

**RE: PETITION OF PENN VIRGINIA OIL &  
GAS CORPORATION TO AMEND THE  
SPECIAL FIELD RULES FOR MAXIE FIELD  
IN FORREST COUNTY, MISSISSIPPI**

NOV - 2 2009

STATE OIL AND GAS BOARD  
LISA IVSHIN, SUPERVISOR

**DOCKET NO. 371-2009-53  
ORDER NO. 601-2009**

**ORDER**

**THIS MATTER** came on for hearing before the State Oil and Gas Board at its regular October 21, 2009 hearing, on the Petition Penn Virginia Oil & Gas Corporation, to amend the Special Field Rules for Maxie Field in Forrest County, Mississippi;

**WHEREAS**, the Board finds 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; that due, legal and sufficient proofs of publication are on file with the Board; and that the Board has full jurisdiction of the parties and subject matter to hear and determine same; and

**WHEREAS**, pursuant to said notice given, public hearing was held by the Board at the hearing room of the Mississippi State Oil & Gas Board, commencing on October 21, 2009, at which hearing all persons present who desired to be heard on said matter were heard and all testimony and evidence were duly considered at said meeting; and

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

1. That Petitioner is the operator of 44 vertical wells producing from the Selma Chalk Gas Pool in Maxie Field. Petitioner is also the owner of certain oil, gas and mineral leasehold interests and operating rights covering the Selma Chalk Gas Pool in Maxie Field, Forrest County, Mississippi.

2. That the Selma Chalk Gas Pool is a tight gas formation with very low permeability and limited drainage area around each well. Increased density wells vertical wells have been previously authorized by this Board with up to 16 wells authorized in each 320 acre unit. Petitioner proposes to further develop its interests in the Selma Chalk Gas Pool by employing horizontal drilling techniques to enhance the ultimate recovery of hydrocarbons from

the Selma Chalk Gas Pool. Only through horizontal drilling techniques can substantially more hydrocarbons be recovered from the Selma Chalk Gas Pool in Maxie Field.

3. That Special Field Rules for Maxie Field were last amended by Order No. 710-2000 in Docket No. 450-2000-53 filed for record on January 8, 2001.

4. That the Petitioner desires to amend the Special Field Rules for Maxie Field to authorize the formation of horizontal Selma Chalk proration units (“Horizontal Units”) limited to horizontal wells drilled in the Selma Chalk Gas Pool. Production from said units will be in addition to and will not replace the existing 320 acre units, which Petitioner proposes to maintain.

5. That the existing Special Field Rules authorize up to 16 wells in the Selma Chalk Gas Pool to be drilled within units of 320 acres, with the well bore being not less than 300 feet from exterior unit lines and 600 feet between wells. Petitioner proposes to amend the Special Field Rules to permit a maximum of 5 horizontally drilled wells per Horizontal Unit, with a minimum of 100 feet between the well bores and laterals of all horizontally drilled wells and 100 feet between said horizontal well bores and existing, vertically drilled well bores.

6. That the proposed amendments will not cause drainage that is not offset by counter drainage and will protect the co-equal and correlative rights of all parties in interest. Therefore, for geologic and engineering reasons, Horizontal Units for the Selma Chalk Gas Pool in the Maxie Field should be authorized for horizontally drilled wells only.

7. That all increased density wells authorized in Maxie Field may be force integrated pursuant to Section 53-3-7(1) Miss. Code Ann., as amended, “simple integration”, in a single docket for all increased density wells in the respective units. After integration, drilling permits may be issued administratively, without notice or hearing, provided that the proposed well complies in all respects with the Special Field Rules. The ownership in each proration unit will be the same for that unit no matter the number of increased density wells drilled. Therefore, the effort to force pool each increased density well is duplicative after the first integration of the unit and wasteful of the assets of both the operator and the Board. The proposed rule will only affect the “simple integration” of non-consenting owners. Should the operator of the unit desire to pursue the application of alternate risk charges against non-consenting owners, the operator will

be required to follow the mandates of Miss. Code Ann. § 53-3-7(2), as amended, to qualify for alternate risk charges against non-consenting owners.

8. That the proposed Amended Special Field Rules of Maxie Field, which are set forth in Exhibit "A", attached hereto, will prevent waste, will avoid the drilling of unnecessary wells, will protect the co-equal and correlative rights of the owners in the Field, will allow all of the owners in the Field the right and opportunity to recover their fair and equitable share of the recoverable hydrocarbons therein, will foster and encourage the full development of the Field, will promote the conservation of hydrocarbons from the Field by preventing waste, and will enable hydrocarbons to be produced which could not otherwise be produced, thereby increasing the ultimate recovery of hydrocarbons.

9. That Personal Notice of the filing of this Petition as required by Procedural Rule 4 is being given to all operators in Maxie Field.

**IT IS THEREFORE ORDERED AND ADJUDGED** that the Amended Special Field Rules for the Maxie Field, attached as Exhibit "A", are hereby approved;

**IT IS FURTHER ORDERED AND ADJUDGED** that Petitioner shall acquire all other permits, if any required, from any other permitting authority;

**SO ORDERED AND ADJUDGED** this the 2nd day of November 2009, and effective October 21, 2009.

MISSISSIPPI STATE OIL AND GAS BOARD

By:   
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DAVID A. SCOTT, Chairman

Submitted by:

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*ATTORNEY FOR PETITIONER,  
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**Exhibit "A"**

**SPECIAL FIELD RULES  
FOR THE MAXIE FIELD  
FORREST COUNTY, MISSISSIPPI**

**A. FIELD AREA**

The Maxie Field, as used herein, is that geographical area comprised of the following described lands, as underlain by the hereinafter defined pools and all productive extensions thereof:

Forrest County, Mississippi  
Township 1 North, Range 12 West

Section 27: All  
Section 28: All  
Section 29: All  
Section 30: All  
Section 31: All  
Section 32: All  
Section 33: All  
Section 34: All

Township 1 North, Range 13 West

Section 36: All

Township 1 South, Range 13 West

Section 1: All  
Section 2: All  
Section 3: Lots 1 - 16  
Section 11: All  
Section 12: All

Township 1 South, Range 12 West

Section 3: All  
Section 4: All  
Section 5: All  
Section 6: All  
Section 7: All  
Section 8: All  
Section 9: All  
Section 10: All  
Section 17: All  
Section 18: All

Including all productive extensions thereof, and which area is underlain by the Eutaw Gas Producing Pool, the Upper Tuscaloosa Gas Producing Pool, the Lower Tuscaloosa LT-1, LT-2 and LT-3 Gas Producing Pools, the "4150 foot" Wilcox Gas Producing Pool, the "4400 foot" Wilcox gas Producing Pool, the "4700 foot" Wilcox Gas Producing Pool, and the Selma Chalk Gas Pool.

**B. POOL DEFINITIONS**

1. The Eutaw Gas Pool as used herein shall be construed to mean those strata of Eutaw Formation productive of gas in the interval 7,015 to 7,340 feet in the Ohio Company Oil Company - Coleman & Powe A/C No. 1 Well located 1,660 feet

South and 990 feet east of the Northwest Corner of Section 5, Township 1 South, Range 12 West, Forrest County, Mississippi are correlatives of these strata and other wells to said interval.

2. The Upper Tuscaloosa Gas Pool is construed to mean those strata productive of gas and condensate in the interval of 7,358 feet to 7,765 in the Ohio Company Oil Company - Coleman & Powe A/C No. 1 Well, located 1,660 feet South and 990 feet East of the Northwest Corner of Section 5, Township 1 South, Range 12 West, Forrest County, Mississippi and all correlatives of this pool and other wells to said interval.
3. The Lower Tuscaloosa LT-1 Gas Pool is construed to mean that Sand interval between the depths of 7,917 feet and 7,959 feet as indicated in the Ohio 011 Company - Coleman & Powe A/C No. 1 Well and all correlatives thereof.
4. The Lower Tuscaloosa LT-2 Gas Pool is construed to mean that Sand interval between the depths of 8,023 feet and 8,035 feet as indicated in the Ohio 011 Company - Coleman & Powe A/C No. 1 Well and all correlatives thereof.
5. The Lower Tuscaloosa LT-3 Gas Pool is construed to mean that Sand interval between the depths of 8,079 feet and 8,155 feet as indicated in the Ohio Oil Company - Coleman & Powe A/C No. 1 Well and all correlatives thereof.
6. The "4150 foot" Wilcox Gas Pool as used herein shall be construed to mean those strata in the Wilcox Formation productive of gas and condensate in the interval of 4,152 feet to 4,160 feet in Marathon Oil Company's Unit SW 41, Well No. 1-E, located 2,854 feet North and 1,110 feet East of the Southwest Corner of Section 12, Township 1 South, Range 13 West, Forrest County, Mississippi and points correlative thereto in other wells to said interval.
7. The "4400 foot" Wilcox Gas Pool as used herein shall be construed to mean those strata in the Wilcox formation productive of gas and condensate in the interval of 4405 feet to 4425 feet in Marathon Oil Company's Unit SW 41, Well No. 3-W located 2,831 feet North and 1,045 feet East of the Southwest Corner of Section 12, Township 1 South, Range 12 West, Forrest County, Mississippi and points correlative thereto in other wells to said interval.
8. The "4700 foot" Wilcox Gas Pool as used herein shall be construed to mean those strata in the Wilcox Formation productive of gas and condensate in the interval of 4650 feet to 4720 feet in Marathon Oil Company's Unit SW 41, Well No. 2-W located 2,900 feet North and 990 feet East of the Southwest Corner of Section 12, Township 1 South, Range 12 West, Forrest County, Mississippi and points correlative thereto in other wells to said interval.
9. The Selma Chalk Gas Pool as used herein shall be construed to mean those strata in the Formation productive of gas and condensate in the interval of 5,928 feet to 7,000 feet in Laura Walters 8-11 No. 1 Well located 1,422.5 feet North and 1,320 feet East of the Southwest corner of Section 8, Township 1 South, Range 12 West, Forrest County, Mississippi and points correlative thereto in other wells to said interval.

#### C. SPACING

1. With respect to the Eutaw Gas Producing Pool, the Upper Tuscaloosa Gas Producing Pool and the LT-1, LT-2 and LT3 Lower Tuscaloosa Gas Producing Pools, each, respectively, characteristics of said pools of such in evidence shows that the gas well located in conformity of Rule 8 and Statewide Order No. 201-51 of land consisting of approximately 320 contiguous surface acres will adequately drain, efficiently produce, and economically recover, the production thereupon without avoidable waste.

2. Notwithstanding any other rule or provision contained in these Special Field Rules all units in the Field which have been permitted or on which there are now producing a producible well are hereby approved and confirmed.
3. The Board expressly reserves the right, after notice and hearing, to alter, amend or appeal any or all of the foregoing rules and regulations contained herein, or to grant exceptions to all or any of them.
4. The following spacing rules shall apply solely with respect to the Selma Chalk Gas Pool:
  - (1) Each 320 acre gas unit may contain up to 16 vertically drilled producing wells from the Selma Chalk. Each 320 acre unit shall developed subject to the following:
    - (a) Each drilling unit shall consist of (i) 320 contiguous surface acres completely encompassed by the perimeter of a rectangle 3735 feet by 5380 feet, provided, however, no unit shall be permitted which will create island acreage; or (ii) a governmental half section containing not less than 300 acres or more than 402 acres, or (c) eight (8) contiguous governmental quarter-quarter sections whose total acreage is not less than 300 or more than 402 acres and is encompassed by the perimeter of a rectangle 3735 feet by 5380 feet.
    - (b) Each well shall be located at least 600 feet from every other drilling or producible well in the same pool.
    - (c) Each well within such unit shall be located at least 300 feet from each exterior boundary of the drilling unit, except where an exception has been granted by the Board after Notice and hearing.
    - (d) Each increased density well shall be granted a full allowable for production.
  - (2) There may also be established horizontal Selma Chalk proration units ("Horizontal Units") for horizontal well(s) only, each of which may contain up to 5 horizontally drilled wells producing from the Selma Chalk Gas Pool. Each such unit shall developed subject to the following:
    - (a) Each Horizontal Unit shall consist of not less than 279 and not more than 325 contiguous surface acres completely encompassed by the perimeter of a rectangle 4,060 feet by 5380 feet, provided however, no unit shall be permitted which will create island acreage.
    - (b) The interval perforated for completion shall be located at least 100 feet from each exterior boundary of the Horizontal Unit at all points of the lateral. The Board may grant an exception after Notice and hearing.
    - (c) The lateral of each horizontal well shall be at least 100 feet from the laterals of all other horizontal wells and 100 feet from the well bores of all vertically drilled wells authorized in (1) above.
    - (d) For each horizontal well completed for commercial production, a complete angular deviation and directional survey of the finished hole shall be made at the expense of the operator and a certified copy of such survey shall be filed with the Board within thirty (30) days.
    - (e) Each increased density horizontal well shall be granted a full allowable for production and shall be produced simultaneously with wells

producing on 320 acre units authorized in (1) above.

(f) The surface location of a horizontal well may be located either within or outside the unit for the Well; provided, that the horizontal drain hole section of the well complies with all other paragraphs of the Special Field Rules.

(g) As to horizontal gas wells, all distances shall be measured from the completion interval.

D. PRODUCTION TUBING

As to the Selma Chalk Gas Pool, each flowing gas well may be produced without production tubing as an exception to Statewide Rule 18 and any other applicable rules, provided that the operator thereof takes proper measures to protect against any undue hazard both underground and at the surface.

E. SELMA CHALK LOGGING REQUIREMENTS

As to any well drilled solely to test the Selma Chalk Gas Pool, the Operator of each such well may elect, without obtaining any further approval, to forego running any and all electrical logs. In the event perforating logs are run, such logs shall be provided to the Board.

F. MEASUREMENT - SELMA CHALK GAS POOL

As to any well drilled solely to test the Selma Chalk Gas Pool, all wells on one unit may be centrally measured on an unit, not individual well basis, but all production shall be allocated back to each individual well and all reports shall allocate production on an individual well basis.

G. ADMINISTRATIVE PERMITS – SELMA CHALK GAS POOL

A well which is to be drilled as an increased density well under Rule C.4(2) of these Special Field Rules on an Horizontal Unit may have the drilling permit issued administratively, without notice or hearing, provided that the proposed well complies in all respects with these Special Field Rules and provided that the established unit has previously been force integrated pursuant to Section 53-3-7(1) Miss. Code Ann., as amended, “simple integration”.

H. APPLICABILITY OF STATEWIDE RULES

1. 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.
2. These rules and regulations shall become effective as of the effective date of the order adopting these rules.

**End of Special Field Rules**