

Examiner \_\_\_\_\_  
 Case No. 12130  
 EXHIBIT NO. 1

 N.M. State Lease V-4510  
 Yates Pet., etal 100%

 Current Proration Unit

 Proposed Amended Proration Unit

 Yates Petroleum  
 Sand Springs "ASU" St. No. 1

*Handwritten notes:*  
 1/2 1/2  
 1/2 1/2  
 1/2 1/2  
 1/2 1/2  
 1/2 1/2

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 1

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION  
OF YATES PETROLEUM CORPORATION  
FOR EXTENSION OF THE VERTICAL  
LIMITS OF THE SAND SPRINGS-ATOKA  
GAS POOL AND FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

CASE NO. 12128

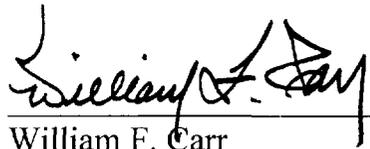
IN THE MATTER OF THE APPLICATION  
OF YATES PETROLEUM CORPORATION  
FOR AN UNORTHODOX GAS WELL LOCATION  
TO ACCOMMODATE THE REDEDICATION  
OF ACREAGE FOR GEOLOGIC REASONS,  
LEA COUNTY, NEW MEXICO.

CASE NO. 12130

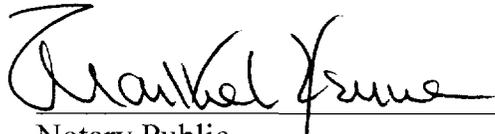
AFFIDAVIT

STATE OF NEW MEXICO        )  
  ) ss.  
COUNTY OF SANTA FE        )

William F. Carr, attorney in fact and authorized representative of Yates Petroleum Corporation, the Applicant herein, being first duly sworn, upon oath, states that notice has been given to all interested persons entitled to receive notice of this application under Oil Conservation Division rules, and that notice has been given at the addresses shown on Exhibit "A" attached hereto.

  
\_\_\_\_\_  
William F. Carr

SUBSCRIBED AND SWORN to before me this 31st day of March, 1999.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: August 19, 1999

**EXHIBIT A**

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

Featherstone Development Corporation  
1801 West Second Street  
Roswell, NM 88201

Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

Bogle Farms Ltd.  
Post Office Box 398  
Tatum, NM 88267

for Oil Conservation Division Case 12128

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

Featherstone Development Corporation  
1801 West Second Street  
Roswell, NM 88201

Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

for Oil Conservation Division Case 12130

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 2

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
ANTHONY F. MEDEIROS  
PAUL R. OWEN  
KATHERINE M. MOSS  
  
JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: ccbspa@ix.netcom.com

January 28, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

TO AFFECTED INTEREST OWNERS

Re: Application of Yates Petroleum Corporation for Extension of the Vertical Limits of the Sand Springs-Atoka Gas Pool and for Special Pool Rules, Lea County, New Mexico

Gentlemen:

This letter is to advise you that Yates Petroleum Corporation has filed the enclosed application with the New Mexico Oil Conservation Division seeking an order expanding the vertical limits of the Sand Springs-Atoka Gas pool to include the Atoka and Morrow formations and promulgating special pool rules and regulations for the expanded pool to provide for a second well on each standard spacing and proration unit.

This application has been set for hearing before a Division Examiner on February 18, 1999. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing statements should be filed by 4:00 o'clock p.m. on the Friday before a scheduled hearing.

Very truly yours,



WILLIAM F. CARR  
ATTORNEY FOR YATES PETROLEUM CORPORATION  
WFC:mlh

Enc.

cc: Mr. Randy Patterson  
Mr. Dave Pearson

Is your **RETURN ADDRESS** completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece above the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

4a. Article Number:  
Z 559 572 300

- 4b. Service type
- Registered
  - Express Mail
  - Return Receipt for Merchandise
  - Certified
  - Insured
  - COI

7. Date of Delivery:  
2-1

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)  
X *[Signature]*

PS Form 3811, December 1994

1-2593-96-18-02214 Domestic Return Receipt

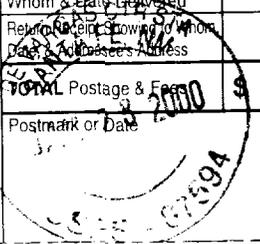
Z 559 572 300

US Postal Service  
**Receipt for Certified Mail**

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

Postage	\$ .33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.25
Return Receipt Showing to Whom Date & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 2.98</b>
Postmark or Date	

PS Form 3800, April 1995



636

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Featherstone Development Corporation  
 1801 West Second Street  
 Roswell, NM 88201

4a. Article Number  
 Z559 572 301

4b. Service Type  
 Registered  
 Express Mail  
 Return Receipt for Merchandise  
 Insured  
 COD

7. Date of Delivery  
 2-11

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)  
 X [Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994

102585-98-0-0200 Domestic Return Receipt

Z 559 572 301

US Postal Service  
**Receipt for Certified Mail**

Featherstone Development Corporation  
 1801 West Second Street  
 Roswell, NM 88201

Postage	\$ 2.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.25
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>2.98</b>
Postmark or Date	APR 11 1995 4657594

PS Form 3800, April 1995

636

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
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I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
  - 2.  Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:

Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

4a. Article Number  
Z 559 572 302

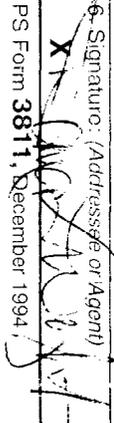
4b. Service Type

- Registered
- Express Mail
- Certified
- Insured
- COD

7. Date of Delivery

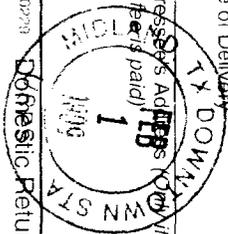
5. Received By: (Print Name)

8. Addressee's Address (if requested and fees paid)

6. Signature: (Address of Agent)  


102/95-08-15-0279

Domestic Return Receipt



Z 559 572 302

US Postal Service  
**Receipt for Certified Mail**

Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

Postage	\$ 1.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>2.73</b>
Postmark or Date	

PS Form 3800, April 1995

036

Thank you for using Return Receipt Service.

CAMPBELL, CARR, BERGE

& SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
ANTHONY F. MEDEIROS  
PAUL R. OWEN  
KATHERINE M. MOSS

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: ccbspa@ix.netcom.com

February 18, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Bogle Farms Ltd.  
Post Office Box 398  
Tatum, NM 88267

Re: Application of Yates Petroleum Corporation for Extension of the Vertical Limits of the Sand Springs-Atoka Gas Pool and for Special Pool Rules, Lea County, New Mexico

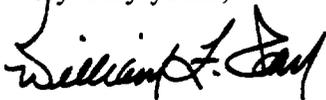
Gentlemen:

This letter is to advise you that Yates Petroleum Corporation has filed the enclosed application with the New Mexico Oil Conservation Division seeking an order expanding the vertical limits of the Sand Springs-Atoka Gas pool to include the Atoka and Morrow formations and promulgating special pool rules and regulations for the expanded pool to provide for a second well on each standard spacing and proration unit.

This application had been set for hearing before a Division Examiner for February 18, 1999 but has been continued to March 18, 1999. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing statements should be filed by 4:00 o'clock p.m. on the Friday before a scheduled hearing.

Very truly yours,



WILLIAM F. CARR  
ATTORNEY FOR YATES PETROLEUM CORPORATION  
WFC:mlh

Enc.

cc: Mr. Randy Patterson  
Mr. Dave Pearson

Is your **RETURN ADDRESS** completed on the reverse side?

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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Bogle Farms Ltd.  
Post Office Box 398  
Tatum, NM 88267

4a. Article Number:

Z 559 572 323

4b. Service type

- Registered  Certified
- Express Mail  Insured
- Return Receipt for Merchandise  COD

7. Date of Delivery

FEB 18 1999

5. Received By: (Print Name)

Signature: (Addressee or Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994.

102595-98-8-0229

Domestic Return Receipt

Z 559 572 323

US Postal Service  
**Receipt for Certified Mail**  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to	
Bogle Farms Ltd.	
Street & Number	
Post Office Box 398	
Post Office, State, & ZIP Code	
Tatum, NM 88267	
Postage	\$ .33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.25
Return Receipt Showing to Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 2.98
Postmark or Date	FEB 18 1999

PS Form 3800, April 1995



Thank you for using Return Receipt Service.

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
ANTHONY F. MEDEIROS  
PAUL R. OWEN  
KATHERINE M. MOSS  
  
JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: ccbspa@ix.netcom.com

February 16, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

TO AFFECTED INTEREST OWNERS

Re: Amended Application of Yates Petroleum Corporation for an Unorthodox Gas Well Location to Accommodate the Rededication of Acreage for Geologic Reasons, Lea County, New Mexico

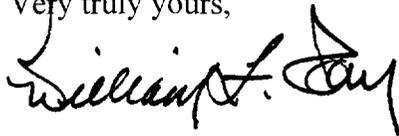
Gentlemen:

This letter is to advise you that Yates Petroleum Corporation has filed the enclosed amended application with the New Mexico Oil Conservation Division seeking an exception to the provisions of General Rule 104.C(2)(b) for an unorthodox gas well location for its Sand Spring State Well No. 1, 330 feet from the North line and 1650 feet from the West line which it has reentered and drilled to a depth of approximately 13,000 feet and recompleted in the Atoka and Morrow formations. The N/2 of said Section 11 has been dedicated to this well and Yates proposes to rededicate the W/2 of Section 11 to the well.

This application has been set for hearing before a Division Examiner on March 18, 1999. You are not required to attend this hearing, but as an owner of an interest that may be affected by the unorthodox well location, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing statements should be filed by 4:00 o'clock p.m. on the Friday before a scheduled hearing.

Very truly yours,



WILLIAM F. CARR  
ATTORNEY FOR YATES PETROLEUM CORPORATION  
WFC:mlh

Enc.

cc: Mr. Randy Patterson  
Mr. Dave Pearson

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I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
  - 2.  Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

4a. Article Number

Z 559 572 320

4b. Service type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of delivery

2/18/99

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

PS Form 3871, December 1994

102596-98-0-01229

Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 559 572 320

US Postal Service  
**Receipt for Certified Mail**

Manzano Oil Corporation  
1801 West Second Street  
Roswell, NM 88201

Postage	\$ .33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	2/18/99
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	1.73
Postmark or Date	87594

PS Form 3800 April 1995

Is your **RETURN ADDRESS** completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b.
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I also wish to receive the following services: (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Featherstone Development Corporation  
 1801 West Second Street  
 Roswell, NM 88201

4a. Article Number: Z 559 572 321

4b. Service Type

- Registered  Certified
- Express Mail  Insured
- Return Receipt for Merchandise  COD

7. Date of Delivery

2/18/99

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

PS Form 3811, December 1994

102595-98-8-0229

Domestic Return Receipt

Z 559 572 321

US Postal Service  
**Receipt for Certified Mail**

Featherstone Development Corporation  
 1801 West Second Street  
 Roswell, NM 88201

Postage	\$ .33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	ASIA 25
Return Receipt Showing to Whom, Date, & Addressee's Address	1999
<b>TOTAL Postage &amp; Fees</b>	\$ 2.18
Postmark or Date	USPS 37594

PS Form 3800, April 1995

Thank you for using Return Receipt Service.

Z 559 572 322

US Postal Service  
**Receipt for Certified Mail**

Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

Postage	\$ 1.33
Certified Fee	1.46
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$ 2.79</b>
Postmark or Date	FEB 18 1999 MIDLAND TX 79702 8759A

PS Form 3800, April 1, 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
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  - 2.  Restricted Delivery
- Consult postmaster for fee.

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Chi Energy, Inc.  
Post Office Box 1799  
Midland, TX 79702

4a. Article Number  
Z 559 572 322

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Mail
- Certified
- Insured

7. Date of Delivery

8. Addressee's Address (if different from sender's address and fee is paid)

5. Received By: (Print Name)

6. Signature: (Address of Agent)

PS Form 3811, December 1994

102595-98-B-0277

Domestic Return Receipt



Thank you for using Return Receipt Service.

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE



**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 5

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

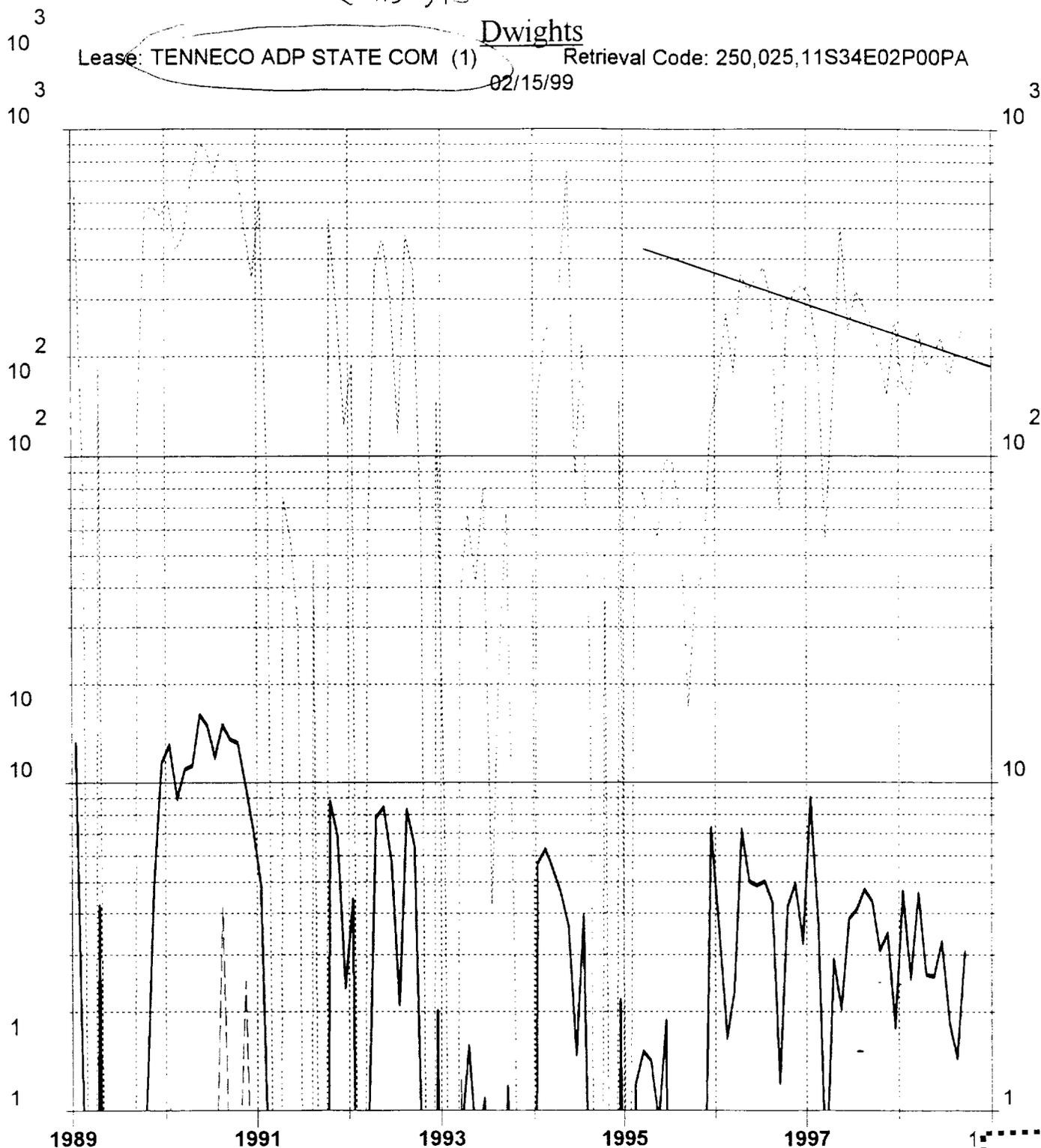
2-11S-34E

### Dwights

Lease: TENNECO ADP STATE COM (1)

Retrieval Code: 250,025,11S34E02P00PA

02/15/99



Oil (bbl/day)

County: LEA, NM

F.P. Date: 01/89

Gas (mcf/day)

Water (bbl/day)

Field: SAND SPRINGS (ATOKA) Oil Cum: 12.92 mbbl

Reservoir: ATOKA

Gas Cum: 805.6 mmcf

Operator: YATES PETROLEUM Location: 2P 11S 34E

Examiner \_\_\_\_\_  
 Case No. 12130  
 EXHIBIT NO. 6

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 6

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

**Decline Curve and Estimated Ultimate Recovery Calculations  
Yates Tenneco ADP State Com #1**

Qinitial : 360 MCF/D  
Qfinal : 290 MCF/D  
t : 1 year

$$d = (360-290)/360 \\ 0.194 \%/\text{yr}$$

Qcurrent : 200 MCF/D  
Qabandon : 50 MCF/D

$$\text{RUR} = ((\text{Qcurrent} - \text{Qabandon}) * 365) / \ln(1-d)$$

$$\frac{(200-50) 365}{\ln(1-0.194)}$$

254 MMCF

EST. RECOVERY

Cumulative Production : 806 MMCF

$$\text{EUR} = \text{RUR} + \text{Cum}$$

$$254 + 806$$

1060 MMCF

**BEFORE THE  
OIL CONSERVATION DIVISION  
Santa Fe, New Mexico**

Case Nos. 12128 and 12130 Exhibit No. 7

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

Dwights

Lease: LAGARTO AMZ STATE (1)

Retrieval Code: 250,025,11S34E01M00PA

02/15/99

3  
10  
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1  
1

10

1990

1992

1994

1996

1998

Oil (bbl/day)

Water (bbl/day)

County: LEA, NM

Field: SAND SPRINGS (ATOKA) Oil Cum: 24.19 mbbl

Reservoir: ATOKA

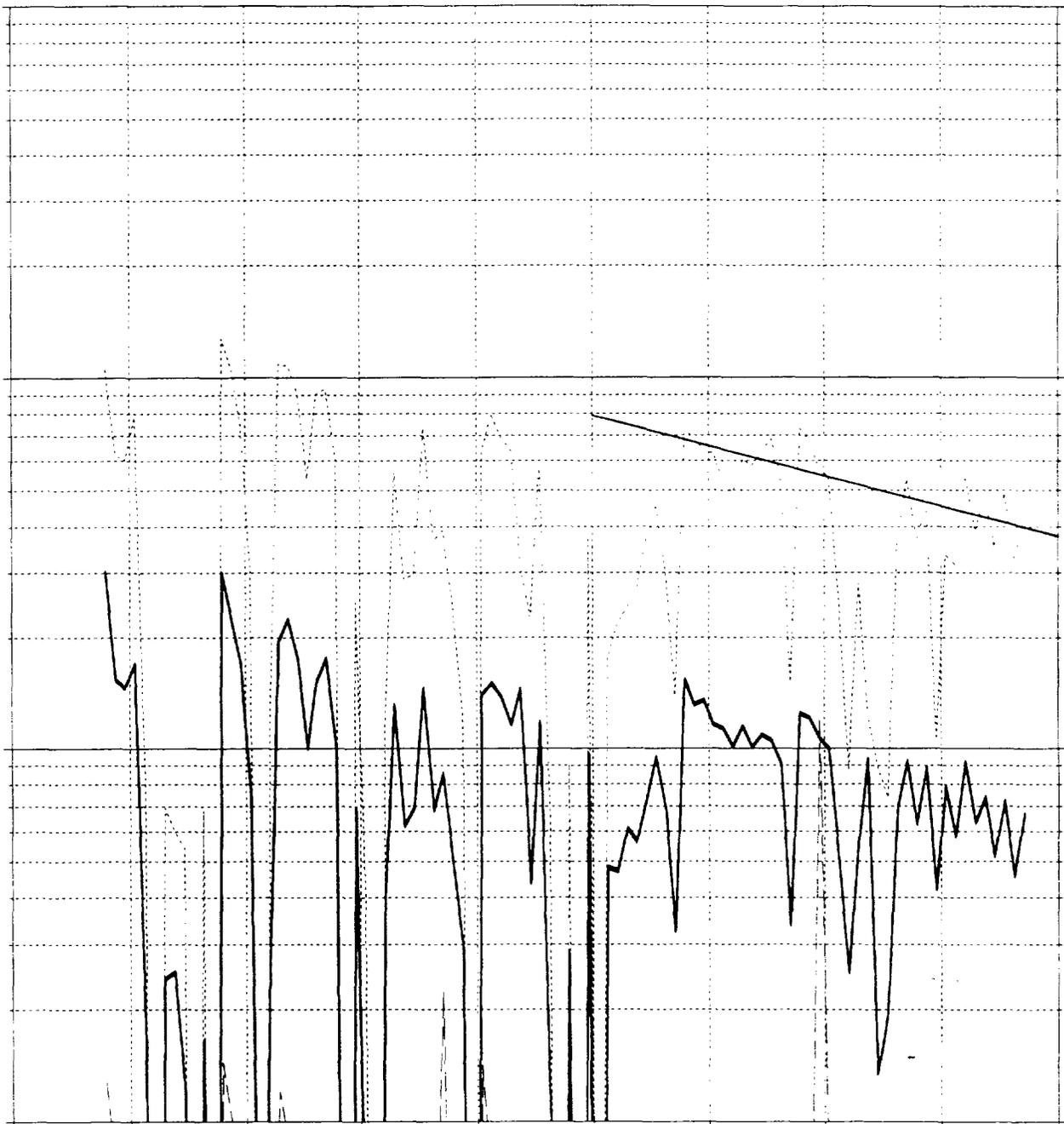
Operator: YATES PETROLEUM Location: 1M 11S 34E

F.P. Date: 10/90

Gas Cum: 1174 mmcf

Gas (mcf/day)

Examiner  
Case No. 12130  
EXHIBIT NO. 8



**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 8

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

**Decline Curve and Estimated Ultimate Recovery Calculations  
Yates Lagarto AMZ State #1**

Qinitial : 800 MCF/D  
Qfinal : 650 MCF/D  
t : 1 year

$$d = (800-650) / 800 \\ 0.188$$

Qcurrent : 400 MCF/D  
Qabandon : 50 MCF/D

$$RUR = ((Qcurrent - Qabandon) * 365) / \ln(1-d)$$

$$\frac{(400-50) 365}{\ln(1-0.188)}$$

613 MMCF

Cumulative Production : 1174 MMCF

$$EUR = RUR + Cum$$

$$613 + 1174$$

1787 MMCF (1.8 Bcf)

**BEFORE THE  
OIL CONSERVATION DIVISION  
Santa Fe, New Mexico**

Case Nos. 12128 and 12130 Exhibit No. 9

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999

## Original Gas In Place and Volumetric Calculations

### Yates Lagarto AMZ State #1

Initial Reservoir Pressure : 4130 psia  
 Reservoir Temperature : 187 degrees F  
 Gas Formation Volume Factor : 0.00406 (cu. ft/SCF)  
 Gas Compressibility Factor : 0.92  
 Estimated Ultimate Recovery : 1.79 x 10<sup>9</sup> SCF  
 Estimated Recovery Factor : 0.80  
 Average Porosity : 12%  
 Average Reservoir Thickness : 12 ft

$$\text{OGIP} = 1.79 \times 10^9 / 0.8$$

$$2.24 \times 10^9 \text{ SCF}$$

$$A = (\text{OGIP} * B_{gi}) / (43,560 * h * \Phi * (1-S_w))$$

$$\frac{(2.24 \times 10^9) (0.00406)}{(43,560) (12) (0.12) (1-0.19)}$$

179 Acres of *ORANGE*

### Yates Tenneco ADP State #1

Initial Reservoir Pressure : 4130 psia  
 Reservoir Temperature : 187 degrees F  
 Gas Formation Volume Factor : 0.00406 (cu. ft/SCF)  
 Gas Compressibility Factor : 0.92  
 Estimated Ultimate Recovery : 1.060 x 10<sup>9</sup> SCF  
 Estimated Recovery Factor : 0.80  
 Average Porosity : 12%  
 Average Reservoir Thickness : 8 ft

$$\text{OGIP} = 1.060 \times 10^9 / 0.8$$

$$1.325 \times 10^9 \text{ SCF}$$

$$A = (\text{OGIP} * B_{gi}) / (43,560 * h * \Phi * (1-S_w))$$

$$\frac{(1.325 \times 10^9) (0.00406)}{(43,560) (8) (0.12) (1-0.19)}$$

158 Acres of *ORANGE*

Examiner \_\_\_\_\_  
 Case No. 12130  
 EXHIBIT NO. 10

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 10

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999