CAMPBELL, CARR, BERGE

& SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY

PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT

JACK M. CAMPBELL OF COUNSEL September 8, 1992

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QIL CONSERVATION DIV. SIUN

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William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

Re: Approval of Yates Petroleum Corporation's Carbon Dioxide Pilot Project in the West Loco Hills Grayburg No. 4 Sand Unit for the Recovered Oil Tax Rate

Dear Mr. LeMay:

Yates Petroleum Corporation hereby makes application to the New Mexico Oil Conservation Division for approval of its carbon dioxide pilot project in the West Loco Hills Grayburg No. 4 Sand Unit for the recovered oil tax rate authorized by the Enhanced Oil Recovery Act, Laws of 1992, Chapter 38, Sections 1 through 5.

Yates plans to commence operation of this pilot project by the injection of carbon dioxide into the reservoir in early November, 1992 and is making application pursuant to the rules promulgated by Commission Order No. R-9708 entered on August 27, 1992.

In support of this application, Yates provides the following information:

a. Operator's name and address:

Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE (505) 988-4421 TELECOPIER (505) 983-6043

JEFFERSON PLACE

- b. Description of project area:
 - 1. a plat outlining the project area is attached hereto as Exhibit "A".
 - 2. Description of project area:

Township 18 South, Range 29 East, N.M.P.M.

Section 12: E/2

Township 18 South, Range 30 East, N.M.P.M.

Section 7: W/2

3. Total acres:

640 acres

- 4. Name of subject pool and formation:
 - a. Local Hills Queen Grayburg San Andres Pool
 - b. Grayburg formation
- c. Status of operations in project area:
 - 1. The West Loco Hills Grayburg No. 4 Sand Unit was approved by Oil Conservation Division Order No. R-2166 dated January 17, 1966
- d. Method of recovery to be used:
 - 1. Injection fluids: Carbon Dioxide
 - 2. This Carbon Dioxide Pilot Project was approved by Oil Conservation Division Order No. R-2178 dated July 9, 1992

- e. Description of project:
 - 1. List of producing wells:

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;

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.

2. List of injection wells:

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).

3. Capital cost of additional facilities:

 New drilling:
 \$665,200

 Well repair:
 \$745,000

 Facilities:
 \$587,500

4. Total project costs: \$4,000,000

- 5. Estimated total value of the additional production that will be recovered as a result of this project: 65,000 barrels over (3) three years. If successful a five-stage expansion could result in 14 million barrels of additional recovery over (25) twenty-five years.
- 6. Anticipated date for commencement of injection: November 1, 1992
- 7. Type of fluid to be injected and anticipated volumes:

 CO_2 1,000 MCFPD/per well for 2 months followed by 400 BWPD for 1 month. Total CO_2 Injection will be 27,500 tons.

- 8. This is not an application for expansion of an existing project
- f. Production history of project area: See transcript of hearing in OCD Case No. 10476.

This pilot project was approved by Division Order No. R-2178-D on July 9, 1992. Based on the record made at the July 18, 1992 hearing in this case, it was proven that:

- 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 is prudent to implement a carbon dioxide flood to maximize the ultimate recovery of crude oil from the project area;
- c. the proposed enhanced oil recovery project is economically and technically feasible and has not been prematurely filed;

Yates Petroleum Corporation hereby requests that its carbon dioxide pilot project for its West Loco Hills Grayburg No. 4 Sand Unit be approved as a qualified project under the Enhanced Oil Recovery Act and that upon certification of a positive production response in accordance with this Act and the Rules and Regulations of the Division, the project qualify for the Recovered Oil Tax Rate.

Since Yates plans to commence injection within 60 days, we request that if additional hearings are required on this application, this matter be included on the October 1, 1992 Oil Conservation Division Examiner Hearing Docket.

By copy of this letter, this application is being filed with the Hobbs District Office of the Oil Conservation Division.

Respectfully submitted,

Yates Petroleum Corporation

By: TW

William F. Carr, Authorized Agent
CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
Post Office Box 2208
Santa Fe, New Mexico 87504
Telephone: (505) 988-4421

cc: Randy Patterson Robert Fant

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