

QUALITY PRODUCTION CORP.

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18 February 1994

Case 10931

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

Re: The Wiser Oil Company
Application for Statutory Unitization
and Approval of Waterflood Project
Caprock Maljamar Unit
Lea County, New Mexico

FFR 18 1994

Gentlemen:

Supplement to our application dated 4 Feb 94 and filed with the Division on 8 Feb 94, enclosed is the Form C-108 and the required attachments.

Respectfully submitted,

Quality Production Corp.



R M Williams, Agent for
The Wiser Oil Company

cc: District Office - Hobbs

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
EXHIBIT NO.	<u>10</u>
CASE NO.	<u>10931</u>

Case 10931
FEB 18 1994

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: THE WISER OIL COMPANY
Address: P.O. Box 250 Hobbs, NM 88241
Contact party: R M Williams Phone: 505-397-2727
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project See Attachment.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: R M Williams Title Agent

Signature: R M Williams Date: 18 Feb 94

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

ATTACHMENT to OCD FORM C-108

THE WISER OIL COMPANY
CAPROCK MALJAMAR UNIT
WATERFLOOD PROJECT

I. Purpose - Application is made for authorization to inject water into the Grayburg/San Andres formation underlying a portion of the Caprock Maljamar Unit in Sections 17, 19 & 20 of Township 17 South - Range 33 East, Lea County, New Mexico, as shown on the enclosed Exhibit "A". The proposed project is an enhanced recovery program designed to economically recover additional oil reserves to the benefit of all parties holding an interest in the Unit Area.

II. Operator - The Wisser Oil Company

III. Injection Well Data - Phase I of the waterflood program proposes injection into the following Caprock Maljamar Unit Well Nos.:

19	31	42	54	68
20	32	43	55	
21	39	44	56	
29	40	52	57	
30	41	53	67	

The required well data and schematic diagrams are enclosed as Exhibit "B".

IV. The proposed Caprock Maljamar Unit waterflood project is a consolidation and expansion of existing waterflood projects on nine individual leases and the Mal Gra Unit, authorized under Oil Conservation Division Order Nos. R-2156, R-2157, R-3011, R-3129, and WFX Nos. 132, 139, 149, 160, 171, 173, 185, 200, 211, and 295.

V. Map - The enclosed Exhibit "A" identifies the proposed injection wells, the Area of Review within one-half mile of a proposed injection well, and all wells and leases within two miles of a proposed injection well.

VI. Well Data - The well data for the wells within the Area of Review are enclosed as Exhibit "C" and the well data and schematic diagrams for all plugged and abandoned well bores within the Area of Review are enclosed as Exhibit "D".

VII. Proposed Operations:

1. Proposed average daily injection rate - 250 BWPD/well
Proposed maximum daily injection rate - 500 BWPD/well
2. A closed injection system will be maintained.
3. An average injection pressure of approximately 1000 psi is anticipated. The maximum injection pressure will be subject to the injection pressures authorized by the Oil Conservation Division.
4. The proposed injection fluid will consist of all of the Unit's produced water and fresh Ogallala water as required to make-up reservoir withdrawal volumes. The Ogallala water will be obtained from current water supply wells located on the caprock to the east of the Unit. Water compatibility studies have not been obtained nor considered pertinent in view of the actual injection experience in the Unit Area of injecting Grayburg/San Andres produced water and Ogallala fresh water in a wide range of proportions into the proposed injection interval since the 1960's without any evidence of compatibility problems.

VIII. Geological Data - The proposed injection interval is in the Grayburg/San Andres formations at a depth of 3900 to 5500 feet. The Grayburg formation primarily consists of quartz sands with dolomitic cementation; while, the San Andres formation primarily consists of dolomite with intermingled stringers of quartz sand with dolomitic cementation. The surface formation is Cretaceous and has no known sources of drinking water. The Ogallala aquifer and the caprock overlies the northeastern portion of the Unit Area; while there are no known sources of drinking water underlying the injection interval.

IX. Stimulation - Small acid treatments of about 2000 gallons per well have been sufficient to open the perforations for injection.

X. Logging Data - The available logs are those on file with the Oil Conservation Division from the original operators of the wells.

XI. Fresh Water Wells - The enclosed Exhibit "E" shows the fresh water wells located in the area, as recorded in the office of the State Engineer. None of these wells are still active or productive.

XII. Not applicable.

XIII. Proof of Notice - Copies of this C-108 Application will be furnished to the surface owners and to each leasehold operator within one-half mile of the proposed injection wells. An Affidavit of such notice with the return receipts will be presented at the time of the hearing on this matter.