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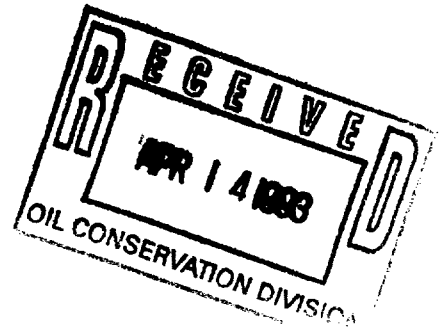
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April 14, 1993

**HAND-DELIVERED**

Mr. David R. Catanach  
Hearing Examiner  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
State Land Office Building  
Santa Fe, New Mexico 87503



Re: Case No. 10712:  
Application of Yates Petroleum Corporation for Amendment of Division  
Order No. R-2178, as amended, Which Approved a Carbon Dioxide/Water  
Injection Project Known as the Yates Petroleum Corporation Loco Hills  
Carbon Dioxide/Water Injection Pilot Project in the Fourth Sand Member of  
the Grayburg Formation, Eddy County, New Mexico

Dear Mr. Catanach:

Enclosed for your consideration is the proposed Order of Yates Petroleum Corporation  
which you requested at the April 8, 1993 Examiner hearing in this case.

If you need anything further from Yates to proceed with your consideration of this matter,  
please advise.

Very truly yours,

WILLIAM F. CARR

WFC:mlh

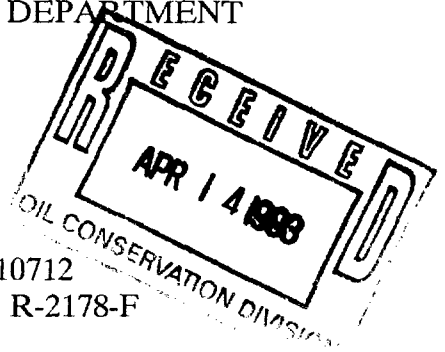
Enclosure

cc w/enc.: Robert S. Fant  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210

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. 10712  
Order No. R-2178-F



APPLICATION OF YATES PETROLEUM CORPORATION  
FOR AMENDMENT OF DIVISION ORDER NO. R-2178,  
AS AMENDED, WHICH APPROVED A CARBON DIOXIDE/WATER  
INJECTION PROJECT KNOWN AS THE YATES PETROLEUM  
CORPORATION LOCO HILLS CARBON DIOXIDE/WATER  
INJECTION PILOT PROJECT IN THE FOURTH SAND  
MEMBER OF THE GRAYBURG FORMATION,  
EDDY COUNTY, NEW MEXICO.

**YATES PETROLEUM CORPORATION'S  
PROPOSED ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on April 8, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_ day of April, 1993, 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 equivalent, 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) By Division Order No. R-2178-E, issued in Case No. 10564 and dated October 14, 1992, the application of Yates Petroleum Corporation to qualify its Loco Hills CO<sub>2</sub>/Water Injection Pilot Project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5) was approved and carbon dioxide injection commenced in December, 1992.

(4) Data obtained from the injection of carbon dioxide into the project area has shown that the original injection/production pattern in the pilot area should be amended to maximize the recovery of oil from the project area.

(5) Yates proposes to amend the development plan for this pilot project by utilizing for injection of carbon dioxide and water the West Loco Hills G4S Unit Tract 1 Well No. 9 located 1980 feet from the North line and 40 feet from the West line (Unit E) of Section 7 and, the West Loco Hills G4S Tract 13 Well No. 12 to be drilled at a location 2408 feet from the North line and 440 feet from the East line (Unit H) of Section 12.

(6) The following existing wells will be the producing wells which will be directly affected by the proposed pilot project:

- West Loco Hills G4S Tract 13A Well No. 4, 1650 feet from the North line and 330 feet from the East line (Unit H) of Section 12;
- West Loco Hills G4S Tract 13 Well No. 11, 2310 feet from the North line and 1175 feet from the East line (Unit H) of Section 12;
- West Loco Hills G4S Tract 6 Well No. 1, 1980 feet from the South line and 660 feet from the East line (Unit H) of Section 12;
- West Loco Hills G4S Tract 1 Well No. 10, 2455 feet from the South line and 50 feet from the West line (Unit L) of Section 7;
- West Loco Hills G4S Tract 1 Well No. 8, 2310 feet from the North line and 330 feet from the West line (Unit E) of Section 7; and
- West Loco Hills G4S Tract 1 Well No. 2, 1650 feet from the North line and 330 feet from the West line (Unit E) of Section 7.

(7) The boundaries of the Yates Petroleum Corporation Loco Hills CO<sub>2</sub>/Water Injection Pilot Project are not altered by this proposed amendment and, other than the proposed relocation of the injection and producing wells within the project boundaries, all other provisions of Order No. R-2178-D which approved this carbon dioxide/water injection

pilot project and the provisions of Order No. R-2178-E which approved this project for the Recovered Oil Tax Rate should remain in full force and effect.

(8) Approval of the relocation of injection and producing wells in this pilot project should improve the efficiency of this pilot project and maximize the production of otherwise unrecoverable oil therefrom, thereby preventing waste.

(9) Since this pilot project is operated within the boundaries of the West Loco Hills Grayburg No. 4 Sand Unit Area, the proposed relocation of injection and producing wells will not impair correlative rights.

(10) The proposed relocation of injection wells as described in Finding Paragraph Nos. (5) and (6) above should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Yates Petroleum Corporation to amend Order No. R-2178, as amended, is hereby granted.

(2) The applicant is hereby authorized to develop its Loco Hills CO<sub>2</sub>/Water Injection Pilot Project in 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, utilizing for injection of carbon dioxide and water the West Loco Hills G4S Tract 1 Well No. 9 located 1980 feet from the North line and 40 feet from the West line in Unit E of Section 17; and the West Loco Hills G4S Tract 13 Well No. 12 to be drilled at a location 2408 feet from the North line and 440 feet from the East line in Unit H of Section 12.

(3) The following existing wells are hereby approved as production wells within the pilot project:

- West Loco Hills G4S Tract 13A Well No. 4, 1650 feet from the North line and 330 feet from the East line (Unit H) of Section 12;
- West Loco Hills G4S Tract 13 Well No. 11, 2310 feet from the North line and 1175 feet from the East line (Unit H) of Section 12;
- West Loco Hills G4S Tract 6 Well No. 1, 1980 feet from the South line and 660 feet from the East line (Unit H) of Section 12;

- West Loco Hills G4S Tract 1 Well No. 10, 2455 feet from the South line and 50 feet from the West line (Unit L) of Section 7;
- West Loco Hills G4S Tract 1 Well No. 8, 2310 feet from the North line and 330 feet from the West line (Unit E) of Section 7; and
- West Loco Hills G4S Tract 1 Well No. 2, 1650 feet from the North line and 330 feet from the West line (Unit E) of Section 7.

(4) Except for the new locations for injection and producing wells authorized by this Order, all provisions of Division Order Nos. R-2178-D and R-2178-E remain in full force and effect.

(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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