

SEP 10 1985

STATE OIL AND GAS BOARD
A. Richard Henderson, Supervisor

IN THE STATE OIL AND GAS BOARD OF MISSISSIPPI

DOCKET NO. 237-85-591

ORDER NO. 314-85PETITION OF SHELL WESTERN E&P INC. AS
UNIT OPERATOR FOR APPROVAL OF THE PLAN
OF UNITIZATION FOR THE LIBERTY FIELD
UNIT, AMITE COUNTY, MISSISSIPPIO 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 for the proposed Liberty Field Unit, for an Order creating the Liberty Field Unit and approving the Unit Agreement and the Unit Operating Agreement as authorized and provided by Mississippi Code Annotated, Sections 53-3-101 to 53-3-119 (1972) (as amended), and 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 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 matters were heard, and the proposed creation of the Liberty Field Unit and the Plan of Unitization composed of the Unit Agreement and the Unit Operating Agreement for the Liberty Field Unit were fully discussed and duly considered by those persons at said meeting.

(3)

Attached to the Petition and made a part thereof are copies of the Unit Agreement and the Unit Operating Agreement for the Liberty Field Unit, together comprising the Plan of Unitization for said unit in Amite County, Mississippi. The Board adopts and confirms as a part of this Order Exhibits "A," "B," and "C" to said Unit Agreement, which exhibits are, respectively, a descriptive list of the tracts composing the unit area showing the percentage of participation of each tract, a description of the proposed unit area, and a map or plat of the unit area on which the boundary lines of the unit area and the tracts composing the unit area are shown. The unit area, lying and being situate in Amite County, Mississippi, is hereby described as follows:

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.

The Board finds that the proposed unitized formation should be and is hereby defined in the same manner as defined in Article 1.2 of the Unit Agreement, Exhibit 1, which definition is as follows:

"Unitized Formation is the subsurface portion of the Unit Area described as those strata of the Lower Tuscaloosa Formation productive or formerly productive of oil and gas from the depth of 12,210 feet to 12,224 feet in the Johnston and 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 strata productive of Unitized Substances which can be correlated therewith."

The Board finds that the Lower Tuscaloosa Formation is a common source of supply of oil and gas for the unit area. The Lower Tuscaloosa Formation included within the boundaries of the proposed unit area has been defined by a sufficient number of wells to a sufficient depth and at such locations as may be necessary to determine the boundaries of the unit and to determine that the Lower Tuscaloosa Formation has been reasonably developed

according to a spacing pattern approved by this Board. Pursuant to Docket No. 39-84-591, this Board entered Order No. 96-84, dated March 22, 1984, establishing a spacing pattern for wells within the Liberty Field in a manner that would require each well drilled as an oil well to the Lower Tuscaloosa Formation to be drilled on a drilling unit consisting of a governmental quarter section containing not less than 144 acres nor more than 176 acres upon which no other drilling or producible well is located. Subsequently by Order No. 230-84, this Board reaffirmed 160 acre spacing and established four additional surveyed units of 158 acres each. The Board finds that there is no need for the drilling of further units or tracts within the unit in order to define or further develop the unit area prior to the establishment of the fieldwide unit.

(4)

The Board hereby finds that Shell Western E&P Inc., Petitioner herein, should be and is hereby approved as the Operator for all of the working interest owners within the Liberty Field Unit. The Petitioner has acquired the execution and approval of a minimum of eighty-five (85) percent of the working interest owners and eighty-five (85) percent of the royalty owners based on surface acreage content in the unit area (exclusive of royalty interest owned by Lessees or by subsidiaries or successors in title of any Lessee) of the Plan of Unitization as set forth in said agreements, Exhibits 1 and 2 hereto.

(5)

The Board finds that the unit operation of the Unitized Formation, as defined in Exhibit 1, in the Liberty Field Unit, so unitized is reasonably necessary in order to effectively carry on secondary recovery, pressure maintenance, repressuring operations, cycling operations, water flooding operations, the injection of extraneous substances, or any combination thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil or gas or both, from the unit so formed, and to prevent waste. Such operations as applied to the common source of supply or portion thereof are feasible and will prevent waste or will with reasonable probability result in the recovery of substantially more oil or

gas, or both, from the unit so formed than would otherwise be recovered. The Plan of Unitization and the agreements effectuating same are fair and reasonable under all of the circumstances and protect the rights of all interested parties. The correlative rights of interested parties will be protected. The estimated additional cost incident to conducting Unit Operations will not exceed the value of the estimated additional recovery of oil and gas, and such cost of unit operations shall not be borne by the royalty owners.

(6)

The Board finds that each drilling unit economically feasible to drill has been drilled and a sufficient number of wells have been drilled to a sufficient depth and at such a location as are necessary, and, therefore, the Board does approve the boundaries of the unit and determines that the proposed Unitized Formation and the unit area have been sufficiently developed in accordance with the spacing pattern promulgated by this Board. This Board finds as a fact that it is not economically feasible to drill any tracts which may not have been drilled and hereby waives such requirements.

(7)

The Board finds that the Unit Agreement and the Unit Operating Agreement attached to the Petition as exhibits and made a part of this Order by reference properly, and in compliance with the Rules and Regulations of this Board, contain:

- (a) A description of the geographical area and the description of the pool or pools, or of any portion or portions or combinations thereof affected which together constitute and are herein termed the "Unit Area".
- (b) A statement of the nature of the operations contemplated.
- (c) A formula for the allocation among the separately owned tracts in the unit area of all the oil or gas, or both, produced and saved from the unit area, and not required in the conduct of such operation, which formula is reasonable to permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to receive, in lieu thereof, their fair, equitable and reasonable share of the unit production or other benefits thereof. A separately owned tract's fair, equitable and reasonable share of unit production is that proportionate part of unit production that the contributing value of such tract for oil and gas purposes in the unit area and its contributing value to the unit bears to the total of all like values of all tracts in the unit, taking into account all pertinent engineering, geological and operating factors that are reasonably susceptible of determination.

(d) A provision for adjustment among the owners of the unit area (not including royalty owners) of their respective investment in wells, tanks, pumps, machinery, materials, equipment and other things and services of value attributable to the unit operations. The amount to be charged unit operations for any such item shall be determined by the owners of the unit area (not including royalty owners), but if said owners of the unit area are unable to agree upon the amount of such charges, or to agree upon the correctness thereof, the Board shall determine them after due notice and hearing thereon, and upon the application of any interested party. The amount charged against the owner of a separately owned tract shall be considered expense of unit operation chargeable against such tract. The adjustments provided for herein may be treated separately and handled by agreements separate from the unitization agreement. The expense of dry holes drilled within the unit area prior to the effective date of an order of the Board, as determined by Section 53-3-107, Mississippi Code, 1972, shall not be chargeable as investment under subsection (c) of Section 53-3-109 of the Mississippi Code of 1972, unless such dry hole is used in the unit operation, in which event its value to the unit shall be charged as investment.

(e) A provision that the costs and expenses of unit operation, including investment past and prospective, shall be borne by the owner or owners (not entitled to share in production free of operating costs and who in the absence of unit operation would be responsible for the expenses of developing and operating) of each tract in the same proportion that such tracts share in unit production. Each owner's interest in the unit area shall be responsible for his proportionate share thereof, and the Unit Operator shall have a lien thereon to secure payment of such share. When any owner fails to pay his part thereof when due and interest thereon at the legal rate, then all of such owner's interest in the unit production and equipment may be foreclosed in the same manner and under the same procedures provided for the foreclosure of mortgages in Chancery Court.

A transfer or conversion of any working interest owner's interest or any portion thereof, however accomplished, shall not relieve the transferred interest of said Operator's lien on said interest for the cost and expense of unit operations, past or prospective.

(f) The designation of, or a provision for the selection of a successor to the Unit Operator. The conduct of all unit operations by the Unit Operator, and the selection of a successor to the Unit Operator, shall be governed by the terms and provisions of the unitization agreements.

(g) The time the unit operation shall become effective and the manner in which, and the circumstances under which, the unit operation shall terminate.

(h) A requirement that all oil and/or gas contained in a unit area shall be produced and sold as rapidly as possible without decreasing the ultimate recovery of such oil and/or causing damage to the reservoir.

The Board finds that the said Unit Agreement and Unit Operating Agreement include and are subject to all provisions, adjustments, obligations and rights as prescribed by Mississippi Code Annotated, Sections 53-3-101 to

53-3-119 (1972), as amended, and that the Plan of Unitization herein prescribed and the creation of the said unit conform to the Conservation Laws of the State of Mississippi.

(8)

The Board further finds that as of the date of the hearing on this matter, i.e., August 21, 1985, operations were being conducted by Crosby-Mississippi Resources, Ltd. for a well proposed to be located in the Southwest Quarter (SW/4) of Section 9, Township 1 North, Range 4 East, Amite County, Mississippi, which tract is included within the unit area of the Liberty Field Unit. The tract participation factor for this quarter section, which is identified as Tract No. 9-3 in Exhibit "A" to the Unit Agreement for the Liberty Field Unit, is .0019882 (decimal equivalent) and consists of only the surface acreage and net-acre feet portions of the tract participation formula contained in ARTICLE 5, Paragraph 5.1 of the Liberty Field Unit Agreement. The Board finds that if a well on this tract is spudded within thirty (30) days after August 21, 1985, and is drilled with due diligence to a depth sufficient to test the stratigraphic equivalent of the Liberty Field Lower Tuscaloosa Oil Pool, the well shall qualify for a productivity factor in the tract participation formula for the Liberty Field Unit. The Board finds that if such well produces 150 barrels or more of oil per day as reported on Form No. 3, the tract shall be assigned a full productivity factor in accordance with the Liberty Field Unit Agreement, and that if such well produces less than 150 barrels of oil per day as reported on Form No. 3, the productivity factor assigned to said tract shall be the quotient determined by dividing the number of barrels of oil per day as reported on Form No. 3, by 150 barrels of oil per day. The Board further finds that the net-acre feet portion of the tract participation formula for said tract shall be revised upward or downward based upon the net feet of reservoir sand found in the well proposed to be drilled on said tract and that the surface acreage portion of the formula for said tract shall be revised upward or downward using the mid-point method.

(9)

The Board is of the opinion that the Petition of Shell Western E&P Inc. for approval of the Plan of Unitization for the Liberty Field Unit, Amite County, Mississippi, and for the creation of said unit pursuant to the fieldwide unit provisions of the Conservation Laws, being Sections 53-3-101, et seq, of the Mississippi Code of 1972, as amended, should be granted.

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREED by the State Oil and Gas Board of Mississippi that the Plan of Unitization for the Liberty Field Unit, Liberty Field, Amite County, Mississippi, consisting of the hereinabove described land, is hereby approved and that the Unit Agreement and the Unit Operating Agreement attached to the Petition and made a part of this Order by reference are hereby approved for the creation of said unit.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that Petitioner, Shell Western E&P Inc., should be appointed Operator of said unit and that said unit be and is hereby created in order to effectively carry on secondary recovery, pressure maintenance, repressuring operations, cycling operations, waterflooding operations, the injection of extraneous substances, or any combination thereof.

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

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the effective date of the Liberty Field Unit and the Unit Agreement and the Plan of Unitization shall be September 1, 1985.

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

MISSISSIPPI STATE OIL AND GAS BOARD

BY:


CHAIRMAN