

APPLICATION FOR AUTHORIZATION TO INJECT

OIL CONSERVATION DIVISION

RECEIVED

Santa Fe
RELEASE 9-1-92

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no

II. Operator: Kelly H. Baxter

Address: P. O. Box 11193, Midland, Tx 79702

Contact party: Kelly H. Baxter Phone: 915-682-6191

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 SWD-368.

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.

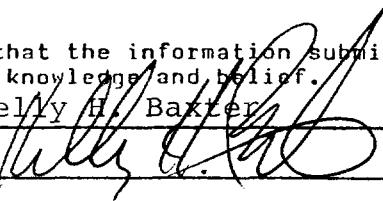
XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

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: Kelly H. Baxter Title: Owner

Signature:  Date: 8-14-92

* 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. April 1989 information was submitted for original

application to permit Wolfcamp, Penn, Strawn zones.

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.

KELLY H. BAXTER

P.O. BOX 11193
MIDLAND, TEXAS 79702

August 14, 1992

OFFICE TELEPHONE
915/682-6191
FAX #
915/682-9019

Kelly H. Baxter
Caudill State No. 2
Lea County, New Mexico

FORM C-108 SUPPLEMENT

III. Well Data:

See attached injection well data sheet

IV. Existing Project - Include San Andres zone to already permitted Wolfcamp, Penn and Strawn zones. Order No. SWD-368.

V. Map is attached - copy of original filing, no changes.

VI. There are four wells within the area of review that penetrate the Strawn (Penn) Zone: Sinclair Oil & Gas State 735 No. 1, Sinclair Oil & Gas State 735 No. 2, Humble Oil & Refining Co. New Mexico State AJ No. 2, Gulf Oil Corp. Lea "GJ" State No. 1. The plugging reports with schematics on these wells were submitted with original application for Wolfcamp, Penn & Strawn zones.

VII. Data on proposed operations:

(1) Average Rate of injection 1500 BWPD.
Maximum rate of injection 3000 BWPD.
Estimated total volume to be injected 6 x 106 BW.

(2) Closed

(3) Average injection pressure 1,000 psi.
Maximum injection pressure 2,060 psi.

(4) Reinjected produced water from the Devonian zone in the Caudill State No. 1.

(5) Injection will be into the San Andres, Wolfcamp, Penn, Strawn zones in the Caudill State No. 2. Copies of the analysis of the disposal zone formation water were previously submitted.

Kelly H. Baxter
Caudill State No. 2
Lea County, New Mexico
Form C-108 Supplement Cont'd.

VIII. Geological Data:

Injection Zone: Perforations Between 6,256-6,492' in the San Andres and 10,300 & 11,665' in the Wolfcamp, Penn and Strawn zones consisting of lime, dolomite, chert and shale.

The underground source of drinking water in this area is Ogallala. Its base is estimated at approximately 300'. The Santa Rosa is a fresh water aquifer with its base at approximately 1300'.

- IX. The planned completion is to inject thru perforations between 6,256 thru 6,492' and 10,300' and 11,665'. Acid stimulation may be done if it is needed to improve injectivity.
- X. A dual spaced neutron log is on file at the NMOCD, Hobbs District Office.
- XI. Copies of water analysis from three fresh water wells within one mile of the Caudill State No. 2 were previously submitted.
- XII. Available geological and engineering data have been examined and no evidence of open faults or any other hydrologic connections between the disposal zone and any underground fresh water aquifers have been found.
- XIII. The offset operator listed below has been furnished a copy of this application by certified mail.

The surface owner listed below has been furnished a copy of this application by certified mail.

Offset Operator

Elk Oil Company
P. O. Box 310
Roswell, NM 88210

Surface Landowner

Frankie Caudill
P. O. Box 23
Lovington, New Mexico 88260
505-396-2283

INJECTION WELL DATA SHEET

Kelly H. Baxter

OPERATOR

Caudill State

LEASE

2 660' FN & 1980' FEL

WELL NO.

FOOTAGE LOCATION

SECTION

SECTION

T-15-S

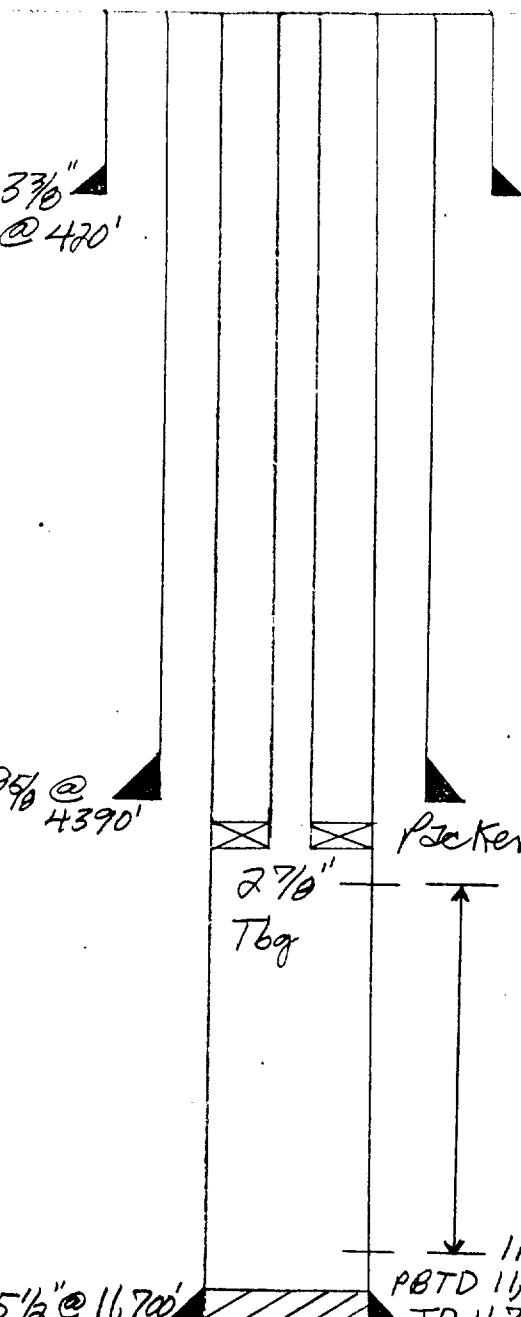
TOWNSHIP

R-36-E

RANGE

Dean (Permo Penn) Field

Les Co., N.M.

SchematicTabular DataSurface Casing Set @ 420'Size 1 3/8" Cemented with 450 sx.TOC Surface feet determined by CirculatedHole size 17 1/8"Intermediate Casing Set @ 4390'Size 9 5/8" Cemented with 1100 sx.TOC Surface feet determined by CirculatedHole size 12 1/4"Long string Set @ 11,700'Size 5 1/2" Cemented with 1125 sx.TOC 4370 feet determined by temperature SurveyHole size 8 1/2"Total depth 11,700

Injection interval

6265' feet to 11,665 feet
(perforated or open hole, indicate which)Tubing size 2 7/8" lined with plastic (material) set in aBaker Model R Double Grip (brand and model) packer at 6093' feet

(or describe any other casing-tubing seal).

Other Data1. Name of the injection formation San Andres - Strawn2. Name of Field or Pool (if applicable) Dean (Permo - Penn)3. Is this a new well drilled for injection? Yes NoIf no, for what purpose was the well originally drilled? Oil Well4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No,11,604'-11,665'; 10,298'-10,728'; 6252'-6492'5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

(No revisions as of 8/92)
Information Posted 5/2/88

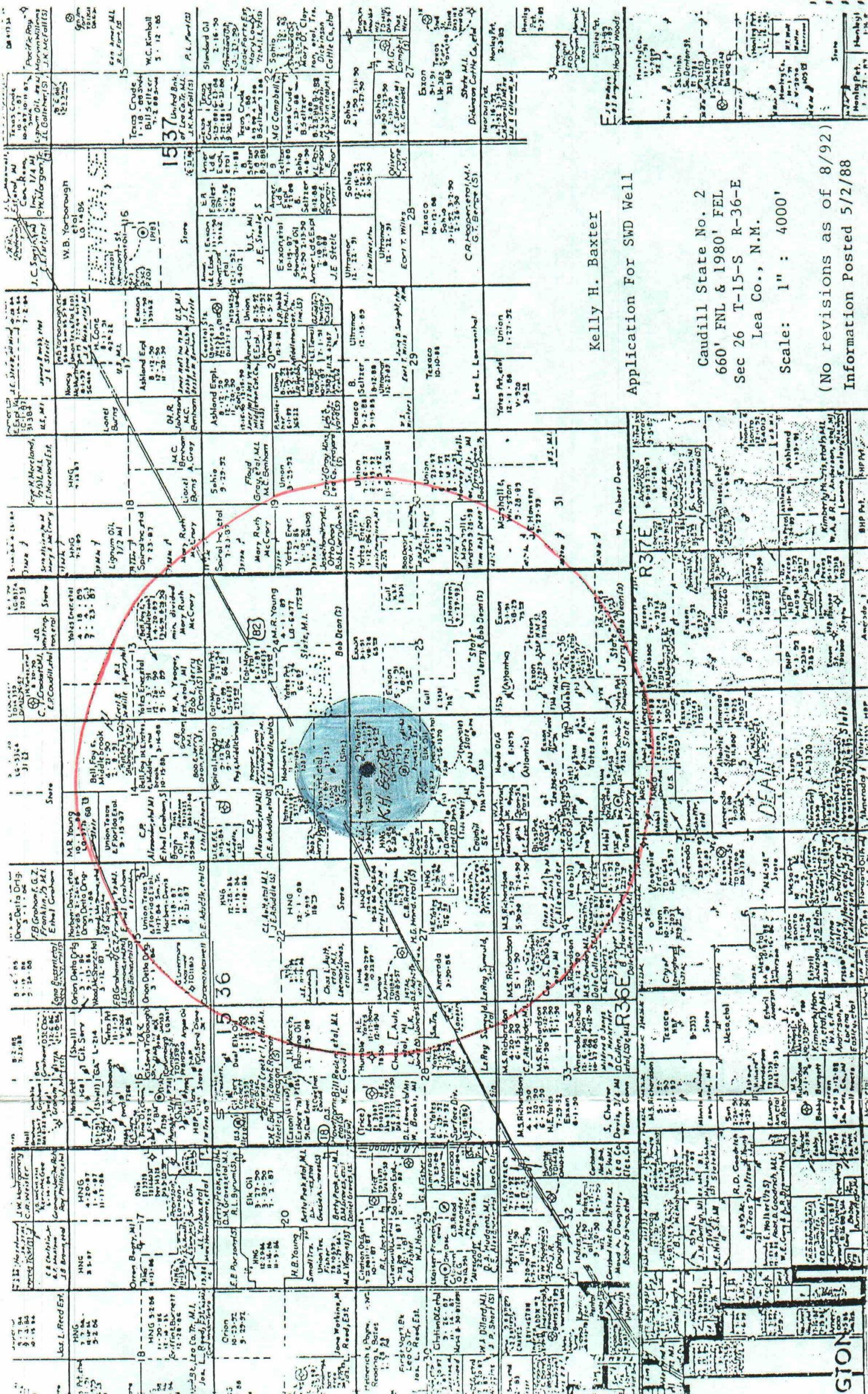
Scale: 1" : 4000'

Caudill State No. 2
660' FNL & 1980' FEL

Sec 26 T-15-S R-36-E

Lea Co., N.M.

Application For SWD Well
Kelly H. Baxter



IGN

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

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

Aug. 10, 1992
and ending with the issue dated

Aug. 10, 1992

Kathi Bearden
General Manager
Sworn and subscribed to before

me this 10 day of

Aug., 1992
Paula Polkian
Notary Public.

My Commission expires _____

Aug. 5, 1995
(Seal)

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.

LEGAL NOTICE
August 10, 1992

Kelly H. Baxter proposes to include the San Andres formation at 6252 feet to 6492 feet interval for disposal of produced water in the Caudill State No. 2 SWD well. This well is located 660 feet FNL and 1980 feet FEL, Sec 26, T-15-S, R-36-E, Lea County, New Mexico. The No. 2, Order No. SWD-368, is currently permitted to dispose of produced water from the Caudill State No. 1. This water is produced from the Devonian formation and is presently disposed of into the Wolfcamp, Penn and Strawn formations in the interval 10,300 feet to 11,665 feet. Maximum injection rate will be 3,000 BWPD and maximum pressure will be 2060 pounds per square inch. Interested parties may contact

Kelly H. Baxter
P.O. Box 11193
Midland, Texas 79702
915/682-6191
Objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 must be filed within 15 days of this notice.

KELLY H. BAXTER

P.O. BOX 11193
MIDLAND, TEXAS 79702

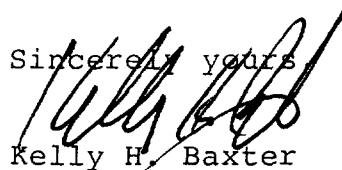
OFFICE TELEPHONE
915/682-6191
FAX #
915/682-9019

August 14, 1992

Re: Application to Include the San Andres Formation
for Disposal Purposes
Caudill State No. 2 Well, Order No. SWD-368
Sec 26, T-15-S, R-36-E
Lea County, New Mexico

Attention Landowner or Offset Operator

As required by the Oil Conservation Division, Energy and Minerals Department State of New Mexico, please find enclosed a copy of Form C-108 Application for Authorization To Inject, whereby, we are proposing to include the San Andres formation with the presently permitted Wolfcamp, Penn and Strawn formation.

Sincerely yours,

Kelly H. Baxter

KHB/mr

Enclosures

CC/ Landowner: Frankie Caudill, P. O. Box 23, Lovington, NM 88260
Offset Operators:

Elk Oil Company, P. O. Box 310, Roswell, NM 88210
Exxon Co. USA, P. O. Box 1600, Midland, TX 79702
Hadson Petro, 921 S. Sanger, Hobbs, NM 88240
Yates Petroleum, 105 S. 4th Street, Artesia NM 88210

P 555 871 292

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

Sent to	EIK Oil Company
Street and No.	P.O. Box 310
P.O. State and ZIP Code	Midland TX 79701
Postage	\$.52
Certified Fee	1.00
Special Delivery Fee	1.00
Restricted Delivery Fee	1.00
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.52
Postmark or Date	

PS Form 3800, June 1985

Sent to	Madison Petro
Street and No.	921 S. Singer
P.O. State and ZIP Code	1100 S NM 88240
Postage	\$.52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.52
Postmark or Date	

P 555 871 297

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

U.S.G.P.O. 1989-234-555

Sent to	Yates Petroleum
Street and No.	105 S 4th Street
P.O. State and ZIP Code	Arliea NM 88210
Postage	
Certified Fee	\$.52
Special Delivery Fee	1.00
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$.52
Postmark or Date	

P 555 871 291

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

U.S.G.P.O. 1989-234-555

Sent to	Frankie Caudill
Street and No.	P.O. Box 23
P.O. State and ZIP Code	Wovington NM 88260
Postage	\$.52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.52
Postmark or Date	

P 555 871 294

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

PS Form 3800, June 1985

U.S.G.P.O. 1989-234-555

Sent to	Exxon Co USA
Street and No.	P.O. Box 1600
P.O. State and ZIP Code	Midland TX 79702
Postage	\$.52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.52
Postmark or Date	



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

GARREY CARRUTHERS
GOVERNOR

5-5-89

POST OFFICE BOX 1900
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 _____
PMX _____

Gentlemen:

I have examined the application for the:

Kelly H. Baxter Caudill State #2-B 26-15-36
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed

MAY - 8 1989

OIL CONSERVATION DIV.
SANTA FE