CASE 5653: MATHIS, SPENCER & HUTSON FOR POUL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO

I have to man !

CASE NO.

5653

APPlication, Transcripts, Small Exhibits,

ETC.

Page	<u>].</u>
BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSIO Santa Fe, New Mexico May 11, 1977	N
EXAMINER HEARING	
IN THE MATTER OF: Case 5653 being reopened pursuant to the) provisions of Order No R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico.)	CASE 5653 (Reopened)
BEFORE: Daniel S. Nutter, Examiner	
TRANSCRIPT OF HEARING	
APPEARANCES	
For the New Mexico Oil Lynn Teschendorf, I	Esq.

sid morrish reporting service
Ceneral Court Reporting Service
Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

For the New Mexico Conservation Commission:

Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

sid morrish reporting service
Ceneral Court Reporting Service
Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (\$05) 982-9212

MR. NUTTER: We will call Case Number 5653.

MS. TESCHENDORF: Case 5653, in the matter of Case 5653 being reopened pursuant to the provisions of Order No.

R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico.

MR. NUTTER: Are there any appearances in Case Number 5653? We will take the case under advisement and recess the hearing until one-thirty.

(THEREUPON, the hearing was in recess.)

Sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

	1
Page	1
raue	

DEFOND THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 11, 1977

EXAMINER HEARING

IN THE MATTER OF:

Case 5653 being reopened pursuant to the) provisions of Order No R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool,) Lea County, New Mexico.

CASE 5653 (Reopened)

na an ang agu gar gar gag ang jan and anu kan an maj an ana anu kan an an an an an an an an an bar da bar da b

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil
Conservation Commission:

Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

sid morrish reporting service

General Court Reporting Service

General Court Reporting Service

S25 Calle Mejia, No. 122, Santa Fe, New Mexico 8750

Phone (505) 982-9212

19 20

10

11

12

13

14

16

17

18

21

22

24

sid morrish reporting service

General Court Reporting Service

General Court Reporting Service

825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501

Phone (505) 982-9212

MR. NUTTER: We will call Case Number 5653.

MS. TESCHENDORF: Case 5653, in the matter of Case 5653 being reopened pursuant to the provisions of Order No. R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico.

MR. NUTTER: Are there any appearances in Case 7 Number 5653? We will take the case under advisement and recess the hearing until one-thirty.

(THEREUPON, the hearing was in recess.)

•		

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, 3 do hereby certify that the foregoing and attached Transcript 4 of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

sid morrish reporting service

General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

I do narrow certify that the foregoing is a co ple e record of the preceedings in the Examiner hearing of Case No.

Moxico Oil Conservation Commission



DIRECTOR

JOE D. RAMEY

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

LAND COMMISSIONER

PHILR. LUCERO June 9, 1977



STATE GEOLOGIST EMERY C. ARNOLD

Mr. Tom Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: CASE NO. 5653 ORDER NO. R-5191-A

Applicant:

OCC (Mathis, Spencer & Hutson)

Dear Sir:

Yours very truly,

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

JDR/fd
Copy of order also sent to:

Hobbs OCC *
Artesia OCC *
Aztec OCC

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 5653 Order No. R-5191-A

IN THE MATTER OF CASE 5653 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. R-5191 WHICH ORDER ESTABLISHED TEMPORARY SPECIAL POOL RULES FOR THE DAISEY-WOLFCAMP POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 11, 1977, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 8th day of June, 1977, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-5191, dated March 30, 1976, temporary special rules and regulations were promulgated for the Daisey-Wolfcamp Pool, Lea County, New Mexico, establishing temporary 160-acre spacing units and proration units.
- (3) That pursuant to the provisions of Order No. R-5191, this case was reopened to allow the operators in the subject pool to appear and show cause why the Daisey-Wolfcamp Pool should not be developed on 40-acre spacing units.
- (4) That no operator in the subject pool appeared to show cause why the Daisey-Wolfcamp Pool should not be developed on 40-acre spacing units.
- (5) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 160 acres.

-2-Case No. 5653 Order No. R-5191-A

(6) That no apparent necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-5191 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Daisey-Wolfcamp Pool, Lea County, New Mexico, promulgated by Order No. R-5191, are hereby abolished.
- (2) 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

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 5653 Order No. R-5191

NOMENCLATURE

APPLICATION OF MATHIS, SPENCER & HUTSON FOR POOL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 17, 1976, at Santa Fe, New Mexico, before Examiner, Daniel S. Nutter.

NOW, on this $30 \, \text{th}$ day of March, 1976, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Mathis, Spencer & Hutson, seeks the creation of a new oil pool for Wolfcamp production in Lea County, New Mexico.
- (3) That the applicant also seeks the promulgation of special rules for said pool, including a provision for 160-acre proration units.
- (4) That the evidence presently available indicates that applicant's Clayton Well No. 1, located in Unit L of Section 22, Township 15 South, Range 33 East, NMPM, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the Daisey-Wolfcamp Pool; that the vertical limits of the pool should be the Wolfcamp formation, and that the horizontal limits of said pool should be as follows:

TOWNSHIP 15 SOUTH, RANGE 33 EAST, NMPM Section 22: SW/4

-2-Case No. 5653 Order No. R-5191

- (5) 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, temporary special rules and regulations providing for 160-acre spacing units should be promulgated for the Daisey-Wolfcamp Pool.
- (6) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (7) That the temporary special rules and regulations should provide for a depth bracket allowable of 515 barrels.
- (8) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.
- (9) That this case should be reopened at an examiner hearing in April, 1977, at which time the operators in the subject pool should be prepared to appear and show cause why the Daisey-Wolfcamp Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That effective April 1, 1976, a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production, is hereby created and designated the Daisey-Wolfcamp Pool, with vertical limits comprising the Wolfcamp formation and horizontal limits comprising the following-described area:

TOWNSHIP 15 SOUTH, RANGE 33 EAST, NMPM Section 22: SW/4

(2) That temporary Special Rules and Regulations for the Daisey-Wolfcamp Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE DAISEY-WOLFCAMP POOL

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

-3-Case No. 5653 Order No. R-5191

- RULE 2. Each well completed or recompleted in the Daisey-Wolfcamp 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. For good cause shown, the Secretary-Director of the Commission 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 Secretary-Director of the Commission 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 a standard allowable in the Daisey-Wolfcamp Pool as the acreage in such non-standard unit bears to 160-acres.

- RULE 4. 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 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director received the application.
- RULE 6. A standard proration unit (158 through 162 acres) in the Daisey-Wolfcamp Pool shall be assigned a depth bracket allowable of 515 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 locations of all wells presently drilling to or completed in the Daisey-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs district office of the Commission in writing of the name and location of the well on or before June 1, 1976.

-4-Case No. 5653 Order No. R-5191

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Daisey-Wolfcamp Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission 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 Daisey-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

- (3) That this case shall be reopened at an examiner hearing in April, 1977, at which time the operators in the subject pool should be prepared to appear and show cause why the Daisey-Wolfcamp Pool should not be developed on 40-acre spacing units.
- (4) 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 herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION CO. LISSION

PHIL R. LUCERO, Chairman

Carry Clarky

MERY C. ARNOLD Member

JOE D. RAMEY, Member & Secretary

viero

SEAL

Page	1	

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 6, 1977

EXAMINER HEARING

IN THE MATTER OF:

Of Case 5653 being reopened pursuant to) the provisions of Order No. R-5191 which) order established temporary special pool) rules for the Daisey-Wolfcamp Pool, Lea) County, New Mexico.

CASE 5653 (Reopened)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:

Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

Sid morrish reporting service

General Court Reporting Service

S Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-971

20

5

6

10

11

12

13

14

15

16

17

18

19

22

21

23

sid morrish reporting
General Court Reporting Set
825 Calle Mejiz, No. 122, Santa Fe, Ner
Phone (505) 982-9212

2

3

5

6

7

8

12

13

14

15

16

17

18

19

20 21

22

23

24

25

MR. NUTTER: We will call Case Number 5653.

MS. TESCHENDORF: Case 5653 in the matter of Case 5653 being reopened pursuant to the provisions of Order No. R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico.

MR. NUTTER: Are there any appearances in Case Number 5653? Just leave that one open.

MR. NUTTER: There being no appearances at this present time in Case Number 5653 this case will be continued to the Examiner Hearing scheduled to be held at this same place at nine o'clock A.M., May 11, 1977.

The hearing is adjourned.

(THEREUPON, the hearing was adjourned.)

D	2	
Page		

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

sid morrish reporting servi General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico Phone (505) 982-9212

West of the State of the State

Page	 1	

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 6, 1977

EXAMINER HEARING 5 IN THE MATTER OF: 6 Of Case 5653 being reopened pursuant to) CASE the provisions of Order No. R-5191 which) 5653 order established temporary special pool) (Reopened) 8 rules for the Daisey-Wolfcamp Pool, Lea) County, New Mexico. BEFORE: Daniel S. Nutter, Examiner TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:

Lynn Teschendorf, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1.3

1 5

24

Sid morrish reporting service
General Court Reporting Service
Calle Mgia, No. 122, Santa Fe, New Mexico 8750
Phone (505) 982-9212

MR. NUTTER: We will call Case Number 5653.

MS. TESCHENDORF: Case 5653 in the matter of Case 5653 being reopened pursuant to the provisions of Order No. R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico.

MR. NUTTER: Are there any appearances in Case Number 5653? Just leave that one open.

MR. NUTTER: There being no appearances at this present time in Case Number 5653 this case will be continued to the Examiner Hearing scheduled to be held at this same place at nine o'clock A.M., May 11, 1977.

The hearing is adjourned.

(THEREUPON, the hearing was adjourned.)

1

2

3

5 6

7

8

10

11

12

14

sid morrish reporting service
Ceneral Court Reporting Service
825 Calle Mejia, No. 122. Santa Fe, New Mexico 87501
Phone (505) 982-9212

4.4

1 4

13

1.0

N. A.

1 %

1 8

12

15

16 17

18

19

20

21

23

24

25

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

t do hereby certify that the foregoin a so place rooted of the proceedings

neare by me on

4/6 77

New Mexico Oil Conservation Commission

CASE 5653:

- CASE 5919: Application of Tenneco Oil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Strawn formation through the perforated interval from 11,174 feet to 11,236 feet in its Jones Federal Well No. 1, located in Unit K of Section 23, Township 19 South, Range 31 East, Lusk-Strawn Pool, Eddy County, New Mexico.
- Application of New Mexico Salt Water Disposal Co., Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation through the perforated interval from approximately 13,000 feet to 13,500 feet in its Sinclair State Lea Well No. 1, located in Unit M of Section 1, Township 11 South, Range 34, East, Sand Springs-Devonian Pool, Lea County, New Mexico.
- Application of Eastland Gil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Grayburg formation through perforated intervals from 3506 feet to 3598 feet in its Power Deep Unit Well No. 1, located in Unit F of Section 6, Township 18 South, Range 31 East, Power Grayburg-San Andres Pool, Eddy County, New Mexico.
- CASE 5922: Application of A. L. Daugherty for an exception to Order No. R-3221, Chaves County, New Mexico.

 Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of produced salt water into an intermittent saline lake located in Section 24, Township 8 South, Range 29 East, and Section 19, Township 8 South, Range 30 East, both in Chaves County, New Mexico.

(Reopened) (Continued from April 6, 1977, Examiner Hearing)

- In the matter of Case 5653 being reopened pursuant to the provisions of Order No. R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.
- Application of El Paso Natural Gas Company for underground gas storage, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute its Barker Dome Gas Storage Project by utilizing certain wells for the injection into and withdrawal of gas from the Upper Dakota formation underlying all of Sections 8, 9, 10, 11, 14, 15, 16, 17, 20, 21, 22, 23, 28, and 29, and portions of Sections 7, 18, 19, 27, 30, and 32, all in Township 32 North, Range 14 West, Barker Creek-Dakota Pool, San Juan County, New Mexico.
- CASE 5904: (Continued from April 20, 1977, Examiner Hearing)

Application of Palmer Oil & Gas Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Fruitland and Pictured Cliffs formations underlying the NE/4 and/or SE/4 of Section 20, Township 32 North, Range 6 West, San Juan County, New Mexico, and in the Mesaverde and Dakota formations underlying the E/2 of said Section 20, the above-described lands to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5905: (Continued from April 20, 1977, Examiner Hearing)

Application of Palmer Oil & Gas Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Dakota formations underlying the W/2 SE/4 and the E/2 SW/4 of Section 3, and the NW/4 of Section 10, and all mineral interests in the Pictured Cliffs and Fruitland formations underlying the NW/4 of Section 10, all in Township 31 North, Range 7 West, San Juan County, Now Mexico, to be dedicated to a well to be drilled 1800 feet from the North line and 850 feet from the West line of said Section 10. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operting costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5906: (Continued from April 20, 1977, Examiner Hearing)

Application of Palmer 0il & Gas Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Dakota formations underlying the W/2 SW/4 of Section 2, the E/2 SE/4 of Section

(Case 5906 continued on Page 3)

CASE 5651: Application of Burmah Cil & Gas Co. for an unorthodox gas well location, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 1780 feet from the South line end 660 feet from the West line of Section 11, Township 24 South, Range 28 East, Eddy County, New Mexico, the W/2 of said Section 11 to be dedicated to the well.

CASE 5652: Application of Continental Oil Company for downhole corningling, Rio Arriba County, New Mexico.

Applicant, in the above-styled cause, seeks authority to commingle Pasin-Rukota gas and OteroGallup oil production in the wellbores of the following wells on its Northeest Haynes Lease in
Township 24 North, Pange 5 West, Rio Arriba County, New Mexico:

No. 1 in Unit L of Section 9 No. 2 in Unit D of Section 16 No. 3 in Unit P of Section 16 No. 4 in Unit E of Section 21 No. 5 in Unit E of Section 22 No. 6 in Unit D of Section 15 No. 7 in Unit L of Section 19 No. 8 in Unit P of Section 15

CASE 5653:

Application of Mathis, Spencer & Hutson for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Permo-Penn production, Lea County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 160-acre spacing and proration units.

CASE 5654:

· 一般の一般の一般の一般をある。

Application of Continental Oil Company for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 480-acre non-standard gas proration unit comprising the N/2 and SE/4 of Section 2, Township 22 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, said unit to be simultaneously dedicated to applicant's State J-2 Wells Nos. 9 and 12, located in Units G and D, respectively, of said Section 2.

CASE 5422: (Reopened)

In the matter of Case 5422 being reopened pursuant to the provisions of Order No. R-4931, which order established special rules and regulations for the EK-Bone Springs Pool, Lea County, New Mexico, including a provision for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

Care 565311

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN ROBERT E. FOX W. THOMAS KELLAHIN

TELEPHONE 982-4315 AREA CODE 505

February 18, 1974

Mr. Joe Ramey, Secretary-Director New Mexico Oil Conservation Commission P. O. Box 2008 Santa Fe, New Mexico 87501

Dear Joe:

Enclosed please find the original and two copies of the application of Mathis, Spencer & Hutson for adoption of pool rules, Lea County, New Mexico. We would appreciate this case being set for hearing on March 18, 1976.

Sincerely,

Jacon

Jason W. Kellahin

JWK:kjf

Enclosure

Dockets Nos. 12-77 and 14-77 are tentatively set for hearing on April 20 and May 11, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 6, 1977

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROCM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 5884: (Continued & Readvertised)

Application of BCO, Inc., for an unorthodox location and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Greenhorn, Graneros and Dakota production in the wellbore of its Dunn Well No. 1 at an unorthodox Dakota location in Unit M of Section 10, Township 23 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 5894: Application of Consolidated Oil & Gas, Inc., for an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jicarilla Well No. 5-34, at a point 790 feet from the South line and 1850 feet from the East line of Section 34, Township 26 North, Range 3 West, Blanco Mesaverde Pool, Rio Arriba County, New Mexico, to be dedicated to the E/2 of said Section 34.

CASE 5895: Application of C & K Petroleum, Inc., for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 12, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 640 feet from the South line and 1760 feet from the East line of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5896: Application of Exxon Company, USA, for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of a special gas-oil ratio limit of 6000 cubic feet of gas per barrel of oil for the Wantz-Abo Pool, Lea County, New Mexico.

CASE 5897: Application of Read & Stevens, Inc., for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Rose Well No. 2 to be located 1650 feet from the South line and 990 feet from the West line of Section 18, Township 15 South, Range 28 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

CASE 5653: (Reopened)

In the matter of Case 5653 being reopened pursuant to the provisions of Order No. R-5191 which order established temporary special pool rules for the Daisey-Wolfcamp Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

Application of Chace Oil Company for downhole commingling, Rio Arriba County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the downhole commingling of BallardPictured Cliffs and South Lindrith Gallup-Dakota production in the wellbore of its Jicarilla
70 Well No. 3 located in Unit C of Section 33, Township 24 North, Range 4 West, Rio Arriba
County, New Mexico. In the alternative, applicant seeks authority to commingle said production at the surface without prior measurement and waiver of the gas-oil ratio test requirement.

CASE 5899: (This case will be continued and will be heard by the Commission at 2 p.m. on April 20, 1977, Oil Conservation Commission Conference Room, State Land Office Building, Santa Fe, New Mexico)

Application of Robert P. Wallach, Ray A. Wallach, and Patricia Louise Wallach House for an exception to Order No. R-3221, Lea County, New Mexico. Applicants, in the above-styled cause, seek, as an exception to the provisions of Commission Order No. R-3221, permission to construct and operate several earthen evaporation pits in the gravel pits in the SW/4 of Section 29, Township 21 South, Range 38 East, Lea County, New Mexico, for the disposal of produced salt water from oil and gas wells in Lea County, New Mexico.

	1	
Page	<u> </u>	

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico March 17, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Mathis, Spencer & Hutson) for pool creation and special pool rules) Lea County, New Mexico.

CASE 5653

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission: William F. Carr, Esq.

Legal Counsel for the Commission State Land Office Building

Santa Fe, New Mexico

For the Applicant:

W. Thomas Kellahin, Esq.

KELLAHIN & FOX Attorneys at Law 500 Don Gaspar Santa Fe, New Mexico

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Sana Fe, New Mexico 87501
Phone (505) 982-9212

2

3

6

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

Page

Page

INDEX

ROY C. WILLIAMSON, JR. Direct Examination by Mr. Kellahin Cross Examination by Mr. Nutter EXHIBIT INDEX Applicant's Exhibit No. One, Form C-123 Applicant's Exhibit No. Two, Area Plat Applicant's Exhibit No. Three, Cross Section Applicant's Exhibit No. Four, Summary

sid morrish reporting service

General Courr Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1.9

2

3

5

6

7

8

9

10

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. NUTTER: We will call the next Case Number 5653.

MR. CARR: Case 5653, application of Mathis,

Spencer and Hutson for pool creation and special pool rules,

Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Fox appearing on behalf of the applicant and I have one witness to be sworn.

(THEREUPON, the witness was duly sworn.)

ROY C. WILLIAMSON, JR.

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q. Please state your name, by whom you are employed and in what capacity?
- A. I'm Roy C. Williamson, Jr. and I'm President of the consulting firm of Sipes, Williamson and Aycock from Midland, Texas.
- What is your working relationship with the applicant
 in this case?
- A. I have been retained as a consultant for Mathis, Spencer and Hutson.
 - Q. Are you familiar with and have you made a study of

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (SOS) 982-9212 the facts surrounding this particular application?

A. Yes, I have.

- Q Have you previously testified before this Commission and had your qualifications as an expert witness accepted and made a matter of record?
 - A. Yes, I have.

MR. KELLAHIN: If the Examiner please, are the witness's qualifications acceptable?

MR. NUTTER: Yes, they are.

- Q (Mr. Kellahin continuing.) Mr. Williamson, would you please refer to what we've marked as Exhibit Number One, identify it and explain what the applicant is seeking?
- A. Exhibit One is Form C-123, which is the request for the extension of an existing pool or the creation of a new pool. I would like to clarify what, in my opinion is an error that had been, this particular form had been filed earlier on February 6th of 1976 by a production foreman in the employment of Mathis, Spencer and Hutson. At that time they asked that the well that is the subject of this study, the Mathis, Spencer and Hutson Clayton No. 1 Well be shown as an extension to a Permo-Penn field which was originally called the Burtner Field and the Burtner Field consisted of one well, the Standard of Texas State No. 1, which was in the northeast quarter of Section 22 of 15 South, 33 East. This well produced for some period of time less than thirty days

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

and had a cumulative production of approximately eight hundred and twenty-six barrels of oil. The production foreman assumed that this would be an extension of that particular field and therefore, so noted that in his 2/6/76 filing of 123. It is my opinion that the Spencer and Hutson Clayton No. 1 Well, although it produces from a correlative interval will show with future testimony, I do not think it is an extension of that field and, therefore, we are requesting the creation of a new pool. We are asking that three names be considered, the MHS Wolfcamp, the Clayton Wolfcamp or the Daisy Wolfcamp Field.

MR. KELLAHIN: That State of Texas Well that you referred to, if the Examiner please, is the subject of Order No. R-2946, entered September 1st, 1966. That is designated as the Burtner, B-u-r-t-n-e-r Wolfcamp.

MR. NUTTER: Is that the only well that was ever drilled in that pool?

MR. KELLAHIN: Yes, sir.

THE WITNESS: And the field area was designated as the northeast quarter of Section 22, I believe.

MR. KELLAHIN: That's right.

(Mr. Kellahin continuing.) Please refer to Exhibit Number Two and identify it?

Exhibit Number Two is an area plat showing the well in question, the Mathis Spencer Hutson Clayton No. 1, which is located in the northwest quarter of the southwest quarter

of Section 22, 15 South, 33 East. This well was completed and the C-104 Form filed. It potentialed for three hundred and twenty barrels of oil on January 26th, 1976, no water and three hundred MCF of gas.

The Exhibit Two depicts an estimated limit of production from the particular interval that this well is completed in and I will show by a later exhibit, a cross section, the relationship of this zone to the well previously mentioned, the Standard of Texas State No. 1 and the Ashman and Hilliard Clayton No. 1 Well which lies immediately south of the Mathis Spencer Hutson Well.

- Q What is the spacing and proration unit you would dedicate to this well?
- A. One hundred and sixty acres and the well location is six sixty from the quarter line section which is what we would ask for in the rules.
- Q All right, let me ask you that again. Now, do you have a proposed recommendation as to spacing of wells within the pool?
- A. Yes, we are asking that an acreage allocation of a hundred and sixty acres be applied and no well be allowed to be drilled closer than six hundred and sixty feet to a quarter section line.
- Q Do you have any proposed recommendations with regards to a special depth bracket allowable?

No, just the standard.

The existing allowable for wells of that depth is sufficient to satisfy your proposed needs?

That is correct, we are not asking for a discovery allowable per se.

Please refer to Exhibit Number Three and identify it?

Exhibit Number Three is a cross section that includes A. the Ashman and Hilliard Clayton No. 1 Well in the southwest quarter of the southwest quarter of Section 22 of 15, 33.

We are ready for Exhibit Number Three, it is. Q.

Right. Exhibit Number Three is a cross section A. between the Ashman and Hilliard Clayton No. 1 Well and the Mathis Spencer Hutson Clayton No. 1 Well and the Standard of Texas State No. 1 Well. You will notice that the Ashman and Hilliard Clayton No. 1 Well was completed from a zone considerably below the completion interval of the Clayton No. This zone was identified as the Cisco zone, the well produced nine hundred and forty-three barrels of oil before being plugged. The Mathis Spencer and Hutson No. 1 Well is producing from a porosity interval at approximately ninety-seven, seventytwo to eighty-two within the Wolfcamp zone and has accumulated to date something over five thousand barrels of oil.

With regards to the Daisy Clayton No. 1 Well, is there any potential for production from the Wolfcamp in that

morrish reporting service General Court Reporting Service Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (\$05) 982-9212

2

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Well?

A. There is not. You will notice referring back to the Ashman Hilliard Clayton No. 1, a drill stem test was taken over the interval ninety-seven ten to ninety-seven, sixty-two and recovery was ninety feet of drilling mud with a slight show of oil, the final shut-in pressure was sixty-six pounds.

Q. Okay.

A. Whereas in the Mathis Spencer Hutson Clayton No. 1
the DST over the interval ninety-six, eighty to ninety-eight,
oh, four flowed oil at the rate of eleven barrels per hour
with a final shut-in pressure of thirty-three, ninety-two psig

Q How does this compare to the Standard Company Texas State 22 No. 1 Well?

A. Okay the Standard of Texas State 22 Well was completed over a very large interval from approximately ninety-seven twenty to ninety-nine ten. The DST over approximately that same interval had gas in thirteen minutes at three hundred and eighty-seven MCF, decreasing to too small to measure. It recovered sixteen hundred and seventy feet of oil, eight hundred and twenty feet of oil and gas cut mud, seven hundred and twenty-eight feet of slightly oil and gas cut mud and thirty feet of mud cut salt water. The flowing pressure was two hundred and ninety-nine pounds, increasing to six ninety-four. It had a final shut-in pressure of two thousand, three

sid morrish reporting service

Ceneral Court Reporting Service
Calle Mejia, No. 122, Santa Fe. New Mexico 87501
Phone (505) 982-9212

ķ.:\$

sia morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

ì

hundred and thirty-seven. With such a large interval perforated there is no way to know precisely where the recovery of this well occurred from. It did produce a total of eight hundred and twenty-six barrels of oil, five hundred and fifty barrels of water and eleven hundred and forty-two MCF of gas and these figures were obtained from Standard of Texas. So, it is my contention that although it is a grossly correlatable interval that the zone in which the Clayton No. 1, Spencer and Hutson Clayton No. 1 Well is producing is non-existent in the Standard of Texas State 22 No. 1 Well or in the Ashman Hilliard Daisy Clayton No. 1 Well.

- Q. Please refer to what has been marked as Exhibit Number Four and identify it?
- A. Exhibit Number Four is a summary of the available pressure history on the Mathis Spencer and Hutson Clayton No. Well showing the initial DST, final shut-in pressure of thirty-three, ninety-two, a measured flowing bottom-hole pressure was taken January 17th of '76 and was three thousand one hundred and twenty-one pounds. A shut-in bottom-hole pressure was taken on January 19th after forty-seven hours and was measured at thirty-four, seventy-three psig. Another bottom-hole pressure was measured after two hundred and eleven hours and thirty minutes shut-in of three thousand, five hundred and ten pounds. Then a draw-down flowing test was taken on January 27th, '76 and after flowing twenty-seven hours

sid morrish reporting service

General Court Reporting Service
825 Calle Mejla, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

2+1

the bottom-hole pressure at that point measured twenty-nine hundred and forty pounds. The well then was produced for a period of time and then was shut-in again on March the 4th, 1976 and after being shut-in for ninety-six hours the bottom-hole pressure was still building, the measured pressure was two thousand and sixty-one pounds and a conservative extrapolation indicated two thousand, four hundred and seventy-three pounds. This extrapolation is probably very inaccurate in that the pressure curve was still curving upward at the time but the operator chose not to leave the well shut in for a longer period of time. The cumulative production at that time was five thousand, three hundred barrels of oil and approximately five thousand, eight hundred and thirty MCF of gas.

In an attempt to define the drainage area available to this wellbore I made a volumetric estimate, utilizing a porosity value of eleven point eight percent from the logs, water saturation of eighteen percent from the logs, an estimated recovery factor of fifteen percent, a formation volume factor determined from lineature of one point seven five, a net pay thickness of ten feet, a drainage area of a hundred and sixty acres, which calculates a recoverable oil reserve of one hundred and two thousand, four hundred barrels of oil. In an attempt to verify that number, I assumed two production decline rates at the time that fifty-three hundred barrels of oil had been produced. If we assume a twenty percent

morrish reporting service
General Court Reporting Service
Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 - 2

8

9

10

11

12

13

14

15

16

17

18

20

21

22

23

24

25

annual decline the ultimate recovery would be two hundred and thirty-eight thousand, four hundred and eighteen barrels of oil. If we assume a forty percent decline the ultimate recovery would be a hundred and eight thousand, one hundred and eight barrels of oil.

Inasmuch as the well at this time is not exhibiting any decline and for the five-day period ending March the 11th, 1976, the well averaged a hundred and forty-three barrels of oil per day with a gas-oil ratio between nine and eleven hundred cubic feet per barrel, so it appears rather obvious that the well is not about to begin a sharp decline and the recovery then should lie somewhere between the twenty and forty percent estimate just as a rough estimate.

- If the recovery falls between those two estimates, in your opinion, will this well be able to drain an acreage area of a hundred and sixty acres?
- Yes, sir, it appears that it will if the reservoir does indeed cover the area that we have estimated and, of course, this is something that will have to be proven by later drilling. There is no way to know, of course, what the total area is. This is a stratigraphic trap and the size at this time of the total trap, of course, is unknown.
- Q. You would request temporary rules for a period of one year from the date of the order entered in this case?
 - That is correct. This would allow time to evaluate

further development as well as the performance of the currently developed well, to more accurately define what the reservoir characteristics are.

- Q In your opinion, Mr. Williamson, will approval of this application be in the best interests of conservation, prevention of waste and the protection of correlative rights?
 - A. Yes.

- Q. And were Exhibits One through Four either prepared by you directly or compiled under your direction and supervision?
 - A. Yes.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Four.

MR. NUTTER: Applicant's Exhibits One through Four will be admitted into evidence.

(THEREUPON, Applicant's Exhibits One through Four were admitted into evidence.)

MR. KELLAHIN: That concludes our case.

CROSS EXAMINATION

BY MR. NUTTER:

- Q Mr. Williamson, I think you stated that the old Standard of Texas Well over here had only produced for thirty days with a total cumulative of eight hundred and twenty-six barrels, is that it?
 - A. Yes, sir, those were the figures that we were able to

1:1

derive from --

2

3

4

5

6

7

8

9

12

13

15

16

17

18

19

20

21

22

23

24

25

- Q. Then what happened to it?
- A. It was plugged.
- Q Why did it quit producing, did it just water out or quit producing everything or what?
 - A. It just quit producing.
- Q How much water did it make with that eight hundred and twenty-six barrels of oil?
- A. It had made five hundred and fifty barrels of water and, of course, there was no way to determine whether that came from the lower part of the perforations or not, they had perforated over such a large interval.
- Q. Now, the interval that it was producing from does include the interval that you are producing from in this MSH Well, right?
 - A. Yes, sir.
- O. So, you don't know that they are not correlative or that they are not producing from the same zone, you is suspect that they may not be?
- A. Yes, sir, that's all, because just from my gross correlation there is no way to separate them.
- Q On any of these three logs here are you able to pick the top of the Pennsylvanian?
- A. No, sir, we've got a top of the Wolfcamp and, of course, the correlations in here are somewhat uncertain as to

terminology and various things but the Pennsylvanian should lie above.

- Q Well, I think you have mentioned the word "Cisco zone" in referring to the Ashman and Hilliard Well over here.
- A. Yes, sir, that is what they call that zone, that they perforated the Cisco zone.
- Q. Is that the perforation shown on the extreme left way out here near the bottom?
 - A. Yes, sir.
 - Q So, Cisco is Pennsylvanian?

A. Right, yes, sir, it should lie somewhere in here but I notice also that the Burtner Well or the well that was called the Burtner Field, they call that Permo-Penn, so I guess that is an indication that they were uncertain as to exactly where the completion lay.

- Q So, apparently back in 1966 they didn't know where the top of the Pennsylvanian was either?
 - A. No, sir.
- Q Now, this oval shape that you have drawn on your Exhibit Number Two, that is just a randomly drawn oval shaped thing there that doesn't bear on any geology or stratigraphy or anything does it?
- A. No. The only thing that we have and I should have mentioned this earlier, in Section 16, in the southwest quarter of the southeast quarter of 15, 33, a well was drilled there

2

3

5

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

by Numble and I don't see the date but it was an abandoned well and the logs indicate just a trace of this Wolfcamp zone that is completed in the Mathis Spencer Clayton No. 1, so, somewhere between the completion and that hole, of course, the Wolfcamp zone that we are completed in goes out.

- Q. Wolfcamp or Permo-Penn?
- A. Well, interchangeably probably, it is not certain exactly which one is what.
- Now, how about this Ashman Hilliard Well, did it actually go on production?
- A. Yes, sir, it produced, according to the record, a total of nine hundred and forty-three barrels of oil and production ceased and it was plugged.
 - Q. Did it make water too, do you know.
- A. I was unable to find any record of water so I don't know.
- Q But your well has already made fifty-three hundred barrels?
- A. Yes, sir, and it is currently producing about an average of a hundred and forty to fifty barrels a day.
 - Q. A hundred and forty-three, I think.
- A. With no water and the gas-oil ratio has been relatively constant throughout its life.
- Now, you had proposed hundred and sixty acre units here and you would dedicate the hundred and sixty acres,

2

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

being the southwest quarter of Section 22 to the Clayton No. 1 I guess, even though you've got a completed well or whatever it is on that one hundred and sixty.

- A. Yes, sir, it might be that even the proration units may have to be changed to lie within this productive area after additional drilling is done.
- Q. And as I understand your proposed rules with the one hundred and sixty acre unit you propose that the well locations be permitted no closer than six hundred and sixty feet to the quarter section line?
 - A. Yes, sir.
- Q. And you mentioned a standard allowable, what kind of a standard allowable was it?
- A. Just whatever the current allowable is for this depth well.
 - Q. On what spacing?
 - A. One hundred and sixty acres.
 - Q On a hundred and sixty?
 - A. Yes, sir.
 - O That would be five hundred and some?
- A. Yes, sir, which is well above the capacity of this well.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

(THEREUPON, the witness was excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 5653? We will take the case under advisement?

We will recess the hearing until one fifteen.

(THEREUPON, the hearing was in recess.)

sid morrish reporting service

General Court Reporting Service

Galle Mejia, No. 122, Santa Fe, New Mexico 87501

Phone (505) 982-9212

.18

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3653, neard by me on 3675.

New Mexico Oil Conservation Commission

	1
D	-
Page	

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico

2 March 17, 1976 3 EXAMINER HEARING 5 6 IN THE MATTER OF: 7 Application of Mathis, Spencer & Hutson) CASE for pool creation and special pool rules) 5653 8 Lea County, New Mexico. 10 BEFORE: Daniel S. Nutter, Examiner 11 12 TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission: William F. Carr, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & FOX Attorneys at Law 500 Don Gaspar Santa Fe, New Mexico

sid morrish reporting service
Ceneral Court Reporting Service
825 Calle Mejia, No. 122, Sarta Fe, New Mexico 87501
Phone (505) 982-9212

18

17

13

14

15

16

19 20

21 22

23

24

25

Page

Page

INDEX

2	
3	ROY C. WILLIAMSON, JR.
4	Direct Examination by Mr. Kellahin
5	Cross Examination by Mr. Nutter
6	
7	
8	
9	
10	EXHIBIT INDEX
11	
12	Applicant's Exhibit No. One, Form C-123
13	Applicant's Exhibit No. Two, Area Plat
14	Applicant's Exhibit No. Three, Cross Section
15	Applicant's Exhibit No. Four, Summary
16	
17	
18	
19	
20	
21	
2	
3	

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122. Santa Fe, New Mexico 87501
Phone (505) 982-9212

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. NUTTER: We will call the next Case Number 5653.

MR. CARR: Case 5653, application of Mathis,

Spencer and Hutson for pool creation and special pool rules,

Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Fox appearing on behalf of the applicant and I have one witness to be sworn.

(THEREUPON, the witness was duly sworn.)

ROY C. WILLIAMSON, JR.

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Please state your name, by whom you are employed and in what capacity?

A. I'm Roy C. Williamson, Jr. and I'm President of the consulting firm of Sipes, Williamson and Aycock from Midland, Texas.

Q What is your working relationship with the applicant in this case?

A. I have been retained as a consultant for Mathis, Spencer and Hutson.

Q Are you familiar with and have you made a study of

the facts surrounding this particular application?

A. Yes, I have.

> 20

- A Have you previously testified before this Commission and had your qualifications as an expert witness accepted and made a matter of record?
 - A. Yes, I have.

MR. KELLAHIN: If the Examiner please, are the witness's qualifications acceptable?

MR. NUTTER: Yes, they are.

- Q. (Mr. Kellahin continuing.) Mr. Williamson, would you please refer to what we've marked as Exhibit Number One, identify it and explain what the applicant is seeking?
- A. Exhibit One is Form C-123, which is the request for the extension of an existing pool or the creation of a new pool. I would like to clarify what, in my opinion is an error that had been, this particular form had been filed earlier on February 6th of 1976 by a production foreman in the employment of Mathis, Spencer and Hutson. At that time they asked that the well that is the subject of this study, the Mathis, Spencer and Hutson Clayton No. 1 Well be shown as an extension to a Permo-Penn field which was originally called the Burtner Field and the Burtner Field consisted of one well, the Standard of Texas State No. 1, which was in the northeast quarter of Section 22 of 15 South, 33 East. This well produced for some period of time less than thirty days

Page_

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 8750).
Phone (505) 982-5015

and had a cumulative production of approximately eight hundred and twenty-six barrels of oil. The production foreman assumed that this would be an extension of that particular field and therefore, so noted that in his 2/6/76 filling of 123. It is my opinion that the Spencer and Hutson Clayton No. 1 Well, although it produces from a correlative interval will show with future testimony, I do not think it is an extension of that field and, therefore, we are requesting the creation of a new pool. We are asking that three names be considered, the MHS Wolfcamp, the Clayton Wolfcamp or the Daisy Wolfcamp Field.

MR. KELLAHIN: That State of Texas Well that you referred to, if the Examiner please, is the subject of Order No. R-2946, entered September 1st, 1966. That is designated as the Burtner, B-u-r-t-n-e-r Wolfcamp.

MR. NUTTER: Is that the only well that was ever drilled in that pool?

MR. KELLAHIN: Yes, sir.

THE WITNESS: And the field area was designated as the northeast quarter of Section 22, I believe.

MR. KELLAHIN: That's right.

Q (Mr. Kellahin continuing.) Please refer to Exhibit
Number Two and identify it?

A. Exhibit Number Two is an area plat showing the well in question, the Mathis Spencer Hutson Clayton No. 1, which is located in the northwest quarter of the southwest quarter

1 -4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

23

24

25

of Section 22, 15 South, 33 East. This well was completed and the C-104 Form filed. It potentialed for three hundred and twenty barrels of oil on January 26th, 1976, no water and three hundred MCF of gas.

The Exhibit Two depicts an estimated limit of production from the particular interval that this well is completed in and I will show by a later exhibit, a cross section, the relationship of this zone to the well previously mentioned, the Standard of Texas State No. 1 and the Ashman and Hilliard Clayton No. 1 Well which lies immediately south of the Mathis Spencer Hutson Well.

- What is the spacing and proration unit you would
 dedicate to this well?
- A. One hundred and sixty acres and the well location is six sixty from the quarter line section which is what we would ask for in the rules.
- Q All right, let me ask you that again. Now, do you have a proposed recommendation as to spacing of wells within the pool?
- A. Yes, we are asking that an acreage allocation of a hundred and sixty acres be applied and no well be allowed to be drilled closer than six hundred and sixty feet to a quarter section line.
- Q. Do you have any proposed recommendations with regards to a special depth bracket allowable?

 A. No, just the standard.

Q The existing allowable for wells of that depth is sufficient to satisfy your proposed needs?

A That is correct, we are not asking for a discovery allowable per se.

Q Please refer to Exhibit Number Three and identify it?

A. Exhibit Number Three is a cross section that includes the Ashman and Hilliard Clayton No. 1 Well in the southwest quarter of the southwest quarter of Section 22 of 15, 33.

O We are ready for Exhibit Number Three, it is.

A. Right. Exhibit Number Three is a cross section between the Ashman and Hilliard Clayton No. 1 Well and the Mathis Spencer Hutson Clayton No. 1 Well and the Standard of Texas State No. 1 Well. You will notice that the Ashman and Hilliard Clayton No. 1 Well was completed from a zone considerably below the completion interval of the Clayton No. 1. This zone was identified as the Cisco zone, the well produced nine hundred and forty-three barrels of oil before being plugged. The Mathis Spencer and Mutson No. 1 Well is producing from a porosity interval at approximately ninety-seven, sevent-two to eighty-two within the Wolfcamp zone and has accumulated to date something over five thousand barrels of oil.

0. With regards to the Daisy Clayton No. 1 Well, is there any potential for production from the Wolfcamp in that

sid morrish reporting service

General Courr Reporting Service

Calle Mejia, No. 122, Santa Fe, New Mexico 87501

Phone (505) 982-9212

A. There is not. You will notice referring back to the Ashman Hilliard Clayton No. 1, a drill stem test was taken over the interval ninety-seven ten to ninety-seven, sixty-two and recovery was ninety feet of drilling mud with a slight show of oil, the final shut-in pressure was sixty-six pounds.

Q Okay.

A. Whereas in the Mathis Spencer Hutson Clayton No. 1 the DST over the interval ninety-six, eighty to ninety-eight, oh, four flowed oil at the rate of eleven barrels per hour with a final shut-in pressure of thirty-three, ninety-two psig.

Q. How does this compare to the Standard Company Texas State 22 No. 1 Well?

A Okay the Standard of Texas State 22 Well was completed over a very large interval from approximately ninety-seven twenty to ninety-nine ten. The DST over approximately that same interval had gas in thirteen minutes at three hundred and eighty-seven MCF, decreasing to too small to measure. It recovered sixteen hundred and seventy feet of oil, eight hundred and twenty feet of oil and gas cut mud, seven hundred and twenty-eight feet of slightly oil and gas cut mud and thirty feet of mud cut salt water. The flowing pressure was two hundred and ninety-nine pounds, increasing to six ninety-four. It had a final shut-in pressure of two thousand, three

1

2

3

4

5

6

7

8

q

10

11

12

14

16

17

18

19

20

21

22

23

24

25

hundred and thirty-seven. With such a large interval perforated there is no way to know precisely where the recover of this well occurred from. It did produce a total of eight hundred and twenty-six barrels of oil, five hundred and fifty barrels of water and eleven hundred and forty-two MCF of gas and these figures were obtained from Standard of Texas. So, it is my contention that although it is a grossly correlatable interval that the zone in which the Clayton No. 1, Spencer and Hutson Clayton No. 1 Well is producing is non-existent in the Standard of Texas State 22 No. 1 Well or in the Ashman Hilliard Daisy Clayton No. 1 Well.

Please refer to what has been marked as Exhibit Number Four and identify it?

A. Exhibit Number Four is a summary of the available pressure history on the Mathis Spencer and Hutson Clayton No. Well showing the initial DST, final shut-in pressure of thirty-three, ninety-two, a measured flowing bottom-hole pressure was taken January 17th of '76 and was three thousand one hundred and twenty-one pounds. A shut-in bottom-hole pressure was taken on January 19th after forty-seven hours and was measured at thirty-four, seventy-three psig. Another bottom-hole pressure was measured after two hundred and eleven hours and thirty minutes shut-in of three thousand, five hundred and ten pounds. Then a draw-down flowing test was taken on January 27th, '76 and after flowing twenty-seven hour

the bottom-hole pressure at that point measured twenty-nine hundred and forty pounds. The well then was produced for a period of time and then was shut-in again on March the 4th, 1976 and after being shut-in for ninety-six hours the bottom-hole pressure was still building, the measured pressure was two thousand and sixty-one pounds and a conservative extrapolation indicated two thousand, four hundred and seventy-three pounds. This extrapolation is probably very inaccurate in that the pressure curve was still curving upward at the time but the operator chose not to leave the well shut in for a longer period of time. The cumulative production at that time was five thousand, three hundred barrels of oil and approximately five thousand, eight hundred and thirty MCF of gas.

In an attempt to define the drainage area available to this wellbore I made a volumetric estimate, utilizing a porosity value of eleven point eight percent from the logs, water saturation of eighteen percent from the logs, an estimated recovery factor of fifteen percent, a formation volume factor determined from lineature of one point seven five, a net pay thickness of ten feet, a drainage area of a hundred and sixty acres, which calculates a recoverable oil reserve of one hundred and two thousand, four hundred barrels of oil. In an attempt to verify that number, I assumed two production decline rates at the time that fifty-three hundred barrels of oil had been produced. If we assume a twenty percent

Page_

annual decline the ultimate recovery would be two hundred and thirty-eight thousand, four hundred and eighteen barrels of oil. If we assume a forty percent decline the ultimate recovery would be a hundred and eight thousand, one hundred and eight barrels of oil.

Inasmuch as the well at this time is not exhibiting any decline and for the five-day period ending March the 11th, 1976, the well averaged a hundred and forty-three barrels of oil per day with a gas-oil ratio between nine and eleven hundred cubic feet per barrel, so it appears rather obvious that the well is not about to begin a sharp decline and the recovery then should lie somewhere between the twenty and forty percent estimate just as a rough estimate.

- Q If the recovery falls between those two estimates, in your opinion, will this well be able to drain an acreage area of a hundred and sixty acres?
- A Yes, sir, it appears that it will if the reservoir does indeed cover the area that we have estimated and, of course, this is something that will have to be proven by later drilling. There is no way to know, of course, what the total area is. This is a stratigraphic trap and the size at this time of the total trap, of course, is unknown.
- Q You would request temporary rules for a period of one year from the date of the order entered in this case?
 - A. That is correct. This would allow time to evaluate

8

9

10

11

12

13

15

16

17

18

19

20

21

22

23

24

25

further development as well as the performance of the currently developed well, to more accurately define what the reservoir characteristics are.

- On your opinion, Mr. Williamson, will approval of this application be in the best interests of conservation, prevention of waste and the protection of correlative rights?
 - A. Yes.
- And were Exhibits One through Four either prepared by you directly or compiled under your direction and supervision?
 - A. Yes.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Four.

MR. NUTTER: Applicant's Exhibits One through Four will be admitted into evidence.

(THEREUPON, Applicant's Exhibits One through Four were admitted into evidence.)

MR. KELLAHIN: That concludes our case.

CROSS EXAMINATION

BY MR. NUTTER:

Mr. Williamson, I think you stated that the old
Standard of Texas Well over here had only produced for thirty
days with a total cumulative of eight hundred and twenty-six
barrels, is that it?

A. Yes, sir, those were the figures that we were able to

1.0

derive from --

2

3

6

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Q Then what happened to it?
- A. It was plugged.
- O Why did it quit producing, did it just water out or quit producing everything or what?
 - A. It just guit producing.
- Now much water did it make with that eight hundred and twenty-six barrels of oil?
- A. It had made five hundred and fifty barrels of water and, of course, there was no way to determine whether that came from the lower part of the perforations or not, they had perforated over such a large interval.
- Now, the interval that it was producing from does include the interval that you are producing from in this MSH Well, right?
 - A. Yes, sir.
- So, you don't know that they are not correlative or that they are not producing from the same zone, you just suspect that they may not be?
- A. Yes, sir, that's all, because just from my gross correlation there is no way to separate them.
- 0 On any of these three logs here are you able to pick the top of the Pennsylvanian?
- A. No, sir, we've got a top of the Wolfcamp and, of course, the correlations in here are somewhat uncertain as to

terminology and various things but the Pennsylvanian should lie above.

- Q. Well, I think you have mentioned the word "Cisco zone" in referring to the Ashman and Hilliard Well over here.
- A. Yes, sir, that is what they call that zone, that they perforated the Cisco zone.
- Q. Is that the perforation shown on the extreme left way out here near the bottom?
 - A. Yes, sir.
 - Q So, Cisco is Pennsylvanian?
- A Right, yes, sir, it should lie somewhere in here but I notice also that the Burtner Well or the well that was called the Burtner Field, they call that Permo-Penn, so I guess that is an indication that they were uncertain as to exactly where the completion lay.
- Q So, apparently back in 1966 they didn't know where the top of the Pennsylvanian was either?
 - A No, sir.
- Now, this oval shape that you have drawn on your Exhibit Number Two, that is just a randomly drawn oval shaped thing there that doesn't bear on any geology or stratigraphy or anything does it?
- A. No. The only thing that we have and I should have mentioned this earlier, in Section 16, in the southwest quarte of the southeast quarter of 15, 33, a well was drilled there

by Humble and I don't see the date but it was an abandoned well and the logs indicate just a trace of this Wolfcamp zone that is completed in the Mathis Spencer Clayton No. 1, so, somewhere between the completion and that hole, of course, the Wolfcamp zone that we are completed in goes out.

- Q Wolfcamp or Permo-Penn?
- A Well, interchangeably probably, it is not certain exactly which one is what.
- Now, how about this Ashman Hilliard Well, did it actually go on production?
- A Yes, sir, it produced, according to the record, a total of nine hundred and forty-three barrels of oil and production ceased and it was plugged.
 - Ω Did it make water too, do you know.
- A. I was unable to find any record of water so I don't know.
- Q But your well has already made fifty-three hundred barrels?
- A. Yes, sir, and it is currently producing about an average of a hundred and forty to fifty barrels a day.
 - Q A hundred and forty-three, I think.
- A. With no water and the gas-oil ratio has been relatively constant throughout its life.
- Now, you had proposed hundred and sixty acresumits here and you would dedicate the hundred and sixty acres,

1.3

2

5

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

being the southwest quarter of Section 22 to the Clayton	No.
I guess, even though you've got a completed well or what	ever
it is on that one hundred and sixty.	

- Yes, sir, it might be that even the proration units may have to be changed to lie within this productive area after additional drilling is done.
- And as I understand your proposed rules with the one hundred and sixty acre unit you propose that the well locations be permitted no closer than six hundred and sixty feet to the quarter section line?
 - Yes, sir.
- And you mentioned a standard allowable, what kind of a standard allowable was it?
- A. Just whatever the current allowable is for this depth well.
 - Q. On what spacing?
 - One hundred and sixty acres.
 - On a hundred and sixty? 0.
 - Yes, sir.
 - That would be five hundred and some?
- Yes, sir, which is well above the capacity of this well.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

(THEREUPON, the witness was excused.)

Kellahin?

MR. NUTTER: Do you have anything further, Mr.

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 5653? We will take the case under advisement? We will recess the hearing until one fifteen.

(THEREUPON, the hearing was in recess.)

sid morrish reporting service
General Court Reporting Service
Actile Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

sid morrish reporting service
Ceneral Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. neard by me on.

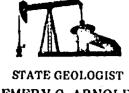
Zericer, Examiner New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

LAND COMMISSIONER



DIRECTOR JOE D. RAMEY PHIL R. LUCERO April 1, 1976

EMERY C. ARNOLD

Mr. Tom Kellahin Kellahin & Fox	Re:	CASE NO. 5653 ORDER NO. R-5191	
Atttorneys at Law Post Office Box 1769 Santa Fe, New Mexico		Applicant:	٠.
		Mathis, Spencer &	Hutson
Dear Sir:			
Enclosed herewith are Commission order recen			
Yours very truly, JOE D. RAMEY Director			·
JDR/fd			
Copy of order also sent	t to:		
Hobbs OCC X			
Artesia OCC	·		
Aztec OCC X			
Other			

REQUEST FOR THE EXTENSION OF AN EXISTING POOL OR THEOR THE CREATION OF A NEW POOL

TO: The O	il Conservation State of New		ssion	. :		D	ate Mar	ch 16	= · · · · · · · · · · · · · · · · · · ·	., 19 <u>76</u>
•	•			•	•		••	. •		·
The			r & Hutso	nn	·····	,		C1ay	ton	******
•		iame of Ope	rator	•	• .		Name o	lesse		
. 1	Located	1980	fect from	a the	South		•	line and	660	fcc
Well No.		:. :	:	22			155		, ,	•
from the	west		line of	22 Section	·4 M 4 s =	To	155 ship		33E Range	**********
	•	•		SCCROB					wange	•
is outside the with on form pool be extend	C-105, we he	creby requ	est that the		ame formati	- 15 MA	0.0315 01 12		on suomitt	ed nere
or that a new	·	ed to inclu		•	bed area		1/2 Sec.	22 E/2 S	Sec. 15	
Suggested nar	me: 1) MSH	(Wolfca	mp)	2) Cla	ton (Wol	fcamp)	3) Daise	y (Wolfca	mp)	
Name of Proc					Roy C.	Mathis, Sp Julium Williamsor ant for Ma	Operator M, P. Jr., P. this, Sp	E. encer & H	utson	****************
		•			· ·		Representat	iive		

######################################	theretal Webill (Amerada),	550	C. G. Gilleri 8 20 / 6 10 10 10 10 10 10 10 10 10 10 10 10 10	Alapazea 19672 iPenasoil	Mobil Milton 7 22 71 Royalty 5-1-81
ichair,	So Unionity and IC & Giller pied.	70"	4 21/4 <u>1</u>	Lend Stor	2199
Nontod Oil	7.0	Gillespie.	'Aloput GPennie	14793	E 104 7 6
19 Ang paga 19 Ang paga 1910 (2012)	America sameració	TO GIVEN 550 AMERICASE SELLATION OF THE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 12 12 12 12 12 12 12 12 12 12 12 12 12	John C. Alle Morie 1 9 16
Sams & Cent Comie Co 'S)			7 State	Marie Electroperry SEMAINS	Elche 362
Artec (10.00) terror	1.02.0. C.R.C.4(\$1041).1 and	Amerode)(Longrade) (Amerode)	(13) (13) (14) (15) (15) (15) (15) (15) (15) (15) (15	MH Christensen	
Haragon E Honagon Amaragon 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Incree American ansa	C.B Gitlespie. Jr. 10.B Gitlespie.	Jr To Un on 1	U.S., MI	Tana 7
8 H80	T	10-11-15-17-18-19-11	E.L. Lathernur M.M.	Pello Ercheverry Penatolielal Penatolielal	2047 7 T
Pauline Ocon, M. t. Union Ocon Foregon & Horogan 10 10265	1 0 0 05 10 (5) 1 0 0 05 10 0 05 11 15 00	Moralo Forman (Lmersta) Maralo Maralo Maralo MBP Costas 26 1 06-5124	L 6756 2 1 64 12/2 L0-1536 Hantod Oil 17/2	5-1) 76 MH Christensen 4-29 76 Susen Eaves,	*****
Hanagan Elphagani TO 10265 1974 Och 815 65 2974 Och 815 65 Soms & Dean Ceitle Ce (Stallste	1 0. 53-(5) 1 0. 53-(5) 1 0. 53-(5) 1 0. 53-(5) 1 0. 50-(5) 1 0. 5	Lerry Edeb Coord Por	1 - 1 - 83 16 - 958 125! >tqte	etal, MI John & Morie Etcheverry,	John Marie Esc
Yates Per.	Hanager & Hanagen 4 - 18 - 27	Goquino 1 1 65 C.E. Strange	Yates Pet Atapar Ex Pennzoit 10-1-82 2-16-78	Sun 8-15-79	#334° A
			16 706 L-1036 31 52	terior than to the second	2414 7
17			14	Marie L John Velle El, Yeverry, Tr. fleherery, Tr. um # Diekson, M	· 18
	18576 18570 Humbig 11500 St. 1366	E340h MBP E-6335	H.B.P. 8-9380	Gulf rt-1 e3 19622	
Stole Seminary States	5,0,00 €	Store U.S.MI Marie Edin	OPTION ACREA	GE Lina EMarie Eicheverry,	ال بلائلة Marie I
Guif Fram Programmes	Same Ceon while Co (5) Some Ceon while Co (5) I state the control of the	Cooper Mathe	Featherstone Yores Pet	Gulf	John Etcheverry
Possible Locati	0005	30 m 1 1250 / 1181 m	6 16 78 (G.361) 1 964 2399	19655 13-1-82	104 7 3155
Jerry 6,800 Geon	Soms a Deon Cattle Co (5)	Total Jack Company	BUN	NER 24	.19 او درورو
1 Meso Pet 12 - 17 - 78 1-1944 58 1)	Se Out Working	Mathis-Sameers	Mobil H.B.P. 8-9955		Azte 4 : 1 : L 537
Colo. 0.60 0.60	Icselito Etche	Clos particulations of Courses of Courses of Participated F213 F7 F213	8-9955 Huber M.P. 2-18-73 Groces 2-18-73 Groces 3-2453 Groces 1-25-23 Groces 1-25	U.S., MI Jo EMarie Eschwary,	284 7 221
State Cook	TCHReh Inc (5) Yates Pel. Mesa Pet.	F213 TCH Reh, Inc. N.P. So Ro. (Grace Moncriells-1:85)	10 18 18 18:18 58 18:	Mark Prod.	Sun Sun
on before the state of the stat	Abo Pet. 14 12:17:78 Yotes Orlo. 14 L-1944 Myco Ind. 14 56:33		27 15	18 17 82 18 17 18 17	8-16-76 4-6276 4-924-7-3329
	26 16 1	9 1 1 85 1 248 1 1 248 1 1 248 1 1 2 2 7	36	Morie C.John Escheverry. 25	30
Cit Ser MANustriffesa Pet Malepter	Gulf 6. 1. es	0.M.McDoniel 12 - 18 - 72 1/2960		Norville Oil Daya Open. 11 - 1 - 79 Sinc - 51. 10803 Ci 4135	Se. Roy. Se. Roy. S-28-76 5 15-76 S-11-76 4-20-76
Allied 56 2 manual	10169 Lor 22 66 Dulou FG-5930	Huber Warest 2-18-79 Warest 2-2483 1 441 3-476-378 12-18-36	Huber 18:18:79	70 4008 24 2:15-61	TOURCH INCISE
1,10	51ale	111100	Sigh 12485 3751 Autoc	Magrie Schwerry State	772 300
Lawton Gulf Edson-St. 10 1:84 TD10850 G-2231 DA10-5-51 43 9	Guif Allied 3.1.95 3-1.85 (Chem. LG-767) LG-7671 11-71-73 3389 3389 LZ-395	7-19 761-21-74 So Union K-208 11-2395 So Union 3715 17875 12-1-85 LG-3226	1 - 1 - 92 L - 6443 12 55		3 : 13 : 13
	Signe	29 52	stole		W.E. Lyles, MI TCHRchine (S)
32 Allied Chem	33	Sun 7- 19- 76 8- 6206 3763	35	Cities Service Dalco H.B.P. 2-21-77	Gelly Oil
उस्मिति कार्य इस्मिति	Mobil 1/2 MI	รถ ปีกัดกใ เริ่มอยน	Mabil 1/4 NI	B-9858 F-67/2 (Dalco Mobil 1699 12-21-77 H.B.F.	2.114 TITE
Science Series	TOHER TO THE USE		TCHRehine (5)	1 4 6 712 185955 1	State Clayton 1
	© Gulf St. 1-83 Cuyman Core 16:200 Lines 132 Core 152 Core 152 Co	Coquing 4 · 1 · 88 LG-30 ₋₂₁	Pennzoil, etal Gulf 5 - 21 - 78 4 - 1 - 93 L - 9:6 18245 6 9 55	. 1850 Partie plante State So.Roy. 13 18173 P. 1-282 25 22	3 4E
·		AREA N	ЛАР	EXhibitz	
4		MINEM I	nesi	Case 5653	
FIELD MSH	(Wolfcamp)		County LEA	State NEW	MEX.
Engineer R. C. W.		Drwn. By Del	Date 3-16-76 File	Spencer & Hutson	
SIPES	WILLIAMSON	a AYCOCK, IN		IFIGURE NO.	
Consulting Engineers		Midland -	Houston, Texas 6.9	17	

SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland, Texas

1100 OIHLS TOWER WEST MIDLAND, TEXAS 79701 915 683-1841 March 17, 1976

I212 THE MAIN BUILDING SUITE 712 HOUSTON, TEXAS 77002 713 228-8146

EXHIBIT

* EXHIRIT

Bottom Hole Pressure History

TYPE OF TEST	DATE	MEASU PRESS @ 9778'	URE	REMARKS
DST-FSIP	1/8/76		3392	PKR Depths 9680-9804
FLWG BHP	1/17/76		3121	FLWG on 12/64" chk
CI BHP	1/19/76		3473	CI 47 hrs.
CI BHP	1/26/76		3510	CI 211 hrs. 30 min.
Draw=Down - FLWG	1/27/76		2940	After FLWG 27 hrs.
Build Up	3/4/76	Meas.	2061	CI 96 hrs.
		Extrap.	2473	Cum. Prod. to time of
				CI is 5300 BO + 5830 MCF

Reserve Estimates

1. Volumetric Estimate:

Porosity % 11.8
Water Sat. % 18.0
Recovery Factor % 15
FVF (est. from literature) 1.75
Net Pay Thickness, feet 10
Drainage area, acres 160
Oil Reserves, BBL 102,400

2. Estimated Production Decline Approach (after the production of 5300 BO)

If 20% Annual Decline, Ultimate oil recovery = 5300 BO + 233,118 BO = 238,418 BO

If 40% Annual Decline, Ultimate oil recovery = 5300 BO + 103,608 BO = 108,908 BO

Exhibit 4 case 5653

/cjg

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR OR THE CREATION OF A NEW POOL

TO: The Oil Conservation		. :		Date March	h 16	, 1976
State of New	r Mexico	•	•	• •		
		••	•		•	.•
The Mathis.	. Spencer & Hut.	e on		<u>.</u>	Clayto	on.
	Name of Operator	× × 11		Name of		*********************
1 Located	1980	om the So	uth		Jine and	660 fcc
Well No.		22		155	and and	33E
from the west	line of	Section		Township	***************************************	Range .
		•				
is outside the boundaries o	f any pool producin	g from the sam	e formation. On t	he basis of the	information	submitted here
with on form C-105, we he	erchy request that t					
. Will on form C-10.7, we th		IIC.	14.			
pool be extended to include	the following descri	ibed area				
	**			•		
***************************************	***************************************		•	_	-d-a -da	
or that a new pool be creat	ed to include the fol	lowing described	i area Sec. 21	, W/2 Sec. 2	2, E/2 Se	s. 15
TNP 155	, Range 33E I	ea County, l	New Mexico.			
Suggested name: 1) MSH	(Wolfcamp)	~2) Clabe	n (Wolfcama)	3) Daigay	(Nolform	a)
Suggested name:	(HOTICAMP)	Z) Glayce	on (Morreamp)	J) Dalsey	(MOIICAII	P)
			Mathis,	Spencer & H	utson	,
			or ll illian	Operator		
Name of Decision !!	walfeeme		Roy C. Williams	son Jr. P.E.	•	•
Name of Producing Form	auon: Hottedin		Cansultant for			tson
•				Representative	· · · · · · · · · · · · · · · · · · ·	***************************************

	Mobil 1/2 MI R3	ARE	quino 11. 82 130. ₂₁	Mebil 1. 7CHRch in Pennsish, etc. 1.2:6 6:35	Guif Guif 4-1- 8) 18045 18045	×hibit	So Rey So	Solote Color 17 Color of Marie Color
56 23. 31014	TCH Ren Inc (S) NO	Coc 4	lesses Juind 1 - 82 130 25	7CHRch In Penntail, etal 5 - 21 - 78 5 - 9:6 6935	Guif 4- 1- 83 18045	× hi bi+	2	Caisy Claylon '
56 33. 31914	TCH Ren Inc (S) NO	Coc	inge jare Tare	7CHRch In 15 H to 16 (200 to Penn toil; etal 5 - 21 - 78 L- 916	Guif 4- 1- 13	16.00	19955	Caisy Claylon '
56 23. 31014	TCH Ren Inc (S) NO	3E		TCHRch In	c (5)	16.00	19955	Caisy Claylon '
J M. Huber Comi		Salingan	1		1	[Dalco 12 · 21 · 77]		20 m 700
32 Allied Chem 13:17.72		Sun 7. 19 7 K 6208 3765		35		Cities Service I H.8.P. I 8-9858	Dako 2 - 21 - 77 2 6717	Getty Oil 19: 18:76 K 6446
Lawrion Gulf Gul Edition 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	7875	Sun Allied Fig. 761 Cherry 19 761 Cherry 8 6208 11 2393 3733 17875	So Union Supply 12 · 1 · 85 LG·3226 29 <u>92</u>	1-1-82 1-6883 12 55 State				So. Roy.
Allied 5833 (**1132 Union Tex N.M. Communication of the Communication of	6·1·05 26·2030 35 0 8 Scole	Right Control	1 2960 1 79 heralization 1 493 feet of all 2 493 1 497 1 49	51p11 Aztec	Huber 12-18-79 1 2-18-79 2 3-7 <u>91</u>	U.S. MI norie tcheverry non Erchnerry	EI 4135 🚪	W. E. Lylon TCHReh (nc (5)
1		So.Roy. 103-2594 4112 27	Huber 12:18:79 1:2469 37:51 M. McGoniel 12:18:72	27 12		Marie E.John Etcheverry. Norville Qil II + 1 + 79	5 Dayo Oper.	30 3741/1 30 50 Roy 35 28 76 5 13 76
Etian (1 30) On the state of t	Pel. Mesa Pet.	FEI3 TOHRO	6136 16 59	(mion 5)	upply IS		Mark Prod. 8 · 1 · 82 LG-475 1822	Sun 8-16-76 1-6276 1-6276 1-9743322
1-1944 50 P	25.461	(2:25 75)) . 68 Clast a comment title and Display Comments and Of Play 1:35 6 4	O. S. IIII	H.B.P. B-9955 Huber M.P. 18 79 Grace 18 79 Grace 12:18 79 2489 12:3873 00 2558737070	W	U.S. JoeEMarie Eic	MI haverry,	4 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·
Possible Locations - Stote Jerry 6, Bob Dean Sor 1 Meso Pet 12-17-78	ns Oceo Comie Co (5)	Cocyne y Markis Cocyne y Markis Cocyne y Service Bill AMerica Markis Service 15 92 Markis Service Marki	1816 O	2312 23 Mobil	BÜN	NER 2	4	<i>ami y</i> 19. Azte
Guld Quad 1 and 1 and 1	N.F. Spencer O. 1. 82 15681	Cocymo Mulhis Cocymo Mulhis Cocymo		Featherstone Qev.	Yotes Pet 12 1 51 16-289	17	υ[ξ 1 · 0 }	John Etcheverry 1-18-76 K-5667 Terrac 7 3155
Stole Serve Stole Serve Serve Stole Serve Ser	16 Minerals Inc.	510'e 335555	U.S. MI Marie Ewina E. Etcheverry	OPTION	8.9380	E Lina EMarie Eie		<u>क्रम</u> ् र्व Jahn Marie
17	16 Minerals Fine.	Endon HBP		14-	Texace H.B.P.	thehering Gu R-1	63	
Yares Pet. () - 1 - 83 La - 1387 (0 2\$	Hanagan Ei Hanagan 4 - 18-77 K-8870 10 T	Coquino 1 · 1 · 83 C 1G-959	E Strange 1 - 1 - 14 19857	10 1 12	Hapat E. Penntoil 1-16-78 E-1036 31 62		Sun 10-15-75	2016 P
		Lower Jerry Reab Cear 1914		17:5 Hantad Vit (1 8) (2 958 1251 17914	1712 1712	M.H. Christensen 4-75-76 Susan Eaves, etal, MI Jor Marie E	!	App. 1 John Marie Era
V3. M1 8 200 180 111	100 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M 20 18 (Narate) - 8 20 18 (Nara	"	26 %	STH bristensen 3 = #4	Peneralietal Feneralietal 6-6-76-5-4-76 5-13-76	j 5 <u></u> j	nsk ₹ 7
Azfec Company America	TO B COLLEGE STREET	Amerate)(Amerate) 407 407 504 E-819 (L. trib) (C.	(Amerada) 6-9433 6-9433 6-9433 6-9433 7-847	Honlos Oil (A)	lapaz (i. Permis) 12 - 17 - 78 L-1943 43 75	MH Christens	1	in the P
1-21-19 1-21-19-1 1-21-19-	State M. State M. I suggest the Cartie	CB GITER 3 SE	THE THE THE	Srare	L-1943 43 77	Africa Elitar	to more erry SEMins	John G. Alus Morie I 18 Elche 1885 Lerry State
10 10 10 10 10 10 10 10	in a file C & Grilespie, Jr 1825 Grilespie, Jr 1825 Grilespie, Jr 1826 Grilespie, Jr 1826 Grilespie, Jr 1826 Grilespie, Jr 1827 Jillespie, Jr 1828 Grillespie, Jr	E. 20 A.	C.B Su Gillespie, Jr.		apar E. Pennsail 12 · 17 · 78	6-1-11		3.701 7 6
1 1 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Taging and	<u> </u>	135/2	C B Gives	36 to Tearing 6 to 14 3 to 14 3 to 14 3 to 14	Control Contro	Alapatti iPenatoil 12-24-76	11301 Milton 2 27 71 Royalty 5-1 81 2/14 11 5461 2198

ę

SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland, Texas

IIOO OIHLS TOWER WEST MIDLAND, TEXAS 79701 915 683-1841 March 17, 1976

1212 THE MAIN BUILDING SUITE 712 HOUSTON, TEXAS 77002 713 228-8146

EXHIBIT

Bottom Hole Pressure History

		measu Press		
TYPE OF TEST	DATE	@ 9778'	psig	REMARKS
DST-FSIP	1/8/76		3392	PKR Depths 9680-9804
FLWG BHP	1/17/76		3121	FLWG on 12/64" chk
CI BHP	1/19/76		3473	CI 47 hrs.
CI BHP	1/26/76		3510	CI 211 hrs. 30 min.
Draw=Down - FLWG	1/27/76		2940	After FLWG 27 hrs.
Build Up	3/4/76	Meas.	2061	CI 96 hrs.
•		Extrap.	2473	Cum. Prod. to time of
		•		CI is 5300 BO + 5830 MCF

Reserve Estimates

1. Volumetric Estimate:

Porosity % 11.8
Water Sat. % 18.0
Recovery Factor % 15
FVF (est. from literature) 1.75
Net Pay Thickness, feet 10
Drainage area, acres 160
Oil Reserves, BBL 102,400

2. Estimated Production Decline Approach (after the production of 5300 BO)

If 20% Annual Decline, Ultimate oil recovery = 5300 BO + 233,118 BO = 238,418 BO

If 40% Annual Decline, Ultimate oil recovery = 5300 BO + 103,608 BO = 108,908 BO

Exhibit 4
Case 5653

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF MATHIS, SPENCER & HUTSON FOR ADOPTION OF POOL RULES, LEA COUNTY, NEW MEXICO

APPLICATION

Come now Mathis, Spencer & Hutson and apply to the Oil Conservation Commission of New Mexico for creation of a new pool for production of oil from the Permo-Penn formation, and the adoption of pool rules, including a provision for 160-acre spacing and proration units, and in support thereof would show the Commission:

- 1. Applicants have completed their Clayton No. 1 well as a discovery well, located 1980 feet from the South line, and 660 feet from the West line of Section 22, Township 15 South, Range 33 East, N.M.P.M., Lea County, New Mexico for the production of oil from the Permo-Penn formation. Perforations are from approximately 9774 feet to 9782 feet.
- 2. Well pressures, producing characteristics and the nature of the formation encountered indicate that one well will efficiently and economically drain and develop a unit of 160 acres, and the economics of drilling and completing wells in the newly-discovered pool are such that it should be developed on 160-acre spacing and proration units.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly

appointed examiner, and that after notice and hearing as required by law the Commission enter its order creating a new pool for the production of oil from the Permo-Penn formation, and adopting pool rules for the development and operation of the pool, including a provision for 160-acre spacing and proration units, and for such other provisions as may be proper for the prevention of waste, and the protection of correlative rights.

Respectfully submitted,
MATHIS, SPENCER & HUTSON

By Casan Kellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF MATHIS, SPENCER & HUTSON FOR ADOPTION OF POOL RULES, LEA COUNTY, NEW MEXICO

APPLICATION

Come now Mathis, Spencer & Hutson and apply to the Oil Conservation Commission of New Mexico for creation of a new pool for production of oil from the Permo-Penn formation, and the adoption of pool rules, including a provision for 160-acre spacing and proration units, and in support thereof would show the Commission:

- 1. Applicants have completed their Clayton No. 1 well as a discovery well, located 1980 feet from the South line, and 660 feet from the West line of Section 22, Township 15 South, Range 33 East, N.M.P.M., Lea County, New Mexico for the production of oil from the Permo-Penn formation. Perforations are from approximately 9774 feet to 9782 feet.
- 2. Well pressures, producing characteristics and the nature of the formation encountered indicate that one well will efficiently and economically drain and develop a unit of 160 acres, and the economics of drilling and completing wells in the newly-discovered pool are such that it should be developed on 160-acre spacing and proration units.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law the Commission enter its order creating a new pool for the production of oil from the Permo-Penn formation, and adopting pool rules for the development and operation of the pool, including a provision for 160-acre spacing and proration units, and for such other provisions as may be proper for the prevention of waste, and the protection of correlative rights.

Respectfully submitted,
MATHIS, SPENCER & HUTSON

By Cason Kullahir Kellahin & Fox P. O. Box 1769 Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF MATHIS, SPENCER & HUTSON FOR ADOPTION OF POOL RULES, LEA COUNTY, NEW MEXICO

APPLICATION

Come now Mathis, Spencer & Hutson and apply to the Oil Conservation Commission of New Mexico for creation of a new pool for production of oil from the Permo-Penn formation, and the adoption of pool rules, including a provision for 160-acre spacing and proration units, and in support thereof would show the Commission:

- 1. Applicants have completed their Clayton No. 1 well as a discovery well, located 1980 feet from the South line, and 660 feet from the West line of Section 22, Township 15 South, Range 33 East, N.M.P.M., Lea County, New Mexico for the production of oil from the Permo-Penn formation. Perforations are from approximately 9774 feet to 9782 feet.
- 2. Well pressures, producing characteristics and the nature of the formation encountered indicate that one well will efficiently and economically drain and develop a unit of 160 acres, and the economics of drilling and completing wells in the newly-discovered pool are such that it should be developed on 160-acre spacing and proration units.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly

appointed examiner, and that after notice and hearing as required by law the Commission enter its order creating a new pool for the production of oil from the Permo-Penn formation, and adopting pool rules for the development and operation of the pool, including a provision for 160-acre spacing and proration units, and for such other provisions as may be proper for the prevention of waste, and the protection of correlative rights.

Respectfully submitted,
MATHIS, SPENCER & HUTSON

Rellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CAS Ord

CASE NO. 5653 Order No. R-5191

NOMENCLATURE

APPLICATION OF MATHIS SPENCER HUT-SON FOR POOL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 17, 1976, at Santa Fe, New Mexico, before Examiner Daviel S. Nulleans

NOW, on this _____ day of March, 1976, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Mathis, Spencer Ethitson seeks the creation of a new oil pool for Wallcamp production in Lea County, New Mexico.
- (3) That the applicant also seeks the promulgation of special rules for said pool, including a provision for 160-acre proration units.
- (4) That the evidence presently available indicates that applicant's Clayton Well No. 1, located in Unit L of Section 22. Township 15 South, Range 33 East, NMPM, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the Davisey Welfsomp. Pool; that the vertical limits of the pool should be the welfcamp formation, and that the horizontal limits of said pool should be as follows:

TOWNSHIP 15 SOUTH, RANGE 33 EAST, NMPM Section 22: 50/4

(5) 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, temporary special rules and regulations providing for 160-acre spacing units should be promulgated for the Daisey-Wolfcampu Pool.

- (6) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (7) That the temporary special rules and regulations should provide for a depth bracket allowable of 5153 barrels.
- (8) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.
- (9) That this case should be reopened at an examiner hearing in April, 1977, at which time the operators in the subject pool should be prepared to appear and show cause why the Daisey-Wolfcamp pool should not be developed on 40-acre spacing units.

, IT IS THEREFORE ORDERED:

(1) That effective April 1, 1976, a new pool in Lea County, New Mexico, classified as an oil pool for Wolfeang production, is hereby created and designated the Daisey Wolfeang Pool, with vertical limits comprising the Wolfeang Formation and horizontal limits comprising the following-described area:

TOWNSHIP 15 SOUTH, RANGE 33 EAST, NMPM Section 28: 5044

(2) That temporary Special Rules and Regulations for the Daisey Wolfferm Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE DAISEY-WOLFCAMP, POOL

- RULE 1. Each well completed or recompleted in the Parkey William Pool or in the Wolframp formation within one mile of the Parkey Pool, and not nearer to nor within the limits of another designated Wolframppool, shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations herein fter set forth.
- RULE 2. Each well completed or recompleted in the Descy-

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. For good cause shown, the Secretary-Director of the Commission 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 Secretary-Director of the Commission 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 a standard allowable in the Daisey-Welfcamp: Pool as the acreage in such non-standard unit bears to 160 acres.

RULE 4. 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.

Exception to the requirement, of buse is without notice and hearing when an application has been filed for an unorthodox location mecessitate by topographical conditions or the recompletion of a well previously drilled to another horizon. all experators experting the proposed location shall be notified of the application lay registered or certification and the application phase state that run notice has been furnished. The Secretary Direct writted vaivers from all aperators expecting the proposed location or if no direction to the unarthodox location has been entered within 20 days after the Secretary-Director reserved the application.

RULE 6. A standard proration unit (158 through 162 acres) in the Dalie Wolf Comp Pool shall be assigned a depth bracket allowable of 515 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 locations of all wells presently drilling to or completed in the Daisey-Well-Land Pool or in the Welfcam formation within one mile thereof are nereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs district office of the Commission in writing of the name and location of the well on or before June 1, 1976.
- (2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Daisey-Wolfedurgs Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission 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 Daisey justification. Pool or in the Wolfermp formation within one mile thereor shall receive no more than one train of a standard allowable for the pool.

- (3) That this case shall be reopened at an examiner hearing in April, 1977, at which time the operators in the subject pool should be prepared to appear and show cause why the Daisey Wolfcampan, Pool should not be developed on 40-acre spacing units.
- (4) 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 herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMERY C ARNOLD Member

JOE D. RAMEY, Mamber & Secretary

ul/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO. 5653

Order No.

5191-A

IN THE MATTER OF CASE 5653 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. R-5191 WHICH ORDER ESTABLISHED TEMPORARY SPECIAL POOL RULES FOR THE DAISEY-WOLFCAMP POOL, LEA COUNTY, NEW MEXICO.

d

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 2019 77, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this day of April Quee, 1977, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-5191 , dated March 30

 19_76, temporary special rules and regulations were promulgated for the __Daisey-Wolfcamp Pool , __Lea County, New Mexico, establishing temporary 160 _-acre spacing units and proration units, and a limiting gas-oil ratio of
- (3) That pursuant to the provisions of Order No. R-5191
 this case was reopened to allow the operators in the subject
 pool to appear and show cause why the Daisey-Wolfcamp Pool

 PXXX should not be developed on 40 __acre spacing units.and a
 limiting gas-oil ratio of ________to _____.

Me-do p. 2 pintar to State To. P. 4181-A

SH

-2-Case No. 5653 Order No. R-5191-A

- (4) That no operator in the subject pool appeared to show cause why the Daisey-Wolfcamp Pool should not be developed on 40-acre spacing units.
- (5) That no wells are presently producing from the subject pool.
- (6) That it is not anticipated that additional wells will be drilled in the subject pool.
- That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 160 acres.
- That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order R-5191 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

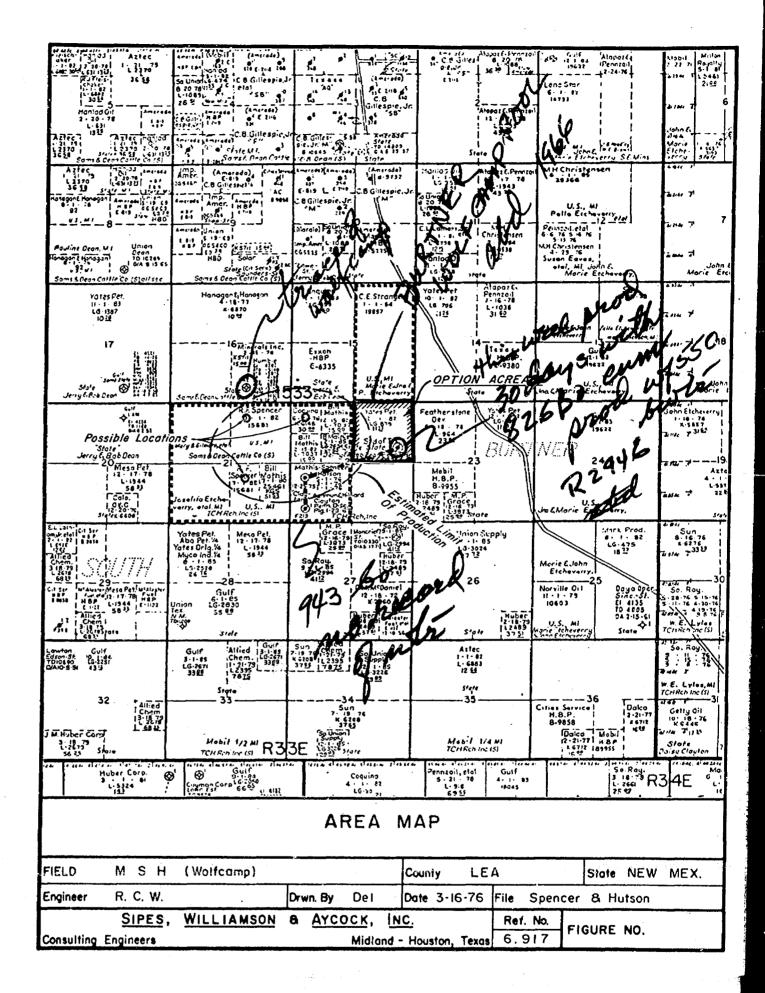
- (1) That the Special Rules and Regulations governing the Daisey-Wolfcamp Pool, Lea County, New Mexico, promulgated by Order No. R-5191, are hereby abolished.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR THE CREATION OF A NEW POOL

TO: The O		ion Commission	ព	•		•	Date	Marc	h 16	10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	., 197
	State of New	A MEXICO		.•			••		•		
	•			•		• •					
• •							• •		•		•
The	Mathis	. Spencer &	Hutson	1				· .	Clay	ton	
		Name of Operato	E	. •			, N	ame of	Lease		
•	•		. •				•				
ı l	Located	1980	ect from	theS	outh			····	line and	660	
Well No.	•	• •			:		· ·				
				22			10	. E		. '	1
from the	west	lin	ie of	22				55		33E	
	•	• • •	•	Section			Township		•	Range	•
					•						
s outside the	boundaries of	of any pool pro	ducing f	rom the sai	me formation	on. On t	he basis	of the	informatio	on submitte	ed he
						• :					
with on form	C-105, we h	ereby request	that the					********		, 	
•••					-	- 19 303		•	•		
sool be extend	ded to includ	e the following	described	i area						***************	*****
	٠.	**		•				٠.			
****					*******	***************************************		·····	*************		
		. • . • • • .				lec 21	11/2 S	00 2	99 E/9 C	. 15	
or that a new	boot pe cres	ted to include t	the Iollow	ang describ	ed area		- W/-E	<u>.ec</u>	<u>. </u>	ES	
	TNP 155	, Range 331	E Lea	County.	New Mexi	co.	•				
	***************		 			······································		•	•	************	******
Suggested no	1) MSH	(Wolfcamp))	-2) Clay	ton (Wolf	camp)	'3) D	aisey	(Wolfca	imp)	
·			***************************************	~~~						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
					Λ . M	athis,	Spence	r & F	lutson		
				• • • • • • • • • • • • • • • • • • • •	 			crator	.4		
			***		Kizelli	HILL	MMILE				
Name of Proc	ducing Form	ation. Wolf	camp		Roy VC. W	illiams	on Jr∜'	, P.E			
	acang rom	1413011		•••	Cansulta	nt for	Mathis	, Spe	ncer & H	utson	
•							٠, ٠.	•• , • •			••.
							Repre	sentativ	c		
					·				,		
					•		•		• :		•
•				بوينده بالمهاج فالمحا	والمتاريخ والمتاريخ	د و دره فرست منهده	بدينت سارو معودها			.•	
			100	WORK I	W.X. VAL		i i gragogogo				
			121	to Not Notice of			113.12	(1) .	15		
				Lichar	Market Market	COMM	น่อรเดห				•
• • • • • • •		,				- South 174	0.22(1.91) 201. 1	•		•	•
	***		** 7.3	and.		(C)	7	. / /		1	
		• • • • • • • • • • • • • • • • • • • •		VST-MON	5653			•		· 🔍	
•				•				- [·	



SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland, Texas

IIOO OIHLS TOWER WEST MIDLAND, TEXAS 79701 915 683-1841 March 17, 1976

117, 1970

1212 THE MAIN BUILDING SUITE 712 HOUSTON, TEXAS 77002 713 228-8146

EXHIBIT

Bottom Hole Pressure History

		MEASU PRESS		
TYPE OF TEST	DATE	@ 9778'		F.EMARKS
DST-FSIP	1/8/76		3392	PKR Depths 9680-9804
FLWG BHP	1/17/76		3121	FLWG on 12/64" chk
CI BHP	1/19/76		3473	CI 47 hrs.
CI BHP	1/26/76		3510	CI 211 hrs. 30 min.
Draw=Down - FLWG	1/27/76		2940	After FLWG 27 hrs.
Build Up	3/4/76	Meas.	2061	CI 96 hrs.
·		Extrap.	2473	Cum. Prod. to time of CI is 5300 BO + 5830 MCF

Reserve Estimates

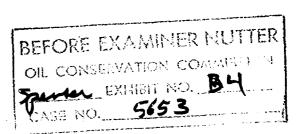
1. Volumetric Estimate:

Porosity % 11.8
Water Sat. % 18.0
Recovery Factor % 15
FVF (est. from literature) 1.75
Net Pay Thickness, feet 10
Drainage area, acres 160
Oil Reserves, BBL 102,400

Estimated Production Decline Approach (after the production of 5300 BO)

If 20% Annual Decline, Ultimate oi! recovery = 5300 BO + 233,118 BO = 238,418 BO

If 40% Annual Decline, Ultimate oil recovery = 5300 BO + 103,608 BO = 108,908 BO



/cjg