BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

JUL 1 0 1984

IN THE MATTER OF THE APPLICATION OF ROBERT N. ENFIELD FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO. Case 8259

Comes now, CAMPBELL, BYRD & BLACK, P.A., and hereby enters its appearance in the above-referenced cause for Marathon Oil Company.

ENTRY OF APPEARANCE

Respectfully submitted,

CAMPBELL, BYRD & BLACK, P.A.

By ` lan (1.

William F. Carr Post Office Box 2208 Santa Fe, New Mexico 87501 (505) 988-4421

ATTORNEYS FOR MARATHON OIL COMPANY

CAMPBELL & BLACK, P.A.

LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE J. SCOTT HALL PETER N. IVES RUTH S. MUSGRAVE LOURDES A. MARTINEZ JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87501 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

August 21, 1984

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AUG 21 1984

Mr. Joe D. Ramey, Director Oil Conservation Division Post Office Box 2088 Santa Fe, New Mexico 87501

DIL CONSERVATION DIVISION

Re: Case 8259: Application of Robert N. Enfield for an Unorthodox Gas Well Location, Eddy County, New Mexico.

Dear Mr. Ramey:

Pursuant to your request, enclosed herewith is Marathon's proposed Order in the above-referenced case.

Your attention to this matter is appreciated.

Very truly yours,

William F. Carr

WFC/cv enclosure

cc: (w/enclosure) Mr. Verne Hall Mr. Russ Holmberg Mr. Robert Pickens Mr. Owen M. Lopez

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> Case 8259 Order R-

APPLICATION OF ROBERT N. ENFIELD FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

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ORDER OF THE COMMISSION

OIL CONSERVATION DIVISION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on August 3, 1984, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this _____ day of August, 1984, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Robert N. Enfield, seeks approval of an unorthodox gas well location 1200 feet from the South line and 330 feet from the East line of Section 18, Township 21 South, Range 23 East, to test the Pennsylvanian formation, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.

(3) That pursuant to the Special Pool Rules for the Indian Basin-Upper Pennsylvanian Gas Pool which provide for 640-acre spacing or proration units, all of said Section 18 is to be dedicated to the well.

(4) That all of said Section 18 is currently dedicated to the Robert N. Enfield Bunnel Federal No. 1 Well located at a standard location 1650 feet from the South line and 1650 feet from the East line of said Section 18.

(5) That the primary purpose for seeking the proposed unorthodox location is to produce the remaining reserves in the Southeast corner of said Section 18.

(6) That Marathon Oil Company, owner of a 43.75% working interest in Section 20, Township 21 South, Range 23 East, the section which diagonally offsets to the Southeast proposed unorthodox gas well location, appeared at the hearing and objected to the proposed unorthodox gas well location.

(7) That said Section 20 is operated by Robert N. Enfield which makes it impossible for Marathon to drill an additional well to offset by counter drainage the advantage gained on Section 20 by Enfield's proposed unorthodox location in Section 18.

(8) That unrestricted production from a well at the proposed location would result in drainage across lease lines which would not be compensated for by counter drainage without the drilling of an unnecessary well in Section 20 which would

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result in economic waste.

(9) That such uncompensated drainage would result in violation of correlative rights and injury to the leases of the objecting offset operator.

(10) That to protect correlative rights, to prevent waste and to prevent injury to said leases, the production from the well at the proposed unorthodox location should be limited from the Morrow formation.

(11) That Enfield's evidence established that on January 1, 1978 only 3.9 BCF of gas reserves remained under Section 18 to be produced from a well located thereon.

(12) That Enfield's evidence also established that the wells on the offsetting proration units to the east in the Indian Basin-Upper Pennsylvanian Gas Pool have nine times the remaining reserves available to them compared to the remaining reserves available to the Bunnel Federal No. 1 Well in Section 18 (West Indian Basin Unit Well No. 1 in Section 17, Township 21 South, Range 23 East, has 27.01 BCF and West Indian Basin Unit Well No. 2 in Section 20, Township 21 South, Range 23 East, has 27.30 BCF).

(13) That use of the formula traditionally used by the Commission to limit production from wells at unorthodox locations based on the extent the proposed well encroaches on offsetting leases, will not result in an effective and equitable limitation on the production from the proposed well for the evidence established that much of Section 18 cannot contribute gas to a well at the proposed location.

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(14) That said Section 18 contains only 576 acres.

(15) That only 420 acres lie on the same side of the ceiling fault which traverses said Section 18 and the proposed well.

(16) That for a well in said Section 18 to be capable of commercial production, the well must encounter dolomite in the formation.

(17) That approximately 160 acres in said Section 18 contain dolomite and that the limestone in the remainder of said Section is fractured and, therefore, in communication with the dolomite bearing portion of the formation.

(18) That no more than 160 acres in said Section 18 contain sufficient dolomite to enable it to produce gas and many of these acres have been drained by the Enfield Bunnel Federal No. 1 well which has produced since 1965 4.75 BCF of gas from the nearest standard location to the offsetting leases in Section 20.

(19) That the production limitation referred to in Finding (10) above, should be based upon the variation in the number of acres in Section 18 that could contribute gas to the proposed well (160 acres) described in Finding (18) above, and a standard spacing unit in the Indian Basin-Morrow Gas Pool (640 acres) described in Finding (3) above, and may best be accomplished by assigning the well at the proposed location a production limitation factor of 0.25 (160 acres available to contribute gas to a well at the proposed location divided by 640 acres in a standard spacing unit).

(20) That the production limitation factor should be

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applied against said well's allowable.

(21) That approval of the subject application, subject to the above provisions and limitations, will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That Robert N. Enfield is hereby authorized an unorthodox Morrow formation gas well location for a well to be drilled at a point 1200 feet from the South line and 330 feet from the East line of Section 18, Township 21 South, Range 23 East, N.M.P.M., Indian Basin-Morrow Gas Pool, Eddy County, New Mexico.

(2) That all of said Section 18 shall be dedicated to the above-described well.

(3) That said well is hereby assigned a production limitation factor of 0.25 in the Morrow formation.

(4) That the production limitation factor shall be applied against said well's allowable.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

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STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member

ED KELLEY, Member

JOE D. RAMEY, Chairman and Secretary

SEAL