

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]

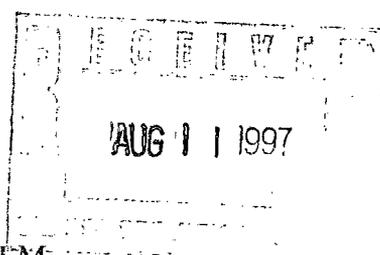
[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [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

Signature

Title

Date

James Bruce

Attorney for Applicant

8/11/97

JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

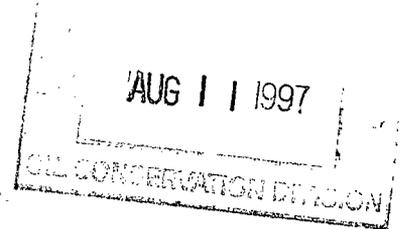
SUITE B
612 OLD SANTA FE TRAIL
SANTA FE, NEW MEXICO 87501

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

August 11, 1997

Hand Delivered

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



Dear Mr. Stogner:

Pursuant to Division Rule 104.F(2), UMC Petroleum Corporation ("UMC") hereby applies for administrative approval of an unorthodox oil well location for the following well:

Townsend St. Well No. 4
400 feet FSL & 1500 feet FWL
S $\frac{1}{2}$ SE $\frac{1}{4}$ of §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 UMC'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. This 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 and reduce the risk involved in drilling the well. The isopach shows that the proposed location provides the best chance to successfully encounter economical oil and gas production from this Strawn algal mound.

Submitted as Exhibit C is a land plat of Section 2, with the well unit and location of the proposed well marked thereon. UMC is the operator of, and only working interest owner in, the proposed well unit, which is comprised entirely of State land. 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, UMC 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 UMC
Petroleum Corporation

cc: L. Smith

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

OIL CONSERVATION DIVISION

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOWNSEND STATE	Well Number 4
OGRID No.	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		400	SOUTH	1500	EAST	LEA

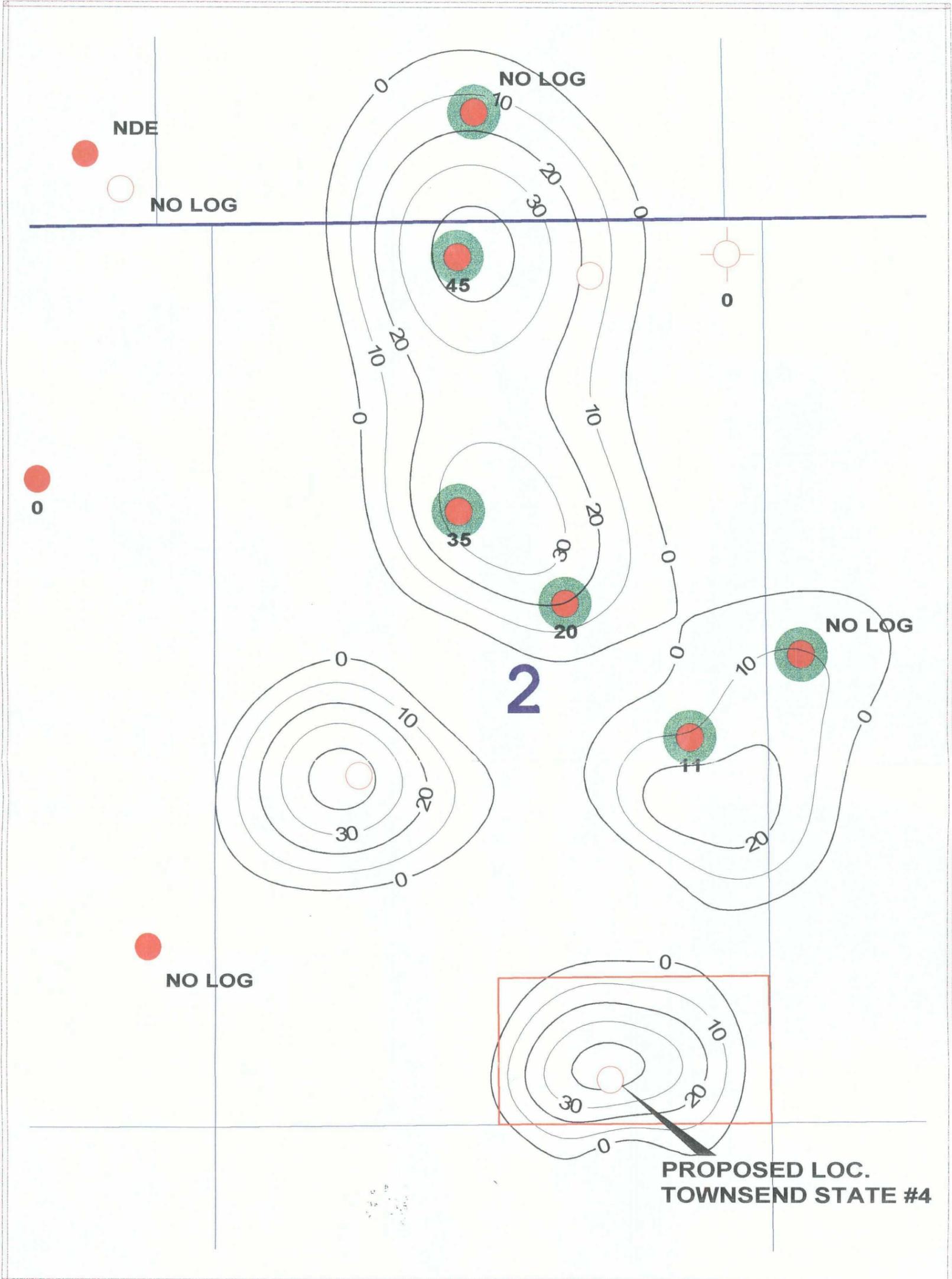
Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>Title _____</p> <p>Date _____</p>	
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p style="text-align: right;">JULY 24, 1997</p> <p>Date Surveyed _____ DMCC</p> <p>Signature & Seal of Professional Surveyor </p> <p style="text-align: right;">7-28-97 87-11-1206</p>	
	<p>EXHIBIT</p> <p style="font-size: 2em; font-weight: bold;">A</p>	
	<p>Certificate No. JOHN W. WEST 676 RONALD J. EIDSON 3239 GARY EIDSON 12641</p>	



 STRAWN PRODUCER
 NDE NOT DEEP ENOUGH

MAP ONLY SHOWS WELLS
 11,000' AND DEEPER



UMC Petroleum Corporation

TOWNSEND STATE #4
 T-16-S, R-35-E, LEA COUNTY, NM
 NET ISOPACH OF STRAWN

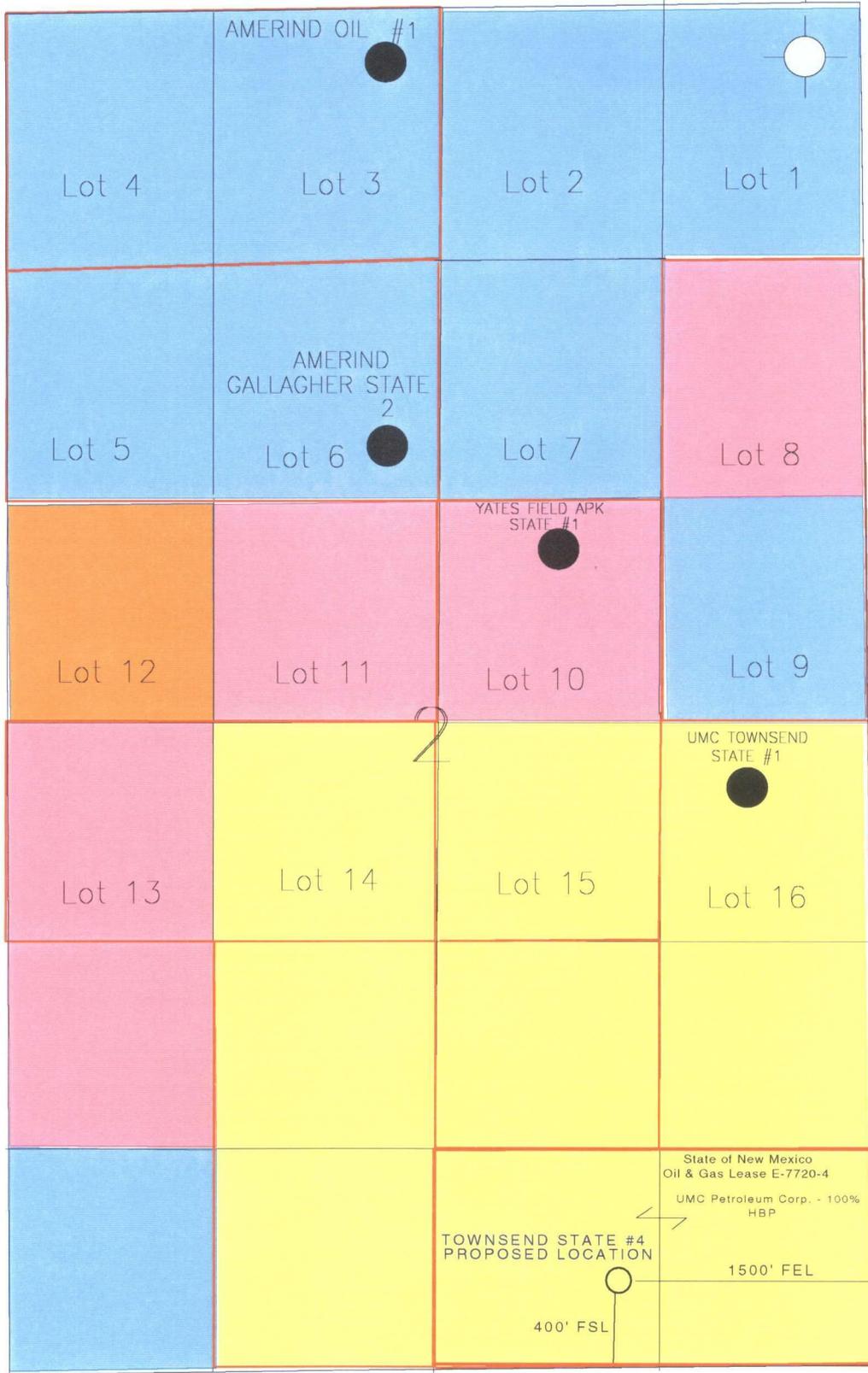
johnm	3% DENSITY POROSITY	8/4/97
Scale 1:12000.		



R 35 E

AMERIND OIL

T 16 S



LEGEND

● UMC ACREAGE	— UNIT OUTLINES
● YATES ACREAGE	
● AMERIND ACREAGE	
● MOBIL ACREAGE	



UMC PETROLEUM CORPORATION		
NEW MEXICO OIL CONSERVATION DIVISION UNORTHODOX WELL LOCATION TOWNSEND STATE #4 - LEA CO., NM		
LANDMAN: SMITH	8/1/97	LAND TECH: SCHERTZ
Scale: 1:12000.		TWNEND4.GPJ

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.

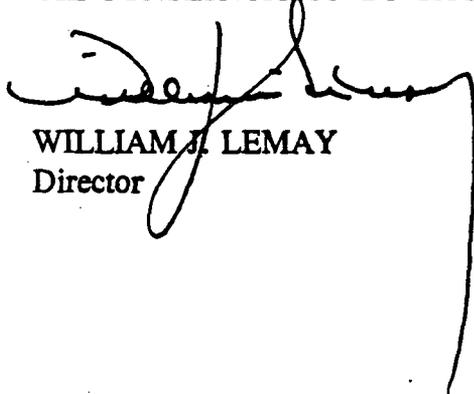
(17) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, the force pooling provisions of this order shall thereafter be of no further effect.

(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



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

July 7, 1997

UMC Petroleum Corporation
c/o James Bruce
P. O. Box 1056
Santa Fe, New Mexico 87501

Administrative Order DD-180(H)
High Angle/Horizontal

Dear Mr. Bruce:

Reference is made to your application dated June 16, 1997 on behalf of the operator, UMC Petroleum Corporation ("UMC"), for authorization to recomplete the Townsend State Well No. 1 (API No. 30-025-33713) by side tracking off of the vertical wellbore and penetrate the Undesignated South Big Dog-Strawn Pool with a horizontal drainhole within an 80-acre area comprising Lot 16 and the NE/4 SE/4 of irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico.

The Division Director Finds That:

- (1) The subject application has been duly filed under the provisions of Rule 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The Townsend State Well No. 1, located at a standard oil well location 3526 feet from the South line and 727 feet from the East line (Lot 16/Unit P) of said Section 2, which was the subject of Division Case 11714, was drilled to total depth on March 6, 1997, the Strawn interval was subsequently completed, and a non-standard 80-acre oil spacing and proration unit comprising Lot 16 and the NE/4 SE/4 of said Section 2 (approved by Division Order No. R-10803, dated May 22, 1997) was dedicated to said well;
- (3) The Townsend State Well No. 1 and subject 80-acre tract are within one mile of the current boundary of the South Big Dog-Strawn Pool, and is therefore subject

to the "*Special Pool Rules and Regulations for the South Big Dog-Strawn Pool*", as promulgated by Division Order No. R-9722-C/R-10448-A, issued in Case No. 11599 and dated February 26, 1997, 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;

- (4) The current vertical wellbore, producing at a rate of 10 barrels of oil per day, is perforated from 11,501 feet to 11539 feet, however the well exhibits low porosity and permeability characteristics in comparison to other nearby Strawn producers within the porous algal reef mound that encompasses the South Big Dog-Strawn Pool, a horizontal drainhole drilled off of the existing vertical wellbore in the Townsend State Well No. 1 as proposed is an attempt to encounter porous and permeable facies within the mound, which should result in a higher production rate and an increased ultimate recovery of oil from this well;
- (5) It is our understanding that UMC now intends to kick-off from vertical at a depth of approximately 11,473 feet by milling a window in the 5 1/2-inch production casing string, drill in a south southeasterly direction with a short radius curve (71 deg./100 feet), and drill horizontally within the Strawn formation a lateral distance of approximately 1100 feet;
- (6) The "project area" as proposed is to consist of the previously approved 80-acre non-standard oil spacing and proration unit comprising Lot 16 and the NE/4 SE/4 of said Section 2;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within said 80-acre tract (Lot 16 and the NE/4 SE/4 of said Section 2) that is no closer than 330 feet to the outer boundary of said 80-acre non-standard oil spacing and proration unit; and,
- (8) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The operator, UMC Petroleum Corporation ("UMC"), is hereby authorized to recomplete its Townsend State Well No. 1 (API No. 30-025-33713), from a standard surface oil well location 3526 feet from the South line and 727 feet from the East line (Lot 16/Unit P) of irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, by milling a window in the 5 1/2-inch production casing string at a depth of approximately 11,473 feet, kick-off from the vertical in a south southeasterly direction with a short radius curve (71 deg./100 feet), and drill horizontally within the Strawn formation a lateral distance of approximately 1100 feet.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(3) The "project area" for said horizontal drainhole shall comprise the existing 80-acre non-standard oil spacing and proration unit comprising Lot 16 and the NE/4 SE/4 (approved by Division Order No. R-10803, dated May 22, 1997) of said Section 2.

(4) The applicable drilling window or "producing area" for said horizontal drainhole shall include that area within said 80-acre tract (Lot 16 and the NE/4 SE/4 of said Section 2) that is no closer than 330 feet to the outer boundary of said 80-acre non-standard oil spacing and proration unit.

(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F and said Order Nos. R-9722-C/R-10448-A and R-10803.

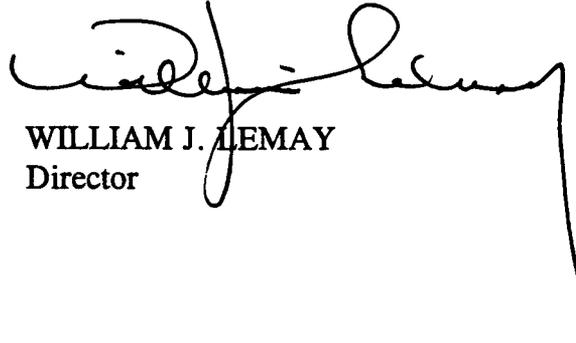
(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured depths (MVD).

Administrative Order DD-180(H)
UMC Petroleum Corporation
July 7, 1997
Page 4

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

SEAL

cc: Oil Conservation Division - Hobbs
New Mexico State Land Office - Santa Fe
File: Case 11741