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

Case No. 12425 May 4, 2000 R-11397

Manzano Oil Corporation c/o James Bruce P. O. Box 1056 Santa Fe, New Mexico 87504

Re: Application of Manzano Oil Corporation for an unorthodox bottomhole oil well location within a standard 80-acre oil spacing and proration unit comprising Lots 12 (Unit L) and 13 (Unit M) of Irregular Section 1, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico for its Cayuma Well No. 1 recently drilled to a point within the Strawn formation of the Undesignated Northeast Lovington-Pennsylvanian Pool 3807 feet from the South line and 1179 feet (which is 72 % closer to the unit line then allowed) (Lot 13/Unit M) of Irregular Section 1, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico.

Dear Mr. Bruce:

My review of this matter indicates the following:

- (i) That this unit is located within the governing limits of the Northeast Lovington-Pennsylvanian Pool which, pursuant to Division Order No. R-3816, as amended, require 80-acre spacing and proration units each comprising of the N/2, S/2, E/2, or W/2 of a governmental quarter section (or equivalent) and designated well location requirements such that each well drilled in this pool is to be within 150 feet of the center of a governmental quarter-quarter section or lot;
- (ii) Concho Resources, Inc. originally drilled the Cayuma Well No. 1 (API No. 30-025-3448) from a surface location 3580 feet from the South line and 990 feet from the West line (Lot 13/Unit M) of Section 1 to a bottomhole location within the Strawn formation 3169 feet from the South line and 636 feet from the West line of Section 1 in April, 1999 under the provisions of Rule 111;
- (iii) In May, 1999 Concho Resources, Inc. plugged and abandoned this well after it tested dry;
- (iv) By Division Administrative Order NSL-4417, dated March 2, 2000, Manzano Oil Corporation was granted authorization to re-enter this well, drill vertically for economical reasons from the surface location, and recomplete at this unorthodox location (which is 35 % closer to the unit line then allowed) in order to further test the Strawn interval underlying this 80-acre unit; and

cc:

(v) The immediate application to amend Administrative Order NSL-4417, dated April 4, 2000, to reflect the actual bottomhole location of the Cayuma Well No. 1 at a more unorthodox location for this 80-acre unit (3807' FSL & 1179' FWL of Section 1) is inadequate, incomplete, and requires further explanation by those involved with the decision to deepen and/or directionally drill this well.

This application will therefore be set for hearing before a Division Hearing Examiner on the next available docket scheduled for June 1, 2000 and will be advertised in the following manner:

subsurface oil well location, Lea County, New Mexico. Applicant, in accordance with Division Rule 111.C (2), seeks an exception to Rule 4 of the "Special Rules and Regulation for the Northeast Lovington-Strawn Pool", as promulgated by Division Orders No. R-3816 and R-3816-A, amending Division Administrative Order NSL-4417 in order to change the provisions contained therein to reflect the actual bottomhole location of its Cayuma Well No. 1 (API No. 30-025-3448) being 3807 feet from the South line and 1179 feet (72% closer then allowed) (Lot 13/Unit M) of Irregular Section 1, Township 16 South, Range 36 East. Lots 12 and 13 of Irregular Section 1 (which is located approximately two miles east-northeast of Lovington, New Mexico) are to be dedicated to this well in order to form a standard 80-acre oil spacing and proration unit for this pool.

Thank you for your cooperation in this matter.

Michael E. Stogner

Sincerely

Chief Hearing Officer/Engineer

New Mexico Oil Conservation Division - Hobbs New Mexico State Land Office - Santa Fe Ms. Kathy Valdes - NMOCD, Santa Fe Ms. Florene Davidson - NMOCD

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

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

CASE NO. 12425 ORDER NO. R-11397

APPLICATION OF MANZANO OIL CORPORATION FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 1, 2000, at Santa Fe, New Mexico before Examiner Mark W. Ashley.

NOW, on this <u>12th</u> day of June, 2000, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Manzano Oil Corporation ("Manzano"), seeks an amendment to Division Administrative Order No. NSL-4417, in order to change the provisions contained therein to reflect the actual bottomhole location of its Cayuma Well No. 1 (API No. 30-025-3448) being 3807 feet from the South line and 1179 feet from the West line (Lot 13/Unit M) of Irregular Section 1, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico.
- (3) Lots 12 and 13 of Irregular Section 1 are dedicated to this well forming a standard 80-acre oil spacing and proration unit for this pool.
- (4) The well is located within the limits of the Northeast Lovington-Pennsylvanian Pool, which is governed by "Special Rules and Regulations for the Northeast Lovington-Pennsylvanian Pool," as promulgated by Division Orders No. R-3816 and R-3816-A, which require 80-acre spacing and proration units each comprising the N/2, S/2, E/2, or W/2 of a governmental quarter section (or equivalent) and designate

location requirements such that each well drilled in this pool is to be within 150 feet of the center of a governmental quarter-quarter section or lot.

- (5) The current allowable for a standard 80-acre oil spacing and proration unit within the Northeast Lovington-Pennsylvanian Pool is 534 BOPD with a limiting GOR of 2000 cubic feet of gas per barrel of oil.
- (6) Concho Resources, Inc. ("Concho") originally drilled the Cayuma Well No. 1 in April, 1999, under the provisions of Division Rule 111, by drilling vertically from a surface location 3580 feet from the South line and 990 feet from the West line (Lot 13/Unit M) of Irregular Section 1 to a depth of 9,330 feet. Concho then kicked off in a southwesterly direction and drilled directionally to a depth of 11,765 feet (TVD) bottoming out at a standard subsurface oil well location within the Strawn formation 3169 feet from the South line and 636 feet from the West line of Irregular Section 1. The well tested dry and Concho subsequently plugged and abandoned it in May, 1999.
- (7) Manzano, as successor operator, filed an unorthodox location application for the Cayuma Well No. 1 with the Division on January 13, 2000, for a location 3580 feet from the South line and 990 feet from the West line (Lot 13/Unit M) of Irregular Section 1.
- (8) Manzano received verbal approval from the Division to start operations before an order was issued.
- (9) By Division Administrative Order No. NSL-4417, dated March 2, 2000, Manzano was granted authorization to re-enter the Cayuma Well No. 1 and drill vertically to an unorthodox bottomhole location 3580 feet from the South line and 990 feet from the West line (Lot 13/Unit M) of Irregular Section 1 at a depth of approximately 11,800 feet in order to test the Strawn formation.
- (10) On April 4, 2000, Manzano filed an application with the Division to amend Administrative Order No. NSL-4417 to reflect the actual bottomhole location of the Cayuma Well No. 1 at a more unorthodox location 3807 feet from the South line and 1179 feet from the West line of Irregular Section 1.
- (11) On May 4, 2000 the Division set for hearing Manzano's application of April 4, 2000, because Manzano's application was incomplete and required further explanation.
- (12) At the hearing, Manzano testified that it reached total depth on February 6, 2000, but the well was dry.

- (13) Manzano further testified that it contacted the Division's Hobbs District Office on February 6, 2000, and that verbal approval to drill directionally was received.
- (14) In a letter dated May 10, 2000, the Division's Hobbs District Office stated that it has no record of the conversation with Manzano or of the verbal approval for Manzano to drill directionally.
- (15) Manzano directionally drilled the Cayuma Well No. 1 to the current unorthodox bottomhole location 3807 feet from the South line and 1179 feet from the West line of Irregular Section 1 without approval from the Division.
- (16) Manzano presented geologic evidence demonstrating that utilizing seismic data, it identified a structurally higher location within the Strawn at the current bottomhole location to the northeast of the unorthodox location approved by Division Administrative Order No. NSL-4417.
 - (17) Manzano presented engineering evidence demonstrating that:
 - (a) the drainage radius of the Cayuma Well No. 1 is less than 100 feet;
 - (b) the current production is 40 BOPD and 76 MCFGPD; and
 - (c) based on the current production, the Cayuma Well No. 1 is an uneconomic well.
- (18) The evidence presented demonstrates that the proposed unorthodox bottomhole location for the Cayuma Well No. 1 is justified and is necessary in order for the applicant to recover the oil and gas reserves underlying Lots 12 and 13 of Irregular Section 1.
 - (19) No affected party appeared at the hearing in opposition to this application.
- (20) Approval of the unorthodox bottomhole location will afford the applicant the opportunity to recover the oil and gas reserves underlying Lots 12 and 13 of Irregular Section 1 and will protect correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Manzano Oil Corporation to amend Division Administrative Order No. NSL-4417 in order to change the provisions contained therein to reflect the actual bottomhole location of its Cayuma Well No. 1 (API No. 30-025-3448) being 3807 feet from the South line and 1179 feet from the West line (Lot 13/Unit M) of Irregular Section 1, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby approved.
- (2) Lots 12 and 13 of Irregular Section 1 are dedicated to this well forming a standard 80-acre oil spacing and proration unit for this pool.
- (3) Jurisdiction is hereby 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

QIL ONSERVATION DIVISION

LORI WROTENBERY

Director