HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

FRANKLIN H MCCALLUM\* GREGORY / NIBERT GREGORY J NIBERT DAVID T MARKETTE\* MARK C DOW KAREN M RICHARDSON\* FRED W SCHWENDIMANN JAMES M HUDSON ALBUQUERQUE, NEW MEXICO 87102-2121 (505) 768-1500

FAX (505) 768-1529

OF COUNSEL O M. CALHOUN\* MACK EASLEY JOE W WOOD RICHARD S MORRIS

CLARENCE E. HINKLE (1901-1985)
W E BONDURANT, JR. (1913-1973)
ROY C SNODGRASS, JR. (1914-1987)

April 16, 1992

. \* DIVISION . 55700 UNITED BANK PLAZA POST OFFICE BOX IO ROSWELL, NEW MEXICO 88202 (55) 222-6510 FAX (505) 623-9332

2800 CLAYDESTA NATIONAL BANK BUILDING POST OFFICE BOX 3580 MIDLAND, TEXAS 79702 (915) 683-4691 FAX (915) 683-6518

> 1700 TEAM BANK BUILDING POST OFFICE BOX 923B AMARILLO, TEXAS 79105 (806) 372-5569 FAX (806) 372-9761

218 MONTEZUMA POST OFFICE BOX 2068 SANTA FE, NEW MEXICO 87504 (505) 982-4554 FAX (505) 982-8623

\*NOT LICENSED IN NEW MEXICO

JEFFREY D HEWETT MARTIN MEYERS
JAMES BRUGHES GREGORY S WHEELER
JERRY F, SHACKELFORD\*
JAFES A GRILESPIE
ALBERT L PITTS
THOMAS M, HNASKO
JOHN C CHAMBERS\*
JOHN R, KULSETH, JR
JEFFREY D HEWETT, JR
JEFREY D HEWETT, JR
JEFFREY D HEWETT, JR
JEFFREY D HEWETT, JR
JEFFRE

PAUL W EATON

OWEN M LOPEZ DOUGLAS L LUNSFORD

JOHN J KELLY

JOHN J KELLY
T CALDER EZZELL, JR
WILLIAM B BURFORD\*
RICHARD E OLSON
RICHARD R WILFONG\*
THOMAS J MEBRIDE
STEVEN O. ARNOLO
JAMES J WECHSLER
NANCY S CUSACK
JEFFREY L FORNACIAR

JEFFREY L FORNACIARI
JEFFREY D HEWETT

GARY D COMPTON

MICHAEL A GROSS

CONRAD E COFFIELD
HAROLD L HENSLEY, JR
STUART D SHANOR
ERIC D LAMPHERE
C D MARTIN
PAUL J KELLY, JR
MARSHALL G MARTIN
OWEN M 10057 CONRAD E COFFIELD

JEFFREY S BAIRD\* PATRICIA A MORRIS

WILLIAM P JOHNSON

MARTIN MEYERS

LISA K SMITH\* JAMES K SCHUSTER\*

MACDONNELL GORDON

REBECCA NICHOLS JOHNSON

STANLEY K KOTOVSKY, JR.
BETTY H LITTLE\*
RUTH S MUSGRAVE
HOWARD R THOMAS
ELLEN S CASEY
S BARRY PAISNER
MARGARET CAPTER LUDEWIG

Mr. David Catanach New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504

Mr. Robert Stovall New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504

Case No. 10,462; Application of Marathon Oil Company for Re: Termination of Prorationing in the Vacuum-Glorieta Pool ("the Pool")

Gentlemen:

This letter constitutes the written closing argument submitted jointly by Phillips Petroleum Company and Exxon Corporation.

Exxon and Phillips support Marathon's application for unrestricted allowables for existing wells in the Pool, provided that termination of allowables is temporary. A brief period of unrestricted allowables will benefit interest owners in the Pool by allowing data acquisition which will permit unitization to proceed. Furthermore, termination of prorationing will not materially harm any operations in the Pool.

Marathon is suffering no harm under the existing allowable limits. The drive mechanism of the Pool is solution gas with a Mr. Robert Stovall Mr. David Catanach April 16, 1992 Page 2

water drive component. Marathon's wells are on the east side of the unit, and water influx is from the north and east. In effect, Marathon's wells are benefitting from a natural water flood or pressure maintenance. This is shown by the fact that the GOR's on Marathon's two top allowable wells are below solution GOR even though the reservoir pressure is well below the bubble point pressure. In areas of the Pool where pressure support is limited, GOR's are well above the solution GOR.

Because Marathon's wells are not being harmed, the only basis for allowing unrestricted allowables is to collect data necessary to allow unitization to proceed. There are many marginal operations in the eastern part of the Pool. The quicker unitization is instituted the better off all interest owners in the Pool will be, including Mobil and Marathon.

Mobil is worried about potential reservoir damage caused by water influx. However, adverse effects on marginal operations are aggravated by a delay in unitization. Any speculative negative effects of temporary, unrestricted allowables are minimal compared to the problems of waiting too long to unitize.

The main issue which has delayed unitization is obtaining reliable data on remaining primary reserves from the top allowable wells. The only way to accurately and quickly obtain this data is by decline curve analysis. Thus, temporarily terminating allowables is vital for unitization to proceed. Mobil has proposed obtaining sheer wave logs in lieu of establishing decline curves. However, as Mobil's engineer admitted at hearing, such data cannot establish decline curves. Rather, it can only establish original oil in place. Original oil in place is not a disputed participation parameter. Thus the test proposed by Mobil is useless.

A temporary 9 month period of unrestricted production should allow sufficient data collection for unitization purposes. As part and parcel of this data collection process, we urge the Division to require the well tests requested by Exxon and Phillips. The information collected by those tests is vital to the engineering committee, and may well settle any existing disputes over unit participation formulas.

We request the application be granted with the two conditions requested by Exxon and Phillips.

Mr. Robert Stovall Mr. David Catanach April 16, 1992 Page 3

Also, enclosed are the proposed findings and conclusions submitted jointly by Phillips and Exxon.

Very truly yours,

HINKLE, COX, EATON, COFFIELD &

HENSLEY

By: / James Bruce

ATTORNEYS FOR PHILLIPS
PETROLEUM COMPANY AND EXXON

CORPORATION

JB:le

cc w/enc: John Nelson

W. Perry Pearce

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

APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO. Case No. 10,462

# PROPOSED FINDINGS AND CONCLUSIONS SUBMITTED BY PHILLIPS PETROLEUM COMPANY AND EXXON CORPORATION

(NOTE: As requested by the Examiner, Phillips and Exxon are not submitting a complete proposed order. Rather, their proposed findings and conclusions are limited to the issues on which Phillips and Exxon presented testimony.)

#### FINDINGS:

- (a) The top allowable wells in the Vacuum-Glorieta

  Pool ("the Pool") are not being harmed by fluid withdrawal from wells offsetting the top allowable wells.
- (b) The primary purpose served by unrestricted allowables is to collect data which will allow unitization discussions to proceed regarding the eastern part of the Pool.
- (c) A nine month period of unrestricted allowables is a sufficient time to collect data with which to better estimate remaining primary reserves from the leases with top allowable wells.
- (d) Better remaining primary reserve estimates will likely decrease the time until unitization is instituted.
- (e) Delay in unitization will be detrimental to marginal operations in the Pool.
- (f) A testing program should be required to ensure collection of adequate data for the engineering committee.

### IT IS THEREFORE ORDERED THAT:

- (a) The application of Marathon Oil Company to terminate prorationing in the Vacuum-Glorieta Pool is hereby granted for a nine month period commencing , 1992.
- (b) The operators of any wells or proration units capable of producing in excess of 107 barrels of oil per day average during a month are required to conduct the following tests or collect the following data, and provide all data to the engineering committee:
- (i) A minimum 24-hour production test of oil,water, and gas volumes, to be performed twice monthly;
- (ii) Monthly pumping fluid levels, to coincide
  with a production test;
- (iii) A multi-rate flow test to enable calculation
  of the well's Productivity Index; and
- (iv) A shut-in bottom hole pressure test, either by direct measurement or fluid level, for any one well on the lease during the period. This test may be taken on any well, even non-top allowable wells.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD &

HENSLEY

James Bruce

500 Marquette, N.W.

Suite 800

Albuquerque, N.M. 87102

(505) 768-1500

Attorneys for Phillips Petroleum Company and Exxon 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 THE APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF OIL PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO.

Case No. 10462 Order No. R-

### CERTIFICATE OF SERVICE

I certify that I caused a true and correct copy of the foregoing Closing Statement of Opponent and Proposed Order to be mailed to James G. Bruce, Esq., 505 Marquette, N.W., #800, Albuquerque, New Mexico 87102 on this 23rd day of April, 1992.

W. Perry Pearce

192 MB 31 PM 9 47

ATTORNEYS AT LAW

400 NORTH PENNSYLVANIA

RUSSELL D. MANN BOB F. TURNER JOHN W. BASSETT

ROBERT E. SABIN BRIAN W. COPPLE

STEVEN L. BELL WILLIAM P. LYNCH RODNEY M. SCHUMACHER

JOHN S. NELSON

R. TRACY SPROULS FREDDIE J. ROMERO

LEE M. ROGERS, JR. TIMOTHY A. LUCAS

VICTORIA S. ARENDS

JEFFERY D. TATUM

SUSAN ZELLER

CRAIG A. ORRAJ BRYAN EVANS RICHARD J. VALLE

IIOO UNITED BANK PLAZA
P. O. DRAWER 700
ROSWELL, NEW MEXICO 88202

TEL. (505) 622-6221 FAX (505) 624-2883

CHARLES F. MALONE OF COUNSEL

JEFF D. ATWOOD (1883-1960)

ROSS L MALONE (1910-1974)

VIA FAX - 827-5741

March 26, 1992

Ms. Florene Davidson Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87504

RE: Application of Marathon Oil Company

Case No. 10462

Docket of April 2, 1992

Dear Ms. Davidson:

Pursuant to our conversation, I am transmitting to you herewith by fax a copy of Marathon's Pre-Hearing Statement. I will mail the original and one copy to you by regular mail.

Yours truly,

John Nelsor

JSN/le Encs.

cc: Mr. Thomas C. Lowry

Mobil Producing Texas & New Mexico, Inc.

# 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 THE APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF OIL PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO.

Case No. 10462 Order No. R-

### CERTIFICATE OF SERVICE

I certify that I caused a true and correct copy of the foregoing Closing Statement of Opponent and Proposed Order to be mailed to Rod M. Schumacher, Post Office Drawer 700, Roswell, New Mexico 88201 on this 23rd day of April, 1992,

W. Perry Pearce

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

RECEIVED

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING THE APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF OIL PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO.

APR 2 3 1992

OIL CONSERVATION DIV.

Case No. 10462 Order No. R-

# CLOSING STATEMENT OF OPPONENT MOBIL EXPLORATION & PRODUCING U.S.

The Application filed by Marathon Oil Company in this case for termination of oil prorationing in the Vacuum-Glorieta Oil Pool in Lea County, New Mexico, should be denied. The denial of this Application will operate to prevent waste of natural resources and will operate to protect the correlative rights of other interest owners in the Vacuum-Glorieta Oil Pool as is required by the Oil and Gas Act and the Rules and Regulations of the Division.

Marathon appears before the Division seeking the termination of oil prorationing and an exemption from the provisions of General Rule 505, because the various interest owners in the area which would be the Vacuum-Glorieta West Unit area have been unable to agree on a participation formula to be used in the proposed secondary recovery unit. Although it may be correct that the interest owners have not been able to agree, such disagreement among interest owners is not sufficient reason to threaten waste of natural resources and impairment of interest owners correlative rights.

Testimony and exhibits presented by Mobil Exploration and Producing U.S. ("Mobil") demonstrate that the eastern part of the Vacuum-Glorieta Oil Pool has already experienced significant water influx. The geological evidence presented by both parties to this hearing indicates that the Vacuum-Glorieta Pool is a particularly heterogeneous reservoir which is composed of zones of varying permeability and porosity and it is this heterogeneity which causes the threat of waste and correlative rights impairment.

The combination of existing water influx and varying permeability zones indicates that if the top allowable wells in the Vacuum-Glorieta Oil Pool are allowed to produce at capacity coning of water to the wellbore of these wells, through the higher permeability zones, is likely to cause the isolation of oil resources that will be bypassed by the water migrating through the higher permeability zones. Isolating these resources in the high porosity low permeability stringers will cause the waste of these natural resources and will make the ultimate recovery of oil from this pool significantly lower.

At the hearing, Applicant indicated that only by allowing the top allowable wells to produce at capacity could decline curves be constructed and accurate participation formulas be derived. Mobil's witness testified that there is modern technology available which will indicate more precise information about the reservoir without the danger inherent in increased production and that this information could be utilized in discussions among interest owners in the proposed unit area to resolve their differences.

In a somewhat novel application, Marathon Oil Company requests that the Division void the provisions of a statewide rule which has been applicable to all wells and all operators in the Vacuum-Glorieta Oil Pool since the discovery and development of this pool in the early 1960's. The justification for this departure from longstanding operating practices and statewide rule is that interest owners within a proposed unit area are unable to agree, and apparently are unwilling to compromise, in order to facilitate the formation of a secondary recovery unit which would facilitate the production of additional reserves.

Mobil agrees that unitization of the Vacuum-Glorieta West Unit area is an appropriate step, however, Mobil is concerned that the granting of this application is certainly not assured of being successful in getting agreement among interest owners in the unit to facilitate unitization and because of the geology of the Vacuum-Glorieta Pool, the granting of this Application threatens to cause waste of natural resources and threatens to impair the correlative rights of other interest owners by causing damage to the reservoir itself. Based upon the availability of alternative and more precise logging technology and because of the threat of waste and impairment of correlative rights, the Application of Marathon Oil Company for the termination of oil prorationing in the Vacuum-Glorieta Oil Pool should be denied.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

W. Perry Pearce Post Office Box 2307

Santa Fe, New Mexico 87504

(505) 982-3873

Attorneys for Mobil Exploration and Producing U.S.

# 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:

APPLICATION OF MARATHON OIL

NEW MEXICO

COMPANY FOR AN ORDER ESTABLISHING

A SPECIAL POOL ALLOWABLE FOR THE VACUUM-GLORIETA POOL, LEA COUNTY,

Finte

CASE NO. 10462 ORDER NO.

RECEIVED

APNOR

OIL CONSERVATION DIVISION

## CLOSING ARGUMENT

THIS Closing Argument is submitted on behalf of Marathon Oil Company pursuant to the instructions of the Examiner following the hearing held in connection with the above referenced Application on April 2, 1992.

The Vacuum-Glorieta Pool was discovered on January 11, 1963, and the Pool was established at a meeting held by the New Mexico Oil Conservation Commission in Hobbs, New Mexico, on January 9, 1963. Following initial discovery of the Pool, rapid development extended the field to the north and east from the initial discovery in Section 36, Township 17 South, Range 34 East. Wells were drilled on statewide 40 acre spacing, and as of January 1, 1990, 185 wells had been productive.

Efforts have long been underway to unitize the field. Production characteristics served to divide the field into proposed western and eastern units, and the top allowable wells which are the subject of this Application are located in the proposed eastern

unit in Sections 28, 32 and 33, Township 17 South, Range 35 East. The current allowable is 107 barrels of oil per day, and Marathon has asked through this Application that the allowable be set at current capacity.

Increased allowables will protect correlative rights of those leaseholds developed by top allowable wells by allowing them to compete for remaining reservoir energy with offset wells which are producing at higher reservoir fluid voidage rates. Average voidage rates for the top allowable wells is 260 BPD, while the Pool average is much higher at 366 BPD.

Increased allowables will also help to prevent waste by allowing those wells on which production is now restricted by allowables to recover more oil from their proration units prior to depletion of available reservoir energy. Because of the heterogeneity of the pool, this will not impair the correlative rights of other producers in the pool.

In close proximity to the Marathon wells, there are two wells on a single proration unit due north producing approximately 500 barrels total voidage per day. Another well to the northwest produces 790 barrels total voidage per day. In all, there are 57 wells producing at higher voidage rates than the top allowable wells. As illustrated in Marathon's Exhibit 13, increased production from the top allowable wells in the field would result

920421/926107/ORDER.2 2

in a 15% increase in the oil production rate with only a 2% increase in the total voidage rate from the field.

Increased production from these wells will not cause any significant increase in the rate of water encroachment. Marathon Exhibits 8, 9, and 10 demonstrate that the current rate of water production remains essentially unchanged even after infill drilling in the area of the top allowable wells. Exhibit 8 demonstrates, for example, that after the drilling of two infill wells and one replacement well in early 1989, there is no indication that the previously demonstrated production decline had increased. Similarly, Exhibit 9 demonstrates that the water-oil ratio associated with the oil production shown in Exhibit 8 has not apparently undergone any unusual increase, indicating that increased total reservoir voldages did not increase water influx.

Producers from this field are generally agreed that the reservoir is heterogeneous in character, and that there is little structural correlation between position and production characteristics. This makes it difficult to calculate primary reserves accurately, without actual production decline figures for the top allowable wells. If the top allowable wells are allowed to produce at capacity, producers of these wells will then be able to collect sufficient data upon which to base accurate primary reserve calculations, and this should expedite the unitization efforts currently underway. Without such data, it will be virtually

impossible for the producers in the proposed east unit to agree to a participation formula, resulting in further delays in the unitization process.

In summary, granting of Marathon's application will result in more efficient use of available reservoir energy, greater production of oil prior to depletion of reservoir energy, and will provide data which may lead to the successful unitization of the eastern portion of the pool. These goals will be achieved without damage to the reservoir, without an increase in water influx, and without impairment of the correlative rights of producers in the pool.

Respectfully submitted,

ATWOOD, MALONE, MANN & TURNER, P.A.

Rod M. Schumacher

P.O. Drawer 700

Roswell, New Mexico 88202

(505) 622-6221

I hereby certify that on this 22 day of April, 1992, a true and correct copy of the foregoing was mailed to:

James G. Bruce, Esq. W. Perry Pearce, Esq.

4

ATWOOD, MALONE, MANN & TURNER

APROFESSIONAL ASSOCIATION

RUSSELL D. MANN BOB F. TURNER JOHN W. BASSETT ROBERT E. SABIN BRIAN W. COPPLE

STEVEN L. BELL WILLIAM P. LYNCH RODNEY M. SCHUMACHER

JOHN S. NELSON

R. TRACY SPROULS

FREDDIE J. ROMERO

LEE M. ROGERS, JR.

TIMOTHY A. LUCAS VICTORIA S. ARENDS

JEFFERY D. TATUM

SUSAN ZELLER

CRAIG A. ORRAJ BRYAN EVANS RICHARD J. VALLE

ATTORNEYS AT LAW

JEFF D. ATWOOD (1883-1960) ROSS L. MALONE (1910-1974)

400 NORTH PENNSYLVANIA JIGO UNITED BANK PLAZA P. O. DRAWER 700 ROSWELL, NEW MEXICO 88202

> TEL. (505) 622-6221 FAX (505) 624-2883

CHARLES F. MALONE OF COUNSEL

VIA FAX - 827-5741

April 22, 1992

Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87504

Attention: Ms. Florene Davidson

Application of Marathon Oil Company

No. 10462

Dear Ms. Davidson:

Pursuant to the instructions of Mr. Catanach, enclosed in connection with the referenced case is Marathon's proposed Order. Marathon's Closing Argument has been or will be hand delivered to you today. By copy of this letter, I am furnishing copies of the Closing Argument and the proposed Order to James Bruce and Perry Pearce, counsel for the other parties who entered appearances.

JSN/le

Mr. James Bruce (w/encs.)

Mr. Perry Pearce (w/encs.)

Mr. Thomas C. Lowry

# 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.	10462	
ORDER	NO.		

APPLICATION OF MARATHON OIL COMPANY FOR AN ORDER ESTABLISHING A SPECIAL POOL ALLOWABLE FOR THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 2, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 1992, 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 applicant, Marathon Oil Company, is the operator of 2 wells currently capable of producing at the depth bracket allowable of 107 BOPD in the Vacuum-Glorieta Pool which comprises all or portions of Sections 24, 25, 26, 35, 36, Township 17 South, Range 34 East; Sections 1 and 2, Township 18 South, Range 34 East; Section 26, 27, 28, 29, 30, 31, 32, 33 and 34, Township 17 South, Range 35 East; and Sections 5 and 6, Township 18 South, Range 35 East, NMPM, Lea County, New Mexico.
- (3) The applicant seeks the assignment of a special depth bracket allowable pursuant to General Rule 505(D), whereby the allowable for each well producing from said pool would equal its producing capacity. Any proration unit on which an additional well or wells are drilled after the effective date of the new allowable would be permitted to produce only the greater of 107 BOPD or the capacity of the best well on the unit.

- (4) Presently, there are 5 proration units in the Vacuum-Glorieta Pool (4 with one well and 1 with 2 wells) that are capable of producing in excess of the current depth bracket allowable.
- (5) The evidence presently available indicates that an increased rate of production from wells in said pool will not result in damage to the reservoir nor have an adverse effect on the ultimate recovery from the pool but rather ultimate recovery should be improved thereby.
- (6) Approval of the subject application will serve to prevent waste and will not violate correlative rights.
  - (7) The subject application should be approved.

#### IT IS THEREFORE ORDERED THAT:

- (1) EFFECTIVE \_\_\_\_\_\_\_, 199\_\_\_\_, a special depth bracket allowable equal to the producing capacity of each well currently drilled in the pool is hereby established for the Vacuum-Glorieta Pool, Lea County, New Mexico. Should any additional well be drilled on an existing proration unit after the effective date of this order, then the allowable for the unit shall be the greater of 107 BOPD or the capacity of the best well on the unit.
- (2) The Division Director may, at any time it appears that reservoir damage is apparent or other evidence of waste occurring, rescind the provisions of the order and cause the top unit allowable for the Vacuum-Glorieta Pool to revert back to 107 barrels of oil per day.
- (3) 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

(SEAL)

WILLIAM J. LEMAY Director



P.O. Box 576 Houston, TX 77001

March 31, 1992

RECEIVED

Will All Const

OIL CONSERVATION DIVISION

# Federal Express

William J. LeMay Chairman and Director Oil Conservation Division State of New Mexico Energy, Minerals and Natural Resources Department P. O. Box 2088 Santa Fe. NM 87504-2088

Dear Mr. LeMay:

Shell Western E&P Inc., operator of eleven State of New Mexico leases and one fee lease in the Vacuum Glorieta Pool located in Lea County, New Mexico recommends that Marathon Oil Company's application (Case No. 10,462) to establish a special pool allowable for the Vacuum Glorieta Pool be denied.

It is the opinion of Shell Western E&P Inc. that approval of the proposed Marathon pool allowable request would result in a significant reduction of the ultimate oil recovery from this limited natural water influx drive type reservoir.

Your consideration of Shell Western's concern for efficient depletion of the Vacuum Glorieta Pool is respectfully requested.

Very truly yours,

W. F. N. Kelldorf

Technical Manager Environmental

Western Division

RLS:CAC

# Shell Western E&P Inc.



P.O. Box 576 Houston, TX 77001

March 31, 1992

# Federal Express

William J. LeMay Chairman and Director Oil Conservation Division State of New Mexico Energy, Minerals and Natural Resources Department P. O. Box 2088 Santa Fe, NM 87504-2088

Dear Mr. LeMay:

Shell Western E&P Inc., operator of eleven State of New Mexico leases and one fee lease in the Vacuum Glorieta Pool located in Lea County, New Mexico recommends that Marathon Oil Company's application (Case No. 10,462) to establish a special pool allowable for the Vacuum Glorieta Pool be denied.

It is the opinion of Shell Western E&P Inc. that approval of the proposed Marathon pool allowable request would result in a significant reduction of the ultimate oil recovery from this limited natural water influx drive type reservoir.

Your consideration of Shell Western's concern for efficient depletion of the Vacuum Glorieta Pool is respectfully requested.

Very truly yours,

W. F. N. Kelldorf

Technical Manager Environmental

Western Division

RLS: CAC

#### STATE OF NEW MEXICO



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

May 22, 1992

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

HINKLE, COX, EATON, COFFIELD & HENSLEY Attorneys at Law 500 Marquette, NW Suite 800 Albuquerque, New Mexico 87102

RE: CASE NO. 10462

ORDER NO. R-9677

Dear Sir:

Enclosed herewith are four copies of the above-referenced Division orders recently entered in the subject cases.

Sincerely,

Florene Davidson

OC Staff Specialist

FD/sl

cc:

BLM - Carlsbad

Perry Pearce

#### 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 10, 1992

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

RE: CASE NO. 10462

ORDER NO. R-9677-A

Dear Sir:

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

Sincerely,

Mucie

Florene Davidson

OC Staff Specialist

FD/sl

cc: BLM - Carlsbad

J. Bruce

# ATWOOD, MALONE, MANN & TURNER OIL CONSER. A DIVISION

A PROFESSIONAL ASSOCIATION

ATTORNEYS AT LAW

400 NORTH PENNSYLVANIA 1100 UNITED BANK PLAZA P. O. DRAWER 700 ROSWELL, NEW MEXICO 88202

> TEL. (505) 622-6221 FAX (505) 624-2883

June 19, 1992

RUSSELL D. MANN BOB F. TURNER JOHN W. BASSETT ROBERT E. SABIN BRIAN W. COPPLE STEVEN L. BELL WILLIAM P. LYNCH RODNEY M. SCHUMACHER JOHN S. NELSON R. TRACY SPROULS FREDDIE J. ROMERO LEE M. ROGERS, JR. TIMOTHY A. LUCAS VICTORIA S. ARENDS SUSAN ZELLER JEFFERY D. TATUM CRAIG A. ORRAJ BRYAN EVANS

RICHARD J. VALLE

CHARLES F. MALONE OF COUNSEL

## VIA TELEFAX AND U.S. MAIL

Ms. Florene Davidson Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504

> Application of Marathon Oil Company for Termination of Oil Prorationing in the Re: Vacuum-Gloriet Pool, Lea County, New Mexico

Dear Ms. Davidson:

Attached is an Application for Hearing De Novo submitted on behalf of Marathon Oil Company in connection with the above referenced case and Order. The original will follow by regular mail, and I would appreciate receiving a file stamped copy. I have enclosed a self-addressed stamped envelope for this purpose.

We would prefer that this matter be placed on the August docket.

Sincerely,

Rod M. Schumacher

Down S. Lumasto

RMS:dk

James Bruce, Esquire xc: W. Perry Pearce

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

JUN 24 1847

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

OIL CONSERVATION DIVISION

CASE NO. 10462 Order No. R-9677

APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF OIL PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO.

### APPLICATION FOR HEARING DE NOVO

The Division rendered its Order No. R-9677 on May 22, 1992. Pursuant to §70-2-13 NMSA (1978) and Rule 1220 of the Division's Rules and Regulations, the Applicant, Marathon Oil Company, hereby requests that its Application be heard <u>de novo</u> before the Oil Conservation Commission. Marathon's request for a hearing <u>de novo</u> is limited to the issue of whether the relief requested by Marathon's Application should be allowed for a limited test period of nine months.

Respectfully submitted,

ATWOOD, MALONE, MANN & TURNER

John Nelson

P. O. Drawer 700 Roswell, NM 88202

(505) 622-6221

Attorneys for Marathon Oil Company

# CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Application for Hearing De Novo was mailed this 19 day of Jour , 1992, to James Bruce, P. O. Box 2068, Santa Fe, NM 87504, attorney for Phillips Petroleum Company and Exxon Company USA, and to W. Perry Pearce, P. O. Box 2307, Santa Fe, NM 87504, attorney for Mobil Exploration & Producing U.S., Inc.

John Nelson

# ATWOOD, MALONE, MANN & TURNER

A PROFESSIONAL ASSOCIATION

ATTORNEYS AT LAW

400 NORTH PENNSYLVANIA
HOO UNITED BANK PLAZA
P. O. DRAWER 700
ROSWELL, NEW MEXICO 88202

TEL. (505) 622-6221 FAX (505) 624-2883

June 19, 1992

RUSSELL D MANN BOB F. TURNER JOHN W BASSETT ROBERT E SABIN BRIAN W COPPLE STEVEN L BELL WILLIAM P. LYNCH RODNEY M. SCHUMACHER JOHN 5 NELSON R. TRACY SPROULS FREDDIE J ROMERO LEE M. ROGERS JR. TIMOTHY A LUCAS VICTORIA S. ARENDS SUSAN ZELLER JEFFERY D TATUM CRAIG A ORRAJ BRYAN EVANS RICHARD J VALLE

CHARLES F. MALONE OF COUNSEL

ROSS L. MALONE (1910-1974)

# VIA TELEFAX AND U.S. MAIL

Ms. Florene Davidson Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504

Re: Application of Marathon Oil Company for Termination of Oil Prorationing in the

Vacuum-Gloriet Pool, Lea County, New Mexico

Dear Ms. Davidson:

Attached is an Application for Hearing De Novo submitted on behalf of Marathon Oil Company in connection with the above referenced case and Order. The original will follow by regular mail, and I would appreciate receiving a file stamped copy. I have enclosed a self-addressed stamped envelope for this purpose.

We would prefer that this matter be placed on the August docket.

Sincerely,

Rod M. Schumacher

Jan S. Lumasto

RMS:dk

xc: James Bruce, Esquire

W. Perry Pearce

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

JUN 9 1 1 - 2

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

OIL CONSERVATION DIVISION

CASE NO. 10462 Order No. R-9677

APPLICATION OF MARATHON OIL COMPANY FOR TERMINATION OF OIL PRORATIONING IN THE VACUUM-GLORIETA POOL, LEA COUNTY, NEW MEXICO.

#### APPLICATION FOR HEARING DE NOVO

The Division rendered its Order No. R-9677 on May 22, 1992. Pursuant to §70-2-13 NMSA (1978) and Rule 1220 of the Division's Rules and Regulations, the Applicant, Marathon Oil Company, hereby requests that its Application be heard <u>de novo</u> before the Oil Conservation Commission. Marathon's request for a hearing <u>de novo</u> is limited to the issue of whether the relief requested by Marathon's Application should be allowed for a limited test period of nine months.

Respectfully submitted,

ATWOOD, MALONE, MANN & TURNER

John Nelson

P. O. Drawer 700

Roswell, NM 88202

(505) 622-6221

Attorneys for Marathon Oil Company

### CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Application for Hearing De Novo was mailed this  $\underline{1}$  day of  $\underline{\mathcal{J}}$  day of  $\underline{\mathcal{J}}$ , 1992, to James Bruce, P. O. Box 2068, Santa Fe, NM 87504, attorney for Phillips Petroleum Company and Exxon Company USA, and to W. Perry Pearce, P. O. Box 2307, Santa Fe, NM 87504, attorney for Mobil Exploration & Producing U.S., Inc.

John Nelson

## KELLAHIN, KELLAHIN AND AUBREY

ATTORNEYS AT LAW

EL PATIO BUILDING

W. THOMAS KELLAHIN\* KAREN AUBREY 117 NORTH GUADALUPE
POST OFFICE BOX 2265

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

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

SANTA FE, NEW MEXICO 87504-2265

TALSO ADMITTED IN ARIZONA

JASON KELLAHIN (RETIRED 1991)

July 6, 1992

William J. LeMay Oil Conservation Commission State Land Office Building 310 Old Santa Fe Trail, Room 219 Santa Fe, New Mexico 87501

RE: OCD Case No. 10462 - DeNovo
Application of Marathon Oil
Company for termination of oil
prorationing in the VacuumGlorieta Pool, Lea County,
New Mexico

RECEIVED

HAND DELIVERED

JIII 0 7 1992

OIL CONSERVATION DIVISION

Dear Mr. LeMay:

Please enter my appearance on behalf of Marathon Oil Company in the reference case which is now set for a DeNovo hearing on July 16, 1992

We request that this case be continued to the August 13, 1992 Commission docket. By copy of this letter I am notifying all counsel of record of our request.

Very truly yours,

V. Thomas Kellahin

WTK/jcl

xc: Robert Stovall, Esq. (by hand)

Gary Kilpatric, Esq.

James Bruce, Esq.

Thomas C. Lowry, Esq. - Marathon Oil Co.

ltrt706.092

#### ATWOOD, MALONE, MANN & TURNER

A PROFESSIONAL ABBOCIATION

ATTORNEYS AT LAW

JEFF 5 ATWOOD (1883-1960) ROSS L MALLINE (1910-1974)

S & F. MA WAL 4 COUNSEL

400 NORTH PENNSYLVANIA HOD UNITED BANK PLAZA P. O. DRAWER 700 ROSWELL, NEW MEXICO 88202

TEL. (SOS) GER-GERI FAX (500) 024-2883

June 19, 1992

RUSSELL D. MANN BOB F. TURNER JOHN W. BASSETT ROBERT E SABIN STEVEN L BELL WILLIAM P. LYNCH RODNEY M. SCHUMACI . R NOSJEN S NHOL R. TRACY PROULS LEE M. ROGERS, JR. TIMOTHY A. LUCAS SUSAN ZELLER EFFERY D. TATUM RAIG A. ORRAU BRYAN EVANS HICHARD I VALLE

### VIA TELEFAX AND U.S. MAIL

Ms. Florene Davidson Oil Conservation Division P.O. Box 2088 Santa Fc, New Mexico 87504

> Re: Application of Marathon Oil Company for Termination of Oil Prorationing in the Vacuum-Gloriet Pool, Lea County, New Mexico

#### Dear Ms. Davidson:

Attached is an Application for Hearing De Novo submitted on behalf of Marathon (iii) Company in connection with the above referenced case and Order. The original will follow ! regular mail, and I would appreciate receiving a file stamped copy. I have enclosed self-addressed stamped envelope for this purpose.

We would prefer that this matter be placed on the August docket.

Sincerely,

Rod M. Schumacher

Jan. S. Sumach

RMS:dk

James Bruce, Esquire W. Perry Pearce

ODESSA, TEXAS 79762 4001 PENBROOK RECEIVED AUG 1.2 1992

EXPLORATION AND PRODUCTION GROUP Permian Basin Area

August 3, 1992

NMOCD Case 10462 (DeNovo)
Application of Marathon Oil Company
for an Order Establishing a Special
Allowable for the Vacuum-Glorieta Pool,
Lea County, New Mexico

Mr. William J. LeMay Chairman Oil Conservation Commission 310 Old Santa Fe Trail Santa Fe, New Mexico 87501

Dear Mr. LeMay:

Phillips Petroleum Company supports any effort to expedite the unitization of the Vacuum-Glorieta Pool. Unitization and the initiation of secondary recovery operations is essential to the efficient recovery of remaining Glorieta reserves. To this end, Phillips Petroleum Company continues to support its original testimony which called for the granting of a special allowable for the Vacuum-Glorieta Pool equal to the producing capacity of each well currently drilled in the pool for a period of nine months.

The granting of this application will be useful in promoting the unitization of the Vacuum-Glorieta East Unit which Phillips Petroleum Company is seeking as unit operator. The main issue which has precluded the working interest owners from obtaining a 75% majority has been the lack of reliable data on remaining primary reserves for the top allowable wells.

The granting of this application will provide an opportunity to produce at capacity thereby generating production decline curves from which to estimate remaining primary production for those wells.

Phillips Petroleum Company's support is predicted upon Marathon Oil Company's evidence which will show:

- 1) That there will be no damage to the reservoir;
- 2) That data gathered will encourage unitization;

Mr. William J. LeMay Oil Conservation Commission NMOCD Case 10462 (DeNovo) August 3, 1992 Page 2

- And that the operators of any wells or proration units capable of 3) producing in excess of 107 barrels of oil per day average during a month are required to conduct the following tests or collect or collect the following data, and provide all data to the engineering committee for the
  - a) A minimum 24-hours production test of oil, water, and gas volumes to be performed twice monthly;
  - Monthly pumping fluid levels, to coincide with a production test.
  - c) A multi-rate flow test to enable calculation of the well's Productivity Index; and
  - d) A shut-in bottom hole pressure test, either by direct measurement or fluid level, for any one well on the lease during the period. This test may be taken on any well, even non-top allowable wells.

Very truly yours,

D. R. Wier yatt for Director, Reservoir Engineering

LDH:jj