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

JASON KELLAHIN (RETIRED 1991)

June 6, 1996

HAND DELIVERED

Mr. Michael E. Stogner Chief Hearing Examiner Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re: NMOCD Case 11512 Application of Marathon Oil Company, Kerr-McGee Corporation and Santa Fe Energy Resources, Inc. to Terminate Gas Prorationing in the Indian Basin-Morrow Gas Pool, Eddy County, New Mexico

Dear Mr. Stogner:

On behalf of the applicants, please find enclosed our proposed order for your consideration.

W. Thomas Kellahin

cc: Marathon Oil Company Attn: Thomas C. Lowry, Esq. Kerr-McGee Corporation Attn: Dave Henke Santa Fe Energy Resources Inc. Attn: Don Rogers William F. Carr, Esq. Attorney for Yates Petroleum Corporation

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. 11512

APPLICATION OF MARATHON OIL COMPANY, KERR-MCGEE CORPORATION AND SANTA FE ENERGY RESOURCES INC. TO TERMINATE GAS PRORATIONING, TO INFILL DRILL AND TO AMEND THE SPECIAL RULE AND REGULATIONS FOR THE INDIAN BASIN-MORROW GAS POOL, EDDY COUNTY, NEW MEXICO.

APPLICANTS' PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 2, 1996, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this _____ day of June, 1996, 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) The applicants, Marathon Oil Company, Kerr-McGee Corporation and Santa Fe Energy Resources, Inc. are operators and working interest owners in the Indian Basin-Morrow Gas Pool, Eddy County, New Mexico and seek to terminate gas prorationing for said pool, to cancel all over and under production, authority

for the infill drilling of a second well within a standard 640-acre gas spacing unit and to amend the special rules and regulations to provide for standard well locations not closer than 660 feet to the outer boundary of a spacing unit for said pool.

(3) The Indian Basin-Morrow Gas Pool ("the Pool") was established by Division Order R-2441 dated February 28, 1963 and made effective March 1, 1964. Said order further adopted temporary special rules and regulations for the Pool which provided for 640-acre spacing units with standard well locations not closer than 1650 feet to the outer boundary of the section nor nearer than 330 feet to any interior quarter-quarter section. On February 13, 1967, the Division issued Order R-2441-A which made these rules permanent.

(4) The horizontal limits of said Pool have been extended several times by orders of the Division.

(5) By Division Order R-8170-O, dated November 27, 1995, entered in NMOCD Case 11333, the Division granted, in part, an application of Marathon Oil Company to expand the Cemetery-Morrow Gas Pool and to Contract the Indian Basin-Morrow Gas Pool because:

(a) the Morrow formation underlying the subject area is approximately 1600 feet below the Cisco/Canyon formation and is now often treated as a secondary objective which can be economically explored in conjunction with the drilling or deepening of a well for production from the primary objective--the Cisco/Canyon formation.

(b) the Morrow wells in both the Indian Basin-Morrow Gas Pool and the Cemetery-Morrow Gas Pool will drain no more than 320 acres.

(c) there is no physical or impermeable barrier within the Morrow interval separating the Cemetery and the Indian Basin Morrow Pools indicating the Morrow formation constitutes one single common source of supply ("reservoir") in this particular area.

(d) in order to afford an opportunity to drill a well to test both the Cisco/Canyon formation of the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Morrow formation, it is necessary to have the Morrow formation spaced on the same 320-acre standard spacing pattern as established for the South Dagger Draw-Upper Pennsylvanian Associated Pool.

with the Division finding that many of Marathon's objectives may be obtained in a manner consistent with Division practice by the following:

(i) contracting a portion of the Indian Basin Morrow Gas Pool and

(ii) by declaring that the special rules and regulations for the Indian Basin-Morrow Gas Pool rules shall not apply beyond its current boundary.

(6) Gas prorationing was instituted in the Pool by Division Order R-1670-F, issued in Case 3237 and dated May 6, 1965 which adopted gas production allocation ("gas prorationing") based on acreage alone for the following reasons:

- (a) there were a total of eight wells completed in the Pool however no Morrow gas had been transported from these wells because no transportation facilities to this area were in existence;
- (b) there existed a market demand for this production and two purchasers were planning construction of gas transportation facilities to these wells; and,
- (c) the wells that were completed at the time were capable of producing in excess of the reasonable market demand for gas from the pool and were capable of producing in excess of the gas transportation facilities to be constructed.

and therefore production from the pool was restricted to reasonable market demand and the capacity of the gas transportation facilities to be constructed.

(7) On August 19, 1993, Oil Conservation Commission held a "gas allowables hearing" at which Kerr-McGee sought but was denied an increase in gas allowable for the Pool. See Order R-9960, NMOCD Case 10799.

(8) Since then, the Oil Conservation Commission has adopted gas allowables for this Pool which have resulted in the following non-marginal pool allowables per month being assigned to the single non-marginal well in the pool.

Oct 93-Mar 94: 16,947 MCF/Mo. Apr 94-Sep 94: 15,469 MCF/Mo. Oct 94-Apr-95: 16,000 MCF/Mo. Apr 95-Sep 95: 16,000 MCF/Mo. Oct 95-Mar 96: 22,304 MCF/Mo. Apr 96-Oct 96: 15,674 MCF/Mo.

(9) In August, 1995, and again in March, 1996 Marathon balloted the operators in the Pool and determined that no operator opposed terminating prorationing for the Pool.

(10) On February 15, 1996 Oil Conservation Commission held its Gas Allowables Hearing at which Marathon and Kerr-McGee advised the Commission that they were seeking to terminate prorationing in this pool.

(11) At the time of the hearing in this case, evidence was presented that: Gas Prorationing for the Pool should now be terminated for reasons which include:

- (a) Since the institution of prorationing for this pool in 1963, there has been substantial changes in the pool production, development, gas purchasing and marketing practices and other factors affecting the oil and gas industry which make prorationing of the pool no longer necessary.
- (b) Market Demand currently exceeds the deliverability for the Pool and for the remaining life of the Pool the total deliverability of the wells in the Pool is not expected to exceed market demand for gas produced from the Pool.

- (c) Currently there are 9 producing wells in the Pool with 5 wells classified as marginal and 4 wells classified as non-marginal.
- (d) 100 % of the operators of both marginal and nonmarginal wells in the pool support the termination of prorationing in the pool
- (e) There are no wells in the pool which are underproduced because of a lack of market for the gas from a wells.
- (f) Geologic and engineering calculations establish that the higher capacity wells are draining less than 320-acres and therefore the termination of prorationing for the pool will not give the non-marginal wells any unfair advantage over the marginal wells.
- (g) Termination of prorationing for the pool will result in increased ultimate recovery from the pool thereby preventing waste.
- (h) Production of the non-marginal wells is being restricted by the proration system assignment of allowables for those wells and not by a lack of market for that production.
- (i) The Division' practice of using the Pool's production for the prior 6-month proration period as the main indication of actual market demand by which it sets allowables has not kept pool production in line with actual market demand because when allowable levels and well capabilities are such that a well attempting to meet its market demand hit the six times limit in two months or less, it will be curtailed by the time the allowable has a chance to reflect the increased market demand.

- (j) The current proration system for the pool lacks the flexibility to resolve the problem by simply producing the non-marginal wells at rates in excess of the current allowables and causing the future allowables to be adjusted upward to reflect actual market demand and now most non-marginal wells are at least six times overproduced.
- (k) Current allowables of 688 MCFPD are too low and do not accurately reflect the actual market demand for gas from the Pool.
- (1) While the current Commission has granted increases in allowables for certain prorated pools in Southeastern New Mexico, simply assigning more allowable to the pool would provide only temporary and partial incentives for additional production, drilling and workover activities. Such adjustments will not provide a long term reliable solution because the Operators are not assured that such practice will continue and the opportunity to produce wells without allowable restrictions provides an economic incentive necessary to encourage further drilling in the pool.
- (m) Because the pipeline companies in the pool which used to be the purchasers of a substantial volume of gas produced are now transporters and not purchasers, the potential for non-ratable takes by the pipelines no longer exists and proration in this pool is no longer justified on that bases.
- (n) Because there is only one non-standard proration unit in the Pool and its well no longer produces, there exists no basis for continuing prorationing of the pool based upon the advantage a non-standard sized proration and spacing unit might theoretically have over standard sized spacing units.

- (o) Because there are no spacing units that currently have producing more than one well per 320-acres, prorationing can be terminated and spacing maintained at 640-acres with authorization for a second "infill" well.
- (p) All current unorthodox well locations are for wells which are no longer producing in this pool and thus is not a basis for continuing proration for the pool.
- (q) Cancellation of over and under production from any GPU will not create the potential for drainage which is not equalized by counter-drainage.
- (r) Termination of prorationing will not cause the nonmarginal wells if allowed to produce at capacity to satisfy more than their share of the market and thereby displace or deny a market for the marginal wells
- (s) Termination of prorationing will not cause the high capacity wells if allowed to produce at capacity to take more than their share of the remaining gas reserves to the disadvantage of the marginal wells' GPU nor will this cause marginal wells to be prematurely abandoned.

(12) At the time of the hearing in this case, evidence was presented that authorization of infill drilling of a second well on a standard 640-acre spacing unit and the amendment of Rule 4 of the current spacial pool rules for this pool to provide for standard well locations not closer than 660 feet to the outer boundary of a spacing unit are necessary because:

- (a) Production from the Morrow formation in the Pool is from many separate stringers which vary greatly in areal extent, porosity and thickness;
- (b) These stringers are not continuous across the Pool;

(c) There are recoverable gas reserves underlying each of the spacing units which might not otherwise be recovered unless greater flexibility is provided for standard well locations and provision is made for increasing the density to greater than one well per 640acre spacing unit.

(13) No other operator and/or interest owner appeared at the hearing in opposition to the application.

(14) Approval of this application will afford the applicants and all affected interest owners the opportunity to produce their just and equitable share of the hydrocarbons in these Morrow formations and will otherwise prevent waste and protect correlative rights.

(15) Approval of Marathon'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.

IT IS THEREFORE ORDERED THAT:

(1) The application of Marathon Oil Company, Kerr-McGee Corporation and Santa Fe Energy Resources Inc. seeking an order terminating gas prorationing in the Indian Basin-Morrow Gas Pool, Eddy County, New Mexico is hereby granted effective July 1, 1996.

(2) Effective July 1, 1996, all allowables established for the Indian Basin-Morrow Gas Pool, including any accumulated under or over production shall be canceled and shall be null and of no effect.

(3) Rule 2 of the Special Rules and Regulations for said pool, as promulgated by Division Order No. R-2441 is hereby amended as follows:

Rule 2(a) Each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be located within a standard unit containing 640 acres, more or less, consisting of a single governmental section.

Rule 2(b) **THE INITIAL WELL** drilled in a spacing unit shall be located not closer than 660 feet to any outer boundary of the spacing unit nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

Rule 2(c) **THE INFILL WELL** drilled in a spacing unit shall be located in the quarter section of the spacing unit not containing a Morrow well and shall be located with respect to the spacing unit boundaries as described in the preceding paragraph.

(4) 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

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