

~~CONFIDENTIAL~~

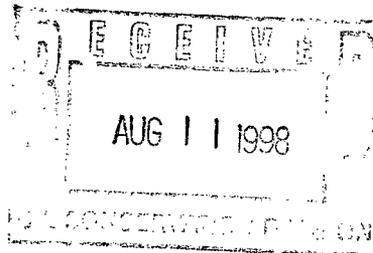
JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

SUITE B
612 OLD SANTA FE TRAIL
SANTA FE, NEW MEXICO 87501

(505) 982-2043
(505) 982-2151 (FAX)

August 11, 1998



Hand Delivered

Michael E. Stogner
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Administrative application of Ocean Energy, Inc. ("Ocean") for approval of an unorthodox oil well location:

Townsend St. Well No. 5
330 feet FSL & 1520 feet FEL
S½SE¼ §2, Township 16 South, Range 35 East, NMPM
Lea County, New Mexico

Dear Mr. Stogner:

This letter is in response to your letter of July 20, 1998, asking for additional information.

First, the "undesirable topographic condition" for Well No. 4 was a caliche pit at the original location 400 feet FSL and 1500 feet FEL. The pit is shown on the attached Exhibit A. Due to the pit, the rig could not be properly located, and the location for Well No. 4 was moved slightly. An examination of the surface shows that Well No. 5 will not be affected by the pit, and will allow the rig to be properly placed.

Second, the main downhole problem in Well No. 4 was lost circulation in the Wolfcamp formation. Several unsuccessful attempts were made to plug off this interval, and ultimately the interval was drilled dry.¹ The plan for Well No. 5 will be to drill dry to 100 feet above the Strawn, and run casing to cover the Wolfcamp. In addition, there was a problem with parted casing, either from a bad joint of casing or use of an external casing

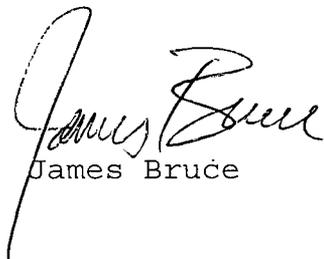
¹The Wolfcamp formation in this area is depleted. No damage was caused to the Strawn or any other reservoir.

packer. The casing for Well No. 5 will be inspected prior to running, and an external casing packer is not planned.

Finally, Well No. 4 has been plugged and abandoned. Well reports and a well diagram are attached as Exhibit B.

Please call me if you need any further information. Ocean is anxious to drill the well, and your attention to this matter is appreciated.

Very truly yours,



James Bruce

July 2, 1998

State of New Mexico, Energy Minerals
and Natural Resources Department
Oil Conservation Division
District I Office
PO Box 1980
Hobbs, New Mexico 88241-1980

RE: Townsend State #4
API# 30-025-34150
Unit W Section 2-T16S-R35E
Lea County

Dear Madam or Sir:

Enclosed for the subject well are the following items:

One original and 2 copies of form C-103, subsequent report of plugging
Wellbore diagrams

If you have any questions or need additional information, I can be reached in Denver at (303) 573-4721.
Thank you for your time in this matter.

Sincerely,

Scott M. Webb
Regulatory Coordinator



TOWNSEND STATE #4

6/27/98 - MI & RU PU. MI & unload 57 jts of 2-7/8" 6.5# J-55 8rd EUE tbg. PU tbg & RIH to 1750' FS. RU BJ. Mixed 25 sx plug of Class "C" Neat cmt. Pumped cmt to btm of tbg. Spotted plug from 1750' to 1639'. Pulled & LD 43 jts of tbg. Btm of tbg @ 450' FS. Mixed & pumped 50 sx plug of Class "C" Neat cmt. Pumped plug, covered from 450' to 250'. Pulled remainder of tbg, unflanged wellhead & BOP. Set BOP off. Ran 1 jt of tbg. Spotted 10 sx plug of Class "C" Neat cmt. Covered approx 10'. POOH w/ 1 jt of tbg & LD. RD PU. Moved off loc & MI welder. Dug out wellhead, cut off wellhead flange, installed plate & dry hole marker. Covered cellar & cut off deadmen. Well plugged 6/26/98.

DC: \$5200

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

OIL CONSERVATION DIVISION
 2040 Pacheco St.
 Santa Fe, NM 87505

WELL API NO.
 30-025-34150

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.

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 "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well:
 OIL WELL GAS WELL OTHER Dry Hole

2. Name of Operator
 Ocean Energy, Inc.

3. Address of Operator
 410 17th Street, Suite 1400, Denver, CO 80202

4. Well Location
 Unit Letter W 330 Feet From The South Line and 1650 Feet From The East Line
 Section 2 Township 16S Range 35E NMMPM Lea County

7. Lease Name or Unit Agreement Name
 Townsend State

8. Well No.
 4

9. Pool name or Wildcat
 Big Dog Strawn South

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
 GR 3981' OR

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
WELL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent date, including estimated date of starting any proposed work).
 SEE RULE 1102.

logs have been placed in the following intervals on 6/26/98:
 CIBP at 10,053'.
 160 sx 9400' Thixotropic.
 50 sx 8195'-8095'.
 50 sx 6306'-6206'.
 50 sx 4785'-4685'.
 23 sx 1750'-1639'.
 0 sx 450' - 350'.
 7 sx from 3'-13'.

at off wellhead 3' below grade, weld on plate and dry hole marker.

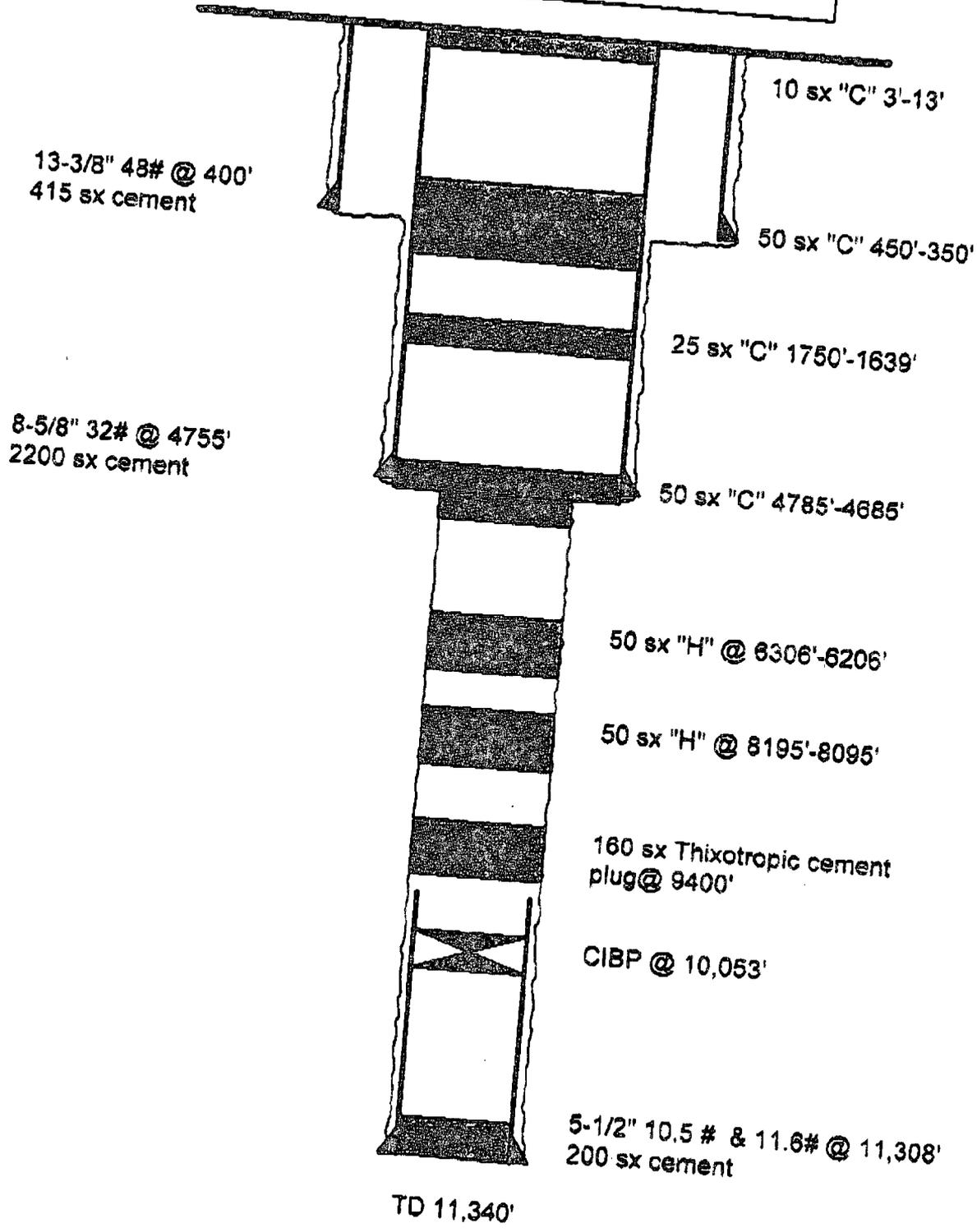
by certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Regulatory Coordinator DATE 07/02/98
 OR PRINT NAME Scott M. Webb TELEPHONE NO. (303) 573-4721

(Leave for State Use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL IF ANY: _____

Townsend State #4
330' FSL & 1650' FEL
Unit W-2-16S-35E
Lea County, New Mexico
Final Plugging Diagram



DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION
 2040 Pacheco St.
 Santa Fe, NM 87505

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

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

WELL API NO.
 30-025-34150

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.

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 "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well:
 OIL WELL GAS WELL OTHER Dry Hole

2. Name of Operator
 Ocean Energy, Inc.

3. Address of Operator
 410 17th Street, Suite 1400, Denver, CO 80202

4. Well Location
 Unit Letter W 330 Feet From The South Line and 1650 Feet From The East Line
 Section 2 Township 16S Range 35E NMPM Lea County

7. Lease Name or Unit Agreement Name
 Townsend State

8. Well No.
 4

9. Pool name or Wildcat
 Big Dog Strawn South

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
 GR 3981' GR

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

11. NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIATION WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: Revised P&A Plan <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent data, including estimated date of starting any proposed work).
 SEE RULE 1107.

Ocean Energy is requesting to plug and abandon the subject well. The well was plugged back to the intermediate casing shoe at 4685'. OEL originally intended to plug back the well for a possible directional drill, instead a replacement well is being drilled. Plugs have been placed in the following intervals: CIBP at 10,053', 160 sx 9400', 50 sx 8195'-8095', 50 sx 6306'-6206', 50 sx 4785'-4685'. The following additional plugs will be set to finish the plugging the well:

- 1) 25 sx "C" @ 1750'
- 2) 50 sx "C" from 450' - 350'
- 3) 10 sx "C" from 3'-13'
- 4) Surface casing would be cutoff and marker set at well spot.
- 5) Well location would be cleaned up and re-contoured.
- 6) Reserve pit will be re-contoured with dry contents three feet below grade.

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

SIGNATURE [Signature] TITLE Regulatory Coordinator DATE 06/25/98
 TYPE OR PRINT NAME Scott M. Webb TELEPHONE NO. (303) 573-4721

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY TITLE _____ DATE JUL 15 1998
 CONDITIONS OF APPROVAL IF ANY SARY WINK
FIELD REP. II

OIL CONSERVATION DIVISION
 2040 Pacheco St.
 Santa Fe, NM 87505

DISTRICT I
 P.O. Box 1990, Hobbs, NM 88240

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

DISTRICT III
 600 Rio Brazos Rd., Abree, NM 87410

WELL API NO.
 30-025-34150

5. Indicate Type of Lease STATE FEE

6. State Oil & Gas Lease No.

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 "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
 Townsend State

8. Well No.
 4

9. Pool name or Wildcat
 Big Dog Strawn South

Type of Well:
 OIL WELL GAS WELL OTHER

Name of Operator
 Ocean Energy, Inc.

Address of Operator
 410 17th Street, Suite 1400, Denver, CO 80202

1. Well Location
 Unit Lease W : 330' Feet From The South Line and 1650' Feet From The East Line
 Section 2 Township 16S Range 35E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
 GR 3981'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: Plug back well <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

5-1/2" casing was cut off @ 10020'. Plug back well for evaluation to directionally drill. Plgs will be placed as per Chris Williams, OCD Hobbs, in the following manner:

- 1) 160 sx Thixotropic @ 10020' over CIBP. tubing @ 9700'.
- 2) 100' plug @ 8200'.
- 3) 100' plug @ 6300'.
- 4) 100' @ 4755'.

All plugs will be centered at the listed intervals.

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

SIGNATURE [Signature] TITLE Regulatory Coordinator DATE 5/27/98

TYPE OR PRINT NAME Scott M. Webb TELEPHONE NO. (303) 573-4721

(This space for State Use) ORIGINAL SIGNED BY GARY WINK DATE JUL 15 1998

APPROVED BY FIELD REP. II TITLE _____ DATE _____

CONDITIONS OF APPROVAL IF ANY:

7/17/98 | 8/6/98 | MS | MW | NSL

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

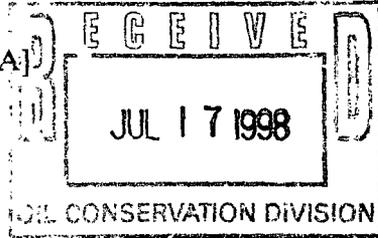
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling
- NSL NSP DD SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
- DHC CTB PLC PC OLS OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
- WFX PMX SWD IPI EOR PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

JAMES BRUCE
P.O. BOX 1056
SANTA FE, NM 87504

Note: Statement must be completed by an individual with supervisory capacity.

Print or Type Name

James Bruce
Signature

Attorney for Applicant
Title

7/17/98
Date

JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

SUITE B
612 OLD SANTA FE TRAIL
SANTA FE, NEW MEXICO 87501

(505) 982-2043
(505) 982-2151 (FAX)

July 17, 1997 *js*

Hand Delivered

Michael E. Stogner
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Pursuant to Division Rule 104.F.(2), Ocean Energy, Inc. ("Ocean") applies for administrative approval of an unorthodox oil well location for the following well:

Townsend St. Well No. 5
330 feet FSL & 1520 feet FWL
S½SE¼ §2, Township 16 South, Range 35 East, NMPM
Lea County, New Mexico

The well will be drilled to a depth sufficient to test the Strawn formation (Undesignated South Big Dog-Strawn Pool). Well spacing is 80 acres. A Form C-102 for the well is attached as Exhibit A.

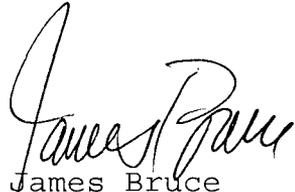
The proposed location is based upon geological and geophysical reasons. Attached as Exhibit B is a net isopach map of the Strawn formation. The isopach was generated using a 3% density porosity cutoff from available well control, and incorporating Ocean's current interpretation of a 3D seismic survey. The Strawn formation in this part of Lea County produces oil and gas from algal carbonate buildups. The isopach shows that the proposed location is in the thickest part of the buildup. The mound is small, and will require only one well to effectively drain it. The proposed location is at the optimum spot to test this mound, will reduce the risk involved in drilling the well, and provide the greatest chance for economical oil and gas production.

Submitted as Exhibit C is a land plat of Section 2, with the well unit and location of the proposed well marked thereon. Ocean is the operator of, and only working interest owner in, the proposed well unit, which is comprised entirely of State land. There are no

overriding royalty interests in the well unit. Because the well is only moving toward an interior boundary of the well unit, notice is not required to be given to any offset lessee or any other interest owner. As a result, Ocean requests that the 20 day waiting period be waived.

This application is submitted in duplicate. Please call me if you need anything further on this matter.

Very truly yours,

A handwritten signature in cursive script, appearing to read "James Bruce".

James Bruce

Attorney for Ocean Energy, Inc.

cc: L. Smith

DISTRICT I
P.O. Box 1900, Hobbs, NM 88241-1900

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

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

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

AMENDED REPORT

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		South Big Dog Strawn
Property Code	Property Name	Well Number
	TOWNSEND STATE	5
OGRID No.	Operator Name	Elevation
169355	OCEAN ENERGY, INC.	3981

Surface Location

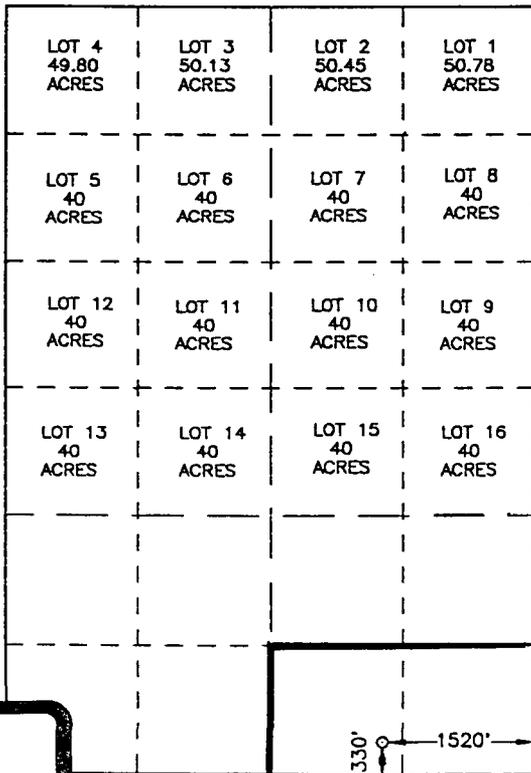
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
W EX	2	16 S	35 E		330	SOUTH	1520	EAST	LEA

Bottom Hole Location If Different From Surface

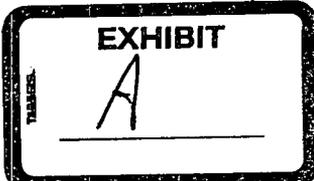
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80	I		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SCALE: 1" = 2000'



OPERATOR CERTIFICATION

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

Scott M. Webb

Signature

Scott M. Webb

Printed Name

Regulatory Coordinator

Title

6/9/98

Date

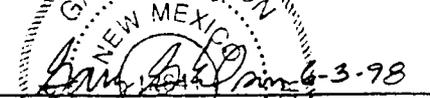
SURVEYOR CERTIFICATION

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 belief.

JUNE 1, 1998

Date Surveyed JLP

Signature & Seal
Professional Surveyor

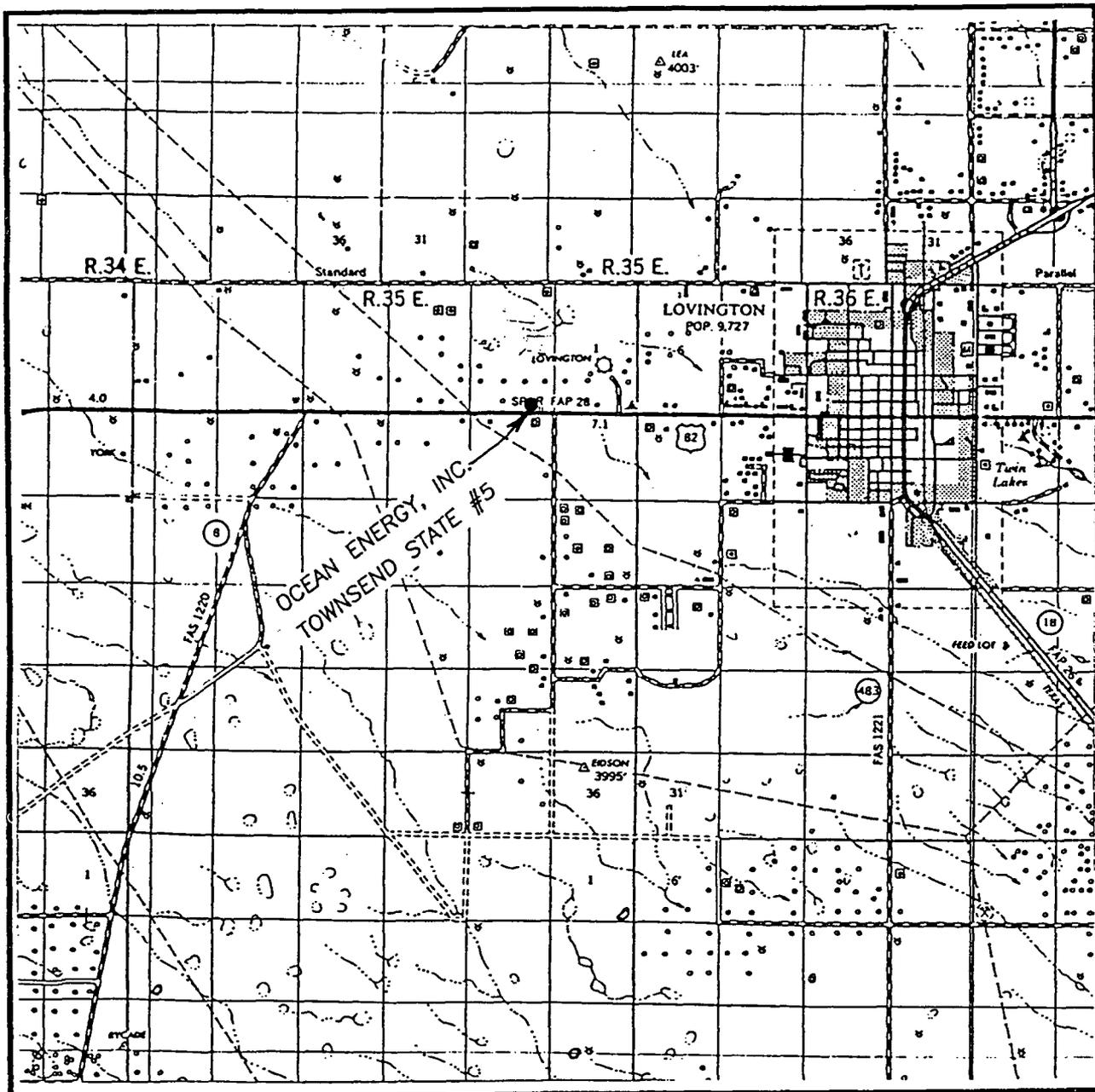


W.O. Num. 98-150851

Certificate No. JOHN W. WEST, 676

RONALD E. EDSON, 3239

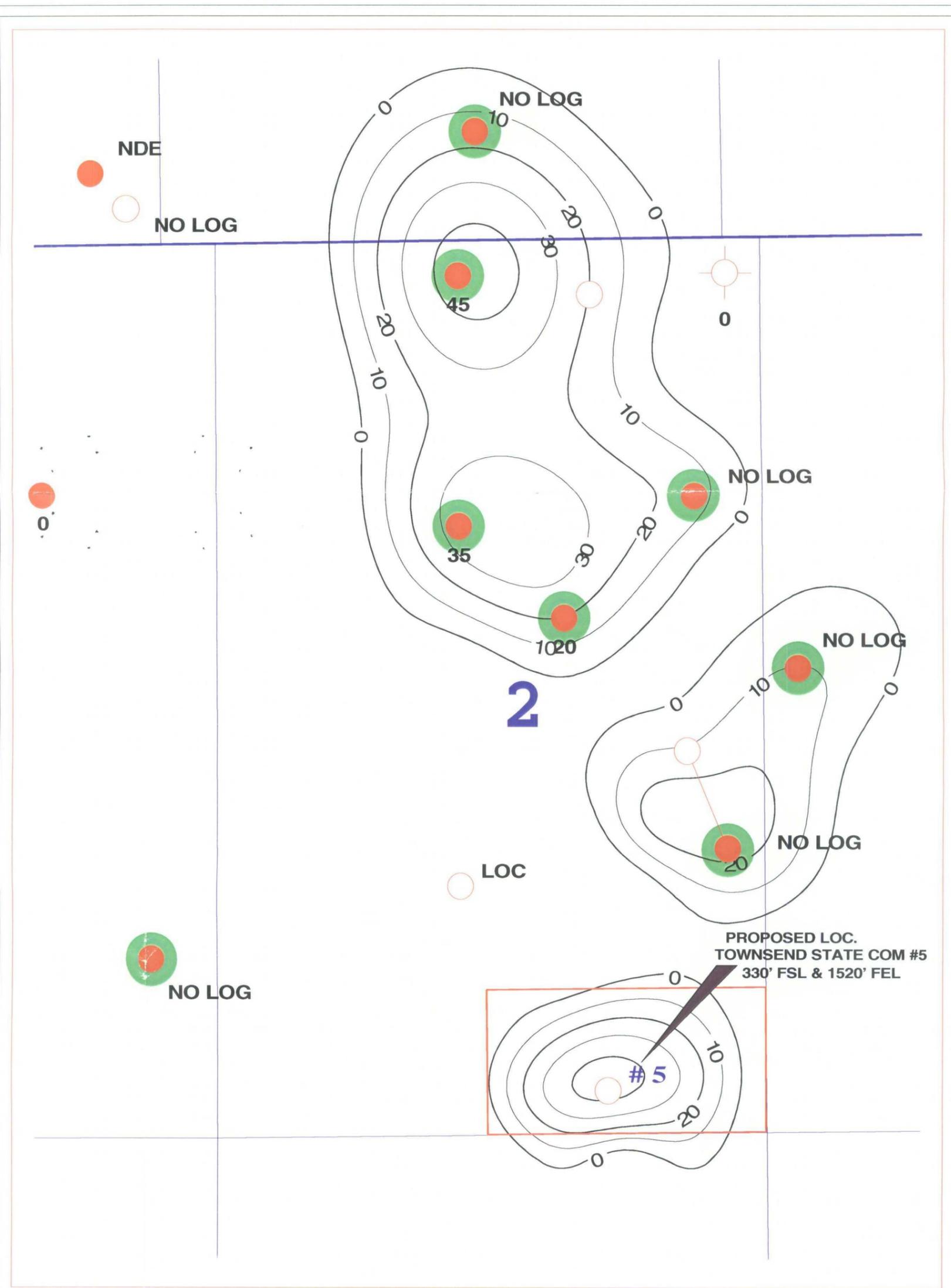
VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 2 TWP. 16-S RGE. 35-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 330' FSL & 1520' FEL
 ELEVATION 3981'
 OPERATOR OCEAN ENERGY, INC.
 LEASE TOWNSEND STATE

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117



 **STRAWN PRODUCER**

MAP SHOWS WELLS DEEPER THAN 11,000'

OCEAN ENERGY RESOURCES, INC.		
TOWNSEND STATE COM #5 T-16-S, R-35-E, LEA COUNTY, NM NET ISOPACH OF STRAWN		
John R. McRae	3% DENSITY POROSITY	7/13/98
twnsnd4.gpf	Scale 1:12000	

EXHIBIT
13



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

July 20, 1998

Ocean Energy, Inc.
c/o James Bruce
P. O. Box 1056
Santa Fe, New Mexico 87504

Re: *Administrative application on behalf of Ocean Energy, Inc. to drill its Townsend State Well No. 5 at an unorthodox oil well location in the Undesignated Big Dog-Strawn Pool 330 feet from the South line and 1520 feet from the East line (Unit W) of irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico. The S/2 SE/4 of said Section 2 to be dedicated to said well in order to form a standard 80-acre oil spacing and proration unit for this pool.*

Dear Mr. Bruce:

Additional information and further explanation are needed in order to complete my evaluation of this application. Division Administrative Order NSL-3870, dated September 17, 1997, authorized UMC Petroleum Corporation ("UMC") to drill its Townsend State Well No. 4 (API No. 30-025-34150) at an unorthodox oil well location 400 feet from the South line and 1500 feet from the East line (Unit W) of said Section 2 in order to test the Undesignated Big Dog-Strawn Pool within a standard 80-acre oil spacing and proration unit comprising the S/2 SE/4 of said Section 2. The application submitted at that time was based on geological and geophysical reasons. In October, 1997 (see NMOCD Form C-103) UMC requested an alternate location within this 80-acre unit that was standard (330' FSL & 1650' FEL) because of an "undesirable topographic condition" at the original location. Our records indicate that this well was drilled to a total depth of 11,340 feet and encountered "downhole problems."

What is the nature of this previously mentioned "undesirable topographic condition," what is its extent, and since it is only 73 feet away from the proposed location of the proposed Townsend State Well No. 5, will it present any problem? I recommend that a detailed topographic land plat be submitted to aid me in evaluating Ocean Energy, Inc.'s written response. What was the nature of the "downhole problems" encountered in the Townsend State Well No. 4? What, if any, preconditions will be taken to assure that these same problems do not occur in the drilling of the No. 5 well? Will Ocean Energy, Inc. be plugging the Townsend State Well No. 4 prior to the drilling of this well? If not, then why not?

Should you have any questions concerning this matter, please contact me in Santa Fe at (505) 827-8185. Thank you for your cooperation.

Sincerely,

Michael E. Stogner
Chief Hearing Examiner/Engineer

cc: New Mexico Oil Conservation Division (Attention: Chris Williams) - Hobbs

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

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

APPLICATION OF AMERIND OIL COMPANY
FOR COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.

Case No. 11716

APPLICATION OF AMERIND OIL COMPANY
FOR COMPULSORY POOLING, LEA COUNTY,
NEW MEXICO.

Case No. 11717

APPLICATION OF YATES PETROLEUM
CORPORATION FOR COMPULSORY POOLING
AND A NON-STANDARD OIL PRORATION UNIT,
LEA COUNTY, NEW MEXICO.

Case No. 11739

APPLICATION OF AMERIND OIL COMPANY,
LTD. AND MICHAEL SHEARN FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO.

Case No. 11740

APPLICATION OF UMC PETROLEUM
CORPORATION FOR A NON-STANDARD OIL
PRORATION UNIT, LEA COUNTY, NEW MEXICO.

Case No. 11741

APPLICATION OF AMERIND OIL COMPANY,
LTD. FOR COMPULSORY POOLING, LEA COUNTY
NEW MEXICO.

Case No. 11753

Order No. R-10803

ORDER OF THE DIVISION

BY THE DIVISION:

The subject cases came on for hearing at 8:15 a.m. on February 6, March 6, and/or April 3, 1997, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 22nd day of May, 1997, 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 these causes and the subject matter thereof.

(2) Each of the six following cases involves acreage in irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico and is within the governing limits of the South Big Dog-Strawn Pool; therefore, due to the similarity, close proximity, and nature of each, a single order issued by the Division is deemed appropriate:

(a) in Case No. 11716 the applicant, Amerind Oil Company, Ltd. ("Amerind"), seeks an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 8 and 9 of said Section 2, forming an 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 1 to be drilled and completed at a standard oil well location in Lot 9 (Unit I) of said Section 2;

(b) in Case No. 11717, Amerind, seeks an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 7 and 10 of said Section 2, forming an 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the designated and Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 2 to be drilled and completed at a standard oil well location in Lot 10 (Unit J) of said Section 2;

(c) in Case No. 11739 the applicant, Yates Petroleum Corporation ("Yates"), seeks an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 8 and 9 of said Section 2, to form a non-standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed Field "APK" State Com Well No. 2 to be drilled and completed at a standard oil well location 2390 feet from

the North line and 640 feet from the East line (Unit H/Lot 8) of said Section 2;

(d) in Case No. 11740, Amerind Oil Company, Ltd. and Michael Shearn seek an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 9 and 16 of said Section 2, forming a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to the UMC Petroleum Corporation Townsend State Well No. 1 (API No. 30-025-33713) being drilled at the time of the hearing at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2;

(e) in Case No. 11741 the applicant, UMC Petroleum Corporation ("UMC"), seeks approval of an 80-acre non-standard oil spacing and proration unit in the Undesignated South Big Dog-Strawn Pool comprising Lots 16 and the NE/4 SE/4 of said Section 2 for its Townsend State Well No. 1 (API No. 30-025-33713) being drilled at the time of the hearing at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2; and,

(f) in Case No. 11753 Amerind seeks an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 8 and 9 of said Section 2, to form an 80-acre oil spacing and proration unit (that is non-standard) for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 1 to be drilled and completed at a standard oil well location in Lot 9 (Unit I) of said Section 2.

(3) By Division Order No. R-9722, issued in Case No. 10530 and dated September 23, 1992, as amended by Order Nos. R-9722-A and R-9722-B, the West Lovington-Strawn Pool (originally designated the East Big Dog-Strawn Pool) was created and designated as an oil pool for the production of oil from the Strawn formation in Lea County, New Mexico. Said orders also promulgated special rules and regulations for said pool including provisions for standard 80-acre oil spacing and proration units subject to a depth bracket oil allowable of 445 barrels of oil per day and designated well location requirements. The extent of said West Lovington-Strawn Pool, prior to February 26, 1997, included the following described acreage in Lea County, New Mexico:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM

Section 28: SE/4
Section 32: SE/4
Section 33: NE/4 and S/2
Section 34: S/2

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 1: Lots 1 through 8
Section 2: Lots 1 through 8

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM

Section 6: Lots 1, 2, 7, and 8.

(4) By Division Order No. R-9722-C/R-10448-A, issued in Case No. 11599 and dated February 26, 1997, the West Lovington-Strawn Pool was contracted by the deletion of the following described area in Lea County, New Mexico:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM

Section 32: W/2 SE/4

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 2: Lots 2 through 7.

(5) Said Order No. R-9722-C/R-10448-A further provided for the concomitant creation of the South Big Dog-Strawn Pool for the production of oil from the Strawn formation underlying the above-described area and promulgated "*Special Pool Rules and Regulations for the South Big Dog-Strawn Pool*", which included provisions for: (I) 80-acre spacing and proration units each comprising of the N/2, S/2, E/2, or W/2 of a governmental Quarter section; (ii) designated well location requirements such that each well drilled within the pool is to be no closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1020 feet to the nearest well drilling to or capable of producing from the same pool; (iii) each standard 80-acre unit within said pool be subject to a depth bracket oil allowable of 445 barrels of oil per day.

(6) The subdivision of the public lands within the State of New Mexico is surveyed under the United States System of Rectangular Surveys or township and range grid system. The primary unit of subdivision for this system is the *township*, bounded by meridional (north/south) and latitudinal (east/west) lines and, as nearly as may be, comprises an area of 6 square miles with the south and east boundaries being the governing lines. The township is divided further into 36 secondary units or *sections*, each being approximately one square mile in area. These section boundaries are established by

meridional and latitudinal section lines at intervals of one mile, again, from the eastern and southern boundaries of the township. This method of establishing sections allows for errors in measurement and to accommodate deficiencies due to the convergence of meridians and is such that all sections of the township are as nearly as may be one mile square except for the eleven sections that lie next to the townships north and west boundaries (Sections 1, 2, 3, 4, 5, 6, 7, 18, 19, 30, and 31).

Thus the layout of a typical township consist of six rows of six sections and that presumably each section is one mile square with any excess or deficiency in the measured distance between the south and north boundaries of the township is placed in the most northern half mile and any deficiency due to the convergency of meridians and any excess or deficiency in the measured distance between the east and west boundaries of the township is placed in the most western half mile.

A regular section contains 640 acres and can be subdivided further into half sections containing 320 acres ($\frac{1}{2}$ by one mile), quarter sections containing 160 acres ($\frac{1}{2}$ mile square), half-quarter sections containing 80 acres ($\frac{1}{4}$ by $\frac{1}{2}$ mile), and quarter-quarter sections containing 40 acres ($\frac{1}{4}$ mile square). When a section does not contain the regular 640 acres, as in the west tier and north row in a township, the odd areas are assigned lot numbers.

Section 2 of Township 16 South, Range 35 East, NMPM, Lea County, New Mexico comprises a total area of 901.16 acres and represents an extreme example whereby a difference in excess of $\frac{1}{2}$ mile exists within a northern row of sections. Said Section 2 consists of: Lot 1 with 50.78 acres; Lot 2 with 50.45 acres; Lot 3 with 50.13 acres; Lot 4 with 49.80 acres; Lots 5 through 16 each with 40 acres; and, the S/2, considered to be a regular subdivision or aliquot part of this section and can be further divided into two quarter sections (SW/4 and SE/4) or eight quarter-quarter sections (NE/4 SW/4, SE/4 SE/4, NW/4 SE/4, etc.).

In forming spacing and proration units within the State of New Mexico it is the New Mexico Oil Conservation Division's policy to follow the established system of survey rules in dividing sections, especially for those that are irregular, into its various standard aliquot parts or regular subdivisions and not simply subdividing such sections on paper which can and will surely result in a chaotic and disorderly pattern for the spacing and proration units.

In this instance where development and standard spacing is on 80-acres with each unit comprising the N/2, S/2, E/2, or W/2 of a governmental quarter section said Section 2 comprises a standard 320-acre S/2 aliquot part, which can be further divided into two quarter sections, being the SW/4 and SE/4, whereby each quarter section can be divided

into two half-quarters (either stand-up, E/2 and W/2, or lay down, N/2 and S/2). North of the S/2 of said Section 2 the next two rows of lots or quarter-quarter section equivalents, being Lots 9 through 16, are considered by the New Mexico Oil Conservation Division as a separate and independent ½ section subdivision whereby Lots 9, 10, 15, and 16 and Lots 11, 12, 13, and 14 are grouped together in order to form two quarter section equivalents. The northern most two rows of Lots, being 1 through 8, is also considered a ½ section and is to be treated in the same manner.

(7) The two cases on the February 6, 1997 examiner's hearing docket, being Case Nos. 11716 and 11717, involved two areas, comprising 80 acres apiece, within said Section 2 that does not conform to the aforementioned subdivision rules; therefore, both proposed 80-acre proration units are considered to be non-standard. Prior to the February 6th hearing date Yates, a working interest owner in Lots 8, 10, and 11 of said Section 2 sought to dismiss Case 11717 for the reason that Amerind failed to request in its application the formation of a non-standard 80-acre unit pursuant to the governing pool rules applicable in this area and that Yates would combine Lots 10 and 15 in order to form a standard 80-acre spacing and proration unit for its Field "APK" State Com Well No. 1 (API No. 30-025-33563) located 3500 feet from the North line and 1880 feet from the East line (Lot 10/Unit J) of said Section 2. By letter from the New Mexico Oil Conservation Division dated February 5, 1997 Yates' motion for dismissal of said Case 11717 was granted.

(8) At the February 6th hearing Amerind requested dismissal of Case 11716.

(9) Both Amerind Cases 11716 and 11717 should therefore be dismissed.

(10) Prior to the March 6, 1997 hearing the applicants in Case 11740, Amerind Oil Company, Ltd. and Michael Shearn requested that their application for the compulsory pooling of Lots 9 and 16 of said Section 2 be dismissed.

(11) Case 11740 should therefore be dismissed.

(12) At the March 6, 1997 hearing UMC presented evidence and testimony in support of its application in Case 11741, which indicate:

(a) UMC commenced the drilling of its Townsend State Well No. 1 (API No. 30-025-33713), located at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2, on December 19, 1996, and by the time of the March 6th hearing the well had reached total depth at a costs to date of approximately \$600,000.00;

(b) prior to the commencement of this well, UMC submitted a Form C-101 (Application for Permit to Drill) to the Division's Hobbs District Office with Form C-102 (Well Location and Acreage Dedication Plat) attached thereto outlined a well unit comprised of Lots 16 and 17 of said Section 2; the Form C-101 was approved December 9, 1996; UMC filed the Forms C-101 and C-102 upon the belief that its proposed spacing and proration unit was standard in accordance with the applicable rules;

(c) referencing the Division's decision on the Yates motion to dismiss Case 11717, the proposed UMC spacing and proration unit is non-standard; standard spacing and proration units for the UMC well drilled in Unit "P" or Lot "16" would either comprise Lots 9 and 16 or Lots 15 and 16;

(d) Lot 15 is unavailable to form a standard 80-acre unit for the applicant's well because Lots 10 and 15 of said Section 2 are committed to a Joint Operating Agreement between Yates and UMC, signed in December 1996, under which Yates' Field "APK" State Well No. 1 is currently being drilled [see Finding No. (7) above];

(e) Lots 8 and 9 of said Section 2 are the subject of competing compulsory pooling applications filed by Yates (Case No. 11739) and Amerind (Case No. 11753);

(f) neither Yates nor Amerind, nor any other interested offset operator or lessee, oppose UMC's request; and,

(g) UMC is the lessee of Lots 14 through 16 and the SE/4 of said Section 2, which are subject to State of New Mexico oil and gas lease No. E07720; UMC is willing to form a 40-acre non-standard Strawn oil spacing and proration unit within the remaining 120 acre area comprising the W/2 SE/4 and SE/4 SE/4 of said Section 2 in the future in order to remedy the Strawn well development patterns with said State of New Mexico lease;

(h) because UMC assumed the sole risk of drilling the Townsend State Well No. 1, and the well was commenced in the good faith belief that the proposed well unit was standard, and because of the willingness of applicant to use its remaining leasehold acreage in Section 2 to remedy any disruption of standard spacing and proration units in Section 2, the applicant's request for a non-standard spacing and proration unit should be granted; further, the granting of the application in Case 11741 is in the best

interests of conservation, serves in the prevention of waste, and protects correlative rights.

(13) At the April 3, 1997 hearing both Division Case Nos. 11739 and 11753 were consolidated for the purpose of presenting testimony. Since both applications encompass the same acreage (Lots 8 and 9 of said Section 2 being a non-standard 80-acre oil spacing and proration unit) and subject matter and the approval of one application would necessarily require denial of the other, one order should therefore be entered for both cases:

(a) the applicant in Case 11739, Yates, who is seeking to be named the operator of the proposed 80-acre non-standard oil spacing and proration unit is proposing to drill its Field "APK" State Com Well No. 2 (API No. 30-025-33792) at a standard oil well location 2390 feet from the North line and 640 feet from the East line in Lot 8 (Unit H) of said Section 2;

(b) the applicant in Case 11753, Amerind is also seeking to be named the operator of the proposed 80-acre non-standard oil spacing and proration unit is proposing to drill its State "AY" Com Well No. 1 at a standard oil well location 3661 feet from the North line and 660 feet from the East line in Lot 9 (Unit I) of said Section 2;

(c) Yates owns and represents 100 percent of the working interests in the oil and gas minerals from the surface to the base of the Strawn formation underlying Lot 8 of said Section 2;

(d) Amerind has control of 100 percent working interest ownership in the oil and gas minerals from the surface to the base of the Strawn formation underlying Lot 9 of said Section 2;

(e) at the time of the hearing Yates offered to resolve this matter by offering to split the proposed 80-acre unit into two non-standard 40-acre oil spacing and proration units in order to allow both Amerind and Yates the opportunity to drill their respective wells and develop its acreage accordingly;

(f) Amerind opposed Yates' suggestion for resolution in that such proposal would only lead to the drilling of unnecessary wells and the possible overdevelopment of the relatively small reservoir, which could result in waste; and,

(g) the geological evidence and testimony presented by both parties supports Amerind's position in the possible overdevelopment of the subject reservoir with unnecessary wells; further, with the current drilling and completion activities for the Strawn formation in Lot 10 (directly offsetting Lot 9 to the west) and in Lot 16 (directly offsetting Lot 9 to the south), the development of the subject 80-acre tract with a well in Lot 9 would result in the grouping of three Strawn oil wells within a relatively small area; such concentration of wells would serve to promote overdevelopment of the reservoir; a well drilled in Lot 8 would serve to space these wells in a more orderly fashion with an adequate distance separating these wells; such spacing and placement of wells within this reservoir would serve to promote conservation, exhibits sound reservoir engineering principles, serves to avoid the drilling of unnecessary wells, prevents waste, and protects correlative rights;

(14) Therefore, the application of Yates in Case No. 11739 should be granted and the application of Amerind in Case No. 11753 should be denied.

(15) In order to afford to the owner of each interest within said 80-acre non-standard oil spacing and proration unit the opportunity to recover or receive without unnecessary expense his just and fair share of oil production in the Undesignated South Big Dog-Strawn Pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit.

(16) Yates should be designated the operator of the subject unit and the proposed Field "APK" State Com Well No. 2 (API No. 30-025-33792) to be drilled at a standard oil well location 2390 feet from the North line and 640 feet from the East line in Lot 8 (Unit H) of said Section 2.

(17) Any non-consenting working interest owner should be afforded the opportunity to pay his share of the estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production.

(18) Any non-consenting working interest owner who does not pay his share of estimated well costs should have withheld from production his share of the reasonable well costs plus an additional 200 percent thereof as a reasonable charge for the risk involved in the drilling of the well.

(19) Any non-consenting interest owner should be afforded the opportunity to object to the actual well costs but actual well costs should be adopted as the reasonable well costs in the absence of such objection.

(20) Following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated well costs should pay to the operator any amount that reasonable well costs exceed estimated well costs and should receive from the operator any amount that paid estimated well costs exceed reasonable well costs.

(21) \$5,400.00 per month while drilling and \$540.00 per month while producing should be fixed as reasonable charges for supervision (combined fixed rates); the operator should be authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator should be authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(22) All proceeds from production from the subject well which are not disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

(23) Upon the failure of the operator of said pooled unit to commence drilling of the subject well to which said unit is dedicated on or before August 20, 1997, that portion of this order pooling Lots 8 and 9 of said Section 2 should become null and void and of no effect whatsoever.

(24) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, the forced pooling provisions of this order should thereafter be of no further effect.

(25) The operator of the well and unit should notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the force-pooling provisions of this order.

IT IS THEREFORE ORDERED THAT:

(1) Case No. 11716, being the application of Amerind Oil Company, Ltd. ("Amerind"), for an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 8 and 9 of Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, thereby forming a non-standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 1 to be

drilled and completed at a standard oil well location in Lot 9 (Unit I) of said Section 2, is hereby dismissed.

(2) Case No. 11717, being the application of Amerind, for an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 7 and 10 of said Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, thereby forming a non-standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the designated and Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 2 to be drilled and completed at a standard oil well location in Lot 10 (Unit J) of said Section 2, is hereby dismissed.

(3) UMC Petroleum Corporation ("UMC"), the applicant in Case No. 11741, is hereby authorized to establish an 80-acre non-standard oil spacing and proration unit in the Undesignated South Big Dog-Strawn Pool comprising Lots 16 and the NE/4 SE/4 of said Section 2 for its Townsend State Well No. 1 (API No. 30-025-33713), located at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2.

(4) Case No. 11740, being the application of Amerind Oil Company, Ltd. and Michael Shearn, for an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 9 and 16 of said Section 2, forming a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to the UMC Petroleum Corporation Townsend State Well No. 1 (API No. 30-025-33713) being drilled at the time of the hearing at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2, is hereby dismissed.

(5) The application of Amerind in Case No. 11753 for an order pooling all mineral interests from the surface to the base of the Strawn formation underlying Lots 8 and 9 of said Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, to form an 80-acre oil spacing and proration unit (that is non-standard) for any and all formations and/or pools developed on 80-acre spacing, which at the time of the hearing included only the Undesignated South Big Dog-Strawn Pool and dedicating said unit to its proposed State "AY" Com Well No. 1 to be drilled and completed at a standard oil well location in Lot 9 (Unit I) of said Section 2, is hereby denied.

IN CASE NO. 11739:

(6) All mineral interests, whatever they may be, from the surface to the base of the Strawn formation, underlying Lots 8 and 9 of said Section 2, are hereby pooled to form a non-standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing, which currently includes only the Undesignated South Big Dog-Strawn Pool. Said unit is to be dedicated to Yates Petroleum Corporation's ("Yates") proposed Field "APK" State Com Well No. 2 to be drilled and completed at a standard oil well location 2390 feet from the North line and 640 feet from the East line (Unit H/Lot 8) of said Section 2.

FURTHER, Yates is hereby designated the operator of the subject well and 80-acre non-standard oil spacing and proration unit

PROVIDED HOWEVER THAT, Yates shall commence the drilling of said Field "APK" State Com Well No. 2 on or before the twentieth day of August, 1997, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Strawn formation.

PROVIDED FURTHER THAT, in the event Yates does not commence drilling operations on the Field "APK" State Com Well No. 2 on or before the twentieth day of August, 1997, Decretory Paragraph No. (6) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

PROVIDED FURTHER THAT, should said well not be drilled to completion, or abandoned, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Decretory Paragraph No. (6) of this order should not be rescinded.

(7) After the effective date of this order and within 90 days prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(8) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(9) The operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; if no objection to the actual well costs is received by the Division and the Division has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, if there is an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(10) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(11) The operator is hereby authorized to withhold the following costs and charges from production:

(A) The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him; and

(B) As a charge for the risk involved in the drilling of the well, 200 percent of the pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(12) The operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(13) \$5,400.00 per month while drilling and \$540.00 per month while producing are hereby fixed as reasonable charges for supervision (combined fixed rates); the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate

share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(14) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(15) Any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(16) All proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

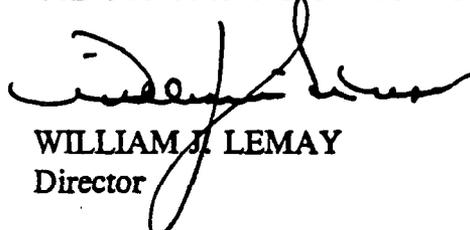
(17) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, the force pooling provisions of this order shall thereafter be of no further effect.

(18) The operator of the subject well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the force-pooling provisions of this order.

(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

Submit to Appropriate District Office
 State Leases - 6 copies
 Fee Leases - 5 copies
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-105
 Revised 1-1-89

WELL API NO. 30-025-34150
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. E-8266

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 _____	7. Lease Name or Unit Agreement Name Townsend State
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DESPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER _____	8. Well No. 4
2. Name of Operator UMC Petroleum Corporation	9. Pool name or Wildcat Big Dog Strawn South
3. Address of Operator 410 17th Street, Suite 1400, Denver, Colorado 80202	

4. Well Location
 Unit Letter W : 330 Feet From The South Line and 1650 Feet From The East Line
 Section 2 Township 16S Range 35E NMPM Lea County

10. Date Spudded 10/22/97	11. Date T.D. Reached 12/23/97	12. Date Compl. (Ready to Prod.) 1/20/98	13. Elevations (DF & RKB, RT, GR, etc.) GR 3981'	14. Elev. Casinghead
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15. Total Depth 11340'	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools All	Cable Tools
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19. Producing Interval(s), of this completion - Top, Bottom, Name Intended interval Strawn (well not completed in zone)	20. Was Directional Survey Made Yes
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21. Type Electric and Other Logs Run Logs will be run on possible well re-entry in future.	22. Was Well Cored NO
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23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	400'	17-1/2"	415 sx "C"	None
8-5/8"	32#	4755'	12-1/4"	2200 sx "C"	None
5-1/2"	17#	11308'	7-7/8"	200 sx "H"	10020'

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					NA	NA	NA

26. Perforation record (interval, size, and number) Zone not completed * Well not logged Tops are esimated.	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED
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28. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in) SHUT-IN					
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By
--	-------------------

30. List Attachments
 Deviation report previously submitted. Well shut-in for future re-entry.

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Scott M. Webb Printed Name Scott M. Webb Title Regulatory Coordinator Date 2/4/98

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

T. Anhy _____	T. Canyon _____ 11076' *
T. Salt _____	T. Strawn _____ 11447' *
B. Salt _____	T. Atoka _____
T. Yates _____ 2830' *	T. Miss _____
T. 7 Rivers _____	T. Devonian _____
T. Queen _____ 3670' *	T. Silurian _____
T. Grayburg _____	T. Montoya _____
T. San Andres _____ 4400' *	T. Simpson _____
T. Glorieta _____ 6070' *	T. McKee _____
T. Paddock _____	T. Ellenburger _____
T. Blinberry _____	T. Gr. Wash _____
T. Tubb _____ 7242' *	T. Delaware Sand _____
T. Drinkard _____	T. Bone Springs _____
T. Abo _____ 8750' *	T. _____
T. Wolfcamp _____ 9800' *	T. _____
T. Penn _____	T. _____
T. Cisco (Bough C) _____	T. _____

Northwestern New Mexico

T. Ojo Alamo _____	T. Penn. "B" _____
T. Kirtland-Fruitland _____	T. Penn. "C" _____
T. Pictured Cliffs _____	T. Penn. "D" _____
T. Cliff House _____	T. Leadville _____
T. Menefee _____	T. Madison _____
T. Point Lookout _____	T. Elbert _____
T. Mancos _____	T. McCracken _____
T. Gallup _____	T. Ignacio Otzte _____
Base Greenhorn _____	T. Granite _____
T. Dakota _____	T. _____
T. Morrison _____	T. _____
T. Todilto _____	T. _____
T. Entrada _____	T. _____
T. Wingate _____	T. _____
T. Chinle _____	T. _____
T. Permian _____	T. _____
T. Perm "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from 11481' to 11800' No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____ feet
 No. 2, from _____ to _____ feet
 No. 3, from _____ to _____ feet

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology

Received
 11-1955
 000

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

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

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

WELL API NO.

30-025-34150

5. Indicate Type of Lease

STATE

FEE

6. State Oil & Gas Lease No.

E-8266

7. Lease Name or Unit Agreement Name

Townsend State

8. Well No.

4

9. Pool name or Wildcat

Big Dog Strawn South

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 "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

OIL WELL

GAS WELL

OTHER

2. Name of Operator

UMC Petroleum Corporation

3. Address of Operator

410 17th Street, Suite 1400, Denver, CO 80202

4. Well Location

Unit Letter W : 330' Feet From The South Line and 1650' Feet From The East Line

Section 2 Township 16S Range 35E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

GR 3981'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK

PLUG AND ABANDON

TEMPORARILY ABANDON

CHANGE PLANS

PULL OR ALTER CASING

OTHER: _____

SUBSEQUENT REPORT OF:

REMEDIAL WORK

ALTERING CASING

COMMENCE DRILLING OPNS.

PLUG AND ABANDONMENT

CASING TEST AND CEMENT JOB

OTHER: Shut-In

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

TD: 11,340' Spud Date: 10/22/97 Drill Completion Date: 1/20/98

Casing in well:

Surface: 10/24/97 13-3/8" @ 400'. 48# cemented to surface with 415 sx class "C".
17-1/2" hole, 5 centralizers every other joint. WOC 18 hours.

Intermediate: 11/4/97 8-5/8" @ 4755', 32# cemented to surface with 2200 sx class "C".
12-1/4" hole, 10 centralizers, 5' above shoe, then everyother joint from
2-18. WOC 6 hours.

Production: 12/15/97 5-1/2" @ 11308'. 17# cemented with 200 sx class "H".
7-7/8" hole. Casing cut-off @ 10020'. 1288' left cemented in hole, 10020'
pulled.

No oil or gas was produced from this well. Requesting to ~~TA~~ Shut-In well for evaluation to sidetrack well in Strawn Zone. Encountered problems downhole with original bore. Will re-apply to plug back and directionally drill into Strawn. Per SW

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

SIGNATURE

TITLE Regulatory Coordinator

DATE 1/23/98

TYPE OR PRINT NAME

TELEPHONE NO.

(This space for State Use)

APPROVED BY

Chris Williams

TITLE

DISTRICT 1 SUPERVISOR

DATE

FEB 05 1998

CONDITIONS OF APPROVAL, IF ANY:

Townsend State #4 Unit W
 LOCATION LEASE & WELL Sec. 2, 16S, 35E Lea County, New Mexico 330/S & 1650/E
 (Give Unit, Section, Township and Range) 30-025-34150
 OPERATOR UMC 410 17th Street, Suite 1400, Denver, Colorado 80202

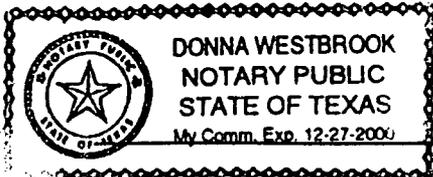
DRILLING CONTRACTOR NABORS DRILLING USA, INC.

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:

DEGREES @ DEPTH	DEGREES @ DEPTH	DEGREES @ DEPTH	DEGREES @ DEPTH
1 150	1 4030	3/4 10180	
1 400	1 4187	1/2 10312	
3/4 890	1 4721		
3/4 1391	1 5210		
1 1768	1 5709		
1 1/2 2237	1 6187		
1/2 2363	3/4 6658		
1 3/4 2836	1/4 7153		
1 3/4 2950	1 7573		
1 3/4 2962	1/4 8012		
1 1/4 3245	1/2 8455		
2 3527	1 8740		
1 3653	1/4 8991		
2 1/4 3810	1/4 9271		
1 1/4 3935	1/2 9431		

Drilling Contractor Nabors Drilling USA, Inc.
 By Brent Sanders
 Brent Sanders, Engineering Manager

Subscribed and sworn to before me this 30th day of December, 1997



Donna Westbrook
 Notary Public

My Commission Expires _____ County MIDLAND County TEXAS

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION 2040 Pacheco St. Santa Fe, NM 87505

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

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

WELL API NO. 30-025-34150
5. Indicate Type of Lease STATE [X] FEE []
6. State Oil & Gas Lease No. E-8266

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 'APPLICATION FOR PERMIT' (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL [X] GAS WELL [] OTHER []

7. Lease Name or Unit Agreement Name TOWNSEND STATE

2. Name of Operator UMC PETROLEUM CORPORATION

8. Well No. 4

3. Address of Operator 410 17th STREET, SUITE 1400 DENVER COLORADO 80202

9. Pool name or Wildcat BIG DOG STRAWN - SOUTH

4. Well Location Unit Letter W : 330' Feet From The South Line and 1650' Feet From The East Line Section 2 Township 16 South Range 35 East NMPM LEA CO. County

10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3981' GR.

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK [] PLUG AND ABANDON [] REMEDIAL WORK [] ALTERING CASING []
TEMPORARILY ABANDON [] CHANGE PLANS [] COMMENCE DRILLING OPNS. [] PLUG AND ABANDONMENT []
PULL OR ALTER CASING [] CASING TEST AND CEMENT JOB []
OTHER: MOVE LOCATION [] OTHER: []

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. UMC Petroleum Corporation requests the approval to move the location of Townsend State well # 4 from 400' FSL & 1500' FEL Section # 2 T16S-R35E Lea Co, to 330' FSL & 1650' FEL Section 2 T16S-R35E Lea Co.

2. An undesirable topographic condition exists at the original location.

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

SIGNATURE Joe T. Janica TITLE Agent DATE 10/14/97
TYPE OR PRINT NAME Joe T. Janica TELEPHONE NO. 10/14/97

(This space for State Use)

APPROVED BY [Signature] TITLE Geologist DATE OCT 14 1997

CONDITIONS OF APPROVAL, IF ANY:

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

AMENDED REPORT

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

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
		96690	BIG DOG STRAWN SOUTH
Property Code	Property Name		Well Number
20032	TOWNSEND STATE		4
OGRID No.	Operator Name		Elevation
23645	UMC PETROLEUM CORPORATION		3981

Surface Location

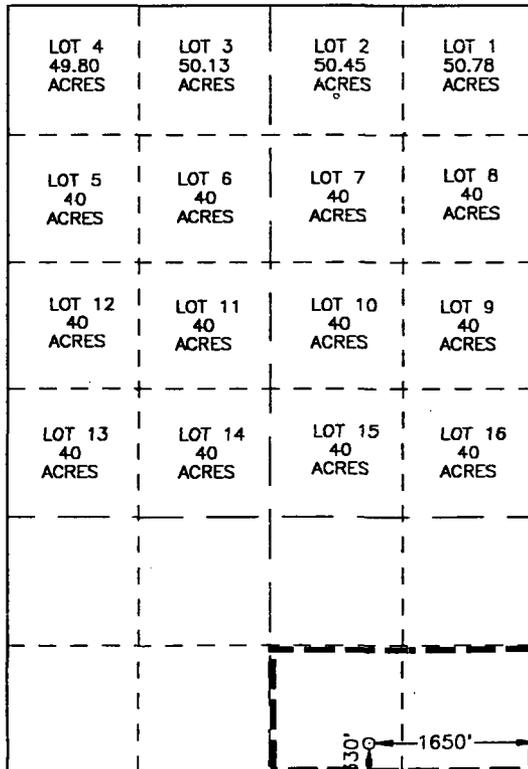
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 23	2	16 S	35 E		330	SOUTH	1650	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SCALE: 1"=2000'

OPERATOR CERTIFICATION

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

Joe T. Janica
Signature

Joe T. Janica
Printed Name

Agent

Title

10/14/97
Date

Date

SURVEYOR CERTIFICATION

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 belief.

OCTOBER 8, 1997

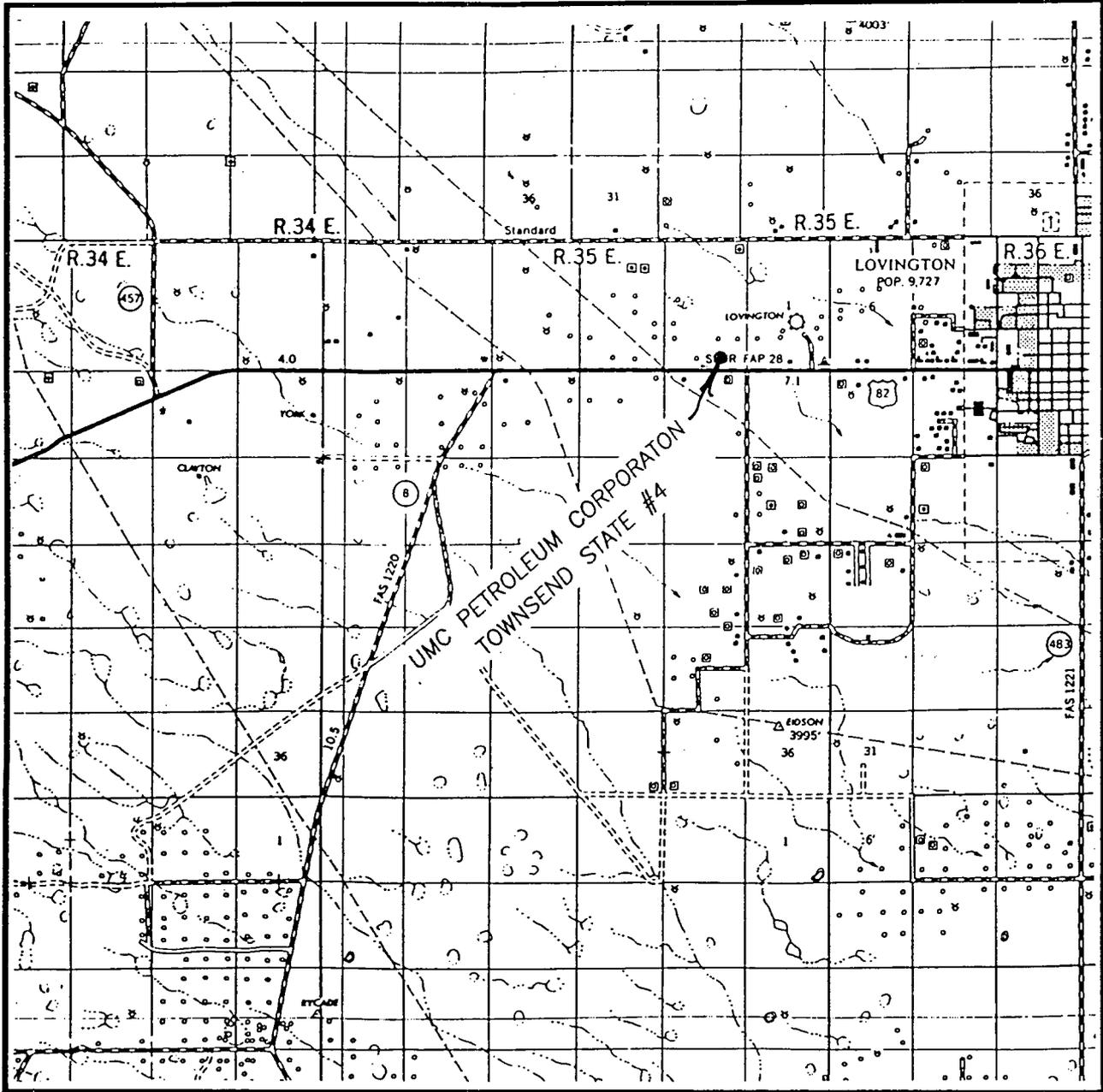
Date Surveyed J. EIDSON JLP

Signature of Seal of Professional Surveyor

Joseph J. Eidsen
Professional Surveyor
3239
P.O. Num. 97-1146645

Certified No. JOHN S. WEST, 676
EIDSON, 3239

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 2 TWP. 16-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 1650' FEL

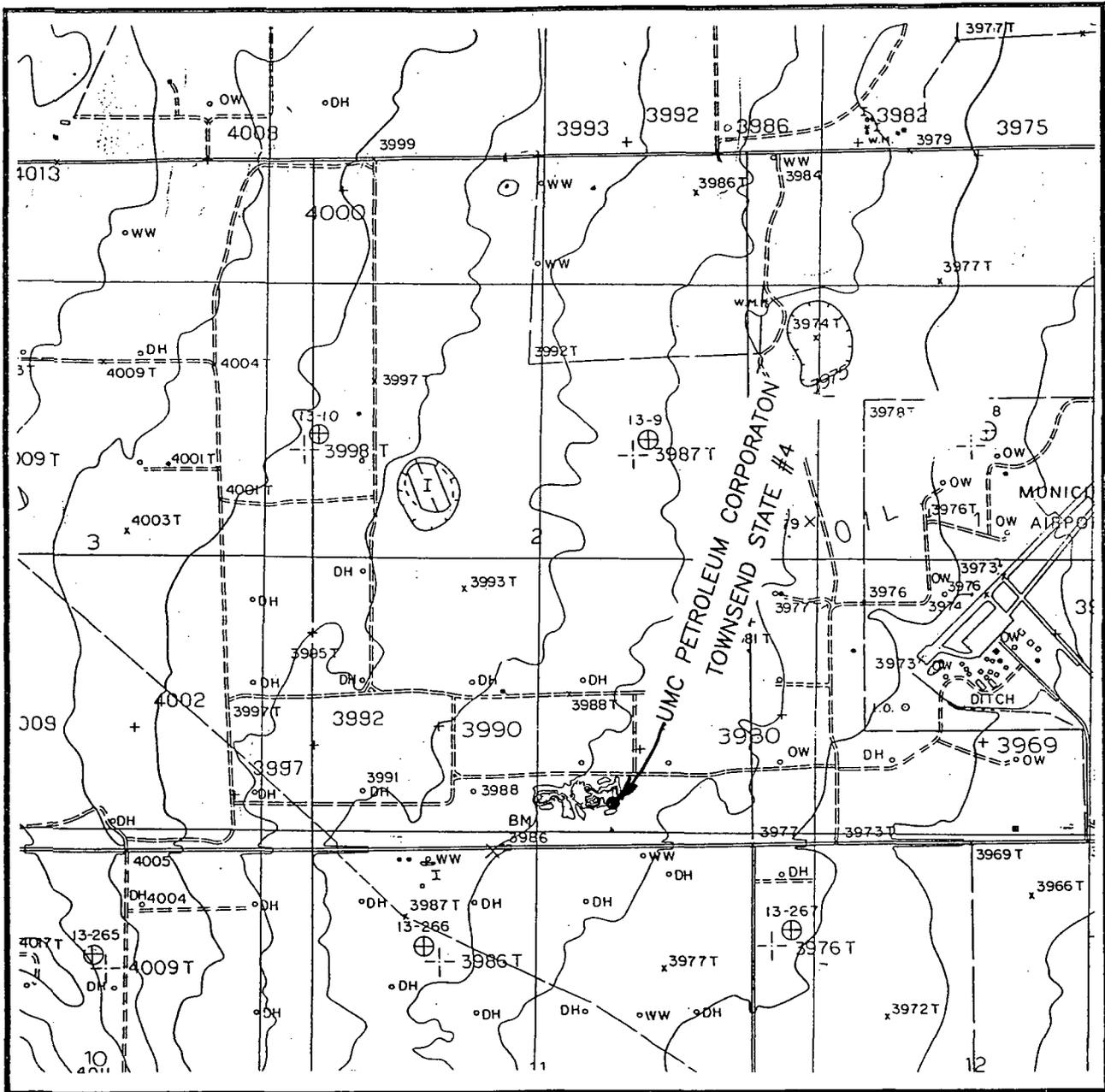
ELEVATION 3981'

OPERATOR UMC PETROLEUM CORPORATION

LEASE TOWNSEND STATE

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 5'

SEC. 2 TWP. 16-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 1650' FEL

ELEVATION 3981'

OPERATOR UMC PETROLEUM CORPORATON

LEASE TOWNSEND STATE

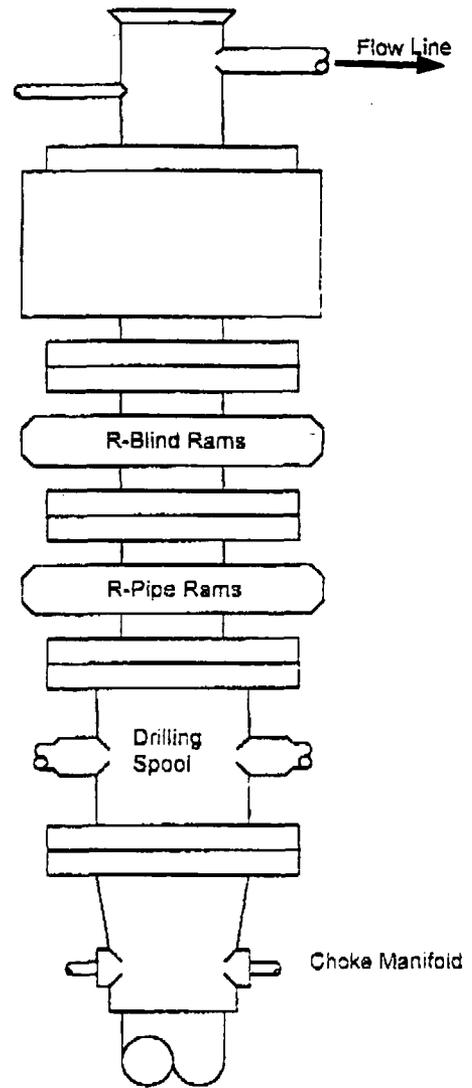
U.S.G.S. TOPOGRAPHIC MAP

LOVINGTON NW, N.M.

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

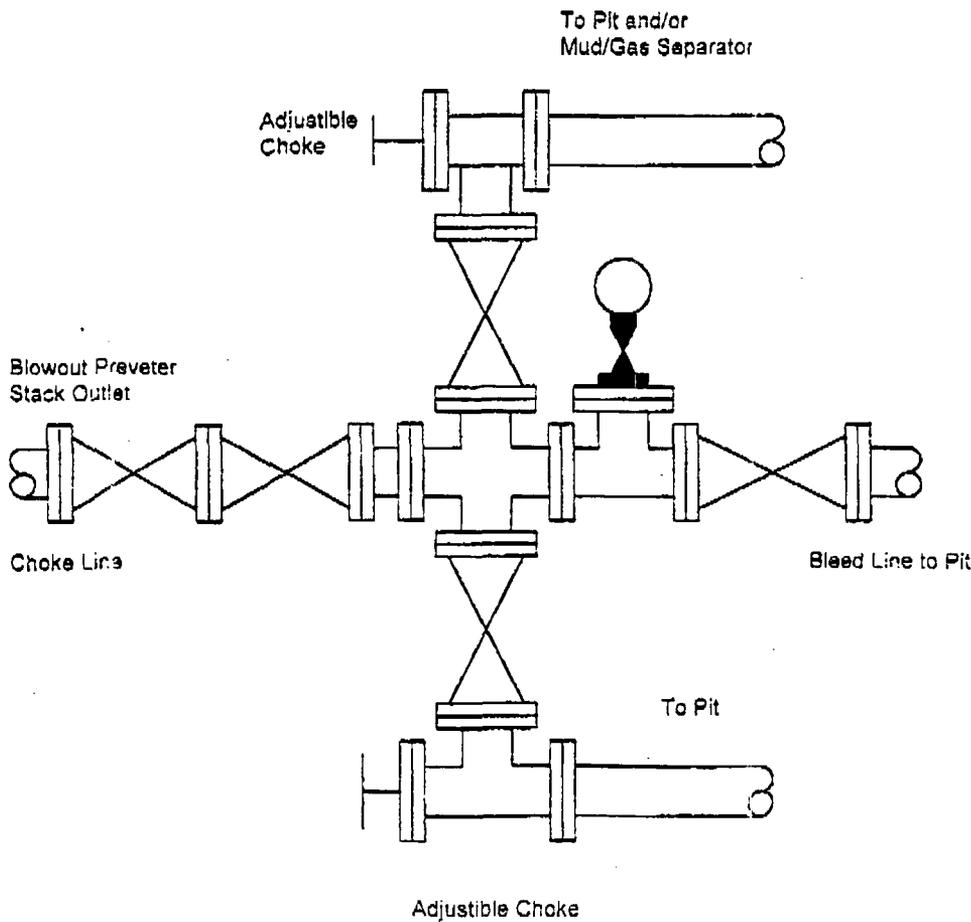
BLOWOUT PREVENTER SYSTEM

Fill Line



Type 900 Series
3000 psi WP

Choke Manifold Assembly for 3M WP System



District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesa, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-101
 Revised February 10, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. UMC Petroleum Corporation 410 17th Street, Suite 1400 Denver, Colorado 80202		' OGRID Number 23654
		' API Number 30-025-34150
' Property Code 20032	' Property Name Townsend State	' Well No. 4

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
W (23)	2	16S	35E		400	South	1500	East	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
' Proposed Pool 1 Strawn (Big Dog South) #96690					' Proposed Pool 2 Wolfcamp				

' Work Type Code N	' Well Type Code O	' Cable/Rotary R	' Lease Type Code State	' Ground Level Elevation 3982'
' Multiple NO	' Proposed Depth 11,900'	' Formation Strawn	' Contractor	' Spud Date Upon Approval

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400'	400	Surf.
12-1/4"	8-5/8"	32#	4800'	1950	Surf.
7-7/8"	5-1/2"	17#	11,900'	850	7600'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

UMC Petroleum Corporation proposes to drill and complete the well into the Strawn Formation. If the zone is economically productive, it will be completed for production. If that zone is non-productive, the Wolfcamp zone up-hole will be tested. If the well is non-productive, it will be plugged and abandoned according to Commission instructions. The site will be re-seeded and re-claimed.

BOP Program: Blowout preventer, 12" 3000# type "E" double ram. 12" 3000# GK, 180 gallon five station electric, 4" 3000# manifold.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Scott M. Webb*

Printed name: Scott M. Webb

Title: Regulatory Coordinator

Date: 7/31/97

Phone: (303) 573-4721

OIL CONSERVATION DIVISION

Approved by: *Paul J. Kelly*

Title: Geologist

Approval Date: OCT - 8 1997 Expiration Date:

Conditions of Approval:
 Attached

Permit Expires 11/1/97 on Approval
 Date Unless Drilling Underway

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34150	Pool Code 96690	Pool Name Strawn (South Big Dog)
Property Code 20032	Property Name TOWNSEND STATE	Well Number 4
OGRID No. 23654	Operator Name UMC PETROLEUM CORPORATION	Elevation 3982

Surface Location

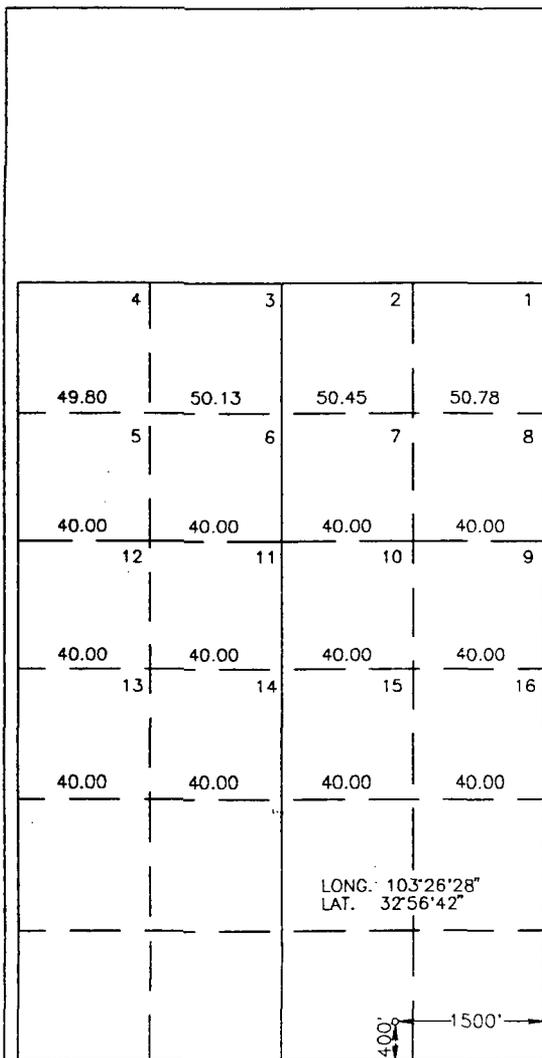
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
W	2	16 S	35 E	23	400	SOUTH	1500	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 80	Joint or Infill Infill	Consolidation Code	Order No. NSL-3870
-----------------------	---------------------------	--------------------	------------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

[Handwritten Signature]

Signature

Scott M. Webb

Printed Name

Regulatory Coordinator

Title

(303) 573-4721

Date

SURVEYOR CERTIFICATION

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 belief.

JULY 24, 1997

Date Surveyed DMCC

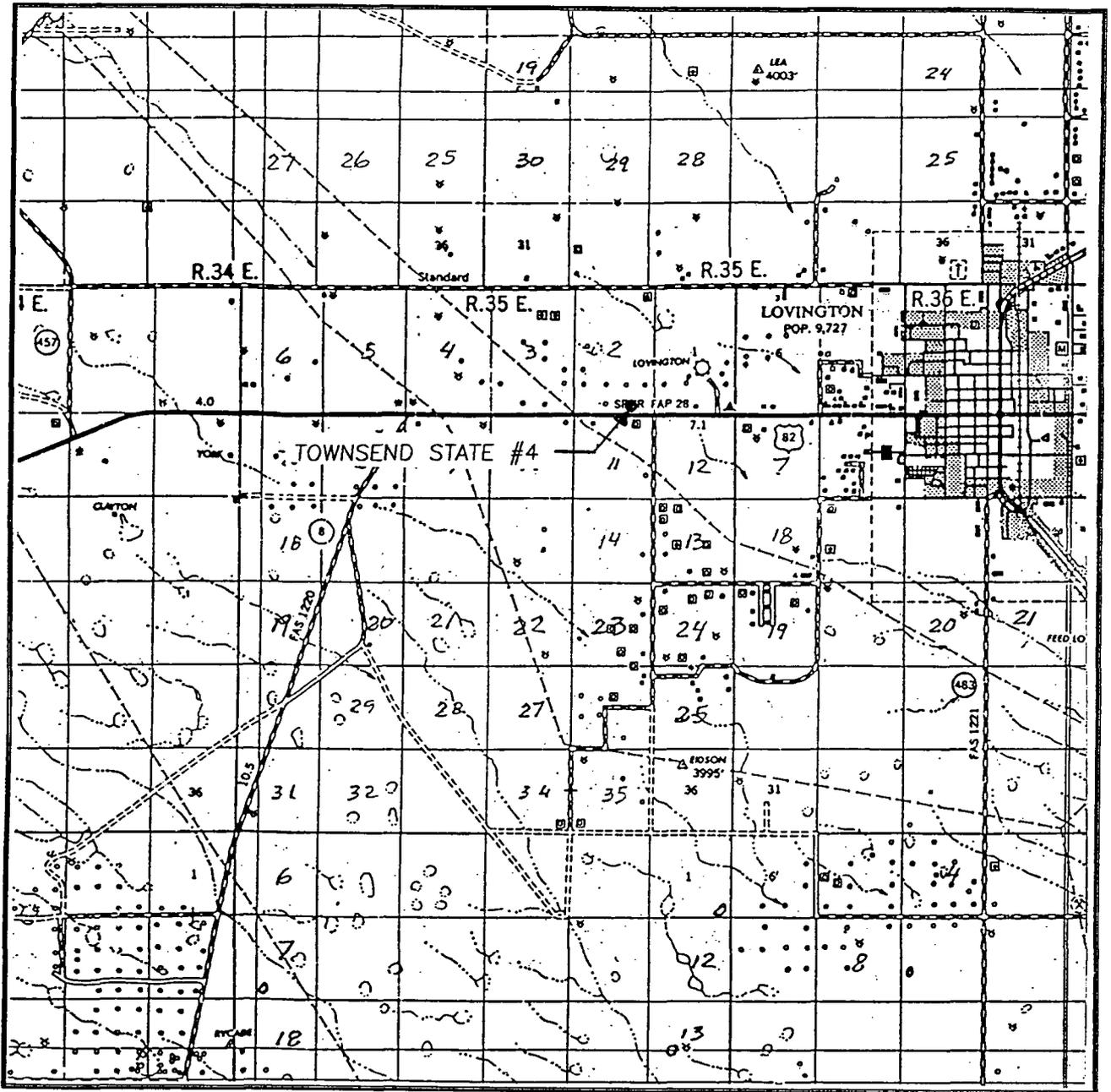
Signature *[Handwritten Signature]*
Professional Surveyor

7-28-97

87-11-1206

Certificate No. JOHN W. WEST 676
RONALD E. EIDSON 3239
EDISON 12641

VICINITY MAP

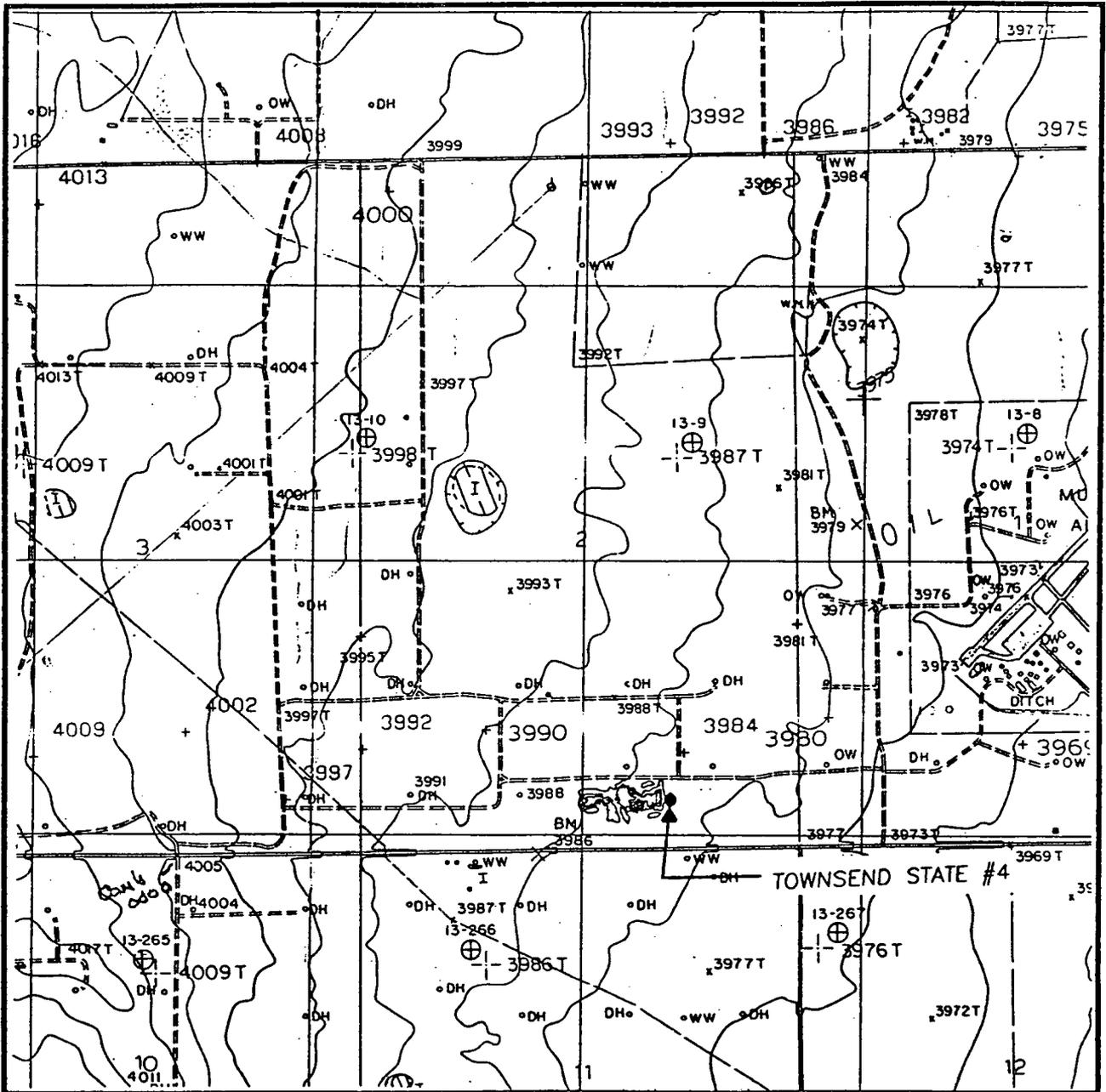


SCALE: 1" = 2 MILES

SEC. 2 TWP. 16-S RGE. 35-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 400' FSL & 1500' FEL
 ELEVATION 3982
 OPERATOR UMC PETROLEUM CORPORATION
 LEASE TOWNSEND STATE

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOVINGTON NW - 5'

SEC. 2 TWP. 16-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 400' FSL & 1500' FEL

ELEVATION 3982

OPERATOR UMC PETROLEUM CORPORATION

LEASE TOWNSEND STATE

U.S.G.S. TOPOGRAPHIC MAP

LOVINGTON NW, N.M.

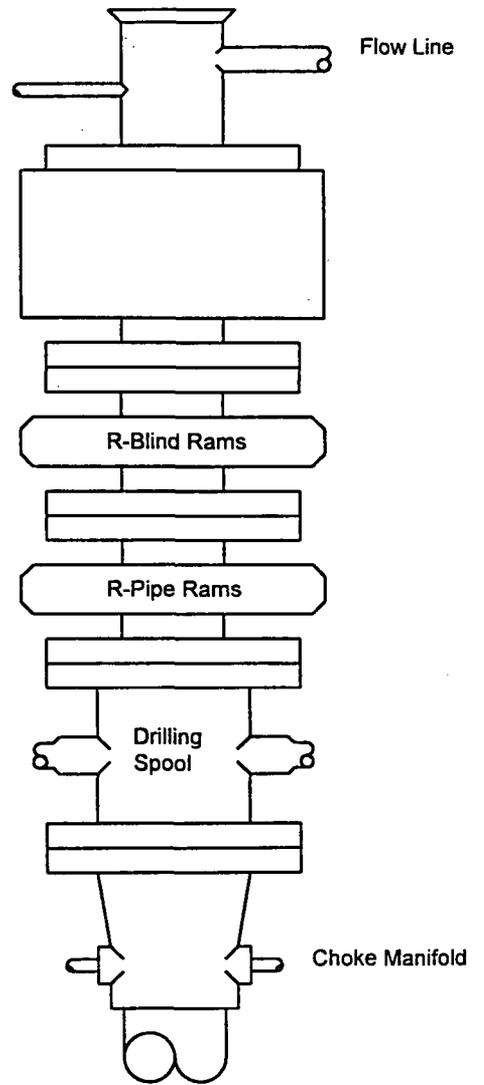
**JOHN WEST ENGINEERING
HOBBS, NEW MEXICO**

(505) 393-3117

BLOWOUT PREVENTER SYSTEM

Fill Line

Flow Line



Choke Manifold Assembly for 3M WP System

To Pit and/or
Mud/Gas Separator

Adjustable
Choke

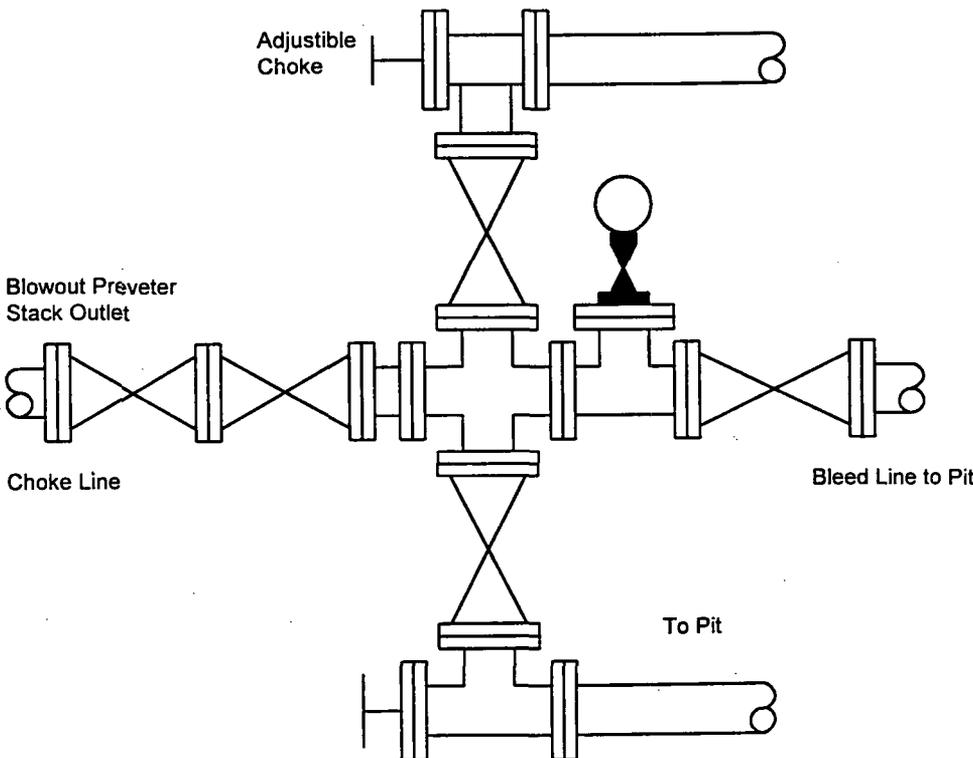
Blowout Preveter
Stack Outlet

Choke Line

Bleed Line to Pit

To Pit

Adjustable
Choke



Type 900 Series
3000 psi WP

WRS COMPLETION REPORT

COMPLETIONS SEC 2 TWP 16S RGE 35E
 30-T-0024 04/03/98 30-025-34150-0000 PAGE 1

NMEX LEA * 330FSL 1650FEL SEC
 STATE COUNTY FOOTAGE SPOT
 UMC PET D D
 OPERATOR WELL CLASS INIT FIN
 4 TOWNSEND STATE
 WELL NO. LEASE NAME
 3982GR BIG DOG S
 OPER ELEV FIELD/POOL/AREA
 API 30-025-34150-0000
 LEASE NO. PERMIT OR WELL I.D. NO.
 10/22/1997 01/20/1998 ROTARY VERT D&A
 SPUD DATE COMP. DATE TYPE TOOL HOLE TYPE STATUS
 11900 STRAWN NABORS DRLG USA 973
 PROJ. DEPTH PROJ. FORM CONTRACTOR
 DTD 11340 FM/TD STRAWN
 DRILLERS T.D. LOG T.D. PLUG BACK TD OLD T.D. FORM T.D.

LOCATION DESCRIPTION

IRREG SEC
 12 MI NE BUCKEYE, NM

WELL IDENTIFICATION/CHANGES

FTG CHGD FROM 400 FSL 1500 FEL OF SEC

CASING/LINER DATA

CSG 13 3/8 @ 400 W/ 415 SACKS
 CSG 8 5/8 @ 4755 W/ 2200 SACKS
 CSG 5 1/2 @ 11308 W/ 200 SACKS
 CUT OFF & PLD 10200 FT 5 1/2 CSG

TYPE	FORMATION	LTH	TOP DEPTH/SUB	BSE DEPTH/SUB
SPL	YATES		2830 1152	
SPL	QUEEN		3670 312	
SPL	SN ANDRS		4400 -418	
SPL	GLORIETA		6070 -2088	
SPL	TUBB		7242 -3260	
SPL	ABO		8750 -4768	
SPL	WOLFCAMP		9800 -5818	
SPL	CANYON		11076 -7094	

SUBSEA MEASUREMENTS FROM GR

DRILLING PROBLEMS

HAD PROBLEMS W/ORIGINAL WELLBORE, MAY SDTK LATER

CONTINUED IC# 300257056397



