

SEP 10 1985

STATE OIL AND GAS BOARD
A. Richard Henderson, Supervisor

IN THE STATE OIL AND GAS BOARD OF MISSISSIPPI

DOCKET NO. 238-85-591

ORDER NO. 315-85

PETITION OF SHELL WESTERN E&P INC. TO
AMEND AND RE-ESTABLISH SPECIAL FIELD
RULES FOR THE LIBERTY FIELD, AMITE
COUNTY, MISSISSIPPI, AND TO PROVIDE
RULES FOR THE OPERATION OF THE LIBERTY
FIELD UNIT

O R D E R

This day this cause came on for hearing before the State Oil and Gas Board of Mississippi on the Petition of Shell Western E&P Inc. as Unit Operator of the proposed Liberty Field Unit, requesting the Board to amend and re-establish the Special Field Rules for the Liberty Field, to define the Liberty Field Unit, Amite County, Mississippi, and to provide rules for the operation of the said unit for secondary recovery and pressure maintenance, and water flooding operations. After examining the Petition and Proofs of Publication, and after hearing all of the evidence offered upon the hearing of said cause and considering the 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 and 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 the 1400 Walter Sillers Building, 550 High Street, Jackson, Mississippi, on August 21, 1985, at which time and place all persons present who desired to be heard on said matter were heard and all proposed amendments to the Special

Field Rules for the Liberty Field were fully discussed and duly considered by those persons at said meeting.

(3)

Special Field Rules for the Liberty Field, Amite County, Mississippi, were initially established by Order No. 354-83 of this Board dated September 22, 1983, pursuant to a hearing in Docket No. 258-83-591. Subsequently, Order No. 96-84 and Order No. 230-8 amended and re-established the Special Rules.

(4)

The definition of the Liberty Field should be amended to delete therefrom lands which have now been established as non-productive from the Lower Tuscaloosa Formation.

(5)

It is now necessary to amend and re-establish Special Field Rules for the Liberty Field to implement the repressuring or pressure maintenance operations, secondary recovery operations by the injection of gas, carbon dioxide, water or other substances and/or the water flooding operations as applied to the Liberty Field Unit in order to increase the ultimate recovery of oil from the said unit. Petitioner should be permitted to drill additional wells for injection or production and to convert any previously drilled well to an injection well. The Special Field Rules should authorize such injection program for the injection of water in water flooding and secondary recovery operations.

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 co-equal and correlative rights of all interested parties.

(6)

The Special Field Rules for the Liberty Field as proposed herein should supersede and replace all previous rules adopted by this Board.

IT IS, THEREFORE, ORDERED ADJUDGED AND DECREED by the State Oil and Gas Board of Mississippi that the following Special Field Rules be, and the same are, hereby adopted for the Liberty Field located in Amite County, Mississippi, to take effect on and after September 1, 1985, to-wit:

EXHIBIT "A"

SPECIAL FIELD RULES FOR THE LIBERTY FIELD,
AMITE COUNTY, MISSISSIPPI

(A.) THE FOLLOWING RULES SHALL APPLY AS TO THE LOWER TUSCALOOSA OIL POOL:

FIELD LIMITS:

Amite County, Mississippi
Township 1 North, Range 4 East

Section 8: South Half (S/2)
Section 9: Southwest Quarter (SW/4)
Section 15: Northwest Quarter (NW/4)
and South Half (S/2)
Section 16: Entirety of said section
Section 17: North Half (N/2) and Southeast
Quarter (SE/4)
Section 21: North Half (N/2)
Section 22: Entirety of said section

1. The Lower Tuscaloosa Oil Pool, as used herein, shall be construed to mean those strata of the Lower Tuscaloosa formation productive of hydrocarbons from the depth of 12,210 feet to 12,224 feet in the Shell Western E&P Inc. Johnston & Owens, et al Unit No. 1 Well located 2065.64 feet from the north line and 615.97 feet from the west line of Section 15, Township 1 North, Range 4 East, Amite County, Mississippi, and including those productive strata which can be correlated therewith.

2. The area defined as lying within the Liberty Field consists of regular governmental sections of approximately 640 acres each. With respect to the Lower Tuscaloosa Oil Pool, the Liberty 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 Lower Tuscaloosa Oil Pool as consisting of that unit area affected by the Unit Agreement, Liberty Field Unit, Amite County, Mississippi, underlain by the Lower Tuscaloosa 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. Shell Western E&P Inc., as operator of the Liberty Field Unit, is hereby authorized to conduct pressure maintenance operations in the Lower Tuscaloosa Oil Pool of the Liberty 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 & 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 Liberty 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 LIBERTY FIELD,
AMITE COUNTY, MISSISSIPPI

(B.) THE FOLLOWING RULES SHALL APPLY AS TO THE LOWER TUSCALOOSA GAS POOL:

FIELD LIMITS:

Amite County, Mississippi
Township 1 North, Range 4 East

Section 10: South Half (S/2)
Section 15: North Half (N/2)

Including all productive extensions thereof
underlain by the Lower Tuscaloosa Gas Pool.

The Lower Tuscaloosa Gas Pool used herein shall be construed to mean those strata of the Lower Tuscaloosa Formation productive of gas in the interval between 12,212 feet and 12,270 feet in the Shell Western E&P Inc. - Johnston, et al Unit No. 1 Well located 941 feet from the north line and 2,100 feet from the west line of Section 15, Township 1 North, Range 4 East, Amite County, Mississippi, as indicated on the electric log of said well and all sands correlative of said strata and interconnected therewith productive of gas.

RULE 1 - DRILLING UNIT SIZE

The characteristics of the Lower Tuscaloosa Gas Pool in said field are such that a well located as hereinafter prescribed and drilled on a drilling unit consisting of six hundred forty (640) surface acres, conforming to the requirements herein contained, will effectively drain and produce the recoverable gas from such unit in said gas pool without avoidable waste.

RULE 2 - SPACING GAS WELLS

Every well hereinafter drilled as a gas well in the Liberty Field to the Lower Tuscaloosa Gas Pool:

- (A) Shall be located on a drilling unit consisting of:
- (1) Six hundred forty (640) contiguous surface acres; or
 - (2) A governmental section containing not less than six hundred (600) acres or more than six hundred eighty (680) acres; or

- (3) Sixteen (16) contiguous governmental quarter-quarter sections whose total acreage is not less than six hundred (600) acres or more than six hundred eighty (680) acres.

In any case, no other well producing from the same pool shall be located on any such unit;

- (B) Any gas drilling unit formed under Section A above of this rule must be completely encompassed by the perimeter of a rectangle 5580 feet by 6245 feet;
- (C) Shall be located at least 3000 feet from every other drilling well or well completed in or producing from the same pool located in conformity with this rule;
- (D) Shall be located not less than 1500 feet from every exterior boundary of the drilling unit;
- (E) No unit shall be permitted which will create island acreage.

RULE 3 - APPLICABILITY OF STATEWIDE 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.

IT IS FURTHER ORDERED that Shell Western E&P Inc. shall acquire all other permits, if any, required by any other permitting authority.

THIS ORDER shall take effect and be enforced from and after September 1,
1985.

ORDERED, ADJUDGED AND DECREED this the 22nd day of August,
1985.

STATE OIL AND GAS BOARD OF MISSISSIPPI

BY: 

CHAIRMAN