

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

February 18, 1987



GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

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

*CASE 9109*

Re: Yates Petroleum Corp.  
Benson Deep Unit  
No. 4-F-3-19-30  
Benson Strawn Pool

Attn.: Patricia Ortiz  
Data Processing Dept.

Dear Ms. Ortiz,

In the matter of Yates Petroleum Corp., Benson Deep Unit No. 4-F Section 3, Township 19S, Range 30E, producing from the Benson Strawn Pool, being over produced, I have granted Yates Petroleum Corp. permission to produce this well, at its present rate, until the hearing to review the present stipulation in the Division's Order R-6129-A. The hearing is to be held on March 18, 1987.

This is to allow Yates Petroleum Corp. time to evaluate the well prior to the hearing.

Very truly yours,

*Les A. Clements*  
Les A. Clements  
Supervisor District II

cc Mr. Bill LeMay  
Yates Pet. Corp. (Attn: Dave Lanning) 748-1471  
Navajo Refining Co.  
Transwestern Pipeline Co.  
Meridian Oil Inc.  
Hanson Op. Corp.



State of New Mexico  
OIL CONSERVATION COMMISSION

From

MICHAEL E. STOSNER  
PETROLEUM ENGINEER

M.S.

Memo

Note: Application called in by  
Jerry Lasser, attorney in Roswell,  
3:00 PM 2/24/87.

746-3508

P.O. BOX 2088  
LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
505-827-5811

LAW OFFICES

LOSEE & CARSON, P. A.

300 AMERICAN HOME BUILDING

P. O. DRAWER 239

ARTESIA, NEW MEXICO 88211-0239

AREA CODE 505

746-3508

TELECOPY

746-6316

A. J. LOSEE  
JOEL M. CARSON  
JAMES E. HAAS  
ERNEST L. CARROLL

5 March 1987

FEDERAL EXPRESS

*Case 9109*

Mr. William LeMay, Director  
Oil Conservation Division  
State Land Office Building  
310 Old Santa Fe Trail, Room 206  
Santa Fe, New Mexico 87504

Re: Application of Yates Petroleum Corporation  
for amendment to Order R-6129-A

Dear Mr. LeMay:

Enclosed herewith please find three copies of the subject application, which we understand has been set for hearing before an examiner on March 18, 1987. If you have any questions concerning the enclosed, please do not hesitate to call or write me.

Very truly yours,

  
A. J. Losee

AJL:scp

cc: Yates Petroleum Corporation

RECEIVED

OIL CONSERVATION DIVISION

March 19, 1987

Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Case No. 9109  
New Mexico Oil Conservation Division  
Application of Yates Petroleum Corporation  
for an Amendment to Order No. R-6129-A, to  
Reclassify the Benson Strawn Pool as a Gas  
Pool, or in the Alternative, to Change the  
Oil Allowable and the Gas-Oil Ratio, Eddy  
County, New Mexico

Gentlemen:

Enclosed for filing, please find an Affidavit reflecting the mailing true copies of the application filed by Yates Petroleum Corporation in the captioned proceeding to all operators of wells and each unleased mineral owner within the proposed pool boundaries and all operators of wells within one mile of such boundaries, in accordance with Rule 1207(a)(4).

Thank you.

Sincerely yours,

DICKERSON, FISK & VANDIVER



Chad Dickerson

CD:pv  
Enclosures

cc w/enclosure: Ms. Janet Richardson  
Mr. David Lanning



S. P. YATES  
PRESIDENT  
JOHN A. YATES  
VICE PRESIDENT  
B. W. HARPER  
SEC. - TREAS.

105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210  
TELEPHONE (505) 748-1471

March 19, 1987

Oil Conservation Division  
P.O. Box 2088  
Santa Fe  
New Mexico 87504-2088

Attn: David Catanach

Dear Sir:

On March 18, 1987 Yates Petroleum Corporation and Meridian Oil presented cases 9109 and 9110 before the Commission concerning the pool rules for the Benson Strawn. During this hearing I presented testimony concerning the GOR history of the Benson Deep Unit #1. Because I did not have an exhibit of the Production history from this well, I was speaking from my best recollection of the data. I testified in error that the Benson Deep Unit #1 reached a peak GOR of 25000 to 1. The actual GOR peaked at approximately 15000 to 1 and this value should be used in reference to all of my testimony regarding the Benson Deep Unit #1. This error does not change my interpretation of the facts involved in these cases. If you require any additional information or explanation please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Lanning', is written over a light-colored background.

David Lanning  
Engineer

DL/gb

cc: Mr. Tom Olle  
Meridian Oil Inc.  
21 Desta Drive  
Midland, Texas 79705

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

March 19, 1987



GARREY CARRUTHERS  
COMMISSIONER

POST OFFICE BOX 2038  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

Yates Petroleum Corp.  
207 South Fourth St.  
Artesia, New Mexico 88210

Re: TEMPORARY ALLOWABLE  
Benson Deep Unit #4-F  
Sec. 3, Twn.19S, Rge.30E

Gentlemen:

A temporary allowable of 250 barrels of oil per day is hereby granted to the above captioned well.

This temporary allowable is valid only until the results of Case Number 9109 and Number 9110, heard at the hearing held on March 18, 1987, has been decided.

If we can be of further service in this matter, please do not hesitate to call on us.

Very truly yours,

  
Les A. Clements  
Supervisor District II

LAC/mm

cc Bill J. LeMay  
Tom Olle  
Patricia Ortiz  
David Catanach  
Phillips Pet. Co.  
John H. Trigg  
Great Western Drilg. Co.  
Texaco Inc.  
Mobil Oil Prod. Co.  
Navajo Refining Co.  
Transwestern Pipeline Co.

April 20, 1987

EXPRESS MAIL

Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Benson-Strawn Pool Hearings  
Case No. 9109: Yates Petroleum Corporation  
Case No. 9110: Meridian Oil Inc.

Gentlemen:

Enclosed for filing, please find the Yates Petroleum Corporation's Response to Meridian Oil Inc.'s Post Hearing Submittals. Yates does not have additional evidence to present at the scheduled hearing continued to April 22, 1987, assuming no appearance is made by any additional party.

Thank you.

Sincerely yours,

DICKERSON, FISK & VANDIVER

  
Chad Dickerson

CD:pv  
Enclosure

cc w/enclosure: Ms. Janet Richardson  
Mr. David Lanning  
Mr. W. Thomas Kellahin

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

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

APPLICATION OF MERIDIAN OIL INC. TO AMEND  
DIVISION ORDER R-6129-A TO PROVIDE FOR  
TEMPORARY CHANGES IN THE DEPTH BRACKET  
ALLOWABLE AND THE OIL-GAS RATIO LIMITATION  
FOR THE BENSON-STRAWN POOL, EDDY COUNTY,  
NEW MEXICO;

CASE NO. 9110

APPLICATION OF YATES PETROLEUM CORPORATION  
FOR RECLASSIFICATION OF THE BENSON-STRAWN  
OIL POOL, THEREBY CHANGING THE SPACING  
FROM 160 ACRES TO 320 ACRES, OR IN THE  
ALTERNATIVE FOR PERMANENT CHANGES IN THE  
DEPTH BRACKET ALLOWABLE AND THE GAS-OIL  
RATIO LIMITATION FOR THE BENSON-STRAWN  
POOL, EDDY COUNTY, NEW MEXICO

CASE NO. 9109

YATES PETROLEUM CORPORATION'S  
RESPONSE TO MERIDIAN OIL INC.'S  
POST HEARING SUBMITTALS

COMES NOW Yates Petroleum Corporation, by its attor-  
neys, and in response to Meridian Oil Inc.'s Post Hearing Submit-  
tals, attaches hereto and incorporates by reference herein the

statement of Yates Petroleum Corporation addressing the three points set forth in the submittal of Meridian Oil Inc.

YATES PETROLEUM CORPORATION

By: *Chad Dickerson*  
Chad Dickerson

DICKERSON, FISK & VANDIVER  
Seventh and Mahone, Suite E  
Artesia, New Mexico 88210  
(505) 746-9841

Attorneys for Yates Petroleum Corporation

I CERTIFY THAT I MAILED A TRUE COPY OF THE FOREGOING RESPONSE TO W. THOMAS KELLAHIN, ATTORNEY FOR MERIDIAN OIL INC., P. O. BOX 2265, SANTA FE, NEW MEXICO, 87504-2265, ON THIS 20<sup>th</sup> DAY OF APRIL, 1987.

*Chad Dickerson*  
Chad Dickerson

Meridian Oil Company has completed their review of the additional reservoir data supplied by Yates Petroleum and has concluded the Benson Strawn should remain an oil pool with 160 acre spacing. Meridian's written response submitted April 6, 1987 basically argues three points which Yates would like to address.

- 1) Meridian believes that the Benson Strawn performance history is consistent with "oil well" behavior.

Meridian believes that the Benson Strawn performance is more typical of oil wells than gas wells. This opinion ignores the similar performance characteristics of adjacent Strawn gas pools, the fluid sample data from the Benson and adjacent Strawn pools, and the extensive drainage area of the Benson Deep #4. There are no defined limits to separate the behavior of a volatile oil pool and a rich retrograde gas pool. There are ranges of usual observed behavior for various fluid systems and the performance of the Benson Strawn is within an expected performance range for a very rich retrograde condensate gas reservoir.

- 2) Meridian believes the fluid samples analyzed for the Benson Deep #1 and Benson Deep #4 are not valid due to erroneous laboratory conditions.

Meridian bases this opinion on a reservoir temperature they calculated from area well logs. It is an established fact that bottomhole temperatures obtained from well logs do not provide an accurate reservoir temperature. Quoting from the reservoir engineering text Meridian used in their memorandum:

"Temperatures determined by means of maximum-reading thermometers in general are not of sufficient accuracy for reservoir engineering purposes.... Even if the temperature log is run in open hole prior to setting and cementing casing, errors may occur unless sufficient time is allowed for the mud to attain equilibrium with the formation. After completion of the well, accurate formation temperature surveys can be made with recording subsurface temperature gauges provided that the fluid in the wellbore is static and is in thermal equilibrium with the surrounding formation. To satisfy these requirements the well must be closed in for approximately 24 to 48 hrs and must be free of casing leaks."

Amyx, Bass & Whiting, "Petroleum Reservoir Engineering," pages 575-576.

Yates utilized temperature data based on the results of numerous readings obtained during pressure buildup surveys. These readings are obviously higher than well log temperatures, as expected, and they are a more accurate estimate of actual reservoir temperature.

Meridian also questions the validity of the Benson Deep #4 fluid sample because it indicated a dew point higher than the initial reservoir pressure. Yates explained the reason for this at the original hearing (Transcript p. 74) and provided the documentation to Meridian. The purpose of the Benson Deep #4 sample was to show that it was the same fluid as that obtained in the Benson Deep #1 sample, it was not intended to represent original reservoir conditions. The Benson Deep #1 sample taken June 29, 1980 was obtained very early in the life of the reservoir at ideal test conditions and it represents the original reservoir fluid.

3. Meridian has submitted an ASTM Distillation Report for the Benson 3 Fed. 1 and concluded the Benson Strawn is an oil reservoir based on this report.

Yates Petroleum also has an ASTM Distillation Report for the Benson Deep Unit #4 dated June 25, 1984. There is no basis for evaluation of these distillation reports and forming a definitive conclusion regarding the Benson Strawn. These reports simply show a fluid representative of many high gravity oils and/or condensates.

Yates' main objective in seeking gas well classification is to receive 320-acre proration units and avoid wasteful additional drilling. Yates believes that thorough analysis of the volumetric calculations and pressure history clearly demonstrates the need for 320-acre spacing. Observed loss of reservoir pressure in the Benson Deep #5 and the Meridian Benson 3 Fed. #1 shows efficient drainage of the 300 acres of reservoir between these wells by the Benson Deep #4. The Benson Deep #4 and Benson 3 Fed. #1 are 1725' apart (215 acre drainage radius and the Benson 3 Fed. #1 has been drained of 1800 psi of reservoir pressure by the Benson Deep #4. These wells currently have a maximum difference in bottomhole pressure of only 300 psi so the Benson Deep #4 is obviously draining an acre much greater than the 215 acre radius between the wells very efficiently.

Yates Petroleum has presented substantial evidence in the original hearing and in this memorandum to support the Benson Strawn being classified as a gas pool. Based on an evaluation of all the evidence, Yates Petroleum concludes the Benson Strawn should be reclassified as a gas pool with 320 acres proration units retroactive to January 1, 1985.

April 29, 1987

Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Benson-Strawn Pool Hearings  
Case No. 9109: Yates Petroleum Corporation  
Case No. 9110: Meridian Oil Inc.

Gentlemen:

Enclosed for filing, please find the Yates Petroleum Corporation's Proposed Order of the Division.

Thank you.

Sincerely yours,

DICKERSON, FISK & VANDIVER



Chad Dickerson

CD:pv  
Enclosure

cc w/enclosure: Mr. David Lanning  
Mr. W. Thomas Kellahin

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

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

APPLICATION OF YATES PETROLEUM CORPORATION  
FOR RECLASSIFICATION OF THE BENSON-STRAWN  
OIL POOL, THEREBY CHANGING THE SPACING  
FROM 160 ACRES TO 320 ACRES, OR IN THE  
ALTERNATIVE FOR PERMANENT CHANGES IN THE  
DEPTH BRACKET ALLOWABLE AND THE GAS-OIL  
RATIO LIMITATION FOR THE BENSON-STRAWN  
POOL, EDDY COUNTY, NEW MEXICO;

CASE NO. 9109

APPLICATION OF MERIDIAN OIL INC. TO AMEND  
DIVISION ORDER R-6129-A TO PROVIDE FOR  
TEMPORARY CHANGES IN THE DEPTH BRACKET  
ALLOWABLE AND THE OIL-GAS RATIO LIMITATION  
FOR THE BENSON-STRAWN POOL, EDDY COUNTY,  
NEW MEXICO

CASE NO. 9110

YATES PETROLEUM CORPORATION'S  
PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 A.M. on March 18, 1987, and on April 22, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, this \_\_\_\_ day of April, 1987, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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 in Case 9109, Yates Petroleum Corporation ("Yates"), seeks an order reclassifying the Benson-Strawn Pool from an oil pool to a gas pool, thereby establishing spacing units of 320 acres, or in the alternative, to permanently increase the oil allowable from 70 barrels of oil a day to the statewide depth bracket allowable of 560 barrels a day, and to further increase the gas-oil ratio to 3,000 to 1 and to make said changes effective January 1, 1985.

3. The Applicant in Case 9110, Meridian Oil Inc. ("Meridian"), seeks an order amending the Special Rules and Regulations of the Benson Strawn Oil Pool (Order R-6129-A) to temporarily increase the allowable from 70 barrels of oil a day to the statewide depth bracket allowable of 560 barrels of oil per day. Meridian further seeks an increase in the gas-oil ratio limitation from 2,000 GOR to 3,000 GOR, but retaining its provisions for 160-acre spacing.

4. The Benson-Strawn Oil Pool was established on April 16, 1980, by Commission Order R-6129-A (DeNovo) based upon PVT analysis of fluid properties from samples taken on February 14, 1980, from the Yates Benson Deep No. 1 Well located in Unit O, Section 33, Township 18 South, Range 30 East, N.M.P.M.

5. At the hearing on March 18, 1987, Yates presented recent PVT data based upon fluid samples from the Yates Benson Deep No. 1 Well (June 29, 1980) and the Yates Benson Deep No. 4 Well (February 25, 1987) from which it was established that the Benson-Strawn Pool was now demonstrating the characteristics of a gas reservoir.

6. An examination of the Yates PVT data and the conditions under which the fluid samples were taken establishes that Yates utilized temperature data based on the results of numerous readings obtained during pressure buildup surveys, and that these readings are obviously higher than well log temperatures, as expected, and are a more accurate estimate of actual reservoir temperature.

7. That the relief sought by Yates will not cause the excessive withdrawal of gas and will not cause waste.

8. Although there are no defined limits to separate the behavior of a volatile oil pool and a rich retrograde gas

pool, the similar performance characteristics of adjacent Strawn gas pools, the fluid sample data from the Benson and adjacent Strawn pools, and the extensive drainage area of the Benson Deep No. 4 Well establishes ranges of usual observed behavior for various fluid systems and the performance of the Benson-Strawn is within an expected performance range for a very rich retrograde condensate gas reservoir.

9. There is sufficient evidence to justify reclassifying the Benson-Strawn Oil Pool as a gas pool and accordingly, the application of Yates in Case 9109 should be granted.

10. That the Benson-Strawn Pool should be reclassified as a gas pool with 320-acre spacing.

11. That this Order should be made effective January 1, 1985. Such retroactive effect will not create waste, and will protect the correlative rights of all parties. Failure to do so would unfairly infringe upon the correlative rights of Yates.

12. That the Application of Meridian in Case 9110 should be denied.

IT IS THEREFORE ORDERED THAT:

A. The Application of Meridian in Case 9110 is hereby DENIED.

B. The Application of Yates in Case 9109 is hereby GRANTED.

C. Order R-6129-A should be amended, effective January 1, 1985, to reclassify the Benson-Strawn Pool as a gas pool (with 320-acre spacing), with a depth bracket allowable from 70 barrels to 560 barrels, and to establish a limiting gas-oil ratio of 3,000 to 1.

IT IS FURTHER ORDERED:

(1) That the special depth bracket allowable and the gas-oil ratio limitations set forth above, shall be for a temporary period of approximately two years, and after said two-year period shall be made the subject of a Division Examiner's hearing to be set at which time the operators shall appear and show cause why said rules should be made permanent.

(2) That jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Respectfully submitted,

YATES PETROLEUM CORPORATION

By: *Chad Dickerson*  
Chad Dickerson

DICKERSON, FISK & VANDIVER  
Seventh and Mahone, Suite E  
Artesia, New Mexico 88210  
(505) 746-9841

Attorneys for Yates Petroleum Corporation

I CERTIFY THAT I MAILED A TRUE COPY OF THE FOREGOING INSTRUMENT TO W. THOMAS KELLAHIN, ATTORNEY FOR MERIDIAN OIL INC., P. O. BOX 2265, SANTA FE, NEW MEXICO, 87504-2265, ON THIS 29 DAY OF APRIL, 1987.

*Chad Dickerson*  
Chad Dickerson

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



May 29, 1987

GARREY CAFRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

Mr. Chad Dickerson  
Dickerson, Fisk & Vandiver  
Attorneys at Law  
Seventh & Mahone, Suite E  
Artesia, New Mexico 88210

Re: CASE NO. 9109 and 9110  
ORDER NO. R-8446

Applicant:  
Yates Petroleum Corporation and  
Meridian Oil Inc.

Dear Sir:

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

Sincerely,

*Florene Davidson*

FLORENE DAVIDSON  
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD           X            
Artesia OCD           X            
Aztec OCD                           

Other Thomas Kellanin

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

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

CASE NO. 6609  
Order No. R-6129

APPLICATION OF NAPECO INC. FOR  
POOL CREATION AND SPECIAL RULES,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of October, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Napeco Inc., seeks the creation of a new pool for Strawn production, said pool having been discovered by applicant's Benson Deep Unit Well No. 1, located in Unit O of Section 33, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico, which well was completed in the Strawn formation on May 9, 1979, with an initial potential of 104 barrels of oil per day from perforations 10,648 feet to 10,718 feet.

(3) That the applicant further seeks the promulgation of special rules for said pool, including provision for 160-acre spacing and proration units and standard well locations.

(4) That the applicant has failed to establish that one well can efficiently and effectively drain 160 acres.

(5) That the evidence adduced at the hearing would indicate that the Strawn formation in the subject well is of poor permeability, and that approval of 160-acre spacing, even on a temporary basis, might cause waste.

-2-

Case No. 6609  
Order No. R-6129

(6) That the creation of a new oil pool for the subject well should be handled in a regular nomenclature case by the Division.

(7) That the application in the subject case should be denied.

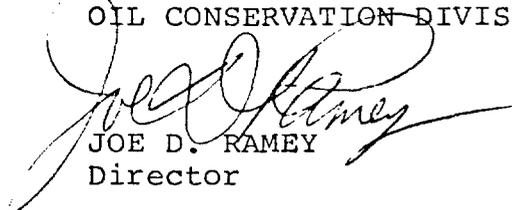
IT IS THEREFORE ORDERED:

(1) That the application of Napeco Inc. for creation of a new oil pool for Strawn production and the promulgation of special rules therefor, including a provision for 160-acre spacing and proration units and standard well locations, is hereby denied.

(2) That 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

  
JOE D. RAMEY  
Director

S E A L

fd/

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

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

CASE NO. 6609 DE NOVO  
Order No. R-6129-A

APPLICATION OF NAPECO INC. FOR  
POOL CREATION AND SPECIAL POOL  
RULES, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing De Novo at 9 a.m. on April 16, 1980, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 14th day of May, 1980, the Commission, a quorum being present, having considered the testimony, the record, and the exhibits, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Napeco Inc., seeks the creation of a new pool for Strawn production in Eddy County, New Mexico, and the promulgation of special rules therefor, including a provision for 160-acre spacing and proration units.

(3) That this cause came on for hearing before Examiner Daniel S. Nutter on July 25, 1979, and the Division entered its Order No. R-6129 on October 10, 1979, denying the application on the grounds that the applicant had failed to establish that one well could effectively and efficiently drain 160 acres.

(4) That on November 4, 1979, Napeco Inc. filed timely application for Hearing De Novo of Case No. 6609, whereupon this matter was set for hearing on November 27, 1979.

(5) That Case No. 6609 came on for Hearing De Novo on November 27, 1979, and was continued to several subsequent hearing dates, finally being heard on April 16, 1980.

(6) That subsequent to filing its application for Hearing De Novo, applicant modified its application, alleging that the subject reservoir is a volatile oil reservoir.

(7) That the evidence indicates that applicant's Benson Deep Unit Well No. 1, located in Unit O of Section 33, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico, has discovered a separate common source of supply in the Strawn formation which should be designated the Benson-Strawn Pool; that the vertical limits of the pool should be the Strawn formation, and that the horizontal limits of said pool should be as follows:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 33: SE/4

(8) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 160-acre spacing units should be promulgated for the Benson-Strawn Pool.

(9) That the special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(10) That the evidence presented demonstrated that said Benson-Strawn Pool should be assigned a special allowable of 70 barrels of oil per day pending further testing and establishment of a permanent optimum producing rate for wells in said pool.

(11) That during the first 90 days of actual production the applicant should conduct tests on its well in said Benson-Strawn Pool designed to establish the optimum producing rate for oil and gas from wells in said pool.

(12) That the results of such tests should be submitted to the Director of the Oil Conservation Division within 30 days following completion thereof.

(13) That the Director of the Division should be authorized to administratively establish a special depth bracket allowable and gas-oil ratio limitation for the Benson-Strawn Pool based upon the results of the tests set out above, or, at his option, set this matter for public hearing.

IT IS THEREFORE ORDERED:

(1) That effective June 1, 1980, a new pool in Eddy County, New Mexico, classified as an oil pool for Strawn production, is hereby created and designated the Benson-Strawn Pool, with vertical limits comprising the Strawn formation and horizontal limits comprising the following-described area:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 33: SE/4

(2) That Special Rules and Regulations for the Benson-Strawn Pool, Eddy County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE BENSON-STRAWN POOL

RULE 1. Each well completed or recompleted in the Benson-Strawn Pool or in the Strawn formation within one mile of the Benson-Strawn Pool, and not nearer to nor within the limits of another designated Strawn pool, shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Benson-Strawn Pool shall be located on a unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Lands Survey.

RULE 3. Each well completed or recompleted in said pool shall not be drilled closer than 660 feet to any quarter section line nor closer than 330 feet to any quarter-quarter section line.

RULE 4. For good cause shown, the Division Director may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 160 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Division Director may

approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to an established allowable in the Benson-Strawn Pool as the acreage in such non-standard unit bears to 160 acres.

RULE 5. A standard proration unit (158 through 162 acres) in the Benson-Strawn Pool shall be assigned a depth bracket allowable of 70 barrels, subject to the market demand percentage factor, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit in any proportion.

IT IS FURTHER ORDERED:

(1) That the special depth bracket allowable set forth in Rule 5 above shall remain in effect pending establishment of a permanent depth bracket allowable and gas-oil ratio limit for said pool.

(2) That during the first 90 days of production the applicant shall conduct tests on said Benson Deep Unit Well No. 1 to establish the optimum producing rate for oil and gas from wells in said Benson-Strawn Pool, provided however, that there shall be no gas-oil ratio limitation in effect in said pool until a permanent depth bracket allowable and gas-oil ratio limitation for said pool has been established.

(3) That the applicant shall submit the results of such tests to the Director of the Division within 30 days following the close of the 90-day test period.

(4) That based upon the results of such tests the Director of the Division may administratively revise the special depth bracket allowable set forth in Rule 5 above and may establish a special gas-oil ratio limit for the Benson-Strawn Pool, or, at his option, he may set the matter for public hearing.

(5) That the locations of all wells presently drilling to or completed in the Benson-Strawn Pool or in the Strawn formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia district office of the Division in writing of the name and location of the well on or before June 1, 1980.

(6) That, pursuant to Paragraph A. of Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, existing wells in the Benson-Strawn Pool shall have dedicated thereto 160 acres 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 by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 160 acres 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 said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Benson-Strawn Pool or in the Strawn formation within one mile thereof shall receive no more than one-quarter of a standard allowable for the pool.

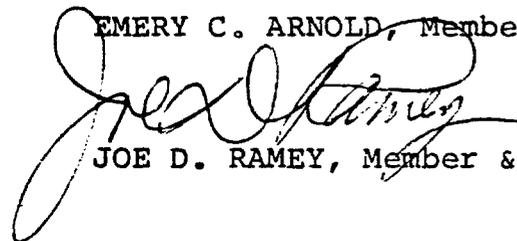
(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
ALEX J. ARMIJO, Member

EMERY C. ARNOLD, Member

  
JOE D. RAMEY, Member & Secretary

S E A L

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