



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

August 26, 1998

Ocean Energy, Inc.  
c/o James Bruce  
P. O. Box 1056  
Santa Fe, New Mexico 87501

*Administrative Order NSL-3870-A*

Dear Mr. Bruce:

Reference is made to the following: (i) your original application dated July 17, 1998 on behalf of the operator Ocean Energy, Inc.; (ii) the Division's initial response to said application by letter from Mr. Michael E. Stogner dated July 20, 1998; (iii) your response by letter dated August 11, 1998; and, (vi) the records of the Division in Santa Fe including well files, the files on Division Administrative Orders NSL-3870 and DD-180(H), and Division Order Nos. R-9722-C/R-10448-A and R-10803: all concerning Ocean Energy, Inc.'s request:

(a) to form a standard 80-acre oil spacing and proration unit for the Undesignated South Big Dog-Strawn Pool; and,

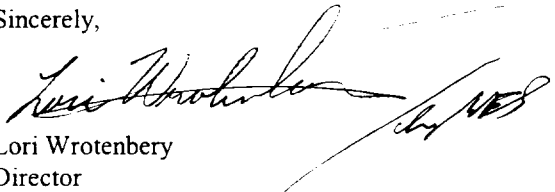
(b) to dedicate said acreage to the proposed Townsend State Well No. 5 to be drilled at an unorthodox oil well location within said 80-acre unit 330 feet from the South line and 1520 feet from the East line (Unit W) of Irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico.

This application has been duly filed under the provisions of **Rule 104.F** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division").

By the authority granted me under the provisions of **RULE 6** of 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, and Division General **Rule 104.F(2)**, the above-described unorthodox oil well location for Ocean Energy, Inc.'s Townsend State Well No. 5 is hereby approved.

Division Administrative Order NSL-3870, dated September 17, 1997, shall be placed in abeyance until further notice.

Sincerely,

  
Lori Wrotenbery  
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe  
File: DD-180(H)  
Case No. 11741 /  
NSL-3870



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

September 17, 1997

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

*Administrative Order NSL-3870*

Dear Mr. Bruce:

Reference is made to:

(a) your application dated August 11, 1997 on behalf of the operator, UMC Petroleum Corporation ("UMC"), to (i) form a standard 80-acre oil spacing and proration unit for the Undesignated Big Dog-Strawn Pool and (ii) dedicate said acreage to the proposed Townsend State Well No. 4 to be drilled at an unorthodox oil well location within said 80-acre unit 400 feet from the South line and 1500 feet from the East line (Unit W) of Irregular Section 2, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico;

(b) 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;

(c) Division Order No. R-10803, dated May 22, 1997 [in particular Decretory Paragraph No. (3)] and Division Administrative Order DD-180(H), which approved for UMC's Townsend State Well No. 1 (API No. 30-025-33713), located at a standard surface oil well location 3526 feet from the South line and 727 feet from the East line (Unit P/Lot 16) of said Section 2: (i) the formation of an 80-acre non-standard oil spacing and proration unit in the Undesignated South Big Dog-Strawn Pool; and, (ii) the corresponding "project area" for a horizontal wellbore; and,

(d) Division Order No. R-10803, dated May 22, 1997 [in particular


Finding Paragraph No. (12)(g)], which addresses further Strawn development within UMC's State of New Mexico oil and gas lease No. E07720 which comprises Lots 14 through 16 and the SE/4 of said Section 2.

The geologic interpretation submitted with this application indicates that a well drilled within the S/2 SE/4 of said Section 2 at the proposed unorthodox oil well location will be at a more favorable geologic position within the Undesignated Big Dog-Strawn Pool than a well drilled at a location considered to be standard.

The application has been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11351 on January 18, 1996.

By the authority granted me under the provisions of RULE 6 of said "*Special Pool Rules and Regulations for the South Big Dog-Strawn Pool*" and Division General Rule 104.F(2), the above-described unorthodox oil well location is hereby approved.

Sincerely,

  
William J. LeMay  
Director

WJL/MES/kv

cc: New Mexico Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe  
File: DD-180(H)  
Case No. 11741 ✓



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

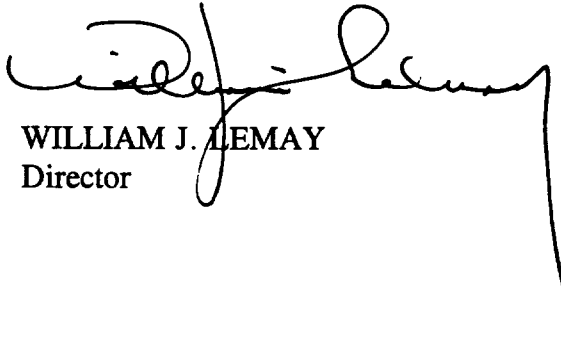
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(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

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