

MAR 10 1986

STATE OIL AND GAS BOARD  
A. Richard Henderson, Supervisor

IN THE STATE OIL AND GAS BOARD OF MISSISSIPPI

PETITION OF ANDERMAN/SMITH OPERATING  
COMPANY TO AMEND AND RE-ESTABLISH  
SPECIAL FIELD RULES FOR THE McNEAL  
FIELD, JASPER COUNTY, MISSISSIPPI,  
AND TO PROVIDE RULES FOR THE OPERATION  
OF THE McNEAL FIELD UNIT

DOCKET NO. 71-86-358

ORDER NO. 101-86

ORDER

THIS DAY this cause came on to be heard on the Petition of Anderman/Smith Operating Company requesting the Board to amend and re-establish the Special Field Rules for the McNeal Field, Jasper County, Mississippi, to redefine the Lower Cotton Valley Oil Pool, to define the McNeal Field Unit, Jasper County, Mississippi, and to provide rules for the operation of said unit for secondary recovery, water flooding and pressure maintenance operations, and after examining the Petition and Proofs of Publication, after hearing all of the evidence offered upon the hearing of said cause and considering the testimony and exhibits presented, and having considered the arguments of counsel and being fully advised in the premises, the Board finds as follows:

1.

Due, proper and legal notice of the meeting of the Board for the purpose of considering and taking action with respect to this matter has been given in the time, manner and way as provided by law and the rules and regulations of the Board and due, legal and sufficient Proofs of Publication are on file with the Board and the Board has full jurisdiction of the parties in the subject matter and has authority to hear and determine said matter.

2.

Pursuant to said Notice, a public hearing was held by said Board in 1400 Walter Sillers Building, 550 High Street, Jackson, Mississippi, on February 19, 1986, at which time and place all

persons present who desired to be heard on said matter were heard, and the proposed Special Field Rules were fully discussed and duly considered by those persons at said meeting.

3.

The Board does find that Special Field Rules for the McNeal Field, Jasper County, Mississippi, were initially established by Order No. 217-73 of this Board dated August 15, 1973, pursuant to a hearing in Docket No. 133-73-358 and made permanent by Order No. 190-75 dated August 20, 1975. Subsequently, Order No. 273-77 dated September 21, 1977, amended and re-established the Special Field Rules.

4.

The Board finds that the definition of the Lower Cotton Valley Oil Pool should be redefined to recognize the existence of an Upper Oil Pool and a Lower Oil Pool, and that the definition of the McNeal Field should be amended to delete therefrom lands which have now been established as non-productive from the Upper Oil Pool of the Lower Cotton Valley Oil Pool.

5.

The Board finds that it is necessary to amend and re-establish Special Field Rules for the McNeal Field to implement the repressuring or pressure maintenance operations, secondary recovery operations, cycling operations, and water flooding operations as applied to the McNeal Field Unit in order to increase the ultimate recovery of oil from said unit. The Board further finds that Petitioner, Anderman/Smith Operating Company, should be permitted to drill additional wells for injection or production and to convert any previously abandoned well to an injection well, but as to injection wells only after obtaining the Board's approval thereof after notice and hearing. The Board finds that the Special Field Rules should authorize such

injection program for injection of water and water flooding and in secondary recovery operations. The Board further finds that the injection of water and the commencement of secondary recovery operations and the proposed appropriate allocation of production will inure to the benefit of all concerned, will prevent waste and will protect the coequal and correlative rights of all interested parties.

6.

The Board further finds that the proposed Special Field Rules for the McNeal Field should supersede and replace all previous rules adopted by this Board.

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREED that the Special Field Rules for the McNeal Field in Jasper County, Mississippi, should be and are hereby amended so as to redefine the Lower Cotton Valley Oil Pool, to provide for the operation of the McNeal Field Unit, to authorize the injection of water, secondary recovery operations and water flooding operations, all as more fully described and set forth in said Special Field Rules, as amended, attached as Exhibit "A" hereto and incorporated herein by reference.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that Anderman/Smith Operating Company shall acquire all other permits, if any, required by any other permitting authority.

SO ORDERED, ADJUDGED AND DECREED, this the 19<sup>th</sup> day of February, 1986.

MISSISSIPPI STATE OIL AND GAS BOARD

BY:   
Chairman

EXHIBIT "A"

SPECIAL FIELD RULES FOR THE McNEAL FIELD,  
JASPER COUNTY, MISSISSIPPI

- A. THE FOLLOWING RULES SHALL APPLY AS TO THE  
UPPER OIL POOL OF THE LOWER COTTON VALLEY OIL POOL:

FIELD LIMITS:

Jasper County Mississippi

Township 2 North, Range 11 East

Section 15: West Half (W 1/2),  
Northeast Quarter (NE 1/4), West  
Half of Southeast Quarter (W 1/2  
of SE 1/4) and Northeast Quarter  
of Southeast Quarter (NE 1/4 of  
SE 1/4);

Section 16: East Half (E 1/2),  
East Half of Southwest Quarter  
(E 1/2 of SW 1/4) and Southeast  
Quarter of Northwest Quarter  
(SE 1/4 of NW 1/4).

1. The Upper Oil Pool of the Lower Cotton Valley Oil Pool, as used herein, shall be construed to mean those strata of the Lower Cotton Valley formation productive of hydrocarbons from the depth of 14,278 feet to 14,300 feet in the electric log in the Petro Grande (now Anderman/Smith) Griffin No. 1 Well located in the West Half of the Northeast Quarter of the Southwest Quarter (W 1/2 of NE 1/4 of SW 1/4) of Section 15, Township 2 North, Range 11 East, Jasper County, Mississippi, which is the same interval described as being between 14,320 and 14,346 feet on the electric log of the Petro Grande (now Anderman/Smith) Board of Supervisors No. 16-9 Well in the Northeast Quarter of Southeast Quarter (NE 1/4 SE 1/4), Section 16, Township 2 North, Range 11 East, and including those productive strata which can be correlated therewith.

2. The area defined as lying within the McNeal Field consists of regular governmental quarter sections of approximately 160 acres each. With respect to the Upper Oil Pool

of the Lower Cotton Valley Oil Pool, the McNeal Field Unit has been created by the voluntary agreement of over eighty-five percent (85%) of the operating owners and over eighty-five percent (85%) of the royalty owners with respect to which it is proper and necessary for the promotion of conservation to consider and treat the unit area in said pool as a single drilling and producing unit as to all tracts therein contained. As to said pool, the rules hereinafter provided applicable to it will enable said pool to be efficiently drilled, and the recoverable oil and gas therein contained to be recovered with full protection of the coequal and correlative rights of all parties and without avoidable waste.

#### RULE 1 - SPACING OF OIL WELLS

A. A fieldwide drilling unit is hereby established for each and all oil wells drilled and completed in the Upper Oil Pool of the Lower Cotton Valley Oil Pool as consisting of that unit area affected by the Unit Agreement, McNeal Field Unit, Jasper County, Mississippi, underlain by the Upper Oil Pool of the Lower Cotton Valley Oil Pool.

B. The location of wells upon the fieldwide unit shall be governed by the standards of geology and petroleum engineering designed to promote the greatest ultimate recovery of hydrocarbons contained in the pool. However, no future well may be drilled or produced from said pool nearer than 500 feet from any boundary of the fieldwide unit except upon permit issued by the Board after notice and hearing.

#### RULE 2 - ALLOCATION OF PRODUCTION

A. The allowable of said pool shall be the sum of the number of wells in the unit, including injection wells but excluding salt water disposal and waste water disposal wells, times the then effective allowable based on depth.

B. The allowable production of the fieldwide unit may be produced by any well or wells on said unit provided, however, that no well shall be operated in such manner as to cause waste as defined by the laws of Mississippi.

RULE 3 - PRESSURE MAINTENANCE AND SECONDARY RECOVERY PROGRAM AUTHORIZED

A. Anderman/Smith Operating Company, as operator of the McNeal Field Unit, is hereby authorized to conduct pressure maintenance operations in the Upper Oil Pool of the Lower Cotton Valley Oil Pool of the McNeal Field by the injection of gas, carbon dioxide, water or other substances. Operator may use for injection purposes existing wells located in said fieldwide unit which may be converted to injection wells or wells may be drilled on said fieldwide unit for such purpose provided, however, that before any additional well or wells may be used for injection purposes, said operator must first file with the Mississippi State Oil and Gas Board a plat showing the location of such injection well or wells, the applicable information required by Statewide Rule 45, the plan proposed or adopted by it for pressure maintenance in said pool and obtain the Board's approval thereof, after notice and hearing.

B. The conversion of producing wells to injection wells will not affect the fieldwide unit allowable as determined by Rule 2.

RULE 4 - AUTOMATIC CUSTODY TRANSFER SYSTEMS AUTHORIZED

Automatic custody transfer systems which automatically test, sample, measure and transfer the production from the operator to the purchaser are hereby authorized for the McNeal Field.

Each such system will be equipped with a sampling device which will take a representative sample of the total production passing through the system in order that the specific gravity and the basic sediment and water content can be determined.

Each such system will be equipped with a volume displacement type metering device which registers the volume of oil passed through it in barrels or multiples thereof; said metering device will be compensated for temperature, will be so equipped as to provide a cumulative total of all oil transferred by such system and will have an accuracy standard equivalent to the accuracy obtained in measurements made in calibrated stock tanks.

RULE 5 - 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 field.

B. These amended Rules and Regulations to become effective as of the date of the Board's Order adopting and establishing same.

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

EXHIBIT "A" (Continued)

SPECIAL FIELD RULES FOR THE McNEAL FIELD,  
JASPER COUNTY, MISSISSIPPI

- B. THE FOLLOWING RULES SHALL APPLY AS TO THE  
LOWER OIL POOL OF THE LOWER COTTON VALLEY OIL POOL:

FIELD LIMITS:

Jasper County, Mississippi

Township 2 North, Range 11 East:

Section 14: West Half (W 1/2);

Section 15: All;

Section 16: East Half (E 1/2) and East Half  
of West Half (E 1/2 of W 1/2);

Section 21: Northeast Quarter (NE 1/4) and  
East Half Northwest Quarter (E 1/2 NW 1/4);

Section 22: North Half (N 1/2);

Section 23: Northwest Quarter (NW 1/4);

Including all productive extensions thereof underlain by  
the Lower Zone of the Lower Cotton Valley Oil Pool.

The Lower Oil Pool of the Lower Cotton Valley Oil Pool used herein shall be construed to mean those strata of the Lower Cotton Valley Formation productive of oil in the interval between 14,300 feet and 14,364 feet in the Petro Grande (now Anderman/Smith) Griffin No. 1 Well located in the West Half of the Northeast Quarter of the Southwest Quarter (W 1/2 NE 1/4 SW 1/4) of Section 15, Township 2 North, Range 11 East, Jasper County, Mississippi, as indicated on the electric log of said well and all sands correlative of said strata and interconnected therewith productive of oil.

RULE 1 - DRILLING UNIT SIZE

The characteristics of the Lower Oil Pool of the Lower Cotton Valley Oil Pool in said field are such that a well located as hereinafter prescribed and drilled on a drilling unit consisting of one hundred sixty (160) surface acres, conforming



to the requirements herein contained, will effectively drain and produce the recoverable oil from such unit in said oil pool without avoidable waste.

RULE 2 - SPACING OIL WELLS

Every well hereinafter drilled as an oil well in the McNeal Field to the Lower Oil Pool of the Lower Cotton Valley Oil Pool:

- (A) Shall be located on a drilling unit consisting of:
  - (1) One hundred sixty (160) contiguous surface acres; or
  - (2) Four governmental quarter-quarter sections containing not less than one hundred forty-four (144) acres or more than one hundred seventy-six (176) acres.

In any case, no other well producing from the same pool shall be located on any such unit. Any oil drilling unit formed under Section A above of this rule;

- (B) Shall be located at least 1,000 feet from every other drilling well or well completed in or producing from the same pool located in conformity with this rule;
- (C) Shall be located not less than 500 feet from every exterior boundary of the drilling unit; and,
- (D) No unit shall be permitted which will create island acreage.

RULE 3 - APPLICABILITY OF STATE RULES

- (A) All Statewide Rules and Regulations of this Board, and any amendments thereto, not specifically covered in the foregoing

Special Field Rules, are hereby adopted and shall apply in said field.

(B) These Rules and Regulations shall become effective as of the effective date of the Order adopting these Rules.

(C) The Board expressly reserves the right after notice and hearing, to alter, amend, or repeal any and all of the foregoing Rules and Regulations.

SOURCE: Order No. 101-86, dated February 19, 1986  
Docket No. 71-86-358