STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

July 8, 1994

Texaco Expl & Prod Inc. ATT: Larry Johnson P O Box 730 Hobbs, NM 88241

RE: ALLOWABLE FOR THE B F HARRISON B #25-C, Sec.9, T-23S, R-37E

Gentlemen:

We have received your C-104 requesting allowable and authorization to transporters on the B F Harrison B #25. We understand that Texaco went to hearing on this well on July 7 and is still waiting on the ruling. We will grant you an allowable until the ruling is made on the hearing.

Your allowable will be according to the GOR limit of the Teague Tubb pool. The GOR limit is 2000 cu. ft. per barrel, top casinghead gas of 248 mcf per day for this pool.

If you have any questions on this matter, please call the District I, Hobbs office (505) 393-6161.

Yours very truly,

OIL CONSERVATION DIVISION

Jerry Sexton

District I, Supervisor

JS;dp

cc:C P Basham, Texaco-Midland office

_Bill LaMay

file

New Mexica ///

DRUG FREE

The a State of Hind!

CAMPBELL, CARR, BERGE 8 SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
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MS.

June 14, 1994

HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

De Oil

Oil Conservation Division Case No. 11005:

Application of Texaco Exploration and Production Inc. for pool reclassification, vertical extension, horizontal contraction and expansion, special pool rules, and for a special depth bracket allowable, Lea County, New Mexico

Dear Mr. LeMay:

Texaco Exploration and Production Inc., respectfully requests that the above-referenced case which is currently set on the June 23, 1994 Division docket be dismissed.

Your attention to this request is appreciated.

Very truly yours,

WILLIAM F. CARR

WFC:mlh

cc: Todd Moehlenbrock

TELEPHONE (505) 982-4285 TELEFAX (505) 982-2047

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING 117 NORTH GUADALUPE

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JASON KELLAHIN (RETIRED 1991)

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

W. THOMAS KELLAHIN*

July 19, 1994

HAND DELIVERED

Mr. David R. Catanach Hearing Examiner Oil Conservation Division 310 Old Santa Fe Trail Santa Fe, New Mexico 87501

NMOCD Cases 11016, 11017 and 11018 Re: Applications of Texaco Exploration and Production, Inc. to create certain Pools with Special Rules, Lea County, New Mexico.

Dear Mr. Catanach:

At the hearing held on July 7, 1994, you requested I prepare draft orders for these three cases. Please find enclosed the three draft orders and the computer disk containing those drafts on Wordperfect 5.1.

Please call me if you need anything further.

W. Thomas Kellahin

cc: Texaco Exploration and Production, Inc.

Mr. Todd W. Moehlenbrock

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11017 ORDER NO. R-5353-O

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. FOR POOL CREATION AND SPECIAL POOL RULES INCLUDING THE CLASSIFICATION OF THIS POOL AS AN ASSOCIATED OIL AND GAS POOL, LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION AND PRODUCTION INC.'S PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 7, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this ____ day of July, 1994, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

- (2) On March 11, 1992, by Order No. R-9646 issued in Case No. 10452, the Division, on its own motion, created and defined the North Teague Blinebry Gas Pool. The discovery well for the pool was the Texaco Exploration and Production Inc. B. F. Harrison "B" Well No. 5 located in Unit E of Section 9, T23S, R37E, NMPM. which was completed on October 21, 1991.
- (3) On August 11, 1993, by Order No. R-9937 issued in Case No. 10783, the Division, on its own motion, extended the vertical limits of the North Teague Blinebry Gas Pool to include the Lower Paddock formation and redesignated said North Teague-Blinebry Gas Pool as the "North Teague Lower Paddock-Blinebry Gas Pool."
- (4) The applicant, Texaco Exploration and Production Inc. ("Texaco"), seeks reclassification of the North Teague Lower Paddock-Blinebry Gas Pool as an associated pool to be operated in accordance with the Division's General Rules and Regulations for Associated Oil and Gas Pool as promulgated by Order No. R-5353, including provisions for 40-acre oil and 160-acre gas spacing and proration units and a special limiting gas-oil ratio of 6000 cubic feet of gas per barrel of oil.
- (5) Texaco proposes that the vertical limits of the renamed and reclassified North Teague Lower Paddock-Blinebry Associated Pool ("the Pool") remain the same but seeks the expansion of the horizontal limits of the Pool to include the NE/4 of Section 8 and the N/2 and SW/4 of Section 9, T23S, R37E, NMPM.
- (6) If Texaco's application is approved there will be four currently producing Blinebry formation wells in the Pool:
 - B. F. Harrison "B" Well No. 5 (Unit E) Sec 9;
 - B. F. Harrison "C" Well No. 1 (Unit L) Sec 9;
 - F. B. Davis Well No. 3 (Unit H) Sec 8;
 - G. W. Sims Well No. 3 (Unit B) Sec 9.

- (7) Division records currently have the B. F. Harrison "C" Well No. 1 (Unit L) Sec 9 and the F. B. Davis Well No. 3 (Unit H) Sec 8 classified in the Teague Blinebry Oil Pool, the northern boundary of that pool being the E/2 of Section 17 and the S/2 of Section 16, T23S, R37E, NMPM.
- (8) Texaco was only interested party to appear and provide technical geologic and engineering testimony concerning the reservoir and its classification.
- (9) Texaco is the only operator in the proposed pool and currently all categories of owners in the pool have common ownership.
- (10) Texaco's proposed plan of development for the Pool is in conjunction with the Tubb formation (NMOCD Case 11016) and the Drinkard and Abo formations (NMOCD Case 11018) whereby Texaco will drill or has drilled a Drinkard-Abo formation well in each 40-acre tract and then intends to dually produced that production so that within a 160-tract, two wells are dualed with Tubb formation production and the remaining two wells are dualed with Paddock-Blinebry production in a checkerboard pattern.
- (11) Texaco presented geologic and petroleum engineering evidence which demonstrates that The Pool is:
 - (a) a circular shaped feature draped over a structure high centered approximately in the NW/4 of Section 9, is of limited extent. The trap of the reservoir is formed by a down structural limit of effective porosity within the Blinebry;
 - (b) a single structure feature geologically separated from the Teague Blinebry Oil Pool which is located to the south of the Pool;
 - (c) a single source of common supply ("reservoir") separated from and not in communication with any other Blinebry pool

> in this area as evidenced by bottomhole pressure buildup data which indicated original reservoir pressure following initial discovery:

- (12) Texaco presented geological and engineering data and conclusions to demonstrate that:
 - (a) only the B. F. Harrison "B" Well No. 5 has production characteristics of a gas well while the other three wells all produce with oil well characteristics;
 - (b) while the B. F. Harrison "B" Well No. 5 is approximately 20 feet up-structure from the nearest oil well, there is no indication that a gas cap exists or is being formed up-structure to the oil wells:
 - (c) the occurrence of increased volumes of gas production in the Pool is attributed to the presence of small higher porosity stringers in the Blinebry which are both laterally and horizontally discontinuous;
 - (d) production data was presented which demonstrates that the Blinebry can be more efficiently produced at a higher rate than a 2000 to 1 GOR allows:
 - (1) production data from the G. W. Sims Well No. 3 demonstrates that it is more efficiently able to recover oil/liquid hydrocarbons from the Pool at a gas rate which exceeds the rate allowed by a 2000 to 1 GOR limit (See Texaco Exhibit 8)
 - (2) variable producing rates tests conducted on the B. F. Harrison "B" Well No. 5 demonstrate that:

- (i) if the well is produced at a choke setting of 8/64th in order to reduce the rate to comply with the 2000 to 1 GOR limit, the producing GOR for the well escalates to 63,000 to 1 GOR, and the oil rate drops to 3.8 BOPD average.
- (ii) but if the well is produced at a choke setting of 15/64th in order to comply to the rate established by a 6000 to 1 GOR limit, the producing GOR for the wells drops to 31,000 to 1 GOR and the oil rate increases to an average of 28 BOPD (See Texaco Exhibits 9 and 10).
- (e) Assuming a depth bracket oil allowable of 107 BOPD (40-acre oil spacing), the maximum gas allowable for each 160-acre tract based upon a 2,000 to 1 GOR limit is 856 MCFPD and at 6,000 to 1 GOR limit is 2568 MCFPD.
- (f) Texaco's plan of operation will be to have two wells in a 160-acre tract producing from the Blinebry formation.
- (13) Present evidence and data indicates that both gas and oil wells exist in this pool. The complexity and heterogeneous nature of the reservoir does not characterize it as a typical associated oil and gas pool. However, geological analysis and limited pressure data suggests a high probability that the gas and oil wells are in communication with one another.
- (14) Texaco presented engineering evidence and testimony, specifically results of production step rate tests on the only gas well in the pool, which demonstrate that more liquids are recovered per cubic feet of gas produced at a rate allowed with a 6000 to 1 GOR limit thereby improving ultimate recovery and preventing waste.

- (15) The results of the evidence indicate under these conditions, the reservoir is best managed and ultimate recovery maximized by making the pool subject to the General Rules and Regulations for the "associated" oil and gas pools pursuant to Order R-5353, as modified herein.
- (16) That the evidence indicates that 40-acre oil well spacing and 160-acre gas well spacing is the appropriate spacing patterns to adopt for this pool.
- (17) That in order to avoid the arbitrary effect of having any well in the Pool shut-in or curtailed as a result of allowables being calculated based upon inapplicable statewide rules as established with the adoption of Division Order No. R-9646, issued March 11, 1992, said order should be rescinded and the effective date of this order should made retroactive to March 11, 1992.
- (18) That there was no evidence or testimony presented upon which to base a denial of this application.
- (19) No other operator and/or interest owner appeared at the hearing in opposition to the application.
- (20) Approval of Texaco's request will allow the interest owners the opportunity to economically recover their share of the oil and gas in the subject pool, will not reduce ultimate recovery from the subject pool, and will not violate correlative rights.
- (21) This case should be reopened at an examiner hearing in January, 1996, at which time the operators in the Pool should be prepared to appear and present evidence and testimony as to the nature of the reservoir with regards to making these rules permanent.

IT IS THEREFORE ORDERED THAT:

- (1) The North Teague Lower Paddock-Blinebry Gas Pool presently comprising the N/2 Section 9, T23S, R37E, NMPM, Lea County, New Mexico, is hereby reclassified as an associated pool and redesignated the North Teague Lower Paddock-Blinebry Associated Pool.
- (2) That the horizontal boundaries of the Pool are hereby expanded to including the NE/4 of Section 8 and the SW/4 of Section 9, T23S, R37E, NMPM.
- (3) The vertical limits of the Pool shall be the top of the Lower Paddock formation to the base of the Blinebry formation being defined at 5406 feet and 6080 feet, respectively, on the log of the B. F. Harrison "B" Well No 5, Unit E) Section 9, T23S, R37E, NMPM.
- (4) The North Teague Lower Paddock-Blinebry Associated Pool shall be governed by the Division's General Rules and Regulations for Associated Oil and Gas Pool as promulgated by Order No. R-5353, insofar as said General Rules and Regulations are not inconsistent with the Special Rules and Regulations for the subject pool as hereinafter set forth, in which event the following Special Rules shall apply:

SPECIAL RULES AND REGULATIONS FOR THE NORTH TEAGUE LOWER PADDOCK-BLINEBRY ASSOCIATED POOL

- Rule 2. (a) A standard oil proration unit shall be 40-acres. A standard gas proration unit shall be 160-acres.
- Rule 6. That the limiting gas-oil ratio shall be 6,000 cubic feet of gas for each barrel of oil.

IT IS FURTHER ORDERED THAT:

- (5) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), existing oil wells in the Pool shall have dedicated thereto 40-acre and existing gas wells shall have dedicated thereto 160-acre in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established administratively by the Division and dedicated thereto.
- (6) Failure to file a new Form C-102 with the Division dedicating the appropriate acreage to a well or to obtain a non-standard unit approved by the Division within 60-days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drill to or completed i the Pool or in its corresponding vertical limits or within one mile thereof shall receive no more than a 40-acre allowable for the pool

1992

(7) Division Order No. R-9646, issued March 11, 1993, is hereby rescinded and the effective date of this order is made retroactive to March 11, 1993.

1992

- (8) The special rules and regulations for this pool established herein shall remain in effect for a temporary period until such time as the Division has entered further orders in this matter.
- (9) This case shall be reopened at an Examiner hearing in January, 1996, at which time the operators in the Pool should be prepared to appear and present evidence and testimony as to the nature of the reservoir with regards to making these rules permanent.

(10) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY Director

SEAL

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

September 27, 1994

KELLAHIN AND KELLAHIN Attorneys at Law P. O. Drawer 2265 Santa Fe, New Mexico 87504

RE: CASE NO. 11017

ORDER NO. R-5353-Q

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Sally E. Martinez

Administrative Secretary

cc: BLM - Carlsbad