

IN THE STATE OIL AND GAS BOARD OF MISSISSIPPI

FILED FOR RECORD

RE: PETITION OF PALMER PETROLEUM, INC. TO
AMEND THE SPECIAL FIELD RULES OF YELLOW
CREEK FIELD, WAYNE COUNTY, MISSISSIPPI

JUL 6 1990

STATE OIL AND GAS BOARD
A. Richard Henderson, Supervisor

DOCKET NO. 189-90-29

ORDER NO. 303-90

ORDER

THIS DAY this matter came on for hearing before the State Oil and Gas Board on the Petition of Palmer Petroleum, Inc. to amend said Special Field Rules by naming and defining three new oil pools for Yellow Creek Field, Wayne County, Mississippi, such hearing being called for such purpose; and

WHEREAS, the Board finding 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 law, and that due, legal and sufficient proofs of publication 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 given, public hearing was held by said Board at the Hearing Room, Suite E, 500 Greymont Avenue, Jackson, Mississippi, commencing on June 20, 1990, at which hearing all persons present who desired to be heard on said matter were heard and all testimony and 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. Special Field Rules for Yellow Creek Field divide Yellow Creek Field into the East, Central and West Sections and were set forth in Order No. 128-81, Docket No. 91-81-29. In

February 1988, Palmer completed its Graham A-1 No. 1 Well in the Washita-Fredericksburg formation of the East Yellow Creek Field. In December 1988, the Graham A-1 was recompleted in the Massive Sand of the Lower Tuscaloosa formation. Based on that discovery, four additional development wells were successfully drilled and completed to develop these new reserves.

2. Based on the Palmer-Graham A-1 and offset wells, there are three oil pools not previously defined in the Special Field Rules of Yellow Creek Field. Spacing consistent with the existing Special Field Rules and Statewide Rules will promote the proper development of these pools.

3. The three new pools are to be defined and identified as follows:

The Lower Tuscaloosa Pilot Sand Oil Pool of the East Section of Yellow Creek Field shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,103 feet and 6,307 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot 5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

The Lower Tuscaloosa Massive Sand Oil Pool of the East Section of Yellow Creek Field shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,307 feet and 6,502 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot 5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

The Washita-Fredericksburg Oil Pool of the East Section of Yellow Creek Field shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,502 feet and 6,800 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot 5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREED that Special Field Rules for Yellow Creek Field be and are hereby amended, as requested by Petitioner, to read as follows:

EXHIBIT "A"

SPECIAL FIELD RULES FOR YELLOW CREEK FIELD

IN WAYNE COUNTY, MISSISSIPPI

A. The Yellow Creek Field as used herein is comprised of the East Section, the Central Section and the West Section. The East Section of the Yellow Creek Field as used herein is that area in all of Section 5, Lots 1, 5, 6, 7, 8 and 9 in Section 6, the East Half (E 1/2) of Section 7, and all of Sections 8 and 17 in Township 9 North, Range 7 West, including all productive extensions thereof. The Central Section of the Yellow Creek Field as used herein is that area in all of Lots 2, 3, 4 and 10 in Section 6, the West Half (W 1/2) of Section 7 in Township 9 North, Range 7 West, the East Half (E 1/2) of Section 1, and the East Half (E 1/2) of Section 12 in Township 9 North, Range 8 West, including all productive extensions thereof. The West Section of the Yellow Creek Field as used herein is that area in the West Half (W 1/2) of Section 1, the West Half (W 1/2) of Section 12, and all of Sections 2, 3, 11, 13, 14, 15, 23, 24 and 25 in Township 9 North, Range 8 West, and all of Sections 18, 19, and 30 in Township 9 North, Range 7 West, including all productive extensions thereof.

B. The Eutaw Pool as used herein shall be construed to mean those strata productive of oil in the Eutaw Formation occurring between the depths of 4,330 and 4,661 feet subsea level in the East Section, and between the depths of 4,470 and 4,840 feet subsea level in the West Section of the Yellow Creek Field.

C. The Lower Tuscaloosa Pilot Sand Oil Pool of the East Section shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,103 feet and 6,307 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot

5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

D. The Lower Tuscaloosa Massive Sand Oil Pool of the East Section shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,307 feet and 6,502 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot 5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

E. The Washita-Fredericksburg Oil Pool of the East Section shall be construed to mean those strata productive of oil in the Lower Tuscaloosa formation occurring between the depths of 6,502 feet and 6,800 feet on the dual induction log of the Graham A-1 No. 1 Well, located in the S 1/2 of Lot 5, Section 6, Township 9 North, Range 7 West, Wayne County, Mississippi, and all horizons correlatable therewith.

F. The Lower Tuscaloosa Pool of the West Section shall be construed to mean those strata productive of oil in the Lower Tuscaloosa Formation occurring between depths of 6565 feet and 6980 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

G. The Upper Zone of the Lower Cretaceous Oil Pool of the West Section shall be construed to mean those strata productive of oil occurring between the depths of 6980 feet and 9175 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

H. The Middle Zone of the Lower Cretaceous Oil Pool of the West Section shall be construed to mean those strata productive of oil occurring between the depths of 9175 feet and 9944 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

I. The Lower Zone of the Lower Cretaceous Oil Pool of the West Section shall be construed to mean those strata productive of oil occurring between the depths of 9944 feet and 11,405 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

J. The Upper Cotton Valley Oil Pool of the West Section shall be construed to mean those strata productive of oil occurring between the depths of 11,405 feet and 12,242 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

K. The Lower Cotton Valley Oil Pool of the West Section shall be construed to mean those strata productive of oil occurring between the depths of 12, 242 feet and 12,523 feet on the Induction Electric Log in the Humble No. 1 U.S.A., in Section 13, Township 9 North, Range 8 West, and all horizons correlatable therewith.

L. A well completed in any of said pools on a tract of land containing 40 contiguous surface acres, or a governmental quarter-quarter section containing not less than 36 acres and located at least 330 feet from any exterior boundary of such tract, will efficiently drain and produce the recoverable oil from such tract without avoidable waste and is the efficient drainage area for said well.

M. The Eutaw Pool in the West Section of the Yellow Creek Field is being unitized by voluntary agreement in order to effectuate a program of pressure maintenance and secondary recovery to increase the ultimate recovery from the pool, and it is necessary and proper for the promotion of conservation to consider and drill said Eutaw Pool as a single drilling and producing unit \as to all tracts contained therein, subject only to such limitations as may be required in order to protect the co-equal and correlative rights of all owners

in those tracts who have not voluntarily consented to join in the West Yellow Creek Field Unit.

N. The Eutaw Oil Pool of the Eutaw Formation in the East Section of Yellow Creek Field is being unitized by voluntary agreement in order to effectuate a program of pressure maintenance and secondary recovery to increase the ultimate recovery from the pool, and it is necessary and proper for the promotion of conservation to consider and drill said pool as a single drilling and producing unit as to all tracts contained therein, subject only to such limitations as may be required in order to protect the co-equal and correlative rights of all owners in those tracts who have not voluntarily consented to join in the East Yellow Creek Unit 1.

O. The Eutaw Pool of the Central Section of the Yellow Creek Field as used herein shall be construed to mean those strata of oil in the Eutaw Formation occurring between the depths of 5,074 feet and 5,113 feet on the Dual Induction- Laterolog in the Kaiser Oil (U.S.), Ltd., Hudson Mississippi Mineral Trust Well No. 2, located 658 feet North and 702 feet East of the Southwest Corner of Section 6, Township 9 North, Range 7 West, and all horizons correlatable therewith.

P. A well completed in the Eutaw Pool of the Central Section of the Yellow Creek Field on a tract of land containing at least 40 contiguous surface acres, or a governmental quarter-quarter section containing not less than 36 acres or more than 44 acres and located at least 330 feet from any exterior boundary of such tract, will efficiently drain and produce the recoverable oil from such tract without avoidable waste and is the efficient drainage area for said well.

Q. The Smackover Oil Pool of the Central Section of the Yellow Creek Field as used herein shall be construed to mean those strata productive of oil in the Smackover Formation occurring between the depths of 12,917 feet and 13,056 feet on the Dual Induction - Laterolog in the Kaiser Oil (U.S.), Ltd., Hudson Mississippi Mineral Trust Well No. 1, located

697 feet North and 702 feet East of the Southwest Corner of Section 6, Township 9 North, Range 7 West, and all horizons correlatable therewith.

R. A well completed in the Smackover Oil Pool of the Central Section of the Yellow Creek Field on a tract of land containing at least 80 contiguous surface acres, or two governmental quarter-quarter sections containing not less than 72 acres or more than 88 acres and located at least 500 feet from any exterior boundary of such tract, will efficiently drain and produce the recoverable oil from such tract without avoidable waste and is the efficient drainage area for said well.

RULE 1

A. With respect to all pools other than the Eutaw Pool of the West Section, the Eutaw Oil Pool of the Eutaw Formation of the East Section, and the Smackover Oil Pool of the Central Section, a drilling unit is hereby established for all oil wells completed in either of said pools except Sections 5 and 6 of Township 9 North, Range 7 West and Section 32 of Township 10 North, Range 7 West, as an area consisting of a quarter of a quarter section and every oil well shall be located on a drilling unit consisting of a governmental quarter-quarter section containing not less than 36 acres upon which no other drilling or producible well in the same pool is located.

With respect to all pools other than the Smackover Oil Pool of the Central Section, a drilling unit is hereby established for each and all oil wells in Sections 5 and 6 of Township 9 North, Range 7 West and Section 32 of Township 10 North, Range 7 West as at least 40 contiguous surface acres, provided that the distance between any two points thereon does not exceed 2100 feet upon which no other drilling or producible well in the same pool is located.

This order shall not be construed to affect the validity and continuing effect of drilling units established or confirmed by Order No. 273-50 entered under Docket 171-50-24 and 29.

B. With respect to the Eutaw Pool of the West Section, a drilling unit is hereby established for each and all oil wells as consisting of the entirety of the area underlain by subject pool within the Unit Area affected by the unitization agreements of the Eutaw Formation of the West Yellow Creek Field; except that portion thereof included in units as defined in the next paragraph hereof.

Each oil drilling unit heretofore or hereafter established in said pool with respect to which any ownership of an operating or royalty interest has not been made subject to the unitization agreement creating the West Yellow Creek Field Unit shall maintain its status as a drilling unit, and any such unit shall be referred to these Rules as "individual drilling unit." The words "fieldwide unit" as used herein shall be construed to mean the entire portion of the West Yellow Creek Field Unit Area other than that portion thereof included in any individual drilling unit.

The location of wells upon any individual drilling unit shall be covered by applicable statewide rules promulgated by this Board. The locations of wells upon the fieldwide unit shall be governed by standards of geology and petroleum engineering designed to promote the greatest ultimate recovery of the hydrocarbons contained in the pool. However, no well on the fieldwide unit may be drilled nearer than 330 feet from any exterior boundary of the fieldwide unit, or nearer than 330 feet to any individual drilling unit, except upon permit issued by the Board after notice and hearing.

C. With respect to the Eutaw Oil Pool of the Eutaw Formation of the East Section, a drilling unit is hereby established for each and all oil wells as consisting of the entirety of the area underlain by subject pool within the

Unit Area affected by the unitization agreements of the Eutaw Formation of East Yellow Creek Field; except that portion thereof included in units as defined in the next paragraph hereof.

Each oil drilling unit heretofore or hereafter established in said pool with respect to which any ownership of an operating or royalty interest has not been made subject to the Unitization Agreement creating the East Yellow Creek Eutaw Unit 1 shall maintain its status as a drilling unit, and any such unit shall be referred to in these Rules as "individual drilling unit." The words "fieldwide unit" as used herein shall be construed to mean the entire portion of the East Yellow Creek Eutaw Unit 1 other than that portion thereof included in any individual drilling unit.

The location of wells upon any individual drilling unit shall be covered by applicable statewide rules promulgated by this Board. The location of wells upon the fieldwide unit shall be governed by standards of geology and petroleum engineering designed to promote the greatest ultimate recovery of the hydrocarbons contained in the pool. However, no well on the fieldwide unit may be drilled nearer than 330 feet from any exterior boundary of the fieldwide unit, or nearer than 330 feet to any individual drilling unit, except upon permit issued by the Board after notice and hearing.

D. With respect to the Smackover Oil Pool of the Central Section of Yellow Creek Field, a drilling unit is hereby established for all oil wells completed in said pool as an area consisting of at least 80 contiguous surface acres or two governmental quarter-quarter sections containing not less than 72 acres or more than 88 acres, upon which no other drilling or producible well in the same pool is located.

THE FOLLOWING RULES HAVE APPLICATION ONLY TO THE EUTAW POOL-WEST SECTION AND TO THE EUTAW OIL POOL OF THE EUTAW FORMATION-EAST SECTION:

RULE 2 - ALLOCATION OF PRODUCTION

A. The maximum efficient daily rate of production shall be determined and fixed by the Board after notice and hearing, and the same shall constitute said pool's daily allowable. Until the Board establishes such daily allowable, the daily allowable for said pool shall be the sum of the per well allowables for all wells in the Unit Areas as set forth in West Yellow Creek Field Allowable Order No. 230-58 of this Board dated December 17, 1958, and as set forth in East Yellow Creek Field Allowable Order No. 313-64 of this Board dated December 16, 1964.

B. The daily allowable shall be allocated as follows: To each individual drilling unit there shall be allocated that proportionate part of said pool's daily allowable that the surface acreage content of such individual drilling unit bears to the total surface acreage contained within all such individual drilling units plus the total surface acreage contained within the fieldwide unit. The remainder of the daily allowable shall be allocated to the fieldwide unit. The former drilling units comprising the fieldwide unit created hereby and the individual drilling units shall, for allowable allocation purposes, be deemed to contain 40 acres.

C. Any individual drilling unit which is not capable of producing, without committing waste, the allowable assigned to it under Rule 2(B) shall be considered a deficient unit. The difference between the allowable assigned to a deficient unit and that which it is capable of producing, without waste, shall be distributed to the non-deficient individual drilling units and the fieldwide unit on the surface acreage basis of apportionment prescribed in said Rule 2(B).

D. The daily allowable production for the fieldwide unit may be produced by any well or wells located on the Unit Area provided, however, that no well shall be operated in such a manner as to cause waste as defined by the Laws of the State of Mississippi, and provided that no fieldwide unit well directly offsetting a well on an individual drilling

unit shall be allowed to produce more than twice the daily allowable assigned to wells on non-deficient individual drilling units.

**RULE 3 - SECONDARY RECOVERY AND
PRESSURE MAINTENANCE AUTHORIZED**

A. The Operators of the West Yellow Creek Field Unit and the East Yellow Creek Eutaw Unit 1, may conduct secondary recovery and pressure maintenance operations in the Eutaw Pool - West Section and in the Eutaw Oil Pool of the Eutaw Formation - East Section of said field by the injection of water, gas or other like substances. Said Operators may use the existing wells on the Fieldwide Units as unit oil wells or as unit injection wells or as both, and may drill and operate additional wells for the same utilization; provided, however, that a permit for the recompletion or drilling of each of said wells will be issued by the Board upon the filing of Form 2 with the information required by Statewide Rule 45.

B. The conversion of any existing wells to injection wells shall not adversely affect the fieldwide daily allowable provided for in Rule 2 above.

RULE 4. - MEASUREMENT OF PRODUCTION

The Unit Operators shall maintain proper metering devices and such connections therewith as are necessary to measure the total production from the West Yellow Creek Field Unit and the East Yellow Creek Eutaw Unit 1. Production from individual drilling units shall be separately measured by proper separators and stock tanks or metering devices to measure the total production therefrom. Where metering devices are used, as herein provided, 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 units commingled in such common storage

system, then such variance shall be allocated back to each of the individual drilling units and the fieldwide unit producing into the common storage system proportionately to the production measured from each.

RULE 5 - EQUIPMENT FOR TESTS

Each producing well shall be so equipped that gas/oil ratio tests and bottom hole or other pressure tests may be made, and so equipped as to permit the adequate testing of each producing well under usual operating conditions without the necessity of closing in any other well.

**RULE 6 - AUTOMATIC CUSTODY
TRANSFER SYSTEMS AUTHORIZED**

Automatic custody transfer systems which will automatically test, sample, measure and transfer the production from the Operator to the purchaser are hereby authorized. Such systems may be used to transfer production from units or from common storage facilities as authorized in Rule 4 above. In the event the transfer is from such a common storage facility, the allocation of production to the units (individual drilling units and fieldwide unit) being produced into such common storage system will be on the basis of the relationship of the measured production from each unit to the total measured production transferred by the automatic custody transfer system.

Rules 2 through 6 shall become effective as of the effective date of unitization, as that term is defined in the Unitization Agreement and the Unit Operating Agreement as amended, West Yellow Creek Field, Eutaw Formation, Wayne County, Mississippi, and as that term is defined in the Unit Agreement, as amended, and the Unit Operating Agreement, East Yellow Creek Eutaw Unit 1, Wayne County, Mississippi.

The Board expressly reserves the right, after notice and hearing, to alter, amend, supplement or repeal any and all of the foregoing rules and regulations.

All applicable Statewide Rules and Regulations not in conflict with the foregoing Special Field Rules shall apply to the Yellow Creek Field.

ORDERED AND ADJUDGED this the 20th day of June, 1990.

MISSISSIPPI STATE OIL AND GAS BOARD

BY: J. B. Hayes Mc Lake
CHAIRMAN