vertical and horizontal limits of the Pool and not classified as a gas well.

**RULE 7.**

The limiting Gas-Oil Ratio for oil wells in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be 6000 cubic feet of gas per barrel of oil.

**RULE 8.**

Commingling in the well bore of production from oil zones and gas zones in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool is prohibited.

**RULE 9.**

In submitting Form C-115 on gas wells producing from the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, the operator shall estimate the condensate and gas volumes produced by each well in the Blinebry, Tubb, and Drinkard zones by using the ratios as reflected in the most recent tests submitted if separate metering equipment for each zone is not utilized.

**RULE 10.**

Oil wells in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall receive oil and casinghead gas allowables as provided in either Rule 701F.3 or Rules 503, 505 and 506 of the Division Rules and Regulations.

**RULE 11.**

An oil well in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool may be recompleted as a gas well in the Blinebry or Tubb formations provided the operator of such well makes application to and receives approval from the District Supervisor for such recompletion.

**RULE 12.**

All gas wells in the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be subject to the same pool rules as would be applicable to gas wells completed in either or both the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool; except that such gas wells shall not be subject to any provision in either set of pool rules relating to classification by gas-liquid hydrocarbon ratio, nor shall they be subject to any provision within such rules prohibiting multiple assignments of acreage, except as provided by Rule 4 above. To the extent applicable rules of either the Blinebry Oil and Gas Pool or the Tubb Oil and Gas Pool conflict with the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool rules, the latter shall control.

**RULE 13.**

Special Pool Rules and Regulations for the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be applicable only within the pool boundaries.

**RULE 14.**

Any expansion of the boundaries of the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool shall be only upon application filed after notice under Rule 1207 and hearing.

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

IN THE MATTER OF THE APPLICATION  
OF SHELL WESTERN E&P INC. FOR A STATUTORY  
UNITIZATION, LEA COUNTY, NEW MEXICO.

Case No. 9231

APPLICATION

COMES NOW the Applicant, Shell Western E&P Inc. (Shell Western) and requests that the Division approve the statutory unitization of the Northeast Drinkard Unit, Lea County, New Mexico for secondary recovery, waterflood, operations.

In support of its application, Applicant states:

1. Shell Western is engaged in the business of producing and selling oil and gas in New Mexico.
2. The unit area for which application is made consists of approximately 5018 acres, more or less, of federal, state and fee lands in Lea County, New Mexico, and is more particularly described in Exhibit A attached hereto and incorporated herein by reference. Shell Western seeks an order pursuant to the Statutory Unitization Act providing for the unitized management, operation and further development of the unit area.
3. The vertical limits of the formation to be included within the proposed unit area is that interval commonly known as the Blinebry, Tubb, and Drinkard formations as encountered

between the log depths of 5530 ft. and 6680 ft. in the Shell Western Argo No. 8 well located 660' FSL, 2310' FWL, Section 15, Township 21 South, R 37 East, Lea County, New Mexico as recorded on the log of that well run on June 21, 1951 and filed with the Oil Conservation Division.

4. The portion of the reservoir involved in this application has been reasonably defined by development.

5. The unitized interval is in effective communication throughout the three stratigraphic intervals due to operational practices in this area which have allowed liberal and frequent commingling of the three zones so that the three zones now comprise one common source of supply.

6. The type of operations to be conducted in this unit will be a waterflood.

7. Attached to this application as Exhibit B and incorporated herein by reference is a copy of the proposed plan of unitization, unit agreement, which Shell Western considers to be fair, reasonable and equitable.

8. Attached to this application as Exhibit C and incorporated herein by reference is a copy of the proposed unit operating agreement setting forth the manner in which the unit will be supervised and managed and setting forth the method of allocation of costs and payment of those costs among unit participants.

9. Shell Western further states:

A. That the unitized management, operation and further development of that portion of the Blinebry, Tubb, and Drinkard formations which is the subject of this application is reasonably necessary in order to effectively carry on waterflood operations and to substantially increase the ultimate recovery of oil from the unitized interval.

B. That the unitized methods of operation applied to the portion of the Blinebry, Tubb, and Drinkard formations which are the subject of this application are feasible, will prevent waste and will result with reasonable probability in the increased recovery of substantially more oil from the unitized portion of the North Eunice Blinebry-Tubb-Drinkard Pool that would otherwise be recovered.

C. That the estimated additional costs, if any, of conducting such operations will not exceed the estimated value of additional oil so recovered plus reasonable profit.

D. That such unitization and adoption of unitized methods of operation will benefit the working interest owners and royalty owners of the oil and gas rights within that portion of the pool directly affected.

E. That Shell Western, as operator, has made a good faith effort to secure voluntary unitization within that portion of the pool affected by this application.

F. That the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable, and equitable basis.

10. Approval of the statutory unitization of the Northeast Drinkard Unit is in the best interests of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Shell Western respectfully requests that this application be set for hearing before the Division examiner on September 23, 1987 and after notice and hearing as required by law and the rules of the Division, the Division enter its order granting this application.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

By

  
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Attorneys for Shell Western  
E & P, Inc.

wpp/5

Case No. 9232

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: Shell Western E&P Inc.  
Address: P. O. Box 576 ; Houston, TX 77001  
Contact party: D. E. Burbank Phone: (713) 870-2213
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
  1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: D. E. Burbank Title Production Engineer

Signature: Douglas E. Burbank Date: September 8, 1987

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.