



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

BRUCE KING  
GOVERNOR

November 15, 1994

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

Mr. Kevin Mayes  
Mewbourne Oil Company  
P. O. Box 7698  
Tyler, Texas 75711

*Attn: Kevin Mayes  
Project Manager*

*Re: Decision on Request to Exempt the Work on the Sprinkle Federal #3, NMOCC  
Commission Order No. R-10151-A, Querecho Plains Queen Waterflood Project*

Dear Mr. Mayes:

In response to your letter of July 26, 1994, in which you requested an exemption for remedial work on the Sprinkle No. 3, this letter denies that request. The denial is based on work that OCD staff has performed in correlating the injection interval (3934' - 4198') in the Federal "E" Well No. 1 in Unit H of Section 27 with the same interval in the Sprinkle Federal No. 3. There is indicated porosity correlatable in both wells. This leads to the conclusion that injection fluid from the Federal "E" Well No. 8 has the potential of reaching the Sprinkle Federal Well No. 3 where it can migrate to other formations. All aspects of NMOCC Order No. R-10151-A are to remain in full force and effect.

If you have any questions or need additional information, please contact this office.

Very truly yours,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay  
Director

WJL/sl

cc: Jerry Sexton - OCD Hobbs Office



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY


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



2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

MEMORANDUM

TO: William J. LeMay  
Jerry Sexton

FROM: David Catanach 

RE: Mewbourne Oil Company  
Sprinkle Federal Well No. 3  
Unit E, Section 26, T-18S, R-32E, NMPM  
Division Order No. R-10151

Bill:

I've had some discussions with Paul and Jerry and these are my conclusions:

Paul has performed a log correlation between the proposed injection interval (3,934'- 4,198') in the Federal "E" Well No. 8, located in Unit H of Section 27, and the Sprinkle Federal Well No. 3 and has found that there are porosity intervals present and correlatable in both wells.

This leads to the conclusion that injected fluid from the Federal "E" Well No. 8 has the potential of reaching the Sprinkle Federal Well No. 3, where it can migrate to other formations.

I recommend that Mewbourne not be granted an exception to the specific provision that they perform remedial cement operations on the Sprinkle Federal Well No. 3, as contained within said Order No. R-10151.

If Mewbourne wishes to pursue their request, I also recommend that it be done at a De-Novo hearing before the full Commission.

Tdrem 11

10/4/94

Bill:

I am forwarding this request from Mewbourne for your review. This is a follow up request to the waterflood order Jim wrote and we revised. Mewbourne seeks to delete the requirement that they recement the Sprinkle Federal Well No. 3, which was required by Division Order No. R-10151. This request is based upon geologic considerations. This probably should have been handled at the de-novo hearing, but its up to you.

OK

W. T.

JK

Dave - Please give me your  
recommendation and why.

J. E. L.

**MEWBOURNE OIL COMPANY**

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

September 27, 1994

New Mexico Oil Conservation Commission  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504  
**Attn: David Catanach**

Re: Sprinkle Federal #3-E  
Sec. 26, T18S, R32E  
Division Order R-10151

Dear Mr. Catanach:

We are in receipt of a letter from Mr. Jerry Sexton to myself dated August 19, 1994, which addresses stipulations for the referenced. In the body of said letter it is documented that you will make the determination concerning the injection of water offset to the referenced well. In particular, injection will occur through the Walker Federal Well No. 1 and the Federal "E" Well No. 8.

At this time we are ready to begin working on the conversion of said Walker and Federal "E" wells to injection. It would be appreciated if we might have your determination concerning the referenced at your earliest convenience. I have enclosed both our letter to Mr. Sexton dated July 26, 1994, as well as said letter from Mr. Sexton dated August 19, 1994.

There is one item in Mr. Sexton's letter of August 19, 1994, we would like to clarify. Mr. Sexton documents the possibility of pressuring up the Penrose formation. We do not think this will happen as the Walker injector is not completed in the Penrose and the Federal "E" injector is mapped with zero pay in the Penrose.

We appreciate your consideration in this matter. If you have any questions please contact me at (903) 561-2900.

Sincerely,



Kevin Mayes, P.E.  
Project Engineer



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

BRUCE KING  
GOVERNOR

August 19, 1994

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

Kevin Mayes  
Mewbourne Oil Company  
P. O. Box 7698  
Tyler, Texas 75711

Re: Sprinkle Federal #3-E, Sec 26, T18S, R32E  
Division Order R-10151

Dear Mr. Mayes:

The information you have submitted on the above referenced well indicates the possibility that this well could be a problem by pressuring up the Penrose formation.

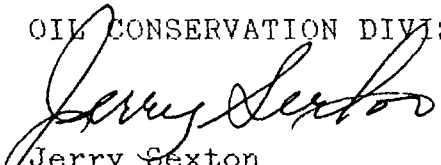
We are sending your letter of request and all information regarding this well to David Catanach, the Examiner originating Order R-10151.

Until such time as Mr. Catanach makes a determination as to any work required on this well, we request that you refrain from injecting into the Walker Federal Well No. 1 and the Federal "E" Well No. 8.

If you have any questions, please feel free to call.

Very truly yours

OIL CONSERVATION DIVISION

  
Jerry Sexton  
Supervisor, District I

JS:bp

cc: David Catanach  
File



**MEWBOURNE OIL COMPANY**

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

July 26, 1994

New Mexico Oil Conservation Commission  
P.O. Box 1980  
Hobbs, New Mexico 88240  
Attn: Jerry Sexton

Re: Findings 11 and 12  
NMOCD Division Order R-10151  
Querecho Plains Queen  
Associated Sand Unit  
Lea County, New Mexico

Dear Mr. Sexton:

This letter is sent in response to our meeting of Friday, July 22, 1994. In said meeting, Kelly Ryan of our Hobbs Office, you and I discussed the technical merits of the referenced findings. A copy of the referenced order was supplied to you at said meeting but if you require additional copies please let me know. The following represents the Mewbourne Oil Company proposal concerning the Sprinkle Federal Well No. 3.

It is proposed that no work is required on the Sprinkle Federal Well No. 3 in that this well is outside the geologic zero line. Enclosed are net thickness above the water-oil contact isopach maps for your review. It can be seen said Sprinkle well is interpreted having zero feet of net pay in the Queen and two feet of pay in the Penrose. However, the Penrose in said Sprinkle well is interpreted as a separate "pod" of sand deposition. There are two wells interpreted with zero feet of net pay between said Sprinkle well and the corresponding offset injectors.

If you are in concurrence with this proposal we would appreciate your authority to inject into the Walker Federal Well No. 1 and Federal "E" Well No. 8 at your earliest convenience. We appreciate your consideration in this matter. If you have any questions please contact me at the above phone number or Kelly Ryan at (505) 393-5905.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kevin Mayes".

Kevin Mayes, P.E.  
Project Engineer

cc: Ken Calvert  
Kelly Ryan  
Jim Bruce







STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION  
RECEIVED  
AUG 23 11 07 52

BRUCE KING  
GOVERNOR

August 19, 1994

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

Kevin Mayes  
Mawbourne Oil Company  
P. O. Box 7698  
Tyler, Texas 75711

Re: Sprinkle Federal #3-E, Sec 26, T18S, R32E  
Division Order R-10151

Dear Mr. Mayes:

The information you have submitted on the above referenced well indicates the possibility that this well could be a problem by pressuring up the Penrose formation.

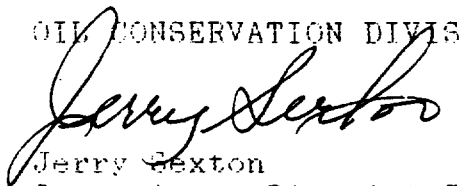
We are sending your letter of request and all information regarding this well to David Catanach, the Examiner originating Order R-10151.

Until such time as Mr. Catanach makes a determination as to any work required on this well, we request that you refrain from injecting into the Walker Federal Well No. 1 and the Federal "E" Well No. 8.

If you have any questions, please feel free to call.

Very truly yours

OIL CONSERVATION DIVISION

  
Jerry Sexton  
Supervisor, District I

JS:bp

cc: David Catanach  
File



# MEWBOURNE OIL COMPANY

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

July 26, 1994

New Mexico Oil Conservation Commission  
P.O. Box 1980  
Hobbs, New Mexico 88240  
Attn: Jerry Sexton

Re: Findings 11 and 12  
NMOCD Division Order R-10151  
Querecho Plains Queen  
Associated Sand Unit  
Lea County, New Mexico

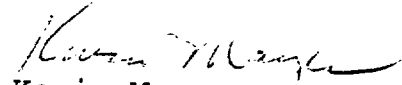
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This letter is sent in response to our meeting of Friday, July 22, 1994. In said meeting, Kelly Ryan of our Hobbs Office, you and I discussed the technical merits of the referenced findings. A copy of the referenced order was supplied to you at said meeting but if you require additional copies please let me know. The following represents the Mewbourne Oil Company proposal concerning the Sprinkle Federal Well No. 3.

It is proposed that no work is required on the Sprinkle Federal Well No. 3 in that this well is outside the geologic zero line. Enclosed are net thickness above the water-oil contact isopach maps for your review. It can be seen said Sprinkle well is interpreted having zero feet of net pay in the Queen and two feet of pay in the Penrose. However, the Penrose in said Sprinkle well is interpreted as a separate "pod" of sand deposition. There are two wells interpreted with zero feet of net pay between said Sprinkle well and the corresponding offset injectors.

If you are in concurrence with this proposal we would appreciate your authority to inject into the Walker Federal Well No. 1 and Federal "E" Well No. 8 at your earliest convenience. We appreciate your consideration in this matter. If you have any questions please contact me at the above phone number or Kelly Ryan at (505) 393-5905.

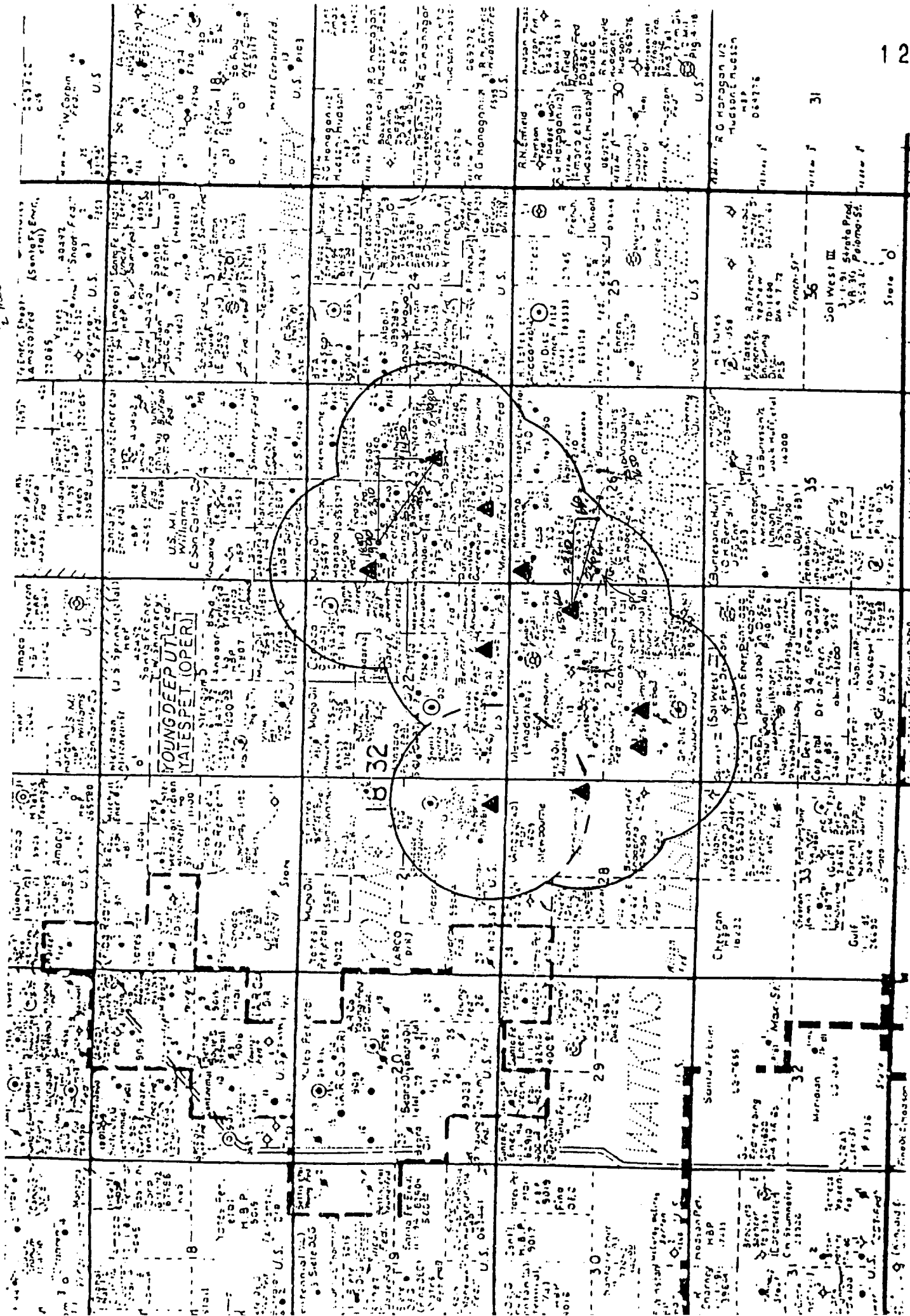
Sincerely,

A handwritten signature in dark ink, appearing to read "Kevin Mayes", with a long horizontal flourish extending to the right.

Kevin Mayes, P.E.  
Project Engineer

cc: Ken Calvert  
Kelly Ryan  
Jim Bruce

Map of All Wells Within 2 Miles of Injector With 1/2 Mile Radius of Investigation  
Querecho Plains Queen Associated Sand Unit



Submit 5 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240  
  
DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210  
  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department  
  
**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

**REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS**

Operator <b>Mewbourne Oil Company</b>		Well APN No. <b>30-025- 29616</b>
Address <b>P. O. Box 7698, Tyler, Texas 75711</b>		
Reason(s) for Filing (Check proper box) <input checked="" type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	Change Well Name.
Recompletion <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	Effective Date: November 1, 1993
Change in Operator <input type="checkbox"/>		Old Name: Sprinkle Federal #3
If change of operator give name and address of previous operator _____		

**II. DESCRIPTION OF WELL AND LEASE**

Lease Name <b>QPBSSU 12F-3</b>	Well No. <b>3</b>	Pool Name, Including Formation <b>Querecho Plains - Upper Bone Spring</b>	Kind of Lease <input checked="" type="checkbox"/> Federal <input type="checkbox"/>	Lease No. <b>NM-40452</b>
Location Unit Letter <b>E</b> : <b>2310</b> Feet From The <b>North</b> Line and <b>330</b> Feet From The <b>West</b> Line Section <b>26</b> Township <b>18-South</b> Range <b>32-East</b> , NMPM, <b>Lea</b> County				

**III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <b>Koch Service, Inc.</b>	or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) <b>Box 1558, Breckenridge, Texas 76024</b>				
Name of Authorized Transporter of Casinghead Gas <b>GPM Gas Corporation</b>	or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) <b>Bartlesville, Oklahoma 74004</b>				
If well produces oil or liquids, give location of tanks.	Unit <b>M</b>	Sec. <b>23</b>	Twp. <b>18S</b>	Rge. <b>32E</b>	Is gas actually connected? <b>Yes</b>	When ?
If this production is commingled with that from any other lease or pool, give commingling order number: _____						

**IV. COMPLETION DATA**

Designate Type of Completion - (X)	Oil Well <input type="checkbox"/>	Gas Well <input type="checkbox"/>	New Well <input type="checkbox"/>	Workover <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same Res'v <input type="checkbox"/>	Diff Res'v <input type="checkbox"/>
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.D.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
<b>TUBING, CASING AND CEMENTING RECORD</b>								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

**V. TEST DATA AND REQUEST FOR ALLOWABLE**

**OIL WELL.** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

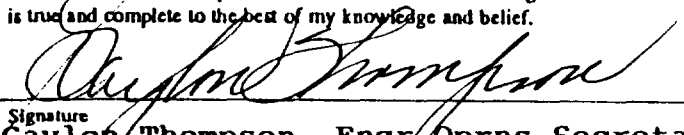
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

**GAS WELL**

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

**VI. OPERATOR CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
Signature  
**Gaylon Thompson, Engr. Oprns. Secretary**  
Printed Name  
**October 27, 1993 (903) 561-2900**  
Date Telephone No.

**OIL CONSERVATION DIVISION**

**NOV 04 1993**

Date Approved \_\_\_\_\_  
By **ORIGINAL SIGNED BY JERRY SEXTON**  
**DISTRICT I SUPERVISOR**  
Title \_\_\_\_\_

**INSTRUCTIONS:** This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

**NM-40452**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Sprinkle Federal #3**

9. API Well No.

**30-025-29616** ✓

10. Field and Pool, or Exploratory Area

**Querecho Plains  
(Upper Bone Spring)**

11. County or Parish, State

**Lea, New Mexico**

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**Mewbourne Oil Company**

3. Address and Telephone No.

**P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2310' FNL & 330' FWL of Sec. 26, T18S-r32E Unit E**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

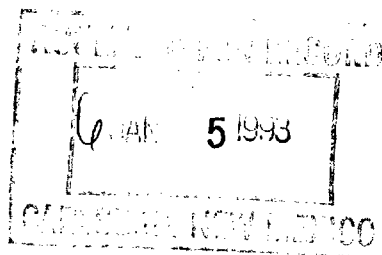
- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other **Change of Operator**

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

**Mewbourne Oil Company assumed operations of the above referenced well from Marathon Oil Company, P. O. Box 552, Midland, Texas 79702, effective December 1, 1992.**



RECEIVED  
Dec 21 9 38 AM '92  
CARLSTADT, NEW MEXICO  
AREA II  
OFFICERS

14. I hereby certify that the foregoing is true and correct

Signed

Title

**Engr. Oprns. Secretary**

Date

**12/14/92**

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Submit 5 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

Operator <b>Mewbourne Oil Company</b>		Well API No. <b>30-025-29616</b>
Address <b>P. O. Box 7698, Tyler, Texas 75711</b>		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	Effective December 1, 1992
Recompletion <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
Change in Operator <input checked="" type="checkbox"/>		
If change of operator give name and address of previous operator <b>Marathon Oil Company, P. O. Box 552, Midland, Texas 79702</b>		

II. DESCRIPTION OF WELL AND LEASE

Lease Name <b>Sprinkle Federal</b>	Well No. <b>3</b>	Pool Name, including Formation (Upper Bone <b>Querecho Plains Spring</b> )	Kind of Lease <del>30-MON</del> Federal <input checked="" type="checkbox"/> PER	Lease No. <b>NM-40452</b>
Location Unit Letter <b>E</b> : <b>2310</b> Feet From The <b>North</b> Line and <b>330</b> Feet From The <b>West</b> Line Section <b>26</b> Township <b>18S</b> Range <b>32E</b> , NMPM, <b>Lea</b> County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> <b>Scurlock Permian Corporation</b>	Address (Give address to which approved copy of this form is to be sent) <b>Box 4648, Houston, Texas 77210</b>					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> <b>GPM Gas Corporation</b>	Address (Give address to which approved copy of this form is to be sent) <b>Bartlesville, Oklahoma 79762</b>					
If well produces oil or liquids, give location of tanks.	Unit <b>E</b>	Sec. <b>26</b>	Twp. <b>18S</b>	Rge. <b>32E</b>	Is gas actually connected? <b>Yes</b>	When ?
If this production is commingled with that from any other lease or pool, give commingling order number:						

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET			SACKS CEMENT		

V. TEST DATA AND REQUEST FOR ALLOWABLE

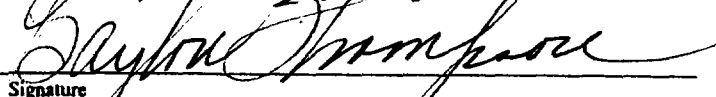
OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
Signature  
**Gaylon Thompson, Engr./Opns. Secretary**  
Printed Name  
December 14, 1992 (903) 561-2900  
Date Telephone No.

OIL CONSERVATION DIVISION

Date Approved **DEC 17 '92**

By **ORIGINAL SIGNED BY JERRY SEXTON**  
**DISTRICT I SUPERVISOR**

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

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- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

## OIL CONSERVATION DIVISION

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

### REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator Marathon Oil Company		Well API No. 30-025-29616
Address P. O. Box 552, Midland, Texas 79702		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/>	
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
If change of operator give name and address of previous operator		

### II. DESCRIPTION OF WELL AND LEASE

Lease Name Sprinkle Federal	Well No. 3	Pool Name, including Formation Querecho Plains, Bone Spring	Kind of Lease State, Federal or Fee	Lease No.
Location Unit Letter <u>E</u> : <u>2310</u> Feet From The <u>North</u> Line and <u>330</u> Feet From The <u>West</u> Line Section <u>26</u> Township <u>18S</u> Range <u>32E</u> , <u>NMPM</u> , Lea County				

### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Permian SCURLOCK PERMIAN CORP EFF 9-1-91	Address (Give address to which approved copy of this form is to be sent) P. O. Box 838, Hobbs, New Mexico 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Phillips 66 Natl Gas GPM Gas Corporation	Address (Give address to which approved copy of this form is to be sent) 4001 Pembroke, Odessa, Texas 79762					
If well produces oil or liquids, give location of tanks.	Unit E	Sec. 26	Twp. 18	Rge. 32	Is gas actually connected? Yes.	When?
If this production is commingled with that from any other lease or pool, give commingling order number:						

### IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET			SACKS CEMENT		

### V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF
GAS WELL			
Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Carl A. Bagwell  
Signature  
Carl A. Bagwell, Engineering Technician  
Printed Name  
1/22/91 Date  
(915) 682-1626 Telephone No.

### OIL CONSERVATION DIVISION

Date Approved JAN 25 1991

By Eddie W. Seay  
Oil & Gas Inspector

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.



## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

### REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator <b>Marathon Oil Company</b>	Well API No. <b>30-025-29616</b>
Address <b>P. O. Box 552, Midland, Texas 79702</b>	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input checked="" type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator <b>TXO Production Corporation, 415 W. Wall, Suite 900, Midland, Texas 79701</b>	

### II. DESCRIPTION OF WELL AND LEASE

Lease Name <b>Sprinkle Federal</b>	Well No. <b>3</b>	Pool Name, Including Formation <b>Querecho Plains Bone Spring</b>	Upper	Kind of Lease State, Federal or Fee	Lease No.
Location					
Unit Letter <b>E</b> : <b>2310</b> Feet From The <b>North</b> Line and <b>330</b> Feet From The <b>West</b> Line					
Section <b>26</b> Township <b>18-S</b> Range <b>32-E</b> , NMPM, Lea County					

### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) <b>P.O. Box 1558, Breckenridge, Texas 76024</b>	
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) <b>4001 Penbrook, Odessa, Texas 79762</b>	
If well produces oil or liquids, give location of tanks.	Unit <b>E</b> Sec. <b>26</b> Twp. <b>18</b> Rge. <b>32</b>	Is gas actually connected? <b>Yes</b> When ?

If this production is commingled with that from any other lease or pool, give commingling order number:

### IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET			SACKS CEMENT		

### V. TEST DATA AND REQUEST FOR ALLOWABLE

**OIL WELL** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Rse To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

### GAS WELL

Actual Prod. Test - MMCFD	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Carl A. Bagwell  
Signature  
**Carl A. Bagwell** Engineering Technician  
Printed Name  
**1/8/91** (915)682-1626  
Date Telephone No.

### OIL CONSERVATION DIVISION

Date Approved **JAN 17 1991**  
By **ORIGINAL SIGNED BY JERRY SEXTON**  
**DISTRICT SUPERVISOR**  
Title

### INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

NAME OF OPERATOR ADDRESS CITY STATE ZIP COUNTY TRANSPORTER OIL GAS OFFICER OFFICE	HOW TO OBTAIN INFORMATION FOR REPORT REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS	How to Obtain Approval of Well and Lease
---	--	--

**TXO Production Corp.**  
Address  
**900 Wilco Bldg. Midland, TX. 79701**

Reason for Filing (Check proper box)  
New Well ☐ Change in Transporter of ☒ Oil ☐ Dry Gas ☐ effective November 1, 1988  
Discontinuation ☐ Gas/Liquid Gas ☐ Condensate ☐  
Change in Ownership ☐

If change of ownership give name and address of previous owner

**DESCRIPTION OF WELL AND LEASE**

Lease Name <b>Sprinkle Federal</b>	Well No. <b>3</b>	Pool Name, including Formation <b>Querecho Plains(U.Bone Springs)</b>	Kind of Lease State, Federal or Free <b>Federal</b>	Lease No.
---------------------------------------	----------------------	--	--	-----------

Location  
Unit Letter **E** : **3210** Feet From The **North** Line and **330** Feet From The **West**  
Line of Section **26** Township **18-S** Range **32-E** , N.M.P.M. Lea

**DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> <b>Koch Oil Company</b>	Address (Give address to which approved copy of this form is to be sent) <b>P.O. Box 1558 Breckenridge, TX. 76024</b>
Name of Authorized Transporter of Gas/Liquid Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> <b>Phillips 66 Natural Gas</b>	Address (Give address to which approved copy of this form is to be sent) <b>400 Penn Brook Odessa, TX. 76762</b>

If well produces oil or liquids, give location of tanks. Unit **E** Sec. **26** Twp. **18-S** Rng. **32-E** Is gas actually connected? When

If this production is commingled with that from any other lease or pool, give commingling order number:

**COMPLETION DATA**

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Stim. Treat.	Full. Rev.
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.D.T.D.			
Measurements (ROP, RRR, RT, CR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Testing Depth			
Perforations			Depth Casing Shoe					

**TUBING, CASING, AND CEMENTING RECORD**

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

**TEST DATA AND REQUEST FOR ALLOWABLE** (Test must be after recovery of total volume of lead oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Testing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

**GAS WELL.**

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MCF	Gravity of Condensate
Testing Method (Flow, back pr.)	Testing Pressure (lbwt-in)	Casing Pressure (lbwt-in)	Choke Size

**CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Commission have been accepted with and that the information given over is true and complete to the best of my knowledge and belief.

*Julia Collier* **Julia Collier**  
Engineer Asst.  
9-20-88

**OIL CONSERVATION COMMISSION**  
**SEP 23 1988**  
APPROVED  
BY **Paul Kautz**  
Geologist  
TITLE

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of all available tests taken on the well in accordance with RULE 1101.  
All sections of this form must be filled out completely for all old and new and recompleted wells.  
Fill out only Sections I, II, III, and VI for changes of terms.

11-00002-100  
 Superseded by 11-00002-101  
 1-11-77 by 1-1-85

4-12-88

NEW ELEC OIL COMPANY REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS		Form OCS-100 Superseding OCS-100 and OCS-100-1 (1-1-67)	
TXO Production Corp.		900 Wilco Bldg. Midland, TX. 79701	
Well Completion: <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Change in Completion: <input type="checkbox"/> Change in Transporter of: <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Condensate <input type="checkbox"/> Other (Please explain): effective May 1, 1988			
Description of Well and Lease: Well Name: Sprinkle Federal Well No.: 3 Pool Name, including Formation: Querecho Plains (U.Bone Spring) Kind of Lease: Federal			
Unit Letter: E Section: 3210 Feet From The North Line and 330 Feet From The West Line of Section: 26 Township: 18-S Range: 32-E NMPM: Lea County:			
Signature of Transporter of Oil and Natural Gas: Scurlock Oil Company Address: 511 W. Ohio Suite 303 Midland, TX. 79701			
Signature of Authorized Transporter of Gas: Phillips Petroleum Corp. 66 Nail Bar Address: Phillips Bldg. Bartleville, Ok. 74004			
Well produces oil or liquids, or location of tanks: Unit: E Sec: 26 Twp: 18-S Rng: 32-E Is gas actually connected? When:			
This production is commingled with that from any other lease or pool, give commingling order number:			
Completion Data: Designate Type of Completion - (X) Oil Well Gas Well New Well Workover Deepen Plug Back Same as before Fill Hole			
Is Spudded Date Compl. Ready to Prod. Total Depth P.D.T.D.			
Productions (OP, RKB, RT, CR, etc.) Name of Producing Formation Top Oil/Gas Pay Testing Depth			
Productions Depth Casing Shoe			
TUBING, CASING, AND CEMENTING RECORD			
HOLE SIZE CASING & TUBING SIZE DEPTH SET SACKS CEMENT			
TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of lead oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)			
First New Oil Run To Tanks Date of Test Producing Method (Flow, pump, gas lift, etc.)			
Length of Test Testing Pressure Casing Pressure Choke Size			
Vol Prod. During Test Oil - Bbls. Water - Bbls. Gas - MCF			
S WELL: Oil Prod. Test - MCF/D Length of Test Bbls. Condensate/MCF Gravity of Condensate			
Other Method (pneum, back pr.) Testing Pressure (lb/sq-in) Casing Pressure (lb/sq-in) Choke Size			
CERTIFICATE OF COMPLIANCE			
I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given is true and complete to the best of my knowledge and belief.			
Signature: Julia Collier Julia Collier Engineer, Asst. 4-12-88			
OIL CONSERVATION COMMISSION			
APPROVED: APR 15 1988 Orig. Signed by Paul Kautz Geologist			
TITLE: This form is to be filed in compliance with Rule 1104. If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the monthly tests taken on the well in accordance with Rule 111. All portions of this form must be filled out completely for all wells on new and existing wells. Fill out only Sections I, II, III, and IV on reopening of wells.			

NAME OF OPERATOR	
ADDRESS	
CITY	
STATE	
ZIP	
DATE OF FILING	
TRANSPORTER	<input checked="" type="checkbox"/> OIL <input type="checkbox"/> GAS
OPERATOR	
PRODUCTION OFFICE	
PERMIT	

NEWLY DRILLED OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form O-100  
Superseding O-100-101 and  
O-100-101-05

Approval to Here Casinghead Gas from  
This well must be obtained from the  
Minerals Management Service.

TXO Production Corp.

900 Wilco Bldg. Midland, TX 79701

Reason(s) for filing (Check proper box)

New Well ☒ Change in Transporter of:  
Completion ☐ Oil ☐ Dry Gas ☐  
Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐

Only (Please explain)

~~ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
DATE 10-1-88 BY 60322 UCBAW/STP~~  
~~EXEMPT FROM DISSEMINATION TO PUBLIC~~

change of ownership give name  
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Well Name Sprinkle Federal Well No. 3 Pool Name, including Formation (Upper Bone Springs) Kind of Lease Federal Lease No. NM-4045

Unit Letter E : 2310 Feet From The North Line and 330 Feet From The West

Line of Section 26 Township 18-S Range 32-E, N.M.P.M. Lea County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐ Address (Give address to which approved copy of this form is to be sent)  
Koch Oil Co. of Texas P.O. Box 1558, Breckenridge, TX 76024  
Name of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐ Address (Give address to which approved copy of this form is to be sent)  
Phillips Petroleum Corp. G. Nath Gas Phillips Bldg. Bartlesville, OK 74004  
Is gas actually connected? When

this production is commingled with that from any other lease or pool, give commingling order numbers:

COMPLETION DATA

Designate Type of Completion - (X) Oil Well Gas Well New Well Workover Deepen Plug Back Since Restored Full Rest  
3-09-86 4-10-86 8710 8638  
Revolutions (DR, RKB, RT, GR, etc.) Name of Producing Formation Top Oil/Gas Pay Testing Depth  
3757 GL & 3768 KB Bone Springs 8502  
Revolutions Depth Casing Shoe  
8502-8518, 8541-8568

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17"	11-3/4"	350'	485sx "C" 2% CaCl
11"	8-5/8"	2767'	1200sx Lite & 500sx "C"
7-7/8"	5-1/2"	8710	500 gal mud flush & 200sx 50/50 POZ

TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of lead oil and must be equal to or exceed allowable for this depth or be for full 24 hours)

First New Oil Run To Tanks Date of Test 4-8-86 4-10-86 Producing Method (Flow, pump, gas lift, etc.) Flowing  
Length of Test 24 hrs. Tubing Pressure 300 Casing Pressure N/A Choke Size 3/4"  
Initial Prod. During Test Oil - Bbls. 237 Water - Bbls. 27 Gas - MCF 248

AS WELL,

Initial Prod. Test - MCF/D Length of Test Tubing Pressure (shut-in) Casing Pressure (shut-in) Choke Size

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given is true and complete to the best of my knowledge and belief.

R. L. Henderson

Engineering Assistant

(Title)

OIL CONSERVATION COMMISSION

APR 14 1986

APPROVED

BY ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

TITLE

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the well test taken on the well in accordance with RULE 111.  
All portions of this form must be filled out completely for all wells on new and recompleted wells.

N. D. OIL CONS. UNITED STATES  
P.O. DEPARTMENT OF THE INTERIOR  
HOBBS, N.M. GEOLOGICAL SURVEY

SUBMIT IN DUPL. (E)

(See other in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM-40452	
1b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP <input type="checkbox"/> PLUG <input type="checkbox"/> REPERFORATE <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR TXO Production Corp.		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 900 Wilco Bldg. Midland, TX 79701		8. FARM OR LEASE NAME Sprinkle Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2310 FNL & 330 FWL At top prod. interval reported below At total depth		9. WELL NO. 3	
14. PERMIT NO.		DATE ISSUED 2-03-86	
15. DATE SPUDDED 3-09-86		16. DATE T.D. REACHED 3-27-86	
17. DATE COMPL. (Ready to prod.) 4-10-86		18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 3757 GL & 3768 KB	
19. ELEV. CASINGHEAD		20. COUNTY OR PARISH Lea	
21. STATE New Mexico		22. FIELD AND POOL, OR WILDCAT (Upper Bone) Querecho Plains Springs	
23. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 26, T-18-S, R-32		24. COUNTY OR PARISH Lea	
25. STATE New Mexico		26. TYPE ELECTRIC AND OTHER LOGS RUN DSN/CDL, DIGL	
27. WAS WELL CORED NO		28. WAS DIRECTIONAL SURVEY MADE NO	
29. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
11-3/4"	42#	350	17
8-5/8"	32# & 24#	2767	11
5-1/2"	17# & 15.5#	8710	7-7/8
CEMENTING RECORD		AMOUNT PULLED	
485sx "C" 2% CaCl			
200sx "lite" & 500sx "C" 2% CaCl			
500gal mud flush w/200sx 50/50 POZ			
30. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
31. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
32. PERFORATION RECORD (Interval, size and number)			
8502-8518 (5 holes) 8541-8568 (7 holes)			
33. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED		
8502-8518	Spt w/250 gal 15% NEFE		
8541-8568	Spt w/250 gal 15% NEFE, acdz w/2000 gal 15% NEFE		
34. PRODUCTION			
DATE FIRST PRODUCTION 4-10-86	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing		WELL STATUS (Producing or shut-in) Producing
DATE OF TEST 4-8-86	HOURS TESTED 24	CHOKES SIZE 3/4"	PROD'N. FOR TEST PERIOD →
FLOW. TUBING PRESS. 300	CASING PRESSURE N/A	CALCULATED 24-HOUR RATE →	OIL—BBL. 237
GAS—MCF. 248		WATER—BBL. 27	
OIL GRAVITY-API (CORR.) 45.6			
35. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold			
36. LIST OF ATTACHMENTS C104, Plat, Inclination Report, Sundry Notices, Logs 1006			
37. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED Cilicia Henderson		TITLE Engineering Assistant	
DATE 4-10-86			

\*(See Instructions and Spaces for Additional Data on Reverse Side)

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION . . LAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

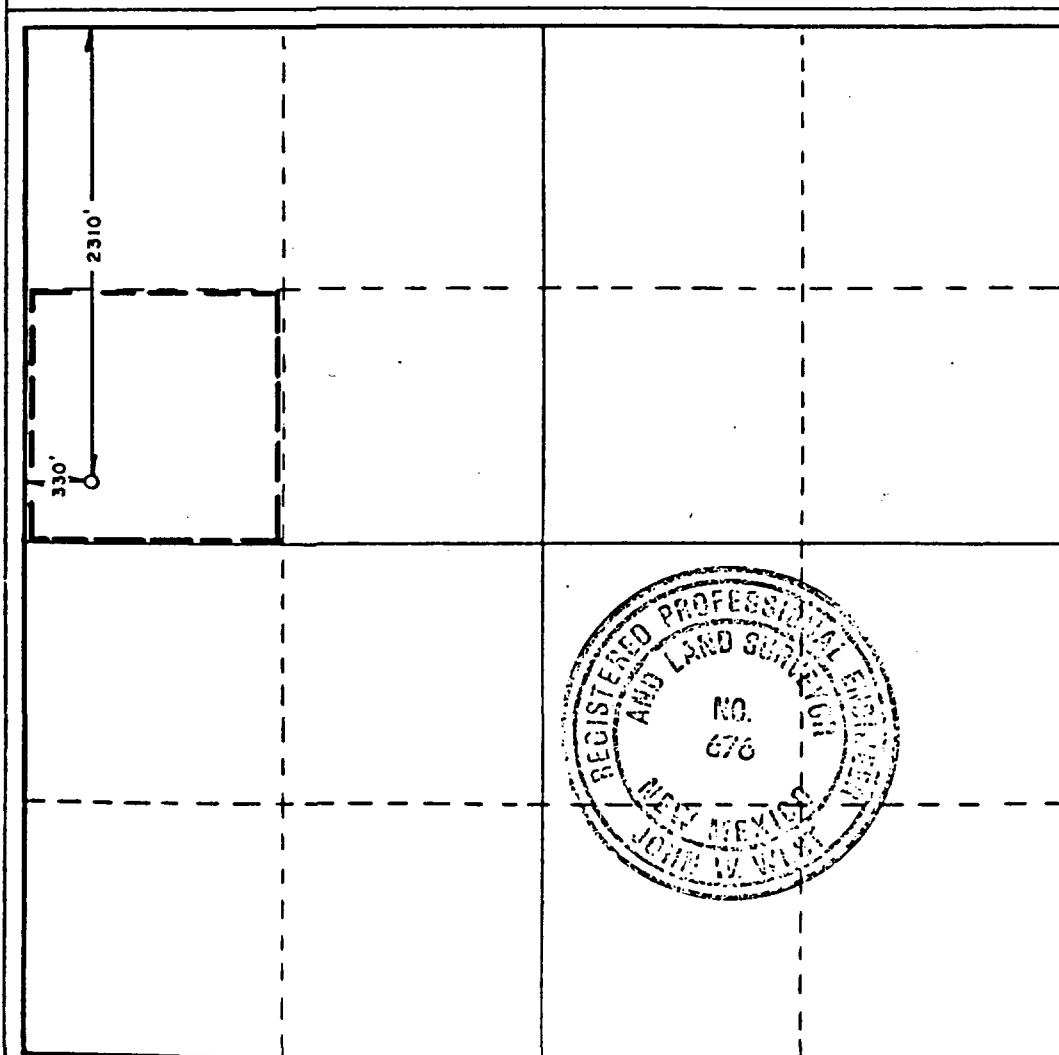
Operator <b>T X O PRODUCTION COMPANY</b>			Lease <b>SPRINKLE FEDERAL</b>		Well No. <b>3</b>
Unit Letter <b>F</b>	Section <b>26</b>	Township <b>18 SOUTH</b>	Range <b>32 EAST</b>	County <b>LEA</b>	
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> <span>2310 feet from the NORTH line and</span> <span>330 feet from the WEST line</span> </div>					
Ground Level Elev. <b>3757.4'</b>	Producing Formation <b>BONE SPRINGS</b>		Pool <b>Querecho Plains</b>		Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes    ☐ No    If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Arthur R. Brown

Position  
**Agent**

Company  
**TXO PRODUCTION CORP.**

Date  
**JANUARY 7, 1986**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**NOVEMBER 18, 1985**

Registered Professional Engineer  
and/or Land Surveyor

John W. West

Certificate No. **JOHN W. WEST, 676**  
**RONALD J. EIDSON, 3239**

91746

WELL NAME AND NUMBER Sprinkle Fed. #3 Rig #4

LOCATION Section 26, T18S, R32E Lea County  
(Give Unit, Section, Township and Range)

OPERATOR TXO Production Corporation

DRILLING CONTRACTOR McVay Drilling Company

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>
<u>1/4 104</u>	<u>1 5,900</u>	<u></u>
<u>1/2 350</u>	<u>1 6,401</u>	<u></u>
<u>3/4 660</u>	<u>1½ 6,903</u>	<u></u>
<u>1 840</u>	<u>1-3/4 7,216</u>	<u></u>
	<u>1-3/4 7,306</u>	<u></u>
<u>3/4 1,431</u>	<u>1½ 7,785</u>	<u></u>
<u>3/4 1,741</u>	<u>1-3/4 8,280</u>	<u></u>
<u>3/4 2,224</u>	<u>1 8,700</u>	<u></u>
<u>1¼ 2,397</u>	<u></u>	<u></u>
<u>1-3/4 2,767</u>	<u></u>	<u></u>
<u>1½ 3,088</u>	<u></u>	<u></u>
<u>1 3,590</u>	<u></u>	<u></u>
<u>1 4,122</u>	<u></u>	<u></u>
<u>3/4 4,624</u>	<u></u>	<u></u>
<u>3/4 5,090</u>	<u></u>	<u></u>
<u>3/4 5,502</u>	<u></u>	<u></u>

Drilling Contractor McVay Drilling Company

By: Joe Hynes

Subscribed and sworn to before me this 27<sup>th</sup> day of March, 1986

Phyllis Jean Cowright  
Notary Public

My Commision Expires: December 27, 1987 Lea County New Mexico



UNITED STATES O. BOX 1000  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

88240

5. LEASE

NM-40452

6. IF INDIAN, ALLOTTEE OR TRIBE NAME.

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Sprinkle Federal

9. WELL NO.

3

10. FIELD OR WILDCAT NAME

Querecho Plains (Upper Bone Springs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 26, T-18-S, R-32-E

12. COUNTY OR PARISH

Lea

13. STATE

New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

3757' GL & 3768' KB

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-330.)

1. oil well ☒ gas well ☐ other ☐

2. NAME OF OPERATOR

TXO Production Corp.

3. ADDRESS OF OPERATOR

900 Wilco Bldg. Midland, TX 79701

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 2310' FNL & 330' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) ☐

SUBSEQUENT REPORT OF:

☐  
☒  
☒  
☐  
☐  
☐  
☐  
☐  
☐

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

3-27-86 Rn 217 jts. 5-1/2" csg, 17# & 15.5#. Set @ 8710'.  
Pump 500 gal. mud flush w/200 sx 50/50 POZ "H" 2%  
CaCl. TD 7-7/8" hole @ 8710'.

3-28-86 TOC @ 7720'. WOCU

3-31-86 Bone Springs perfs 8502-8518. Perf w/4" gun, 5 holes.

4-02-86 Spt w/250 gal. 15% NEFE. Set pkr @ 8374' w/15,000#.

4-03-86 Bone Springs perfs 8541-8568. Perf w/4" gun, 7 holes.

Spt w/250 gal. 15% NEFE. Set pkr @ 8529' w/20,000#.  
Rls pkr. Set pkr @ 8374' w/20,000#. Acdz w/2000 gal.  
15% NEFE.

4-05-86 Frac w/39,000 gal. 40# gel. & 60,000# 20/40 snd.

4-07-86 Remove frac head. Install BOP. Set pkr @ 8374'. Test  
to 1500#. O.K. Install WH.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Celia Henderson TITLE Engineering Ass't DATE 4-10-86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD

SWD

\*See Instructions on Reverse Side

APR 14 1986

CARLSBAD, NEW MEXICO

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill, rework, or plug back to a different reservoir. Use Form 9-330 for such proposals.)

1. oil well ☒ gas well ☐ other ☐

2. NAME OF OPERATOR  
TXO Production Corp.

3. ADDRESS OF OPERATOR  
900 Wilco Bldg. Midland, TX 79701

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 2310' FNL & 330' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

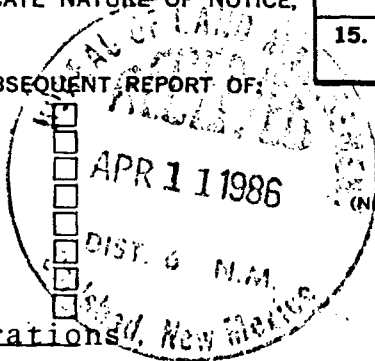
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐

SUBSEQUENT REPORT OF:

(other) Begin drilling operations



5. LEASE  
NM-40452

6. IF INDIAN, ALLOTTEE OR TRIBE NAME.

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Sprinkle Federal

9. WELL NO.  
3

10. FIELD OR WILDCAT NAME  
Querecho Plains (Upper Bone Springs)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 26, T-18-S, R-32-E

12. COUNTY OR PARISH  
Lea

13. STATE  
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
3757' GL & 3768' KB

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

3-09-86 Spud 17" hole @ 11:30 a.m. TD hole @ 3:30 p.m. Rn 8 jts. 11-3/4", 42# csg. Set @ 350'. Cmt w/485 sx "C" 2% CaCl. Circulated 75 sx to pit. WOC.  
3-10-86 Drilling 11" hole.  
3-11-86  
3-12-86 Rn 15 jts. 8-5/8" csg., 32# & 51 jts. 24# for a total of 66 jts. Set @ 2767'. Cmt w/1200 sx "lite" & 500 sx "C" 2% CaCl. Circ 200 sx to pit. WOC.  
3-13-86 thru Drilling 7-7/8" hole.  
3-26-86

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Cecilia Henderson TITLE Engineering Ass't DATE 4-1-86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD

GWD

APR 14 1986

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

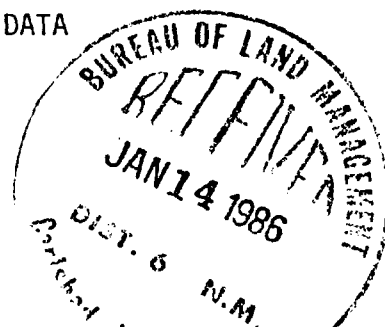
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. NAME OF OPERATOR TXO PRODUCTION CORP.		
3. ADDRESS OF OPERATOR 900 WILCO BUILDING, MIDLAND, TEXAS 79701		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 2310' FNL AND 330' FWL OF SECTION 26 At proposed prod. zone		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 9 MILES SOUTH OF MALJAMAR, NEW MEXICO		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)	330'	16. NO. OF ACRES IN LEASE 1361.18
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1320'	19. PROPOSED DEPTH 8700'
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3757.4 GL		17. NO. OF ACRES ASSIGNED TO THIS WELL 40
22. APPROX. DATE WORK WILL START* UPON APPROVAL		20. ROTARY OR CABLE TOOLS ROTARY

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11-3/4"	47#	350'	SUFFICIENT TO CIRCULATE
11"	8-5/8"	24#	2800'	SUFFICIENT TO CIRCULATE
7-7/8"	4-1/2"	10.5# & 11.6#	8700'	400 SACKS

AFTER SETTING PRODUCTION CASING, PAY ZONE WILL BE PERFORATED AND  
STIMULATED AS NECESSARY.

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA  
BOP SKETCH  
SURFACE USE PLAN



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Arthur R. Brown SIGNED Agent TITLE JANUARY 9, 1986 DATE  
(This space for Federal or State office use)

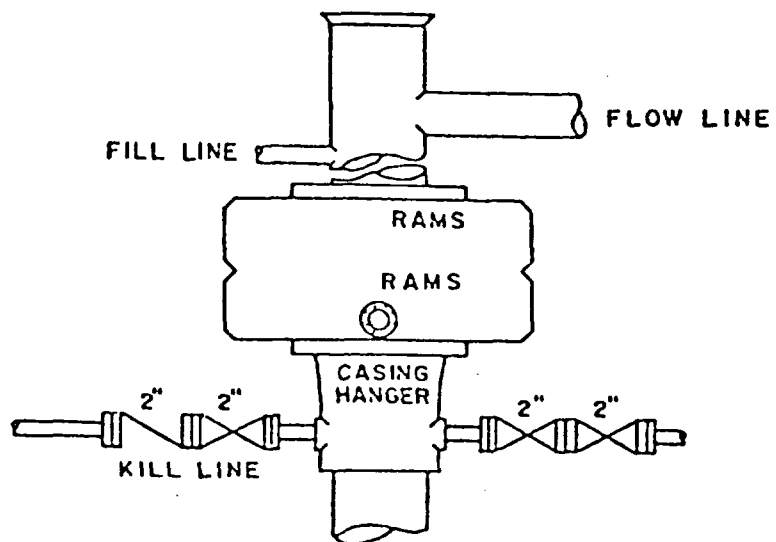
PERMIT NO. Origl Sgd. Charles S. Dutton APPROVAL DATE  
APPROVED BY Area Manager TITLE 2-3-86 DATE

CONDITIONS OF APPROVAL, IF ANY:

Subject to  
Like Approval

\*See Instructions On Reverse Side

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT

**MEWBOURNE OIL COMPANY**

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

NEW MEXICO  
OIL CONSERVATION DIVISION

January 10, 1994

Mewbourne EXHIBIT 5C

GARY L. BENNETT, ET UX  
CANDACE JO BENNETT  
P. O. BOX 16844  
LUBBOCK, TX 79490

CASE NO. 10959 + 10960

Re: Proposed Querecho Plains  
Queen Associated Sand Unit  
Lea County, New Mexico

Dear Royalty Interest Owner:

Mewbourne Oil company proposes to unitize an area of the Querecho Plains Field, comprising 1,520 acres of Lea County, New Mexico to perform secondary recovery operations through waterflooding of the Queen/Penrose reservoirs. The field is nearing depletion and without unitization and waterflooding, most of the wells will be abandoned in the near future.

Mewbourne Oil Company is requesting to be appointed Operator since Mewbourne operates 67 percent of the wells included in the proposed Unit.

Unitization, as is herein proposed, treats each party equitably in that the unitization parameters represent the actual quality of each well contributed to the Unit. The participation formula for the Unit is 95% Ultimate Primary Oil Reserves, plus 5% surface acres.

Waterflooding is projected to recover an additional 220,000 barrels of incremental secondary oil. Unrisked incremental economics over a 5.5 year life show the royalty owners as a group will receive \$458,000.

Plan of Unitization

The attached Plan of Unitization is in compliance with New Mexico Statutory Unitization Act [70-7-1 to 7-7-21 NMSA (1987 Repl.)]. Exhibits "A", "B", "C" and "D" are found at the end of the Unit Agreement. Exhibit "A" shows the proposed unitized area. Exhibit "B" describes each tract and its respective ownership, Exhibit "C" gives Unit participation of each tract, and Exhibit "D" identifies the Unitized Formation.

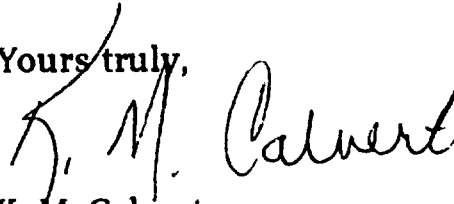
**2 - Querecho Plains Queen Associated Sand Unit  
Royalty Interest Owner**

Based on the foregoing discussions, Mewbourne requests your early concurrence in joining the proposed Querecho Plains Queen Associated Sand Unit. The targeted date for initiating injection is June 1, 1994.

The Plan of Unitization, Unit Agreement, and Unit Operating Agreement have been executed on behalf of Mewbourne Oil Company. Royalty Interest signature pages for the Unit Agreement and the Plan of Unitization are found at the end of the Unit Agreement and in the back of the book, respectively. In addition, two copies of these signature pages have been enclosed. Please show your approval by signing, attesting/notarizing and dating the two extra sets of signature pages and return them to my attention in the enclosed self-addressed envelope. Please sign the identical signature pages in the book for your files.

If you have questions regarding this proposal, please contact me at A/C 903 561-2900.

Yours truly,

A handwritten signature in cursive script, appearing to read "K. M. Calvert".

**K. M. Calvert  
Engineering Manager  
Secondary Recovery**

**KMC/sh**

**Enclosures:    Plan of Unitization (Book)  
                  2 Sets of Signature Page  
                  Return Envelope**

**MEWBOURNE OIL COMPANY**

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

February 7, 1994

**Certified Mail No. P 028 722 285**

Gary L. Bennett, et ux  
Candace Jo Bennett  
P. O. Box 16844  
Lubbock, Tx 79490

Re: Proposed Querecho Plains  
Queen Associated Sand Unit  
Lea County, New Mexico

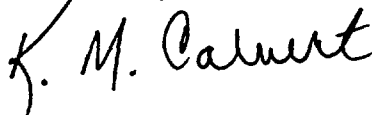
Dear Mr. Bennett:

The purpose of this letter is to confirm that you have received the Unit Agreement as transmitted under our letter of January 10, 1994. As of this date we have not received your executed signature pages concerning these agreements.

We again invite you to join the proposed Waterflood Project and ask that you contact the undersigned with any questions you may have in this matter.

We would appreciate hearing from you prior to our making application to the New Mexico Oil Conservation Division approximately March 1, 1994.

Yours truly,

A handwritten signature in dark ink, appearing to read "K. M. Calvert", written over a horizontal line.

K. M. Calvert  
Engineering Manager  
Secondary Recovery

KMC/sh

F

State of New Mexico  
**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
Santa Fe, New Mexico 87505



January 24, 1995

Mewbourne Oil Company  
P.O. Box 7698  
Tyler, Texas 75711

Attention: Mr. Kevin Mayes

Re: Stay of Ordering Paragraph No. (6)  
Division Order No. R-10151  
Querecho Plains Queen Sand Unit WF Project

Dear Mr. Mayes:

Reference is made to your request dated January 23, 1995, for a 60-day stay of Ordering Paragraph No. 6 of Division Order No. R-10151. This Ordering Paragraph requires that Mewbourne Oil Company perform remedial cement operations on the Sprinkle Federal Well No. 4 (F-26-18S-32E), prior to commencing injection operations within one half mile of this well. It is our understanding that the stay is requested for the following reasons:

- a) Mewbourne will shortly conclude a deal with Santa Fe Energy Resources, Inc. for the purchase of the Sprinkle Federal Well No. 4;
- b) Additional time delays associated with the purchase of this wellbore (eg paperwork, transfer of rights, etc.) may result in Mewbourne being unable to perform remedial cement work on the well until approximately 30-60 days from now;
- c) Immediate injection into Well Nos. 18 and 25 is necessary in order to balance current offset injection.

Mewbourne is hereby authorized to commence immediate injection into Well Nos. 18 and 25 within the Querecho Plains Queen Associated Sand Unit Waterflood Project subject to the following conditions:

- 1) Prior to commencing injection operations, Well Nos. 18 and 25 shall be in conformance with the injection well requirements contained within Division Order No. R-10151;

**VILLAGRA BUILDING - 408 Galileo**

Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830

Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465

**2040 South Pacheco**

Office of the Secretary  
827-5950

Administrative Services  
827-5925

Energy Conservation & Management  
827-5900

Mining and Minerals  
827-5970

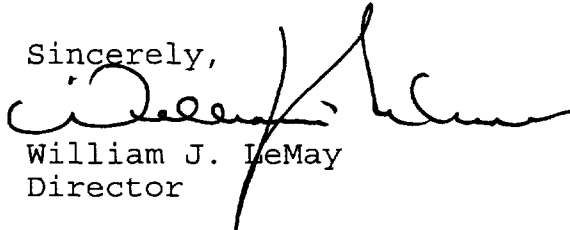
Oil Conservation  
827-7131



2) Injection shall cease March 24, 1995, unless the Sprinkle Federal Well No. 4 has been re-cemented as per the requirements of Order No. R-10151. Mewbourne shall notify the Santa Fe and Hobbs offices of the Division of the date and time such remedial cement operations will commence; and,

3) All other provisions contained within Division Order No. R-10151 shall remain in full force and effect.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', is written over the typed name and title.

William J. LeMay  
Director

xc: Case File: 10960  
OCD-Hobbs  
D. Catanach

**MEWBOURNE OIL COMPANY**

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

January 23, 1995

New Mexico Oil Conservation Commission  
P.O. Box 1980  
Hobbs, New Mexico 88240  
Attn: David Catanach

Re: Sprinkle Federal #4  
Section 26, T18S, R32E  
Lea County, New Mexico  
Division Order R-10151


Dear Mr. Catanach:

Mewbourne Oil Company requests a 60 day reprieve from items 5 and 6 of the referenced Division Order so far as they cover the Sprinkle Federal No. 4 well. This reprieve will allow Mewbourne to inject into wells QPQASU 18 and 25 while negotiating the purchase of the referenced well and operating rights. It is then Mewbourne's intentions to fully comply with the Division Order and squeeze cement as necessary in the referenced well. Cement squeeze work has already been performed on the Sprinkle Federal No. 3 which is also mentioned in the Order.

Attached is a letter from Santa Fe Energy, the current operator of the referenced well, indicating they will sell the well to Mewbourne. Final approval of this transaction should happen shortly; however, it could take over a month to assign and record title and operating rights to Mewbourne. The urgency for placing wells 18 and 25 on injection is to "balance" the injection from well 14. Injection into well 14 caused a 50+ bopd response. Injection in well 14 is now curtailed until 18 and 25 can be placed on injection. Both injectors are approximately 2500' away from the Sprinkle No. 4 or 140' inside the 1/2 mile limit.

Please contact me at the above phone number with any questions. If you agree with a 60 day reprieve to inject into the QPQASU Nos. 18 and 25 while finalizing purchase of the Sprinkle No. 4 from Santa Fe, please so indicate below and return to my attention at your earliest convenience.

Sincerely,

  
Kevin Mayes, P.E.  
Project Engineer

pg 2

Approved:  
New Mexico Oil Conservation Division

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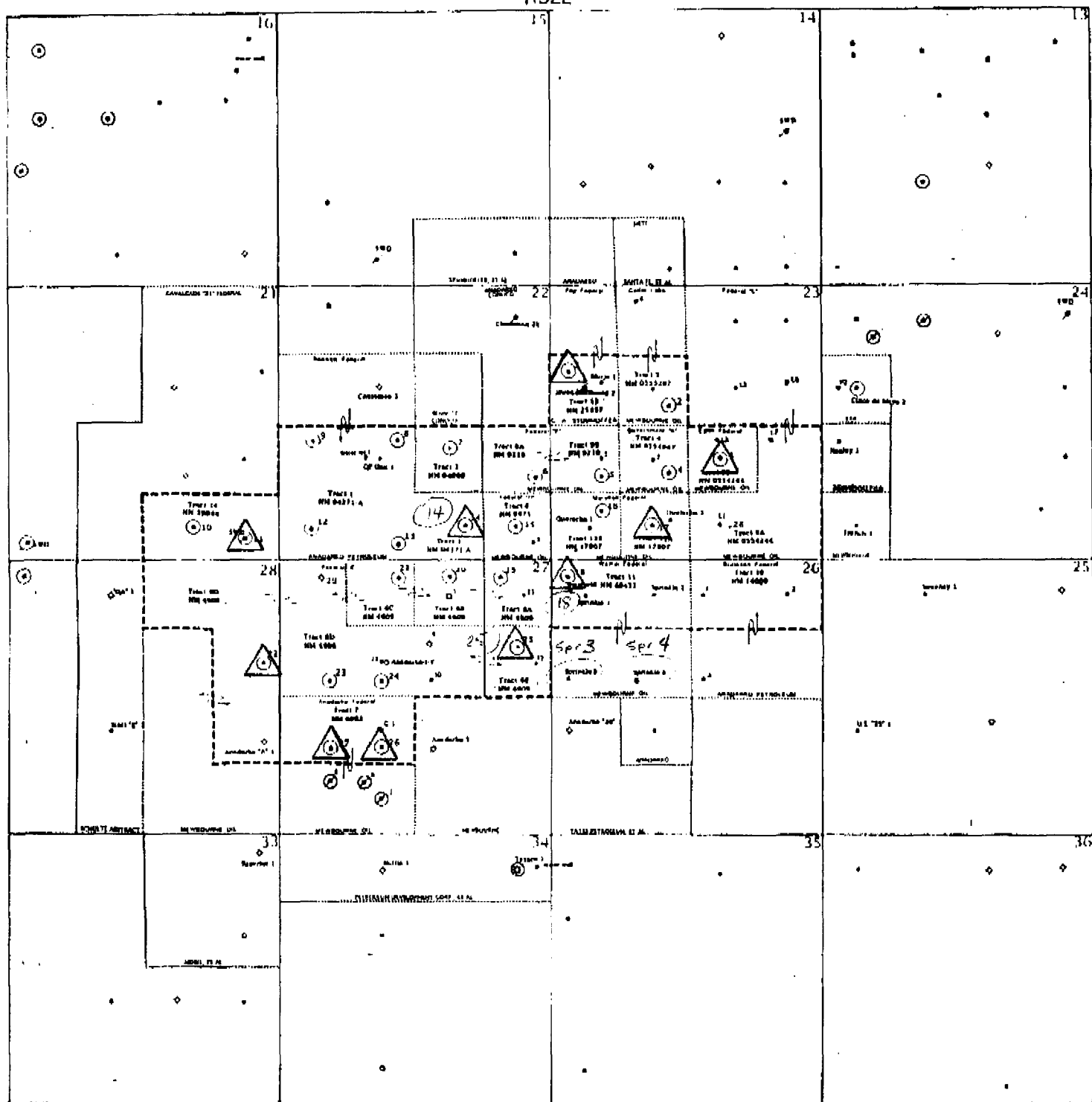
David Catanach

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Date

cc: Kelly Ryan, MOC Hobbs

7-85



△ INJECTION WELLS

MOC Mewbourne Oil Company  
Tyler, Texas  
EXHIBIT "A"  
○ Wells With Queen Production  
QUERÉCHO PLAINS QUEEN  
ASSOCIATED SAND UNIT  
Unit Boundary and Tracts

Case No. 10960  
Order No. R-10151  
Page 7

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(2) The waterflood project, hereby designated the Querecho Plains Queen Associated Sand Unit Waterflood Project, shall coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area, as further described below, which was the subject of Division Case No. 10959 heard in combination with this case:

**QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT  
WATERFLOOD PROJECT  
LEA COUNTY, NEW MEXICO**

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21: S/2 SE/4  
Section 22: S/2  
Section 23: S/2 and S/2 NW/4  
Section 26: N/2 N/2  
Section 27: N/2 and N/2 SW/4  
Section 28: NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(3) However, the initial waterflood project area, for allowable and tax credit purposes, shall comprise only the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2  
Section 23: SW/4, S/2 NW/4 and NE/4 SE/4  
Section 26: NW/4 NW/4  
Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4  
Section 28: SE/4 NE/4

(4) The applicant must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

**PROVIDED HOWEVER THAT:**

(5) Prior to initiating injection within one-half mile of any of the wells listed below, the applicant shall re-plug said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.



**Santa Fe Energy Resources, Inc.**

**TELECOPIED**

**Fax #685-4170**

**January 20, 1995**

**Mewbourne Oil Company  
500 West Texas  
Suite 1020  
Midland, Texas 79701**

**ATTN: Mr. Paul Haden**

**Re: Pussyfoot Prospect  
Farewell "18" Fed Com #1 Well  
SFERI Cont. #NM-4856  
Secs. 6, 7, 18 & 19  
T-22-S, R-26-E  
Eddy County, New Mexico**

**Dear Mr. Haden:**

**Santa Fe Energy Resources, Inc. hereby formally offers to purchase all right, title and interest from Mewbourne Oil Company in the following leases and lands:**

- 1. Fed. Lease #NM-71752 covering Lots 2-7, SE/4NW/4; S/2NE/4; N/2SE/4 & E/2SW/4 Section 6, T-22-S, R-26-E.**
- 2. State of New Mexico Lease V-3577 covering Lot 3, SE/4SW/4 & SW/4SE/4 Section 7, T-22-S, R-26-E.**
- 3. Fed. Lease #NM-89153 covering the SE/4 Section 18 & NW/4NE/4 Section 19, T-22-S, R-26-E.**

**Santa Fe Energy offers Mewbourne a total purchase price of \_\_\_\_\_ to purchase all of their right, title and interest in the above described leases as well as the wellbore and associated equipment in Mewbourne's #1-N Well located in Lot 7 of Section 6, T-22-S, R-26-E, Eddy County, New Mexico. Santa Fe Energy offers to purchase these lands and wellbore for \_\_\_\_\_ and makes such offer contingent upon Santa Fe Energy selling its Sprinkle Fed. #4 Well to Mewbourne Oil for \_\_\_\_\_ If Mewbourne is agreeable to the above described purchase and trade, please so indicate by signing this letter in the space provided on Page 2, returning one executed copy to me at the letterhead address.**

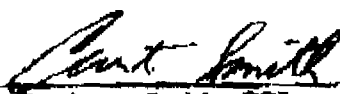
**Central Division  
550 W. Texas, Suite 1330  
Midland, Texas 79701  
915/687-3051**

Page 2  
Mewbourne Oil Company  
January 20, 1995

If you have any questions or comments, please call me at 686-6631.

Yours truly,

**SANTA FE ENERGY RESOURCES, INC.**

By:   
Curtis D. Smith, CPL  
Senior Landman

CDS/efw  
1 Encl - Plat

**AGREED TO AND ACCEPTED**  
this \_\_\_\_\_ day of \_\_\_\_\_, 1995

**MEWBOURNE OIL COMPANY**

By: \_\_\_\_\_

Title: \_\_\_\_\_

**EW2380**

Case No. 10960  
Order No. R-10151  
Page 8

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Plugged Wells: Oil Associates, Inc.  
Edwards Well No. 1  
(Unit M), Section 22;

H & S Oil Company  
Anadarko Well No. 1-Y  
(Unit F), Section 27.

(6) Prior to initiating injection within one-half mile of any of the five active, producing wells listed below, the applicant shall perform remedial cement operations on said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

Producing Wells: Anadarko Petroleum Company  
Cavalcade Federal No. 3  
(Unit I), Section 21;

Mowbourne Oil Company  
Murjo Federal Well No. 1  
(Unit E), Section 23;

Mowbourne Oil Company  
Dulanna Federal No. 1  
(Unit F), Section 26;

Mowbourne Oil Company  
Sprinkle Federal Well No. 3  
(Unit F), Section 26; and,

Santa Fe Energy Company  
Sprinkle Federal Well No. 4  
(Unit F), Section 26,

all in Township 18 South, Range 32 East, NMPM,  
Lea County, New Mexico.

**IT IS FURTHER ORDERED THAT:**

(7) Injection shall be accomplished through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.





STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

May 10, 1995

Department of Taxation & Revenue  
P.O. Box 630  
Santa Fe, New Mexico 87509-0630

*Case 10960*

Attention: Mr. John Chavez, Secretary

Dear Secretary Chavez:

Enclosed is a copy of a letter to Mewbourne Oil Company wherein the Division approved the expansion of a previously certified enhanced oil recovery project, the Querecho Plains Queen Associated Sand Unit Enhanced Oil Recovery Project. This project was certified to the Taxation & Revenue Department on July 1, 1994. Mewbourne has drilled an additional producing well on acreage offset by injection wells, and the Division has deemed that this acreage should be included in the project area. If you should have any questions, please contact Mr. David Catanach at (505) 827-8184.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay  
Division Director

WJL/drc

Enclosures



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

December 4, 1996

Mewbourne Oil Company  
P.O. Box 7698  
Tyler, Texas 75711-7698

Attn: Mr. K.M. Calvert

***RE: Injection Pressure Increase Quercho Plains Queen Associated  
Sand Unit EOR Waterflood Project Lea County, New Mexico.***

Dear Mr. Calvert:

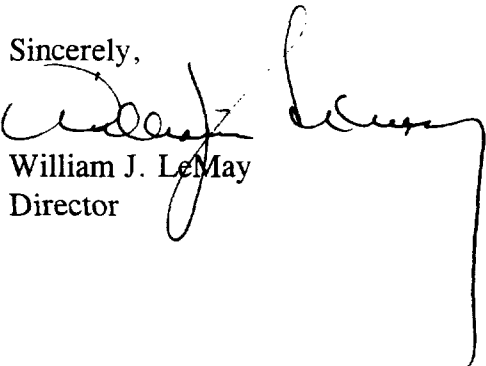
Reference is made to your request dated October 1, 1996 to increase the surface injection pressure on two wells in the above referenced project. This request is based on step rate tests conducted recently on these wells. The results of the tests have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

<i>Well and Location</i>	<i>Maximum Injection Surface Pressure</i>
QPQASU Well No.2 (Cedar Lake Well No.1)	1470 PSIG
QPQASU Well No.17 (Marshall Well No.1)	1625 PSIG
Both wells located in Lea County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

  
William J. LeMay  
Director

*Injection Pressure Increase*  
*Mewbourne Oil Company*  
*December 4, 1996*  
*Page 2*

---

WJL/BES

cc: Oil Conservation Division - Hobbs  
Files: Case File No.10960; EOR-19; PSI-X 1st QTR 97



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

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

June 8, 1994

M E M O R A N D U M

TO: Bill LeMay

FROM: David Catanach *DC*

RE: Mewbourne Oil Company  
Case Nos. 10959 & 10960

I discussed the Mewbourne waterflood case with Jim on Thursday, June 8. Jim essentially advised me that if we wanted to make changes to his order, that we should go ahead and make them, or re-open the case so Mike or myself could hear additional evidence concerning the items in question. He will not make any changes to the order.

I have raised my concerns to you, however, I refuse to be put in a position where I am forced to re-write this order and overrule Jim's recommendations. I will be happy to make changes to this order provided that you dictate what the changes are to be, and that Jim is aware that you made the changes.

# HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

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

LEWIS C. COX, JR. (1934-1993)  
CLARENCE E. HINKLE (1901-1985)

OF COUNSEL  
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RICHARD L. CAZZELL\*\* RAY W. RICHARDS\*\*  
L. A. WHITE\*\*

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FRED W. SCHWENDIMANN  
JAMES M. HUDSON  
JEFFREY S. BAIRD\*  
THOMAS E. HOOD\*\*  
REBECCA NICHOLS JOHNSON

September 8, 1994

HAND DELIVERED

- 8 1994

William LeMay  
Oil Conservation Division  
State Land Office Building  
Santa Fe, New Mexico 87501

Re: **Case No. 10,960, Order No. R-10151-A, Application of Mewbourne Oil Company for a Waterflood Project and Qualification for the Recovered Oil Tax Rate, Lea County, New Mexico.**

Dear Mr. LeMay:

Enclosed is an original plus two copies of the Proposed Order of Mewbourne Oil Company in the above matter.

Very truly yours,

HINKLE, COX, EATON, COFFIELD  
& HENSLEY

*James Bruce* (SP)

James Bruce

Enclosures

JGB/sp

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

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

CASE NO. 10,960 (de novo)  
ORDER NO. R-10151-A

APPLICATION OF MEWBOURNE OIL COMPANY FOR A WATERFLOOD  
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX RATE,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION  
(Proposed Order of Mewbourne Oil Company)

BY THE DIVISION:

This cause came on for hearing at 9:00 a.m. on August 11, 1994, at Santa Fe, New Mexico, before the Commission.

NOW, on this \_\_\_\_ day of September, 1994, the Commission, having considered the testimony, the record, and being fully advised in the premises,

FINDS THAT:

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

(2) In Case No. 10,960 the applicant, Mewbourne Oil Company, seeks authority to inject through bare tubing rather than internally-coated tubing. In support of this request the applicant presented the following:

(a) The costs to coat are substantial;

(b) The already existing Querecho Plains Bone Spring Waterflood (Division Order R-9737-A) will deliver source water to the proposed Querecho Plains Queen Waterflood;

(c) The Querecho Plains Bone Spring water system has operated since November, 1993;

(d) The portion of produced water to total water in said Bone Spring water system fluctuated from 13% produced water in January 1994 to 66% in June 1994;

(e) The corrosion rate association with said water system over said January to June period averaged 1.5 mils/year;

(f) Said 1.5 mils/year corrosion rate extrapolated over a 5.5 year flood life (injection has already occurred for 3 years) represents only 4% loss in pipewall thickness and stays within API specifications for "new" pipe;

(g) Injection time should be short in that various energies have been injected into the reservoir over previous years and the applicant's waterflood should only last 5.5 years;

(h) Bare tubing was authorized in the Querecho Plains Bone Spring Waterflood for use in injection wells;

(i) An aggressive corrosion inhibition program has been and will be pursued for said water system;

(j) Oxygen and CO<sub>2</sub> exist only in low and acceptable concentrations; H<sub>2</sub>S has not been detected to date.

(k) Offset injection suggests no correlation exists between coating of tubulars and the number of mechanical failures for an injection well; and

(l) A packer will be set within 100 feet of top perforations and an inert liquid circulated into the tubing casing annulus so as to operate and monitor all injection wells to assure mechanical integrity.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Mewbourne Oil Company, must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

Case No. 10,960  
Order No. R-10151-A  
Page 3

(2) Injection can be accomplished through bare tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) Prior to commencing injection operations, the casing in each injection well shall be pressure tested for mechanical integrity. Hobbs District Office shall be notified in order that all mechanical integrity tests may be witnessed.

(4) Such mechanical integrity test described in Order 3 above shall be conducted on all injection wells on an annual basis. Hobbs District OCD Office shall be notified in order that all mechanical integrity tests may be witnessed.

(5) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(6) The Applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

WILLIAM J. LEMAY  
Director

S E A L



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

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

CASE NO. 10,960 (de novo)  
ORDER NO. R-10151-A

APPLICATION OF MEWBOURNE OIL COMPANY FOR A WATERFLOOD  
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX RATE,  
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BY THE DIVISION:

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(b) The already existing Querecho Plains Bone Spring Waterflood (Division Order R-9737-A) will deliver source water to the proposed Querecho Plains Queen Waterflood;

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(d) The portion of produced water to total water in said Bone Spring water system fluctuated from 13% produced water in January 1994 to 66% in June 1994;

(e) The corrosion rate association with said water system over said January to June period averaged 1.5 mils/year;

(f) Said 1.5 mils/year corrosion rate extrapolated over a 5.5 year flood life (injection has already occurred for 3 years) represents only 4% loss in pipewall thickness and stays within API specifications for "new" pipe;

(g) Injection time should be short in that various energies have been injected into the reservoir over previous years and the applicant's waterflood should only last 5.5 years;

(h) Bare tubing was authorized in the Querecho Plains Bone Spring Waterflood for use in injection wells;

(i) An aggressive corrosion inhibition program has been and will be pursued for said water system;

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**IT IS THEREFORE ORDERED THAT:**

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Case No. 10,960  
Order No. R-10151-A  
Page 3

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(6) The Applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

WILLIAM J. LEMAY  
Director

S E A L



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

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

September 16, 1994

HINKLE, COX, EATON,  
COFFIELD & HENSLEY  
Attorneys at Law  
P. O. Box 2068  
Santa Fe, New Mexico 87501

RE: CASE NO. 11960  
ORDER NO. R-10151-A

Dear Sir:

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

Sincerely,

*Sally E. Martinez*  
Sally E. Martinez  
Administrative Secretary

cc: BLM - Carlsbad



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

BRUCE KING  
GOVERNOR

November 18, 1994

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

Mewbourne Oil Company  
P. O. Box 7698  
Tyler, Texas 75711

*Case File  
10960*

Re: Sprinkle Federal Well #3-E, Sec. 26, T18S, R32E

Gentlemen:

As stated in the letter dated August 19, 1994, David Catanach was to be consulted regarding work on the above referenced well as specified in Division Order R-10151.

We are enclosing a copy of the letter, stating the position of Mr. Catanach, confirming that the original requirements of the order are to be carried out.

Very truly yours

OIL CONSERVATION DIVISION

*Jerry Sexton*  
Jerry Sexton  
Supervisor, District I

JS:bp

cc: David Catanach  
File

Enclosure



# HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

218 MONTEZUMA POST OFFICE BOX 2068

SANTA FE, NEW MEXICO 87504-2068

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LEWIS C. COX, JR. (1924-1993)  
CLARENCE E. HINKLE (1901-1985)

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RICHARD L. CAZZELL\* RAY W. RICHARDS\*  
L. A. WHITE\*

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R. 'TREY' ARVIZU, III  
AMY C. WRIGHT\*

\*NOT LICENSED IN NEW MEXICO  
\*FORMERLY COMPRISING THE FIRM OF  
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ALBERT L. PITIS  
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MARK C. DOW  
FRED W. SCHWENDIMANN  
JAMES M. HUDSON  
JEFFREY S. BAIRD\*  
THOMAS E. HOOD\*\*  
REBECCA NICHOLS JOHNSON

July 26, 1994

Florene Davidson  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87504-2088

Dear Florene:

Enclosed are an original and three copies of a pre-hearing statement in Case No. 10,960 (de novo). Also enclosed is the original transcript of the proceedings in Case Nos. 10,959 and 10,960, which we borrowed from you.

Very truly yours,

HINKLE, COX, EATON, COFFIELD  
& HENSLEY

  
James Bruce

Enclosures

JGB/sp

# MEWBOURNE OIL COMPANY

P.O. BOX 7698  
TYLER, TEXAS 75711  
903 - 561-2900  
FAX 903 - 561-1870

July 27, 1994

New Mexico Oil Conservation Division  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504  
Attn: Jim Morrow

Re: Findings 13, 14, 15, 18 and 19  
NMOCD Division Order R-10151  
Querecho Plains Queen Assoc.  
Sand Unit Waterflood Project  
Lea County, New Mexico

Dear Mr. Morrow:

This letter is sent to review technical information and again seek authority to inject in the referenced waterflood using uncoated tubing.

Item seven on page eight of the referenced Order dictates that plastic coated tubing be used and is based on Finding 13 located on page four. Finding 13 suggests that the water supply currently consists of all fresh water and that the "evidence of corrosion" was taken with fresh water in the system. I apologize for not making this clear in the hearing of April 28, 1994, but the subject system has been operating with upwards of 66% produced water to date. As a matter of fact, a corrosion rate of 1.7 mils per year was recorded on a corrosion coupon while testing injectivity in the Government K No. 2 back in January, 1993. The water being injected during this test was made up entirely of 300,000 ppm TDS produced Delaware brine. Most of the produced water coming into the system which will supply both the Bone Spring waterflood and the referenced waterflood is this same Delaware produced water. Corrosion rates associated with the above mentioned system have averaged 1.5 mils per year based on seven corrosion coupons analyzed over eight months while the system has supplied water to the Querecho Plains Bone Spring waterflood. Attached for your consideration are the monthly water reports for the Bone Spring waterflood. All sources are listed at the bottom of said report with the Double Eagle being the only fresh water and the QPBSSU being the Bone Spring produced water. All other sources are Delaware produced water. Please remember the referenced waterflood will use this same water in its operations. As mentioned in the hearing for the Querecho Plains Bone Spring waterflood, there are

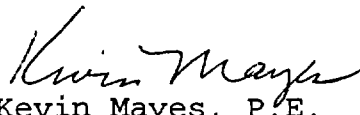
no detectible amounts of H2S or CO2 in any of the waters brought into the system.

In that the referenced waterflood is estimated to have a life of five and a half years and if the corrosion rate is sustained at 1.5 mils per year then the tubing wall will loose 8.25 mils. This represents a four percent (4%) loss in tubing wall thickness for 2 3/8" tubing (less in 2 7/8" tubing) and will certainly not degrade the integrity of the tubing. API standards allow for a 12.5% variation in wall thickness for new pipe shipped from the factory.

Item twelve located on page nine of the referenced Order goes on to further dictate that any failure of the tubing shall be reported to the supervisor of the Hobbs Office and corrected in a timely manner. This is based on Findings 14, 15, 18 and 19 which site that all injectors will be equipped, operated, monitored and maintained to facilitate testing and assure mechanical integrity. It is the opinion of Mewbourne Oil Company that the decision to accomplish this with or without coated tubing lies with the well's Operator. We are in complete agreement with item twelve and will repair any tubing leak occurring during our injection operations. However, it is our opinion that the expense of coating all the injection tubulars associated with the referenced waterflood is unmerited.

If you are in agreement with the above opinions we would appreciate written recantation of the plastic coating requirement of Item seven of the referenced Order. We appreciate your consideration in this matter. If you have any questions please contact me or Ken Calvert at (903) 561-2900.

Sincerely,

  
Kevin Mayes, P.E.  
Project Engineer

cc: Ken Calvert  
Kelly Ryan  
Jim Bruce  
David Catanach  
Jerry Sexton

Attachments: NMOCD Order No. R-10151  
Excerpts from April 28 Hearing  
Bone Spring Monthly Water Reports  
Corrosion coupon analysis



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

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

*Case No. 10960*  
*Order No. R-10151*

**APPLICATION OF MEWBOURNE OIL COMPANY FOR A WATERFLOOD  
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX RATE, LEA  
COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 28, 1994 at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 14th day of July, 1994 the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing this case was consolidated with Division Case No. 10959 for the purpose of testimony. Case No. 10959 is a companion case concerning statutory unitization.
- (3) The applicant, Mewbourne Oil Company, seeks authority to institute a waterflood project in its proposed Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool, as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the *Welex - Compensated Acoustic Velocity Log* run on July 15, 1983 in the applicant's Federal Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

(4) It is proposed that the waterflood project area coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area in Lea County, New Mexico, as further described below, which was the subject of Division Case No. 10959 and was heard in combination with this case:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21: S/2 SE/4  
Section 22: S/2  
Section 23: S/2 and S/2 NW/4  
Section 26: N/2 N/2  
Section 27: N/2 and N/2 SW/4  
Section 28: NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(5) The above-described area contains several tracts of undeveloped acreage; therefore, in compliance with Division General Rule 701.G(1) the project area as requested should be reduced to include only those oil spacing and proration units within the proposed area that have experienced production from the Querecho Plains-Queen Associated Pool. The S/2 SE/4 of Section 21 should also be removed from the project area because of the reasons explained in Finding Paragraph No. 21 of this order. The resulting project area should contain the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2  
Section 23: SW/4, S/2 NW/4 and NE/4 SE/4  
Section 26: NW/4 NW/4  
Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4  
Section 28: SE/4 NE/4

(6) The present Queen Associated oil producing wells within the subject project area and interval are in an advanced state of depletion and should therefore be properly classified as "stripper wells".

(7) The applicant requested that maximum surface injection pressure be set at 1400 psi. In support of this request, the applicant's witness used initial shut-in pressure and fluid gradients from the fracture treatments of seventeen wells in the pool, but failed to prove that 1400 psi surface injection pressure would not cause fracturing in the Queen-Penrose interval.

(8) The injection wells or pressurization system should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 777 PSI because the increase in surface injection pressure as requested by the applicant was not supported with step rate tests.

(9) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(10) The operator of the proposed Querecho Plains Queen Associated Sand Unit Waterflood Project should take all steps necessary to ensure that the injected water enters and remains confined to only the proposed injection interval and is not permitted to escape from that interval and migrate into other formations, producing intervals, pools or onto the surface from injection, production, or plugged and abandoned wells.

(11) The applicant submitted data concerning all plugged and producing wells within the area of review. There are five wells which may not be plugged in such a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval. Three of the wells are located outside the zero contour lines of the Queen and Penrose porosity isopach maps and should pose no problem. The other two following described wells should be re-plugged in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

Plugged Wells:

Oil Associates, Inc.  
Edwards Well No. 1  
660' FSL & 660' FWL (Unit M), Section 22;  
  
H & S Oil Company  
Anadarko Well No. 1-Y  
1980' FNL & 1995' FWL (Unit F), Section 27.

(12) There are five active producing wells in the area of review which do not have cement covering the Queen-Penrose interval. These wells, and their casing program and calculated cement tops, are listed below. These wells will require remedial cement operations in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

Anadarko Pet. Co.	Cavalcade Federal No. 3	I-21-18S-32E
	13 3/8" @ 753' w/750 sx	TOC - Surface
	8 5/8" @ 3465' W/1700 sx	TOC - Surface
	5 1/2" @ 10,787' w/400 sx	TOC - 8880'
Mewbourne Oil Co.	Murjo Federal Well No. 1	E-23-18S-32E
	13 3/8" @ 350' w/350 sx	TOC - Surface
	8 5/8" @ 2777' w/1200 sx	TOC - Surface
	5 1/2" @ 10,800' w/650 sx	TOC - 7701'
Mewbourne Oil Co.	Burleson Federal No. 1	B-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
	8 5/8" @ 2800' w/2250 sx	TOC - Surface
	4 1/2" @ 8700' w/1205 sx	TOC - 4331'
Mewbourne Oil Co.	Sprinkle Federal No. 3	E-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
	8 5/8" @ 2767' w/1700 sx	TOC - Surface
	5 1/2" @ 8710' w/700 sx	TOC - 5373'
Santa Fe Energy	Sprinkle Federal No. 4	F-26-18S-32E
	13 3/8" @ 353' w/370 sx	TOC - Surface
	8 5/8" @ 2810' w/1050 sx	TOC - Surface
	5 1/2" @ 9700' w/900 sx	TOC - 5409'

(13) Evidence on the corrosive nature of the proposed injection fluid was submitted by the applicant in support of its request to utilize "bare steel" tubing instead of internally plastic-coated tubing at this time. The Division requires plastic-coated tubing on injection wells because even though fresh water is used for initial injection, this water is recirculated and injected with produced water from the Queen-Penrose formation, which can be corrosive.

(14) The injection of water into the proposed injection wells should be accomplished either through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(15) Prior to commencing injection operations into the proposed injection wells, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(16) The injection wells or pressurization system for each well should be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.

(17) Any further increase in the injection pressure limitation placed upon any well in the project area should only be approved after the Santa Fe office of the Division has reviewed evidence showing that increased injection pressure will not result in fracturing.

(18) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-tests in order that the same may be witnessed.

(19) The proposed waterflood project should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

(20) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(21) The applicant's witness submitted a unit area production performance curve showing oil, gas and water production from 1973 to 1993. Oil production peaked at approximately 12,000 barrels per month in 1983 and has now declined to less than 2500 barrels per month. Slight increases in production were shown in 1987 and 1991 in response to injection in Section 27 outside the unit area and later into the Cavalcade Federal 21 Well No. 4 in Section 21 as approved by Division Order No. R-9240, dated July 1, 1990. While injection outside the unit area had some slight affect on unit production, it does not constitute an area project and would not disqualify any part of the project for approval under the "Enhanced Oil Recovery Act." However, as required by Rule D.2, Exhibit "A" of Division Order No. R-9708, the project area should have the S/2 SE/4 of Section 21 removed because of the injection into the Cavalcade Federal 21 Well No. 4. Average injection rate into the well in 1993 was 66 barrels of water per day. Total injection as of December 1993 was 88,208 barrels.

(22) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(23) The approved "project area" should initially comprise that area described in Finding Paragraph No. (5) above.

(24) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(25) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(26) The project is expected to cost at least \$592,000 and recover an additional 220,000 barrels of oil.

(27) The applicant requested special operating rules for the unit which would provide for administrative approval of unorthodox locations and injection wells. Division General Rule 104.F(1) and 701.G currently provide for the administrative procedures, therefore the special rules are not needed.

(28) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Mewbourne Oil Company, is hereby authorized to institute a waterflood project in its Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool (as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the *Welex - Compensated Acoustic Velocity Log* run on July 15, 1983 in the applicant's Federal "E" Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico) through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

(2) The waterflood project, hereby designated the Querecho Plains Queen Associated Sand Unit Waterflood Project, shall coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area, as further described below, which was the subject of Division Case No. 10959 heard in combination with this case:

**QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT  
WATERFLOOD PROJECT  
LEA COUNTY, NEW MEXICO**

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21: S/2 SE/4  
Section 22: S/2  
Section 23: S/2 and S/2 NW/4  
Section 26: N/2 N/2  
Section 27: N/2 and N/2 SW/4  
Section 28: NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(3) However, the initial waterflood project area, for allowable and tax credit purposes, shall comprise only the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2  
Section 23: SW/4, S/2 NW/4 and NE/4 SE/4  
Section 26: NW/4 NW/4  
Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4  
Section 28: SE/4 NE/4

(4) The applicant must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

PROVIDED HOWEVER THAT:

(5) Prior to initiating injection within one-half mile of any of the wells listed below, the applicant shall re-plug said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

Plugged Wells:

Oil Associates, Inc.  
Edwards Well No. 1  
(Unit M), Section 22;

H & S Oil Company  
Anadarko Well No. 1-Y  
(Unit F), Section 27.

(6) Prior to initiating injection within one-half mile of any of the five active, producing wells listed below, the applicant shall perform remedial cement operations on said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

Producing Wells:

Anadarko Petroleum Company  
Cavalcade Federal No. 3  
(Unit I), Section 21;

Mewbourne Oil Company  
Murjo Federal Well No. 1  
(Unit E), Section 23;

Mewbourne Oil Company  
Burleson Federal No. 1  
(Unit B), Section 26;

Mewbourne Oil Company  
Sprinkle Federal Well No. 3  
(Unit E), Section 26; and,

Santa Fe Energy Company  
Sprinkle Federal Well No. 4  
(Unit F), Section 26,

all in Township 18 South, Range 32 East, NMPM,  
Lea County, New Mexico.

IT IS FURTHER ORDERED THAT:

(7) Injection shall be accomplished through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.



(8) The injection wells or pressurization system for each injection well shall be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.

(9) Any additional increase in the injection pressure limitation placed upon any well in the project area shall only be approved by the Santa Fe Office of the Division.

(10) Prior to commencing injection operations, the casing in each injection well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(11) The operator shall give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(12) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(13) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

**FURTHERMORE:**

(14) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(15) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (3) above.

(16) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(17) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the

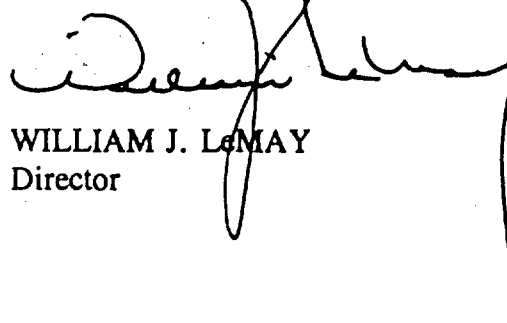
operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(18) The injection authority granted herein for the proposed injection wells shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(19) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

SEAL

**EXHIBIT "A"**

CASE NO. 10960  
ORDER NO. R-10151

**Mewbourne Oil Company  
Proposed Injection Well Locations  
Querecho Plains Queen Associated Sand Unit Waterflood Project Area**

**Township 18 South, Range 32 East, NMPM,  
Lea County, New Mexico**

Well Name and Number	Footage Location	Section	Unit	Proposed Injection Interval (Feet)
Cavalcade Federal Well No. 4	400' FSL & 660' FEL	21	P	4096 - 4130
Bennett Federal Well No. 1	660' FSL & 1650' FEL	22	O	3897 - 4138
Flip Federal Well No. 1	1650' FNL & 330' FWL	23	E	4143 - 4150
Edith Federal Well No. 2	1980' FSL & 1980' FEL	23	J	3953 - 4224
Marshall Federal Well No. 1	660' FSL & 1980' FWL	23	N	4176 - 4190
Walker Federal Well No. 1	330' FNL & 330' FWL	26	D	3914 - 3947
Federal "E" Well No. 8	1650' FNL & 660' FEL	27	H	3934 - 4198
Anadarko Federal Well No. 2	1650' FSL & 1980' FWL	27	K	3888 - 4026
Anadarko Federal Well No. 3	1650' FSL & 990' FWL	27	L	3830 - 4060
Federal "E" Well No. 9	1980' FNL & 330' FEL	28	H	3875 - 4152

1 discuss your proposed injection wells?

2 A. Yes. Pages 2 through 11 of the C-108 are  
3 schematics of all of our proposed injection wells. The  
4 mechanical integrity of all the proposed injectors appears  
5 to be adequate.

6 The first schematic, on page 2, is the already-  
7 existing injector, Cavalcade Number 4.

8 And then if I could refer the Examiner to page  
9 number 3, there are notes at the bottom of page-number 3  
10 that describe how the top of cement was calculated.  
11 Throughout the C-108, the top of cement is calculated using  
12 appropriate cement yields, a 25-percent reduction to that  
13 yield with no consideration given to casing collars.

14 It is our intention to set a packer within 100  
15 feet of the top perforation and use non-coated tubing. And  
16 we have a number of reasons for requesting non-coated  
17 tubing, beyond the fact the initial cost is substantial.

18 First, the Bone Spring unit that we've discussed  
19 is going to provide the water for this Queen Unit.

20 Q. This is the Querecho Plains-Bone Spring Unit?

21 A. That's correct, the Querecho Plains-Bone Spring,  
22 in that the facilities and the water injection system for  
23 that Bone Spring waterflood are already in place and  
24 geographically overlies the same area as this Queen unit  
25 will lie.

1           We've had that Bone Spring injection system in  
2 place for six months now, and just pulled our first  
3 corrosion coupons out of that water injection system, and  
4 the corrosion rate was measured at 1.2 mils per year, which  
5 is an exceptionally low corrosion rate.

6           Second, we will set a packer 100 feet within the  
7 top perforation and have packer fluid circulated into the  
8 tubing and casing annulus on all these injectors, so we  
9 will have a means for monitoring. Should there be a tubing  
10 leak at any time, we will have immediate monitoring of  
11 that, and we will repair that tubing leak immediately.

12           Third, the Division approved a non-coated tubing  
13 for the Querecho Plains-Bone Spring Unit, in that we  
14 presented the waters would be noncorrosive with this water  
15 system. As a result, in that we have low corrosive water  
16 and that we have a means to immediately monitor if there is  
17 a tubing leak of any kind with our injection wells, and  
18 that the Queen is going to have a short waterflood life, we  
19 would request that the Division approve non-coated tubing  
20 for this Queen Unit.

21           Q.   Now, keeping Exhibit 23 in front of you, but also  
22 adding Exhibit 24, Mr. Mayes, could you identify that  
23 exhibit and discuss the wells in the area of review?

24           A.   Yes, I can. Exhibit 24 is a plat showing the  
25 area of review, which is a one-half mile radius around all

1 producing and will require removal of pumping equipment.  
2 We again plan to install a packer within 100 feet of the  
3 top perforation and circulate an inert fluid into the  
4 tubing casing annulus.

5 All injectors will receive acid treatments during  
6 their conversions, and all injection wellheads will have  
7 pressure gauges installed on the tubing and casing  
8 annuluses.

9 Q. We've already gone over this briefly, but could  
10 you describe what additional facilities Mewbourne Oil  
11 Company will need to install for the unit and the  
12 waterflood?

13 A. Okay. Very few additional facilities are  
14 planned. The injection water, again, will be obtained from  
15 the already-in-place injection system that's associated  
16 with the Querecho Plains-Bone Spring waterflood. This will  
17 require laying a minimal amount of injection lines, tying  
18 into the Bone Spring system and just laying over to the  
19 Queen injectors.

20 Pressure regulators will be installed so that we  
21 can control the injection pressures going from the Bone  
22 Spring lines to the Queen injectors. And production  
23 facilities will remain essentially intact by utilizing  
24 three satellite tank batteries, and all flow lines will be  
25 rerouted accordingly.

**QPBSSU WATER INJECTION MONTHLY REPORT**  
**JUNE 1994**

WELL NAMES	DAYS INJ.	DAILY AVE.	MONTH TOTAL	GROSS TOTAL
=====	=====	=====	=====	=====
<u>BURLESON FED #1</u>	30	221	6627	83681
<u>BURLESON FED #2</u>	30	107	3198	45757
<u>FEDERAL "E" #10</u>	30	281	8441	69702
<u>FEDERAL "E" #11</u>	30	174	5214	85695
<u>FEDERAL "F" #3</u>	30	222	6667	101236
<u>FEDERAL "L" #2</u>	30	345	10355	76759
<u>FEDERAL "P" #1</u>	30	249	7460	103860
<u>GOVERNMENT "K" #2</u>	30	127	3813	90050
<u>SHINNERY "14" #3</u>	30	191	5743	71968
<u>SHINNERY "14" #4</u>	30	272	8159	87879
<u>SPRINKLE FED. #1</u>	30	257	7696	93594
<u>SPRINKLE FED. #2</u>	30	168	5039	57065
<u>FEDERAL "L" #4</u>	30	0	0	84259
<u>FEDERAL "L" #5</u>	30	0	0	55334
<u>FEDERAL "L" #7</u>	30	0	0	73153
=====	=====	=====	=====	=====

Average barrels of water injected per day	2614
Total barrels of water injected for month	78412
Total barrels of water injected as of 7/01/94	1179992

SOURCE	DATE	07/01/94	06/01/94	
DOUBLE EAGLE		80415	77512	29030 → 34%
ANADARKO		36538	33698	2840
FED. JEWITT		134992	134281	711
SANTA FE (SWD)		30838	22478	8360
SANTA FE (SF4)		1525	907	618
PRONGHORN				37797
CEDAR LAKE #4				1517
QPBSSU				4171
		TOTAL		84426

# QPBSSU WATER INJECTION SUMMARY

MAY 1994

WELL NAMES	Tubing Pressure	DAYS INJ.	DAILY AVE.	MONTH TOTAL	GROSS TOTAL	REMARKS
<u>BURLESON FED #1</u>	1700 psi	31	262	8108	77054	
<u>BURLESON FED #2</u>		31	129	4014	42559	
<u>FEDERAL "E" #10</u>		28	337	9438	61261	HOLE IN TBG
<u>FEDERAL "E" #11</u>		31	208	6433	80481	
<u>FEDERAL "F" #3</u>		31	254	7865	94569	
<u>FEDERAL "L" #2</u>		15	687	10306	66404	TURNED WELL ON
<u>FEDERAL "P" #1</u>		31	293	9088	96400	
<u>GOVERNMENT "K" #2</u>		31	141	4363	86237	
<u>SHINNERY "14" #3</u>		31	217	6739	66225	
<u>SHINNERY "14" #4</u>		31	308	9557	79720	
<u>SPRINKLE FED. #1</u>		31	301	9334	85898	
<u>SPRINKLE FED. #2</u>		31	186	5758	52026	
<u>FEDERAL "L" #4</u>	0	0	0	0	84259	SI
<u>FEDERAL "L" #5</u>	0	0	0	0	55334	PRODUCER
<u>FEDERAL "L" #7</u>	0	0	0	0	73153	SI

Average barrels of water injected per day

3323

Total barrels of water injected for month

91003

Total barrels of water injected as of 6/1/94

1101580

SOURCE	DATE	06/01/94	05/01/94	
DOUBLE EAGLE		77512	74370	31420 → 35%
ANADARKO		33698	30488	3210
FED. JEWITT		134281	129198	5083
SANTA FE (SWD)		22478	13136	9342
SANTA FE (SF4)		907	320	587
PRONGHORN				0 - ?
CEDAR LAKE #4				1887
QPBSSU				6532
				<u>57474</u>
			TOTAL	



QPBSSU  
WATER INJECTION SUMMARY  
APRIL 1994

WELL NAMES	DAYS INJ.	DAILY AVE.	MONTH TOTAL	GROSS TOTAL
=====	=====	=====	=====	=====
<u>BURLESON FED #1</u>	30	313	9376	68946
<u>BURLESON FED. #2</u>	30	148	4425	38545
<u>FEDERAL 'E' #10</u>	30	611	18344	51823
<u>FEDERAL 'E' #11</u>	30	244	7323	74048
<u>FEDERAL 'F' #3</u>	30	301	9025	86704
<u>FEDERAL 'P' #1</u>	30	348	10436	87312
<u>GOVERNMENT 'K' FE</u>	30	157	4724	81874
<u>SHINNERY '14' #3</u>	30	268	8049	59486
<u>SHINNERY '14' #4</u>	30	371	11117	70163
<u>SPRINKLE FED. #1</u>	30	361	10841	76564
<u>SPRINKLE FED. #2</u>	30	209	6264	46268
<u>FEDERAL 'L' #2</u>	0	0	0	56098
<u>FEDERAL 'L' #4</u>	0	0	0	84259
<u>FEDERAL 'L' #5</u>	0	0	0	55334
<u>FEDERAL 'L' #7</u>	0	0	0	73153
=====	=====	=====	=====	=====

Average barrels of water injected per day	3331
Total barrels of water injected for month	99924
Total barrels of water injected as of 5/01/94	1010577

SOURCE	DATE	NEW M/R 05/01/94	OLD M/R 04/01/94	USAGE
DOUBLE EAGLE		74370	69878	44920 → 41%
ANADARKO		30488	27445	3043
FED. JEWITT		129198	123833	5365
SANTA FE (SWD)		13136	4302	8834
SANTA FE (SF4)		320	0	320
PRONGHORN				36292
CEDAR LAKE #4				1706
QPBSSU				10492
			TOTAL	110652

To: Kevin Wang  
Revised 4-22-94

QPBSSU  
WATER INJECTION SUMMARY  
MARCH 1994

WELL	<i>Tubing Press</i> DAYS	DAILY	MONTH	GROSS	REMARKS
=====	=====	=====	=====	=====	=====
✓BURLESON FED. #1	1600 31	307 ✓	9525	59570	
✓BURLESON FED. #2	1600 30	157 ✓	4704	34120	RAN INJ PROFILE
✓FEDERAL 'E' #10	1600 30	355 ✓	10651	33479	RAN INJ PROFILE
✓FEDERAL 'E' #11	1600 31	288 ✓	8914	66725	
✓FEDERAL 'F' #3	1600 31	376 ✓	11661	77679	
✓FEDERAL 'L' #2	0 0	0 ✓	0	56098	
✓FEDERAL 'L' #4	0 0	0 ✓	0	84259	
✓FEDERAL 'L' #5	0 0	0 ✓	0	55334	
✓FEDERAL 'L' #7	0 0	0 ✓	0	73153	
✓FEDERAL 'P' #1	1600 31	427 ✓	13226	76876	
✓GOVERNMENT 'K' #2	1600 31	156 ✓	4837	77150	
✓SHINNERY '14' #3	1600 30	338 ✓	10128	51437	RAN INJ PROFILE
✓SHINNERY '14' #4	1600 30	436 ✓	13075	59046	RAN INJ PROFILE
✓SPRINKLE FED. #1	1600 30	448 ✓	13439	65723	RAN INJ PROFILE
✓SPRINKLE FED. #2	1600 31	213 ✓	6590	40004	
=====	=====	=====	=====	=====	=====

Average barrels of water injected per day	3813
Total barrels of water injected for month	106750
Total barrels of water injected as of 4/1/94	910653

SOURCE	DATE	NEW M/R 04/01/94	OLD M/R 03/01/94	USAGE
DOUBLE EAGLE		69878	63804	(60740) 52%
ANADARKO		27445	23342	4103
FED. JEWITT		123833	117369	6464
SANTA FE		4302	0	4302
PRONGHORN				31396
CEDAR LAKE #4				1892
QPBSSU				6891
			TOTAL	115788

QPBSSU  
WATER INJECTION SUMMARY  
FEBRUARY 1994

WELL	DAYS	DAILY	MONTH	GROSS	Ave Tbg Pressure
=====	=====	=====	=====	=====	
BURLESON FED. #1	28	334	9360	50045	1700
BURLESON FED. #2	28	183	5112	29416	1700
FEDERAL "E" #10	28	376	10516	22828	1600
FEDERAL "E" #11	8	551	4410	57811	1600
FEDERAL "F" #3	28	521	14599	66018	1600
FEDERAL "L" #2	13	653	8490	56098	1700
FEDERAL "L" #4	13	1345	17489	84259	1600
FEDERAL "L" #5	0	0	0	55334	0
FEDERAL "L" #7	13	1033	13434	73153	1600
FEDERAL "P" #1	28	563	15776	63650	1700
GOVERNMENT "K" <sup>2</sup> (FE)	28	169	4739	72313	1600
SHINNERY "14" #3	28	470	13172	41309	1700
SHINNERY "14" #4	28	556	15557	45971	1700
SPRINKLE FED. #1	28	607	16987	52284	1700
SPRINKLE FED. #2	28	230	6446	33414	1700
=====	=====	=====	=====	=====	

Average barrels of water injected per day	5575
Total barrels of water injected for month	156087
Total barrels of water injected as of 3/1/94	803903

SOURCE	DATE	NEW M/R 03/01/94	OLD M/R 02/01/94	USAGE
DOUBLE EAGLE		63804	50976	128280
ANADARKO		23342	20364	2978
FED. JEWITT		117369	107582	9787
SANTA FE				0
PRONGHORN				14595
CEDAR LAKE #4				2001
QPBSSU				5065
			TOTAL	162706

⇒ 79%

QPBSSU  
WATER INJECTION SUMMARY  
JANUARY 1994 (Revised)

WELL NAMES	DAYS INJ.	DAILY AVE.	MONTH TOTAL	GROSS TOTAL	AVG TBG PRESS
=====	=====	=====	=====	=====	=====
BURLESON FED. #1	31	371	11502	40685	1500
BURLESON FED. #2	31	197	6100	24304	1500
FEDERAL "E" #10	21	586	12312	12312	1500
FEDERAL "E" #11	0	0	0	53401	0
FEDERAL "F" #3	30	775	23254	51419	1500
FEDERAL "L" #2	31	631	19574	47608	1500
FEDERAL "L" #4	30	1093	32796	66770	1300
FEDERAL "L" #5	24	1219	29248	55334	0
FEDERAL "L" #7	31	901	27932	59719	1500
FEDERAL "P" #1	29	838	24295	47874	1500
GOVERNMENT "K" #2	31	156	4843	67574	1500
SHINNERY "14" #3	31	731	22667	28137	1300
SHINNERY "14" #4	31	817	25324	30414	1300
SPRINKLE FED. #1	31	970	30085	35297	800
SPRINKLE FED. #2	31	249	7717	26968	1500
=====	=====	=====	=====	=====	=====
Average barrels of water injected per day				9535	
Total barrels of water injected for month				277649	
Total barrels of water injected				647816	

SOURCE	DATE	NEW M/R	OLD M/R	USAGE
	02/01/94		?	
=====				
DOUBLE EAGLE		50976	26000	249760
ANADARKO		20364	16500	3864
FED. JEWITT		107582	93200	14382
SANTA FE				0
PRONGHORN				9969
CEDAR LAKE #4				3084
QPBSSU				5340
				=====
		TOTAL		286399

⇒ 87%

COUPONS

Corrosion  
SpecialtiesPHONE 915 586-2902  
STAR RT., SOUTH HIGHWAY 18  
KERMIT, TEXAS 79745

TESTING

## COUPON ANALYSIS REPORT

DATE: JAN. 13, 1993

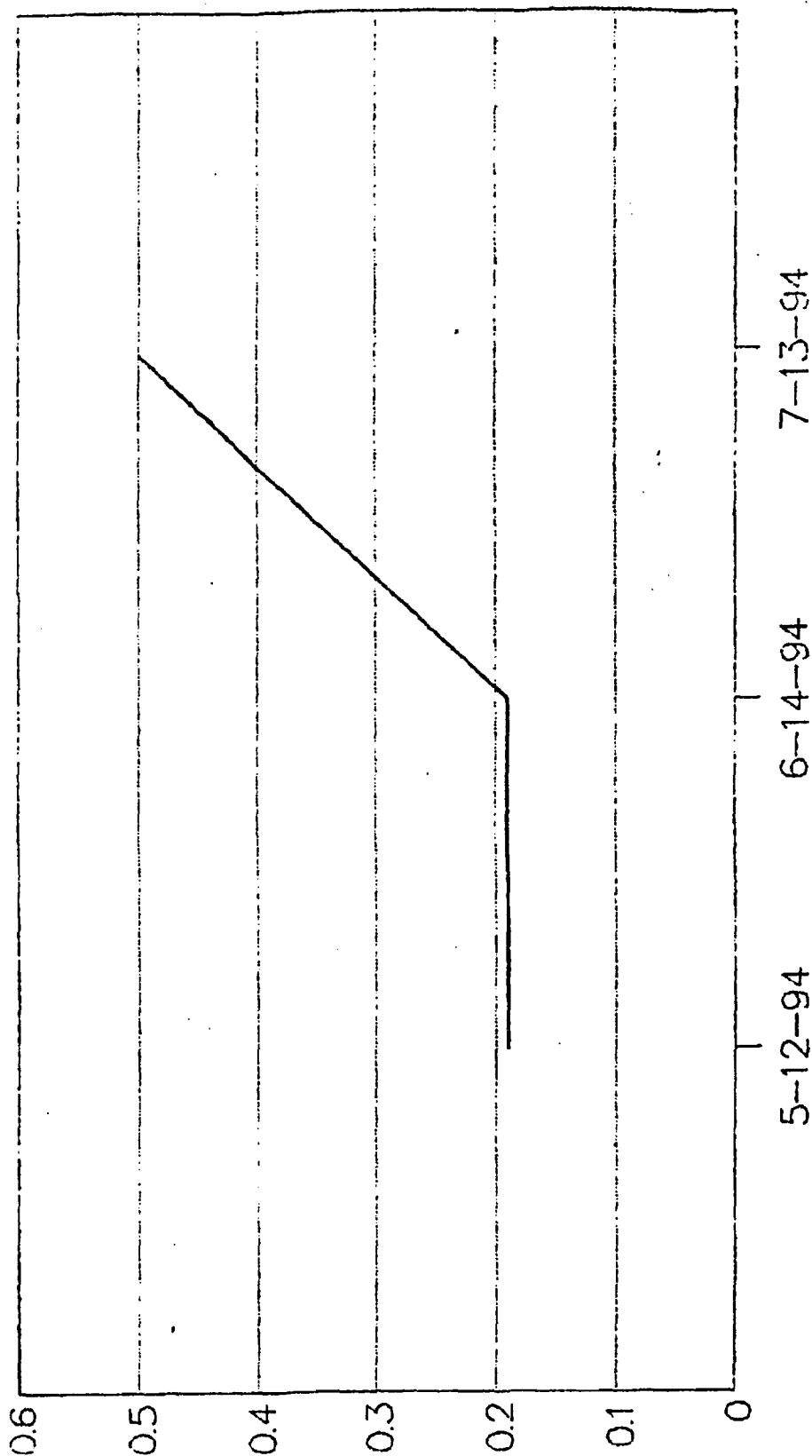
COMPANY NALCO CHEMICAL COMPANYSUBMITTED: TERRY BURLESON

LOCATION	COUPON NO.	DAYS IN	INSTALLED WEIGHT	REMOVED WEIGHT	WEIGHT LOSS	MPY RATE
<del>REMOVED</del>						
KELLER #1	7648	33	11.0618	11.0438	.0180	.9623
GOVT. K-2	7165	85	11.0475	10.9692	.0783	1.6816
<del>#7165</del> 776	7642	31	11.0668	11.0271	.0397	2.2594

# MEWBOURNE OIL CO.

## QPBSSU 7A-10

COUPON STATION AT SOUTH END OF WATER SYSTEM



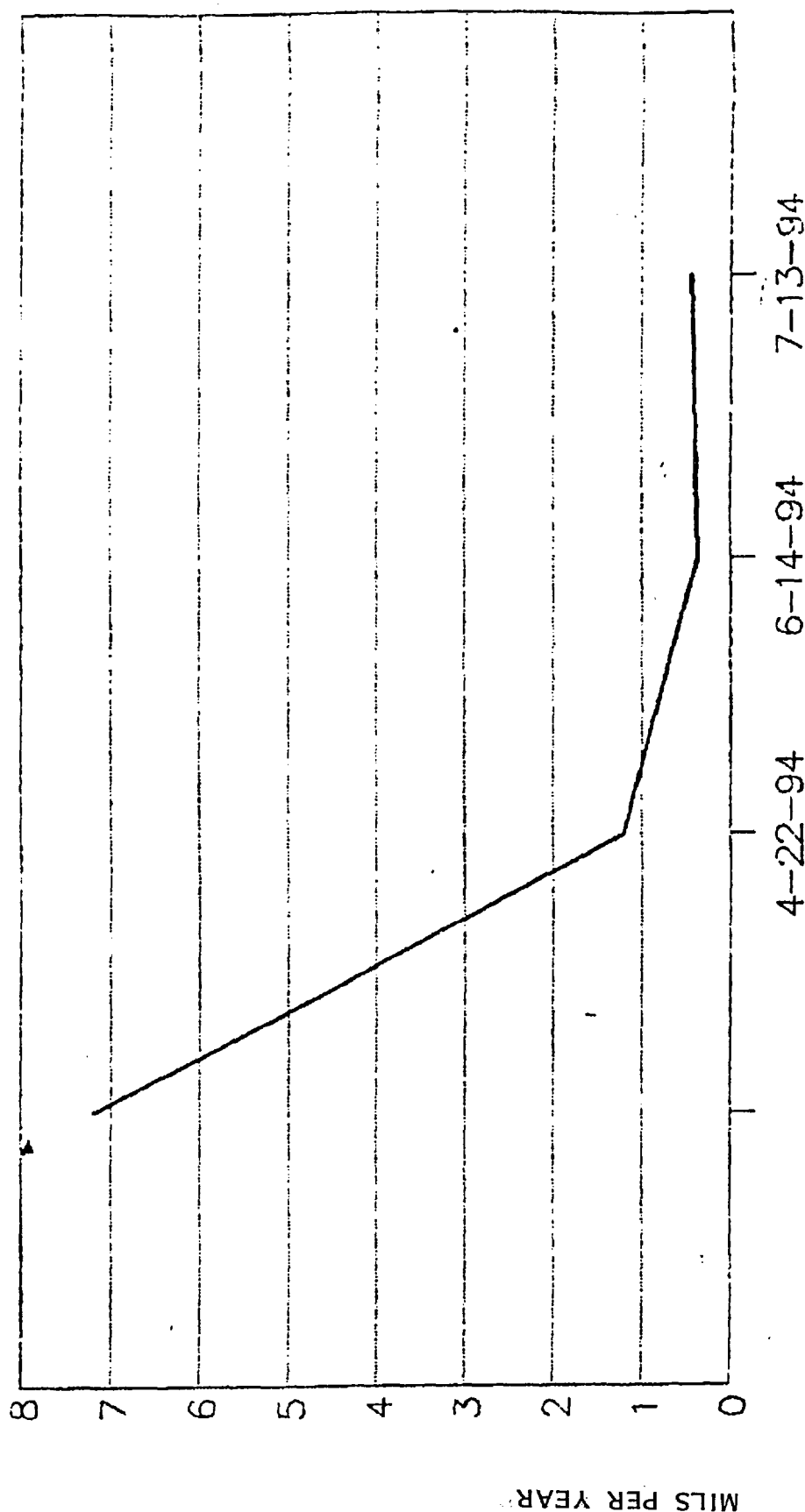
COUPON EVALUATION

MILS PER YEAR

# MEWBOURNE OIL CO.

## QPBSSU 12B--3

COUPON STATION AT NORTH END OF WATER SYSTEM



COUPON EVALUATION

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

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

APPLICATION OF MEWBOURNE OIL  
COMPANY FOR A WATERFLOOD  
PROJECT AND QUALIFICATION  
FOR THE RECOVERED OIL TAX  
RATE, LEA COUNTY, NEW MEXICO.

CASE NO. 10,960 (de novo)

PRE-HEARING STATEMENT

This Pre-Hearing Statement is submitted by Applicant  
as required by the Oil Conservation Commission.

APPEARANCE OF PARTIES:

Applicant:

Mewbourne Oil company  
Post Office Box 7698  
Tyler, Texas 75711  
Attn: Kevin Mayes  
(903) 561-2900

Attorney:

James Bruce  
Hinkle, Cox, Eaton  
Coffield & Hensley  
Post Office Box 2068  
Santa Fe, New Mexico 87504  
(505) 982-4554

Other Party:

Attorney:



**STATEMENT OF CASE:**

**Applicant:**

Applicant seeks to institute a secondary recovery waterflood project for the Querecho Plains Queen Associated Sand Unit. The Division entered Order No. R-10151 approving the waterflood and approving the project as an enhanced oil recovery project. However, the Division denied applicant's request for (a) initial injection pressures in excess of 0.2 psi/ft., and (b) unlined tubing. See Finding paragraphs (7), (8), (13), and (14), and Ordering paragraphs (7) and (8). Applicant appeals Order No. R-10151 only with respect to the matters of injection pressure and unlined tubing.

**OPPOSITION:**

**PROPOSED EVIDENCE**

**APPLICANT:**

	<b>WITNESS</b>	<b>ESTIMATED TIME</b>	<b>EXHIBITS</b>
1.	Kevin Mayes	20 minutes	(a) Injectivity test results. (b) Economic summaries. (c) C-108. (d) Pressure gradient data.

Pre-Hearing Statement  
NMOCD Case No. 10,960 (de novo)  
Page 3

**OPPOSITION:**

**WITNESSES**

**ESTIMATED TIME**

**EXHIBITS**

**PROCEDURAL MATTERS**

HINKLE, COX, EATON, COFFIELD  
& HENSLEY

By:



James Bruce  
Post Office Box 2068  
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(505) 982-4554

Attorneys for Applicant

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\*NOT LICENSED IN NEW MEXICO  
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JEFFREY D. HEWETT  
JAMES BRUCE  
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JEFFREY W. HELLBERG\*  
WILLIAM F. COUNTESS\*\*  
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RUSSELL J. BAILEY\*\*  
CHARLES R. WATSON, JR.\*\*  
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MARK C. DOW  
FRED W. SCHWENDIMANN  
JAMES M. HUDSON  
JEFFREY S. BAIRD\*  
THOMAS E. HOOD\*\*  
REBECCA NICHOLS JOHNSON

August 11, 1994

## HAND DELIVERED

Mr. William LeMay  
Oil Conservation Commission  
Santa Fe, New Mexico

AUG 11 1994

Re: Case No. 10960 (de novo)  
Application of Mewbourne  
Oil Company

Dear Mr. LeMay:

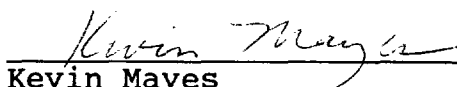
Mewbourne Oil Company recognizes the Commission's concern over potential failure of unlined tubing in the proposed Queen unit waterflood. As a result, Mewbourne Oil Company suggests that the Commission approve unlined tubing, but require that mechanical integrity tests be conducted on injection wells annually, rather than every five years as required by Division rules.

Very truly yours,

HINKLE, COX, EATON, COFFIELD  
& HENSLEY

  
James Bruce

APPROVED:

  
Kevin Mayes  
Mewbourne Oil Company

JGB/sp