BEFORE THE STATE OIL AND GAS BOARD OF MISSISSIPPI MAY 2 5 2011

RE: PETITION OF TENSAS DELTA EXPLORATION COMPANY TO AMEND THE SPECIAL FIELD RULES FOR

STATE OIL AND GAS BOARD LISA IVSHIN, SUPERVISOR

BLACKBURN FIELD IN JONES COUNTY, MISSISSIPPI

DOCKET NO. 101-2011-D ORDER NO. 186-2011

ORDER

This day this matter came on for hearing before the State Oil and Gas Board at its regular May 18, 2011, hearing on the Petition of Tensas Delta Exploration Company to amend the

Special Field Rules for Blackburn Field, Jones 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, a public hearing was held by said Board in the hearing of the State Oil &

Gas Board of Mississippi, 500 Greymont Avenue, Suite E, Jackson, Mississippi 39202, on May

18, 2011 at which time 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 evidence and

recommendations made in said hearing and finds as follows:

1. That Petitioner proposes to redevelop Blackburn Field by drilling multiple wells

to the Hosston formation. To facilitate the redevelopment of Blackburn Field by Petitioner the

Special Field Rules of Blackburn Field should be amended to extend the field limits, to define

the producing interval in the Hosston formation, to provide for 160 acre spacing for the Hosston

Formation Producing Interval, to authorize increased density wells and to obtain related relief.

2. That the field limits of Blackburn Field should be extended to include the SE1/4

of SE1/4 of Section 10; the S1/2 of S1/2 of Section 11; all of Section 14; the East 1/2 of Section

15; the N1/2 of Section 22; and the N1/2 of N1/2 of Section 23, all in Township 7 North, Range

13 West, Jones County, Mississippi, as outlined in the Field Limits paragraph in Exhibit "A"

attached hereto.

- 3. That the Hosston Formation Producing Interval in Blackburn Field should be defined as those strata of the Hosston formation productive of oil and casinghead gas in the interval commencing at 14,300 feet measured depth in the Paramount Cochran 14-5 No. 1 Well as indicated on the Dual Induction/Sonic Log of said well as recorded by Schlumberger on May 29, 1990, and continuing to the base of the Hosston formation and all sands correlative of this strata productive of oil and casinghead gas, said well being located 1,908 feet from North line and 788 feet from West line of Section 14, Township 7 North, Range 13 West, Jones County, Mississippi.
- 4. That 160 acre spacing should be established for oil production from the Hosston Formation Producing Interval which should be developed subject to the following:
- (i) each Well shall be located on a drilling unit consisting of four (4) contiguous governmental quarter-quarter sections containing not less than one hundred forty-four (144) acres or more than one hundred seventy six (176) acres completely encompassed by the perimeter of a rectangle 2,750 feet by 4,050 feet; or
- (ii) each Well shall be located on a drilling unit consisting of 160 contiguous surface acres completely encompassed by the perimeter of a rectangle 2,750 feet by 4,050 feet, provided however, in no event shall a unit be permitted which will create island acreage.
- 5. That a second well should be authorized for each unit for the Hosston Formation Producing Interval if needed in order to effectively and efficiently drain the 160 acre units. Without this authority, producible reserves for the Hosston Formation Producing Interval will be left in the ground and not recovered thereby reducing the ultimate recovery of hydrocarbons.
- 6. That the Special Field Rules for Blackburn Field should authorize two (2) wells in the Hosston Formation Producing Interval to be drilled within units of 160 acres, with the producing perforations being no less than 250 feet from exterior unit lines and the producing perforations being no less than 500 feet from producing perforations of every other drilling or producible well in the Hosston Formation Producing Interval. The Special Field Rules should impose no restriction on surface locations provided that producing perforations comply with the Special Field Rules and the surface locations are situated within the unit.
- 7. That all increased density wells authorized in Blackburn Field may have drilling permits issued administratively, without notice or hearing, provided that the proposed well complies in all respects with the Special Field Rules and the 160 acre unit has been previously

force integrated pursuant to Section 53-3-7 Miss. Code Ann., as amended. 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 new 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 may not rely on the Special Field Rules but will be required to follow the requirements of Miss. Code Ann. §53-3-7(2), as amended, and the established Statewide Rules to qualify for alternate risk charges against non-consenting owners.

- 8. That the Amended Special Field Rules of Blackburn Field, which are set forth in Exhibit "A", attached hereto, will prevent waste, will avoid the drilling of unnecessary wells, will not cause drainage that is not offset by counter drainage, 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 Eland Energy Inc. currently operates the Paramount Cochran 14-5 No. 1 Well in Blackburn Field which is producing from the Hosston formation at the time of this Petition and should be exempt from the amendments to the Special Field Rules of Blackburn Field.
- 10. That Personal notice of the filing of this Petition as required by Procedural Rule 4 has been given to all operators in Blackburn Field.

IT IS, THEREFORE, ORDERED AND ADJUDGED that the Special Field Rules for Blackburn Field, Jones County, Mississippi, are amended and are attached hereto as Exhibit "A"; and

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

SO ORDERED AND ADJUDGED this the 25th day of work.

effective May 18, 2011.

MISSISSIPPI STATE OIL AND GAS BOARD

By:_

JOHN R. PAKKER, Chairman

OF COUNSEL:

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Exhibit A

AMENDED SPECIAL FIELD RULES FOR BLACKBURN FIELD JONES COUNTY, MISSISSIPPI

FIELD LIMITS:

The Blackburn Field is defined as that area consisting of the following described lands, to wit:

Southeast quarter of Southeast quarter of Section 10; South half of South half of Section 11; all of Section 14; East half of Section 15; North half of Section 22, and the North half of the North half of Section 23, all being located in Township 7 North, Range 13 West, Jones County, Mississippi

as underlain by the oil pools herein defined and all correlative or productive extensions thereof.

DEFINITIONS:

(a) Upper Paluxy Oil Pool

The Upper Paluxy Oil Pool in the Blackburn Field shall be construed to mean those strata of the Paluxy Formation productive of oil in the interval between 11,500 feet to 12,490 feet in the Triad-McAlester Fuel Company et al Trotter-Collins Unit No. 1 Well, located 330 feet North and 510 feet East of the Southwest corner of Southwest Quarter of Northeast Quarter, Section 14, Township 7 North, Range 13 West, First District, Jones County, Mississippi, as indicated on the electric log of said well and all sands correlative of these strata productive of oil.

(b) <u>Lower Paluxy Oil Pool</u>

The Lower Paluxy Oil Pool in the Blackburn Field shall be construed to mean those strata of the Paluxy Formation productive of oil in the interval between 12,490 feet to 12,903 feet in the Triad-McAlester Fuel Company et al Trotter-Collins Unit No. 1 Well, located 330 feet North and 510 feet East of the Southwest corner of Southwest Quarter of Northeast Quarter, Section 14, Township 7 North, Range 13 West, First District, Jones County, Mississippi, as indicated on the electric log of said well and all sands correlative of these strata productive of oil.

(c) Mooringsport Oil Pool

The Mooringsport Oil Pool in the Blackburn Field shall be construed to mean those strata of the Mooringsport Formation productive of oil in the interval between 12,903 feet to 13,302 feet in the Triad-McAlester Fuel Company et al Trotter-Collins Unit No. 1 Well, located 330 feet North and 510 feet East of the Southwest corner of Southwest Quarter of Northeast Quarter, Section 14, Township 7 North, Range 13 West, First District, Jones County, Mississippi, as indicated on the electric log of said well and all sands correlative of these strata productive of oil.

(d) Rodessa Oil Pool

The Rodessa Oil Pool in the Blackburn Field shall be construed to mean those strata of the Rodessa Formation productive of oil in the interval between 13,546 feet to 13,668 feet in the Triad-McAlester Fuel Company et al Trotter-Collins Unit No. 1 Well, located 330 feet North and 510 feet East of the Southwest corner of Southwest Quarter of Northeast Quarter, Section 14, Township 7 North, Range 13 West, First District, Jones

County, Mississippi, as indicated on the electric log of said well and all sands correlative of these strata productive of oil.

(e) <u>Hosston Formation Producing Interval</u>

The Hosston Formation Producing Interval in Blackburn Field is defined as those strata of the Hosston formation productive of oil and casinghead gas in the interval commencing at 14,300 feet measured depth in the Paramount Cochran 14-5 No. 1 Well as indicated on the Dual Induction/Sonic Log of said well as recorded by Schlumberger on May 29, 1990, and continuing to the base of the Hosston formation and all sands correlative of this strata productive of oil and casinghead gas, said well being located 1,908 feet from North line and 788 feet from West line of Section 14, Township 7 North, Range 13 West, Jones County, Mississippi.

RULE I – Spacing of Oil Wells:

- (a) The characteristics of the Upper Paluxy Oil Pool, the Lower Paluxy Oil Pool, the Mooringsport Oil Pool and the Rodessa Oil Pool in Blackburn Field are such that a well located as hereinafter prescribed and drilled upon a drilling unit containing approximately 80 contiguous surface acres conforming to the requirements of the rules herein contained will efficiently drain and produce the recoverable oil from such unit in said pool without avoidable waste. Every well drilled as an oil well in these four oil pools:
 - (i) shall be located on a drilling unit consisting of a governmental half-quarter section, containing not less than 72 acres or on a drilling unit consisting of approximately 80 contiguous surface acres, upon which no other drilling or producible well is located;
 - (ii) shall be located at least 880 feet from every other drilling or producible well located in the Blackburn Field in the same defined oil pool;
 - (iii) shall be located at least 330 feet from every exterior boundary of the drilling unit; and
 - (iv) the distance between any two points farthest apart on the drilling unit upon which the well is located shall not exceed 3150 feet.
- (b) Each oil unit for the Hosston Formation Producing Interval may have two (2) producing wells from the Hosston Formation Producing Interval. Each oil unit for the Hosston Formation Producing Interval shall be developed subject to the following:
 - (i.i) each well shall be located on a drilling unit consisting of four (4) contiguous governmental quarter-quarter sections containing not less than one hundred forty-four (144) acres or more than one hundred seventy six (176) acres completely encompassed by the perimeter of a rectangle 2,750 feet by 4,050 feet; or
 - (i.ii) each well shall be located on a drilling unit consisting of 160 contiguous surface acres completely encompassed by the perimeter of a rectangle 2,750 feet by 4,050 feet, provided however, in no event shall a unit be permitted which will create island acreage;
 - (ii) the producing perforations of each well shall be located at least 500 feet from the producing perforations of every other drilling or producible well in the Hosston Formation Producing Interval;

- (iii) the producing perforations of each well shall be located at least 250 feet from each exterior boundary of the drilling unit;
- (iv) this Rule I (b) shall not apply to the surface location of any well which is intentionally deviated such that the producing perforations of which are at least 500 feet from the producing perforations of every other drilling or producible well in the Hosston Formation Producing Interval. As to such wells intentionally deviated, there shall be no restriction on the surface location within the unit; provided, however, the interval perforated for completion shall be located at least 500 feet from the producing perforations of every other drilling or producible well in the Hosston Formation Producing Interval and the intervals perforated for completion shall also be located at least 250 feet from each exterior boundary of the drilling unit.
- (v) pursuant to this Rule I (b), when a well is directionally deviated from its normal course for any reason, 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.
- (vi) each increased density well shall be granted a full allowable for production.
- (vii) the Paramount Cochran 14-5 No. 1 Well is an existing well in the Hosston Formation Producing Interval at the time these Amended Special Field Rules were adopted; and to the extent said well is an exception(s) to the foregoing rules, said exception(s) is adopted and confirmed.

RULE II – Measurement of Production:

The operator of each producing lease shall maintain proper separators, treaters, and stock tanks and/or metering devices and such connections thereto as they are necessary to measure the total production from such lease. Where metering devices are used, the production may be commingled in a common storage system. And if, upon a sale therefrom a variance exists between the measurement from the common storage system and the total measurement of the production of all the leases commingled in such common storage system, then such variance shall be allocated back to each of the leases producing into such common storage system proportionately to the production measured from each lease.

RULE III – Use of Meters:

The use of meters for testing and for measurement of lease production shall be subject to and in accordance with the following provisions:

- (a) Only a positive displacement or dump type metering device or vessel which registers the volume of oil passed through it in barrels or multiples thereof may be used.
- (b) All meters shall be downstream of the necessary separating or treating vessels. All meters shall be designed and installed in conformance with recognized metering practices and acceptable to the Oil and Gas Board.
- (c) No meter used for oil production measurement shall be directly or indirectly by-passed in such manner as to permit oil to pass into common storage without first being measured by said meter including wells on test.
- (d) A calibration vessel shall be provided so that each meter measuring actual lease production and the test meter may be tested for accuracy at any time, but no tests shall be required at intervals of less than ninety (90) days.

- (e) The meter used to measure the oil from the system to the purchaser will be compensated for temperature, will be so equipped as to provide a cumulative total of all oil transferred by the system, and will have a standard of accuracy equivalent to the accuracy obtained in measurements made in a calibrated stock tank.
- (e) The corrected meter reading at 7:00 a.m. on the first day of each month for each meter shall be reported on the bottom of the Form 9 reporting the monthly production from the wells being measured by such meter.

RULE IV – Force Integration:

A well which is to be drilled as an increased density well under Rule I (b) of these Amended Special Field Rules on an established unit, may have the drilling permit issued administratively, without notice or hearing, provided that the proposed well complies in all respects with these Amended 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".

RULE V – Applicability of Statewide Rules:

All rules and regulations contained in Statewide Order No. 201-51 and amendments thereto, not in conflict with the foregoing, shall apply to said field until such time as these Amended Special Field Rules may be altered or amended. The Board expressly reserves the right, after notice and hearing, to alter or amend or repeal any and all of the foregoing regulations.

End of Special Field Rules