# 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. 10564 ORDER NO. R-2178-E* 

APPLICATION OF YATES PETROLEUM CORPORATION TO QUALIFY A CERTAIN CARBON DIOXIDE INJECTION PILOT PROJECT FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE "NEW MEXICO ENHANCED OIL RECOVERY ACT", EDDY COUNTY, NEW MEXICO

### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 1, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>14th</u> day of October, 1992 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 this cause and the subject matter thereof.
- (2) By Division Order No. R-2178-D, issued in Case No. 10476 and dated July 9, 1992, Yates Petroleum Corporation was granted authorization to initiate its Loco Hills CO<sub>2</sub>/Water Injection Pilot Project, by injecting carbon dioxide and water into the Fourth Sand Member of the Grayburg formation underlying portions of the SE/4 NE/4 and NE/4 SE/4 (Units H and I, respectively) of Section 12, Township 18 South, Range 29 East, NMPM, and Lots 2 and 3 (SW/4 NW/4 and NW/4 SW/4 equivalents, Units E and L, respectively) of Section 7, Township 18 South, Range 30 East, NMPM; both portions of said sections located in the Loco Hills Queen-Grayburg-San Andres Pool, West Loco Hills Grayburg No. 4 Sand Unit, Eddy County, New Mexico.

- (3) Said project to be initially developed on a 22.5 acre and a 10 acre (approximate) inverted five-spot pattern utilizing the following two wells as carbon dioxide/water injection wells both located in said Section 7:
  - West Loco Hills G4S Unit Tract 1 Well No. 9 1980' FNL 40' FWL (Unit E); and,
  - West Loco Hills G4S Unit Tract 1 Well No. 10 2455' FSL - 50' FWL (Unit L).
- (4) Both aforementioned wells have been drilled and are currently injecting water in order to establish proper injection rates and to establish production rates under secondary recovery operations on the following five existing wells within the pilot project area prior to initially starting carbon dioxide injection:
  - West Loco Hills G4S Tract 13A Well No. 4 1650' FNL - 330' FEL (Unit H) of Section 12;
  - West Loco Hills G4S Tract 6 Well No. 1
     1980' FSL 660' FEL (Unit I) of Section 12;

both wells are located in Section 12, Township 18 South, Range 29 East, NMPM;

- West Loco Hills G4S Tract 1 Well No. 2 1650' FNL - 330' FWL (Unit E) of Section 7;
- West Loco Hills G4S Tract 1 Well No. 3
   1980' FSL 660' FWL (Unit L) of Section 7; and,
- West Loco Hills G4S Tract 1 Well No. 8
   2310' FNL 330' FWL (Unit E) of Section 7,

the three above-described wells are located in Section 7, Township 18 South, Range 30 East, NMPM.

(5) At this time, Yates Petroleum Corporation seeks an order pursuant to the Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects and Certification of Recovered Oil Tax Rates, as promulgated by Division Order No. R-9708, qualifying said Loco Hills CO<sub>2</sub>/Water Injection Pilot Project for the recovered oil tax rate under the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

- (6) Based on the record made at the July 18, 1992 hearing in Case No. 10476 and in the testimony presented in this case:
  - (a) the application of carbon dioxide to the project area should result in an increase in the amount of crude oil ultimately recovered therefrom;
  - (b) the project area has been so depleted that it is prudent to implement a carbon dioxide flood to maximize the ultimate recovery of crude oil from the project area; and,
  - (c) the proposed enhanced oil recovery project is economically and technically feasible and has not been prematurely filed.
- (7) The subject pilot project should be qualified an "Enhanced Oil Recovery Project" (EOR) pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (8) To be eligible for the EOR credit, the operator should advise the Division when the carbon dioxide injection phase of the project commences and at such time, request the Division certify the project to the New Mexico Taxation and Revenue Department.
- (9) The "enhanced oil recovery project area" should initially comprise the proration units assigned the producing wells to be affected by CO<sub>2</sub>/water injection which includes the following area:

## TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM

Section 12: SE/4 NE/4 and NE/4 SE/4

## TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM

Section 7: Lots 2 and 3(SW/4 NW/4 and NW/4 SW/4 equivalents).

(10) The application should be approved and the EOR project should be governed by the provisions of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Yates Petroleum Corporation to qualify its Loco Hills CO<sub>2</sub>/Water Injection Pilot Project, which was the subject of Division Order No. R-2178-D, as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5), is hereby approved.
- (2) The subject "enhanced oil recovery project area" shall initially comprise the following described areas in Eddy County, New Mexico.

## TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM

Section 12: SE/4 NE/4 and NE/4 SE/4

#### TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM

Section 7: Lots 2 and 3(SW/4 NW/4 and NW/4 SW/4 equivalents).

- (3) The operator shall advise the Division when the  $CO_2$  injection phase of the project commences.
- (4) Said EOR project shall be governed by the provisions of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.
- (5) 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

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