QUALITY PRODUCTION CORP.

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4 February 1994

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division P O Box 2088 Santa Fe, NM 87504

FEB - 8 1994

10930

Re: The Wiser Oil Company

Application for Qualification of EOR Project

Caprock Maljamar Unit

Maljamar Grayburg/San Andres Pool

Lea County, New Mexico

Gentlemen:

The Wiser Oil Company hereby applies for qualification of the proposed consolidation and expansion of existing enhanced oil recovery projects for the oil tax rate pursuant to the New Mexico "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5) as implemented by Order No. R-9708. The proposed project is the Caprock Maljamar Unit in the Maljamar Grayburg San Andres Pool, Lea County.

The following information pertinent to the Application is hereby submitted as outlined in Paragraph D.4. of Exhibit "A" to Order No. R-9708:

- a.) The Unit Operator is to be The Wiser Oil Company, at 8115 Preston Rd Suite 400, Dallas, TX 75225 (214-265-0080) with Quality Production Corp. at P O Box 250, Hobbs, NM 88241 (505-397-2727) being their local agent.
- b.) 1. A plat outlining the Unit Area is enclosed as Exhibit "A". A map, Exhibit A-1, and a tabulation showing the proposed well numbering system for the Unit is also enclosed.
 - 2. The proposed Unit Area includes:

Township 17 South - Range 32 East
Section 13: SE/4
Section 24: All

Township 17 South - Range 33 East

Section 17: All

Section 18: E/2 & SW/4

Section 19: All

Section 20: All

Section 21: W/2 W/2, SE/4 NW/4 & SE/4 SW/4

Section 27: NW/4 SW/4

Section 28: W/2, SE/4 & SW/4 NE/4

Section 29: NE/4 NE/4

Section 33: N/2 NE/4 & SE/4 NE/4.

- 3. The proposed Unit Area consists of 4160 acres.
- 4. The project is in the Maljamar Grayburg/San Andres Pool.
- c.) 2. The application for approval of the proposed Caprock Maljamar Unit and Waterflood Project is being filed with the Oil Conservation Division simultaneously with this Application for Qualification for the oil tax rate.
- d.) 1. The Plan of Operations proposes to inject all of the Unit's produced water and fresh Ogallala water as required for make-up of reservoir withdrawal volumes.
 - 2. The proposed Caprock Maljamar Unit is a consolidation and expansion of existing enhanced oil recovery projects on nine individual leases and the Mal Gra Unit, authorized under Oil Conservation Division Order Nos. R-2156, R-2157, R-2769, R-3011, R-3129 and WFX Nos. 132, 139, 149, 160, 171, 173, 185, 200, 211 and 295.
- e.) 1. The current producing wells are the Caprock Maljamar Unit Well Nos.:

22	63	98
27	65	100
29	68	103
31	69	148
38	71	150
40	73	152
42	82	166
44	83	173
52	89	177
54	90	179
56	94	201
58	96	202
	27 29 31 38 40 42 44 52 54	27 65 29 68 31 69 38 71 40 73 42 82 44 83 52 89 54 90 56 94

The development of the Waterflood Project as outlined in the Plan of Operation will result in most of the existing standard 40-acre location wells being converted to water injection and infill 20-acre wells drilled being the producers.

2. The current active injection wells are the Caprock Maljamar Unit Well Nos.:

32	55	91
39	59	95
41	62	97
43	74	99
53	86	102
	39 41 43	39 59 41 62 43 74

Development of the Waterflood Project as outlined in the Plan of Operation will result in the conversion of most of the existing standard 40-acre location wells to injection.

3. The estimated Capital Expenditures for the proposed Waterflood Project are tabulated by Phase as follows:

	<u>Phase I</u>	Phase II	Phase III TOTA	<u>1L</u>
Infill Drilling WIW Drilling	\$2 670	\$7 350 1 000	\$5 530 \$15 550 1 200 2 200	0
WIW Conversions	64 5	860	505 2 010	
Facilities	720	1 080	580 2 380)
Prod Workovers		100	50 150)
WIW Workovers	200	325	<u>270</u> <u>795</u>	<u>5</u>
TOTAL	\$4 235	\$10 715	\$8 135 \$23 085	5

-all figures in thousands.

- 4. The Total Project Cost is \$65.634 million, considering the estimated operating costs of \$42.549 million.
- 5. The estimated total value of the additional production to be recovered as a result of the proposed project is \$204.2 million.
- 6. It is proposed to begin the expansion of the injection program immediately upon receipt of the necessary approvals of the State and Federal agencies.
- 7. Injection fluid will consist of all produced water and fresh water as required to make-up reservoir withdrawal volumes. The project will attempt to attain an estimated injectivity of 250 BWPD per injection well.
- 8. The previous waterflood operations on the leases to be included into the proposed Caprock Maljamar Unit were curtailed during the 1970's from an 80-acre five-spot waterflood operation to a water disposal operation only injecting the produced water volumes into an erratic pattern of active injection wells. The Engineering Report by T Scott Hickman & Associates, Inc., dated 31 Dec 92, a copy of which is enclosed, indicates that significant oil reserves remain to be recovered in the Unit Recovery of these estimated additional reserves will require infill drilling to a well spacing of 20 acres per well (from 40 acres) and reinstitution of the waterflood operations on 40-acre five-spot patterns rather than the previous 80-acre patterns. This is, in reality, an entirely new waterflood project, only related to the previous projects by the similar areas and the continued water disposal under the existing waterflood orders.

f.) Production data and other supporting data to show the production history and forecast of oil, gas and water to be produced from the project area are provided in detail in the enclosed Engineering Report.

CERTIFICATION:

I hereby certify that the information stated above is true and correct to the best of my knowledge.

R M Williams, Agent for The Wiser Oil Company

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