

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: 207 W. McKay, Carlsbad, NM 88220  
Contact party: Perry L. Hughes Phone: 505-885-5433
- 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 R-10094  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- 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: Perry L. Hughes Title Agent

Signature: Perry L. Hughes Date: October 12, 1994

- \* 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. All P & A well bore diagrams and active well data was submitted in Caprock Maljamar Unit C-108 dated 7/20/94, approved Administrative Order No. WFX-661

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

## 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.

# CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: Wiser Oil Co. Well: Chico Springs OH # 51870

Contact: Perry Hynes Title: \_\_\_\_\_ Phone: \_\_\_\_\_

DATE IN 6/7/84 RELEASE DATE \_\_\_\_\_ DATE OUT 12/12/84

Proposed Injection Application is for:  WATERFLOOD  Expansion  Initial

Original Order: R- 10090  Secondary Recovery  Pressure Maintenance

SENSITIVE AREAS  SALT WATER DISPOSAL

WIPP  Capitan Reef  Commercial Operation

Data is complete for proposed well(s)?  Additional Data \_\_\_\_\_

## AREA of REVIEW WELLS

25 Total # of AOR 2 # of Plugged Wells

Tabulation Complete  Schematics of P & A's

Cement Tops Adequate  AOR Repair Required

## INJECTION INFORMATION

Injection Formation(s) \_\_\_\_\_

Source of Water \_\_\_\_\_ Compatible \_\_\_\_\_

## PROOF OF NOTICE

Copy of Legal Notice  Information Printed Correctly

Correct Operators  Copies of Certified Mail Receipts

Objection Received  Set to Hearing \_\_\_\_\_ Date

NOTES: \_\_\_\_\_

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL

## COMMUNICATION WITH CONTACT PERSON:

1st Contact:  Telephoned  Letter \_\_\_\_\_ Date \_\_\_\_\_ Nature of Discussion \_\_\_\_\_

2nd Contact:  Telephoned  Letter \_\_\_\_\_ Date \_\_\_\_\_ Nature of Discussion \_\_\_\_\_

3rd Contact:  Telephoned  Letter \_\_\_\_\_ Date \_\_\_\_\_ Nature of Discussion \_\_\_\_\_

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 19 and 20 of Township 17 South - Range 33 East, Lea County, New Mexico, as shown on the attached 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. These two wells were omitted from the previously approved Form C-108, approved under Administrative Order No. WFX-661.
- II. Operator - The Wiser Oil Company
- III. Injection Well Data - The required well data and schematic diagrams of Caprock Maljamar Unit Wells No. 51 and 70 are enclosed as Exhibit "B".
- IV. This project is an expansion of the Caprock Maljamar Waterflood Project authorized under Division Order No. R-10094. In addition to wells authorized in Phase 1 of the Caprock Maljamar Unit, approval for injection is requested for the wells listed in No. III above. These wells are necessary for continued producing operations outside the Phase 1 redevelopment area and will be a part of Phases 2 and 3 to be redeveloped in the next two to three years.
- V. Map - The attached 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 was previously submitted.
- 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 as 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 - Information on fresh water wells in the area as recorded in the office of the State Engineer was previously submitted. None of these wells are still active or productive.
- XII. Not applicable.
- XIII. Proof of Notice - Copies of this C-108 Application have been mailed to the surface owners and to each leasehold operator within one-half mile of the proposed injection wells. An Affidavit of such notice is attached Exhibit "C". Copies of the return receipts will be furnished upon request. Notice is being published in the Hobbs News Sun. An Affidavit of Publication will be forwarded as soon as available.





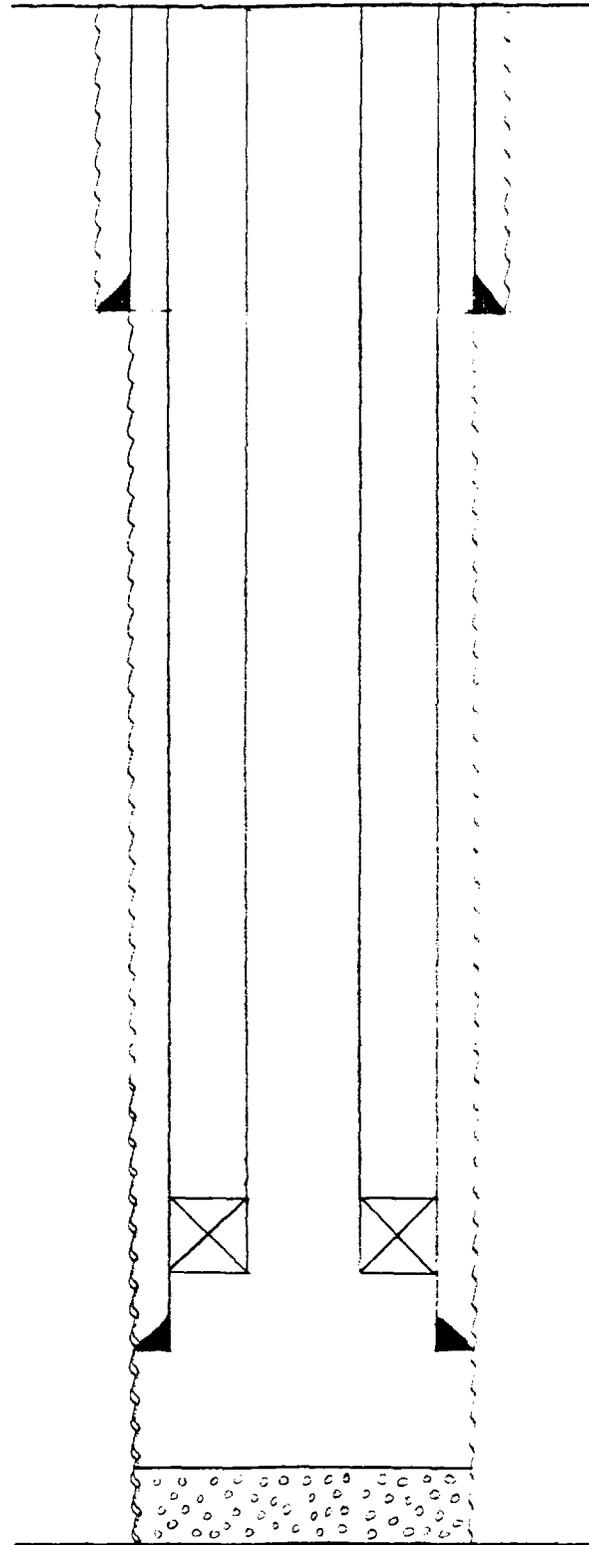


# **Exhibit "B"**

## **Diagrams of Proposed Injection Well Bores**



Caprock Maljamar Unit #70  
 1980' FSL & 1980' FEL  
 Unit J, Section 20-T17S-R33E  
 Completed 06/22/54



12 1/4" hole

8 7/8" CSG set @ 1394'  
 w/50 SK cmt.

7 7/8" hole

2 3/8" plastic coated tbg  
 Coated injection pkr  
 set @ 4001'

5 1/2" CSG set @ 4074'  
 w/100 SK cmt

Pea Gravel 4380'-4506'

TD 4506'

13 7/8" 200 SHEETS PER L5 5 SQUARE  
 42 3/4" 50 SHEETS PER L5 5 SQUARE  
 42 3/4" 100 SHEETS PER L5 5 SQUARE  
 42 3/8" 200 SHEETS PER L5 5 SQUARE  
 42 3/8" 100 RECYCLED WHITE 5 SQUARE  
 42 3/8" 200 RECYCLED WHITE 5 SQUARE  
 MADE IN U.S.A.



MP  
 10/11/94



NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

(Form C-104)  
Revised 7/1/57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

**ORIGINAL**

This form shall be submitted by the operator before an initial allowable will be assigned to any completed oil or gas well. Form C-104 is to be submitted in QUADRUPPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.023 psia at 60° Fahrenheit.

Levelland, Texas 4/30/58  
(Place) (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Warren Bradshaw Expl. Co. State NEP Well No. 1  
(Company or Operator) (Lease) (NE) (SE) (SW) (NW)  
Sec. 29 T. 17 S R. 33 E NMPM., Maljamar Pool  
Lease

Country Date Spudded 1/4/58 Date Drilling Completed 1/22/58  
Elevation 4184 Total Depth 4490

Please indicate location:

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

Top Oil/Gas Pay 4249 Name of Prod. Form. Grayburg

PRODUCING INTERVAL -  
Perforations (4249-53) (4347-50) (4408-22) (4264-72) (4362-70) (4318-30)  
Open Hole None Casing Shoe 4449 Wellbore 4435

OIL WELL TEST -  
Natural Prod. Tests: 0 bbl./oil, 0 this water in 24 hrs. 0 in. Size  
Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of acid used): 36 bbl./oil, 0 this water in 24 hrs. 0 in. Size Pump

GAS WELL TEST -  
Natural Prod. Tests: \_\_\_\_\_ MCF/Day Hours Flowed \_\_\_\_\_ Choke Size \_\_\_\_\_

Logging, Casing and Cementing Records

Size	Feet	Gas
8-5/8"	320	275
5-1/2"	4449	200

Method of Testing (pitot, back pressure, etc.): \_\_\_\_\_  
Test After Acid or Fracture Treatment: \_\_\_\_\_ MCF/Day Hours Flowed \_\_\_\_\_  
Choke Size \_\_\_\_\_ Method of Testing: \_\_\_\_\_

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): 650 gal acid 16,000 oil w/8,350# sand  
Casing Tubing None Wellbore None  
Press. None Press. None Oil run to tanks 4/11/58

Oil Transporter Texas New Mexico Pipe Line Co.  
Gas Transporter No connection

Remarks: \_\_\_\_\_

I hereby certify that the information given above is true and complete to the best of my knowledge.  
Approved: APR 30 1958 19\_\_\_\_

OIL CONSERVATION COMMISSION  
K. H. Reed  
Engineer District 1

By K. H. Reed (Signature)  
K. H. Reed  
Title: Division Supt.  
Send Communications regarding well to:  
Name: Warren Bradshaw Expl. Co.  
Address: Box 1417, Levelland, Texas

# SHAHARA OIL CORPORATION

December 12, 1994

Mr. David Catanach  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

RE: The Wiser Oil Company  
Form C-108  
Caprock Maljamar Unit Wells No. 51 and 70

Dear Mr. Catanach:

Enclosed please find the Affidavit of Publication from the Hobbs Daily News-Sun regarding the C-108 filed on behalf of The Wiser Oil Company requesting authorization to inject into its Caprock Maljamar Unit Well No. 51 and Well No. 70 submitted October 12, 1994. Also enclosed are copies of the proof of mailing to the offset operator and the surface owner.

If you need anything further, please call.

Sincerely,



Melanie J. Parker

/mp

Enclosures

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, Kathi Bearden

General Manager

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of \_\_\_\_\_

one weeks.

Beginning with the issue dated

October 14, 19 94

and ending with the issue dated

October 14, 19 94

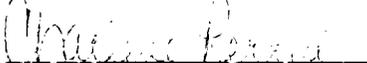


General Manager

Sworn and subscribed to before

me this 18 day of

October, 19 94



Notary Public.

My Commission expires

March 15, 1997

(Seal)

**LEGAL NOTICE**  
**October 14, 1994**  
**PROPOSED INJECTION**  
**WELLS**

The Wiser Oil Company proposes to continue injection in two wells in Sections 19 and 20, T17S R33E, Lea County, New Mexico, to provide injection service for the existing Caprock Majamar Unit Waterflood, Order No. R-10094. The zones to be injected into are Grayburg and San Andres from 3900' to 5500' with a maximum injection rate of 500 BWPD/well at a maximum pressure of 2800 psi. Any interested parties with objection or request for hearing should notify the Oil Conservation Division at PO Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice. Any questions should be directed to Perry L. Hughes, Agent for The Wiser Oil Company, at 207 W. McKay, Carlsbad, New Mexico 88220, telephone number 505-885-5433.

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

RECEIVED OCT 21 1994

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:** *CMU C-108*  
 \*51\*70

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

COMMISSIONER OF PUBLIC LANDS  
 PO BOX 1148  
 SANTA FE NM 87504-1148

4a. Article Number  
*Z 730 340 316*

4b. Service Type

Registered  Insured

Certified  COD

Express Mail  Return Receipt for Merchandise

7. Date of Delivery  
*4-10-91*

5. Signature (Addressee)  
*[Signature]*

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:** *CMU C-108*  
 \*51\*70

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

CROSS TIMBERS OPERATING COMPANY  
 PO BOX 50847  
 MIDLAND TX 79710

4a. Article Number  
*Z 730 340 315*

4b. Service Type

Registered  Insured

Certified  COD

Express Mail  Return Receipt for Merchandise

7. Date of Delivery  
*OCT 14 1994*

5. Signature (Addressee)  
*[Signature]*

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



STATE OF NEW MEXICO  
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
 OIL CONSERVATION DIVISION  
 HOBBS DISTRICT OFFICE

RECEIVED  
 JUN 8 50

BRUCE KING  
 GOVERNOR

8-3-94

POST OFFICE BOX 1980  
 HOBBS, NEW MEXICO 88241-1980  
 (505) 393-6161

OIL CONSERVATION DIVISION  
 P. O. BOX 2088  
 SANTA FE, NEW MEXICO 87501

RE: Proposed:  
 MC \_\_\_\_\_  
 DHC \_\_\_\_\_  
 NSL \_\_\_\_\_  
 NSP \_\_\_\_\_  
 SWD \_\_\_\_\_  
 WFX \_\_\_\_\_ X  
 PMX \_\_\_\_\_

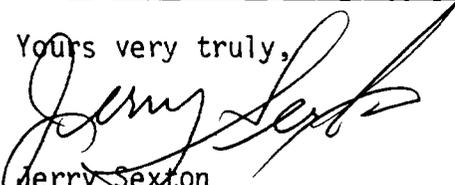
Gentlemen:

I have examined the application for the:

Wiser Oil Co. Caprock Maljamar Unit  
 Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Yours very truly,  
  
 Jerry Sexton  
 Supervisor, District 1

/ed

OIL CONSERVATION DIVISION

The Wiser Oil Company  
207 West McKay  
Carlsbad, New Mexico 88220

Re: Caprock Maljamar Unit  
Waterflood Project

Attention: Mr. Perry Hughes

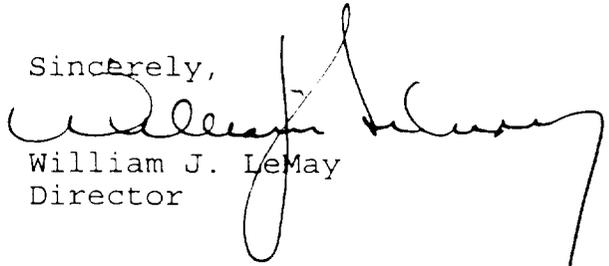
Dear Mr. Hughes:

We were recently advised by our Hobbs District Office that several of the injection wells within the Caprock Maljamar Unit Waterflood Project are injecting water at pressures that greatly exceed their approved pressure limit. It is our understanding that step rate tests are being conducted at the present time in order to gather data to support an increase in injection pressure on these wells, however, our records indicate that such an increase has not been granted as yet.

Such disregard for the terms and conditions of Division Order Nos. R-10094, WFX-660 and WFX-670 represents a serious violation of Division Rules and Regulations as well as a violation of the Federal Underground Injection Control Rules and Regulations as contained within CFR Parts 144, 145 and 146.

Please be advised that any future disregard for Division UIC Rules and Regulations and/or Division Orders will result in the imposition of fines of \$1000.00 per day per violation and/or termination of injection authority for this waterflood project.

Sincerely,



William J. LeMay  
Director

xc: OCD-Hobbs  
Case File-10931  
File-WFX-666, 670  
D. Catanach  
B. Stone