

BEFORE THE STATE OIL AND GAS BOARD OF MISSISSIPPI

RE: PETITION OF DENBURY MANAGEMENT, INC.
TO AMEND THE SPECIAL FIELD RULES FOR
THE PUCKETT FIELD, SMITH AND RANKIN
COUNTIES, MISSISSIPPI AND TO ESTABLISH
AN EXTENDED TEST PERIOD FOR THE FREIDA
J. LAUGHLIN, ET AL, NO. 1

FILED IN PUBLIC RECORD

NOV 27 1995

STATE OIL AND GAS BOARD

DOCKET NO. 251-95-143

ORDER NO. 386-95

ORDER

THIS DAY, this cause came to be heard on the Petition of Denbury Management, Inc. ("Petitioner") requesting that the Special Field Rules be amended by this Board for the Puckett Field, Smith and Rankin Counties, to define three separate and distinct Upper Tuscaloosa Oil Pools, and further relief, as set forth in said Petition, such hearing being called for such purpose; and

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 required by Miss. Code Ann. §53-3-7(2) (Supp. 1994) and the rules and regulations of the Board; that due, legal, and sufficient proofs of publication and service are on file with the Board; and that the Board has full jurisdiction of the subject matter to hear and determine same; and

WHEREAS, pursuant to said Notice, a public hearing was held by said Board in the Hearing Room, Suite E, 500 Greymont Avenue, Jackson, Mississippi, commencing on November 15, 1995, at 9:30 o'clock a.m. at which hearing all persons present who desired to be heard on said matter were heard and all testimony and the evidence were duly considered by those present 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.

Petitioner is the current operator of all producing wells within the Field. By Order No. 296-84 in Docket No. 220-84-143 the Special Field Rules for the Puckett Field were last amended. The date of that Order is July 18, 1984.

2.

Petitioner plans to re-complete the Freida J. Laughlin, et al, No. 1 ("the Well") into a new undefined oil pool in the Upper Tuscaloosa Formation. This new reservoir is labeled the 7650 Foot "A" Upper Tuscaloosa Oil Pool. Additionally, Petitioner would show that another separate oil pool, the 7650 Foot "C" Upper Tuscaloosa Oil Pool, needs to be defined. Petitioner would show that the log interpretations and production characteristics conclusively establish that three separate and distinct oil reservoirs exist within what is now known as the 7650 Foot Upper Tuscaloosa Oil Pool. This former oil pool will hereinafter be designated as the 7650 Foot "B" Upper Tuscaloosa Oil Pool.

3.

Petitioner proved that it was necessary to amend the Special Field Rules to define the separate and distinct Pools to promote conservation, protect the co-equal and correlative rights of all owners in interest, avoid the drilling of unnecessary wells and permit gas and oil to be produced from said pools which would not otherwise be recoverable. Petitioner also requested an extended test period of 60 days in order to establish a realistic GOR for the Well in the 7650 Foot "A" Upper Tuscaloosa Oil Pool. Prior testing in that zone indicated that the GOR was so high as to possibly be a gas, not oil, pool. However, based on Petitioner's prior experience in this field, after significant test periods, similar high GOR wells dropped to oil well levels and Petitioner expects the same in this case.

4.

The establishment of the Amended Special Field Rules as set forth herein will promote conservation, protect the co-equal and correlative rights of all owners in interest, avoid the drilling of unnecessary wells and permit oil and gas to be produced from said pools which would not otherwise be recoverable.

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREED, by the State Oil and Gas Board of Mississippi that Petitioner is granted an extended test period of sixty (60) days to establish the GOR for the Freida J. Laughlin, et al, No. 1 Well in the 7650 Foot "A" Upper

Tuscaloosa Oil Pool and that the following Special Field Rules, as amended, be and the same are hereby adopted for the Puckett Field located in Smith and Rankin Counties, Mississippi, to take effect on and after November 15, 1995, to-wit:

I.

The six (6) pools defined by Order No. 152-72 dated June 21, 1972, as amended to date are as follows:

A. The 7,950-foot Lower Tuscaloosa Sand Pool - Defined as the Lower Tuscaloosa Sand occurring in the Larco Drilling Company - R. H. ALLEN #1 WELL located in the Northeast Quarter of the Southeast Quarter (NE/4 SE/4) of Section 13, township 3 North, Range 5 East, Rankin County, Mississippi, on its electric log in the interval of 7,948 feet to 7,997 feet, and all sands in other electric logs in the field correlating thereto.

B. The 8,050-foot Lower Tuscaloosa Sand Pool - Defined as the Lower Tuscaloosa Sand occurring between the interval of 8,046 feet and 8,072 feet on the electric log of the Chevron Oil Company - FREIDA J. LAUGHLIN #1 WELL located on the Southeast Quarter of the Southeast Quarter (SE/4 SE/4) of Section 13, Township 3 North, Range 5 East. (Refer to Oil and Gas Board Order #308-61, Puckett Field).

C. The 8,150-foot Lower Tuscaloosa Sand Pool - Defined as the Lower Tuscaloosa Sand occurring in the interval between 8,130 feet and 8,203 feet on the electric log of the Transcontinental Oil Corporation - O. H. BOONE #1-A WELL located on the Northeast Quarter of the Southwest Quarter (NE/4 SW/4) of Section 13, Township 3 North, Range 5 East, and all sands in other electric logs in the field correlating thereto.

D. The 8,500-foot Washita-Fredericksburg Sand Pool - Defined as the Washita-Fredericksburg Sand occurring in the interval between 8,500 feet and 8,533 feet on the electric log of the Larco Drilling Company - LAUGHLIN - McINTYRE #1 WELL located on the Southwest Quarter of the Southwest Quarter (SW/4 SW/4) of Section 18, Township 3 North, Range 6 East, and all sands in other electric logs in the field correlating thereto.

E. The 9,050-foot Washita-Fredericksburg Oil Pool is defined as that stratum occurring between 9,042 and 9,081 feet on the

electric log for the Larco Drilling - LAUGHLIN WELL NO. 2-A WELL located on the Southeast Quarter of the Southwest Quarter of Section 18, Township 3 North, Range 6 East and found between 9,070 and 9,160 feet on the electric log for the Transcontinental Oil - BURNHAM 14-9 WELL NO. 2 located on the Northeast Quarter of the Southeast Quarter of Section 14, Township 3 North, Range 5 East, and all other strata correlating thereto.

F. The 10,500-foot Morringsport Sand - defined as that hydrocarbon-bearing sand occurring in the measured depth interval between 10,503 feet and 10,549 feet on the Schlumberger dual induction electric log of the Chevron Oil Company - FREIDA J. LAUGHLIN UNIT NO. 1 located in Section 13, Township 3 North, Range 5 East, Rankin County, Mississippi, and all sands in other electric logs in the field correlating thereto.

II.

The two oil pools defined by Order No. 147-74, dated July 17, 1974, and Order No. 179-74, dated August 21, 1974, are as follows:

A. The 9,200-foot Washita-Fredericksburg Oil Pool is found between 9,184 and 9,204 feet on the electric log for the Larco Drilling Company - PUCKETT OIL UNIT NO. 1

B. The 8,610-foot Washita-Fredericksburg Oil Pool which is found between 8,608 feet and 8,618 feet on the electric log for the Larco Drilling Company - PUCKETT OIL UNIT NO. 2.

III.

The three oil pools defined by Order No. 14-75 dated January 15, 1975, as amended herein, are as follows:

A. The 9,300-foot Washita-Fredericksburg Oil Pool found between 9,314 feet and 9,328 feet on the electric log of the Larco Drilling Company - PUCKETT OIL UNIT NO. 2 located on the East Half of the Southeast Quarter (E/2 SE/4) of Section 13, Township 3 North, Range 5 East, Rankin County, Mississippi.

B. The 8,430-foot Washita-Fredericksburg Oil Pool found between 8,430 feet and 8,438 feet on the electric log for the Larco Drilling Company - LAUGHLIN-McINTYRE #1 which is located in the Southwest Quarter of the Southwest Quarter (SW/4 SW/4) of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi.

C. The 7,650-foot "A" Upper Tuscaloosa Oil Pool found between the depths of 7,660 feet to 7,682 feet found on the electric log in the Denbury Management - Freida J. Laughlin, et al, No. 1 Well located in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 13, Township 3 North, Range 5 East, Rankin County, Mississippi.

D. The 7,650-foot "B" Upper Tuscaloosa Oil Pool found between 7,669 feet and 7,688 feet on the electric log of the Denbury Management, Inc. - Puckett Oil Unit #2 located in the Southeast Quarter of the Southwest Quarter (SE/4 SW/4) of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi.

E. The 7,650-foot "C" Upper Tuscaloosa Oil Pool found between 7,685 feet and 7,710 feet on the electric log of the Denbury Management, Inc. - Freida J. Laughlin, et al, No. 1 Well located in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 13, Township 3 North, Range 5 East, Rankin County, Mississippi.

IV.

The three (3) gas pools also defined by Order No. 14-75 dated January 15, 1975, are as follows:

A. The 9,400-foot Up-Thrown Paluxy Gas Pool found between 9,390 feet and 9,426 feet on the electric log for the ALLEN #1-A WELL located on the Northwest Quarter of the Southwest Quarter (NW/4 SW/4) of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi.

B. The 9,350-foot Up-Thrown Paluxy Gas Pool found between 9,346 feet and 9,362 feet on the electric log of the same well.

C. The 9,300-foot Up-Thrown Paluxy Gas Pool found between 9,308 feet and 9,332 feet on the electric log for the same well.

V.

The oil pool first defined by Order No. 7-78 is:

A. The 8,220-foot Washita-Fredericksburg Oil Pool is defined as that stratum appearing on the electric log for the well known as Larco Drilling Co. - LAUGHLIN - MCINTYRE NO. 1-A WELL located on the Southwest Quarter of the Southwest Quarter (SW/4 SW/4) of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi, between 8,222 feet and 8,287 feet on said electric log, and all strata that may be correlative thereto.

VI.

The gas pool first defined by Order No. 392-78 is:

A. The 9,550-foot Paluxy Gas Pool is defined as the stratum found in the Transcontinental Oil Corp. - BURNHAM NO. 1-14-9 WELL located on Section 14, Township 3 North, Range 5 East, between 9,561 feet and 9,597 feet on the electric log for said well.

VII.

The gas pools defined by Order No. 52-79 are:

A. The 9,270-foot Washita-Fredericksburg Gas Pool is defined as the stratum found in the Transcontinental Oil Corp. - ALLEN NO. 1-14-10 WELL (located in the Northwest Quarter of the Southeast quarter of Section 14) between 9,294 feet and 9,346 feet on the electric log for said well.

B. The 10,150-foot Paluxy Gas Pool is defined as that stratum found in the Transcontinental Oil Corp. - BOONE NO. 2-13-12 WELL between 10,148 feet and 10,176 feet on the electric log for said well and all strata correlative thereto.

VIII.

The two oil pools and two gas pools that were defined by Order No. 116-79, dated May 16, 1979, are:

A. The 7,730-foot Upper Tuscaloosa Oil Pool shall be defined as that stratum found between 7,790 feet and 7,805 feet on the electric log of the well known as the Transcontinental Oil - BURNHAM NO. 2-14-9.

B. The 8,000-foot Washita-Fredericksburg Oil Pool shall be defined as that stratum appearing between 8,860 feet and 8,970 feet on the electric log of the well known as the Transcontinental Oil - BOONE NO. 2-13-12.

C. The 9,950-foot Paluxy Gas Pool shall be defined as that stratum found between 9,950 feet and 10,086 feet on the electric log of the well known as the Transcontinental Oil - BURNHAM NO. 2-14-9 as above described.

D. The 10,100-foot Paluxy Gas Pool shall be defined as that stratum found between 10,094 feet and 10,140 feet on the electric log of the well known as Transcontinental Oil - BOONE NO. 2-13-12 WELL as above described.

IX.

The seven (7) gas pools that were defined by Order No. 318-79 dated October 17, 1979, are:

A. The 9,430-foot Washita Fredericksburg Gas Pool shall be defined as that stratum found between 9,433 feet and 9,455 feet on the electric log for the well known as the Transcontinental Oil - BURNHAM 14-9 No. 2 (GAS WELL NO. 4).

B. The 9,500-foot Paluxy Gas Pool shall be defined as that stratum found between 9,503 feet and 9,560 feet on the electric log for the well known as the Transcontinental Oil - BURNHAM 14-9 NO. 2 (GAS WELL NO. 4).

C. The 9,700-foot Paluxy Gas Pool shall be defined as that stratum found between 9,710 feet and 9,735 feet on the electric log for the well known as the Transcontinental Oil - BURNHAM 14-9 NO. 2 (GAS WELL NO. 4)

D. The 9,750-foot Paluxy Gas Pool shall be defined as that stratum found between 9,745 feet and 9,790 feet on the electric log for the well known as the Transcontinental Oil - BOONE 13-12 NO. 2 (GAS WELL NO. 3)

E. The 9,800-foot Paluxy Gas Pool - Deleted and the following substituted:

The 9,800-foot Paluxy Oil Pool shall be defined as that stratum found between 9,784 and 9,805 feet on the electric log for the well known as the Transcontinental Oil - BURNHAM 14-9 WELL NO. 2 (GAS WELL NO. 4)

F. The 9,830-foot Paluxy Gas Pool shall be defined as that stratum found between 9,828 feet and 9,895 feet on the electric log for the well known as the Transcontinental Oil - BOONE 13-12 NO. 2 (GAS WELL NO. 3)

G. The 10,310-foot Paluxy Gas Pool shall be defined as that stratum found between 10,305 feet and 10,340 feet on the electric log for the well known as the Transcontinental Oil - BOONE 13-12 NO. 2 (GAS WELL NO. 3).

X.

The seven (7) gas pools above defined and the (5) that have heretofore been defined as they appear within the four (4) gas producing wells in the PUCKETT GAS UNIT NO. 5 will be as follows:

<u>POOL</u>	<u>(BURNHAM NO. 1) GAS WELL NO. 1</u>	<u>(ALLEN NO. 1) GAS WELL NO. 2</u>	<u>(BOONE NO. 2) GAS WELL NO. 3</u>	<u>(BURNHAM NO. 2) GAS WELL NO. 4</u>
9,270' Washita Fredericksburg	9,268-9,298	9,294-9,346*	9,290-9,323**	9,278-9,310
9,430' Washita Fredericksburg	9,430-9,448	9,480-9,488	9,450-9,475	9,433-9,455*
9,500' Paluxy	9,490-9,550	9,528-9,572	9,520-9,565	9,503-9,560*
9,550' Paluxy	9,561-9,597*	9,614-9,628**	9,594-9,636	9,576-9,610
9,700' Paluxy	9,700-9,725	Not Present	Not Present	9,710-9,735*
9,750' Paluxy	9,737-9,757	9,768-9,790	9,745-9,790*	9,748-9,768
9,800' Paluxy	Deleted -- Changed to Oil Pool - 1982			
9 850' Paluxy	NDE	9,843-9,906	9,828-9,895*	9,814-9,885
50' Paluxy	NDE	9,982-10,110	9,960-10,080	9,950-10,086*
10,100' Paluxy	NDE	10,137-10,172	10,094-10,140*	10,096-10,136
10,150' Paluxy	NDE	10,190-10,204**	10,148-10,176*	10,170-10,182
10,310' Paluxy	NDE	10,332-10,380	10,305-10,340*	F/O

* Indicates the log used for the definition of the pool.

** Indicates probably not productive

The two (2) Oil Pools defined by Order No. 383-79 dated December 19, 1979, are as follows:

A. The 7,900-foot Lower Tuscaloosa Oil Pool shall be defined as that stratum found between 7,898 feet and 7,908 feet on the electric log of that well known as the Larco Drilling Company - LAUGHLIN NO. 2, located on the Southeast Quarter of the Southwest Quarter (SE/4 SW/4) of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi.

B. The 8,950-foot Washita-Fredericksburg Oil Pool shall be defined as that stratum found between 9,002 feet and 9,080 feet on the electric log of that well known as the Transcontinental Oil - ALLEN 14-10 NO. 1, located on the Northwest Quarter of the Southeast Quarter (NW/4 SE/4) of Section 14, Township 3 North, Range 5 East, Rankin County, Mississippi.

XI.

The 8630 Foot Washita-Fredericksburg Gas Pool is hereby defined as that stratum found between 8630 feet and 8636 feet on the electric

log of that well known as the Denbury Management, Inc. - Freida J. Laughlin, et al, No. 1 Well, located in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 13, Township 3 North, Range 5 East, Rankin County, Mississippi.

XII.

The two (2) Gas Pools defined by Order No. 51-67, dated February 15, 1967, are as follows:

A. The 8,800 foot Washita-Fredericksburg Gas Pool, as used herein, shall be construed to mean those strata of the Washita-Fredericksburg Formation productive of gas in the interval of 8,800 feet to 8,880 feet in the Larco Drilling Corporation - Puckett Gas Unit No. 1, Well No. 1, located 1,003.5 feet from the East line and 990 feet from the South line of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi, or correlative of these strata in other wells to said interval.

B. The 8,950 foot Washita-Fredericksburg Gas Pool, as used herein, shall be construed to mean those strata of the Washita-Fredericksburg Formation productive of gas in the interval of 8,923 feet to 9,005 feet in the Larco Drilling Corporation - Puckett Gas Unit No. 1, Well No. 1, located 1,003.5 feet from the East line and 990 feet from the South line of Section 18, Township 3 North, Range 6 East, Smith County, Mississippi, or correlative of these strata in other wells to said interval.

XIII.

All rules and regulations contained in Statewide Order No. 201-51 and amendments thereto not specifically covered in the foregoing rules are hereby adopted and shall apply to the Puckett Field.

ORDERED AND ADJUDGED this 15th day of November, 1995.

STATE OIL AND GAS BOARD OF MISSISSIPPI


CHAIRMAN

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