

IN THE STATE OIL AND GAS BOARD OF MISSISSIPPI

RE: PETITION OF EDWARDS & JONES EXPLORA-
TION COMPANY TO SUPPLEMENT AND AMEND
THE SPECIAL FIELD RULES FOR THE
HORSESHOE LAKE FIELD, HOLMES AND
HUMPHREYS COUNTIES, MISSISSIPPI.

FILED FOR RECORD

JUN 13 1980

STATE OIL AND GAS BOARD
Clyde R. Davis, State Oil & Gas Supervisor

DOCKET NO. 99-80-419.

ORDER NO. 167-80

O R D E R

THIS DAY this cause came on for hearing before the State Oil and Gas Board on the Petition of Edwards & Jones Exploration Company as Unit Operator of the Horseshoe Lake Unit to supplement and amend the Special Field Rules for the Horseshoe Lake Field, Holmes and Humphreys Counties, Mississippi, such hearing being called for such purpose; and

The Board finding that due, proper and legal notice of the meeting of the Board for the purpose of considering and taking action with respect to such matter was given in the manner and way provided by law and the rules and regulations of the Board, and that due, legal and sufficient proofs of publication are on file with the Board, and that the Board has full jurisdiction of the subject matter to hear and determine the same; and

WHEREAS, pursuant to said notice given, public hearing was held by said Board in the Second Floor Auditorium of the Woolfolk State Office Building, North West Street, Jackson, Mississippi, commencing on May 21, 1980, at which hearing all persons present who desired to be heard on said matter were heard and all testimony and evidence were duly considered by those present at said meeting; and

WHEREAS, the Board has fully considered said matter and the evidence and recommendations made at said hearing and finds as follows:

1. In Docket No. 98-80-419, this Board has approved the plan of unitization composed of a Unit Agreement and Unit Operating Agreement, creating the Horseshoe Lake Unit. The amendment of the Field Rules to enlarge the description of the field, redesignate the pool and authorize injection is necessary for the operation of the said unit.

2. The production history of the wells in this field shows that the producing pool in this field originally defined as the Smackover Gas Condensate Pool is an oil pool productive of both oil and gas. The oil is in liquid phase in the reservoir and enhanced oil recovery by injection of the CO₂ and other gases produced from the reservoir will substantially increase recovery. Operator proposes to amend the pool designation to the Smackover Pool productive of oil and gas from the Smackover Formation in order to conform to the facts disclosed by this production history.

3. The proposed enhanced recovery project involves the application (in accordance with sound engineering principles) of one or more tertiary recovery methods which can reasonably be expected to result in more than an insignificant increase in the amount of crude oil which will ultimately be recovered from the Smackover Pool. The project beginning date is after May, 1979. The portion of the property to be affected by the project is adequately delineated.

Edwards & Jones Exploration Company should be permitted to drill additional wells for injection or production and to convert certain of the producing wells to injection wells. The Field Rules should be amended to authorize such injection program. The injection of nitrogen, CO₂, and other gas, contemplated by the operator and the proposed appropriate allocation of production will prevent waste and will protect the coequal and correlative rights of all interested parties.

IT IS, THEREFORE, ORDERED AND ADJUDGED that the Special Field Rules for the Horseshoe Lake Field in Holmes and Humphreys Counties, Mississippi, be hereby amended to read as follows:

SPECIAL FIELD RULES FOR THE
HORSESHOE LAKE FIELD,
HOLMES AND HUMPHREYS COUNTIES, MISSISSIPPI

- A. The Horseshoe Lake Field, as used herein, is that area consisting of the following described land, to wit:

Sections 20, 21, 28 and the N 1/2 of Section 29, Township 16 North, Range 1 West, Holmes County, Mississippi; and the E 1/2 of E 1/2 of Section 19, Township 16 North, Range 1 West, Humphreys County, Mississippi; underlain by the Smackover Pool in the Horseshoe Lake Field and all productive extensions thereof.

- B. The Horseshoe Lake Unit as used herein is the following described area:

Section 20, Section 21, the W 1/2 of NW 1/4 and NE 1/4 NW 1/4 and NW 1/4 NE 1/4 of Section 28, the N 1/2 of Section 29, Township 16 North, Range 1 West, Holmes County, Mississippi; and the E 1/2 of E 1/2 of Section 19, Township 16 North, Range 1 West, Humphreys County, Mississippi.

- C. The Smackover Pool in the Horseshoe Lake Field shall be construed to mean those strata productive of oil and gas in the interval between the depths of 9,276 feet and 9,370 feet as indicated on the electric log of the Edwards & Jones Exploration Co. - No. 1 Martha Wingo Well located in the S 1/2, Section 20, Township 16 North, Range 1 West, Holmes County, Mississippi, and all correlative intervals in communication therewith.
- D. The characteristics of the Smackover Pool in said field are such that wells located in conformance with the hereinafter prescribed rules will efficiently drain and produce the recoverable oil and gas from said pool without avoidable waste.

RULE 1 - SPACING OF WELLS:

(1) A drilling and production unit is hereby established for each and all wells drilled within the Horseshoe Lake Unit and completed in the Smackover Pool as consisting of the entire Horseshoe Lake Unit Area hereinabove described.

(2) Each drilling unit located within the Horseshoe Lake Unit Area heretofore or hereafter established under the provisions of the Special Field Rules for a well producing from the Smackover Pool shall be considered as producing from the Unit Area in accordance with Order No. 166-80 of this Board entered in Docket No. 98-80-419.

(3) The location and utilization of wells upon the Horseshoe Lake Unit for production or injection from or into the Smackover Pool shall be governed by standards of geology and petroleum engineering designed to promote the greatest ultimate recovery of oil and gas contained in the Smackover Pool within the Horseshoe Lake Unit.

RULE 2 - INJECTION OF GAS AUTHORIZED:

A. The Unit Operator of the Horseshoe Lake Unit is hereby authorized to conduct injection operations in the Smackover Pool by the injection of CO₂, nitrogen and other gases. Said Unit Operator may use existing wells located in said Unit Area for injection purposes.

B. A permit to drill each new well or recomplate an existing well, either as a producer or injection well, shall be issued upon the filing of Form 2 in accordance with Statewide Rule 4. The completion or recompletion of wells for production or injection shall be reported on Form 3.

RULE 3 - APPLICABILITY OF STATEWIDE RULES:

A. All rules and regulations contained in Statewide Order No. 201-51, and any amendments thereto, not specifically

covered in the foregoing Special Field Rules, are hereby adopted and shall apply to said Unit.

B. The Special Field Rules for the Horseshoe Lake Field adopted in Order No. 65-80 shall be superseded after the effective date hereof.

C. These rules and regulations shall become effective as of the effective date of unitization as provided by the Oil and Gas Board in Order No. 166-80, Docket No. 98-80-419.

D. The Board expressly reserves the right after notice and hearing to alter, amend or repeal, any and all of the foregoing rules and regulations.

ORDERED AND ADJUDGED this the 21st day of May, 1980.

MISSISSIPPI STATE OIL AND GAS BOARD

BY: Joe R. Fancher, Jr.
CHAIRMAN