

OIL CONSERVATION DIVISION  
RECEIVED

RANDOLPH M. RICHARDSON

OIL AND GAS LAND AND UNIT CONSULTANT

FEDERAL - STATE - FEE

P. O. BOX 2423

ROSWELL, NEW MEXICO 88202-2423

July 18, 1990

'90 JUL 20 AM 8 31

ATTORNEY AT LAW  
NEW MEXICO - TEXAS

OFFICE 505 622-8801  
HOME 505 622-7985

In Re: Application for Water Disposal  
Well, Hat Mesa Delaware and Hat  
Mesa Bone Springs, T-20-21-S,  
R-32-33-E, NMPM, Lea County, N. M.

Mr. William J. Lemay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay,

Pursuant to OCD Rule 701, I am enclosing two (2) copies of Form C-108 together with attachments and requesting Administrative Approval for a Water Disposal Well. The proposed Disposal Well is the Cleary Petroleum "SL" State No. 1, located in Unit "N", Sec 32, T-21-S, R-32-E, NMPM.

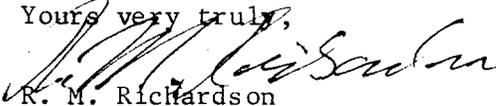
All of the information called-for in Form C-108 is attached and includes copy of Affidavit of Publication attesting that Public Notice was published in the Hobbs Daily News Sun on July 2, 1990. All the Leasehold Operators within the half-mile radius of the well were furnished copy of the C-108 by Certified Mail. Copy of Return Receipts as well as my letter to each Operator is attached.

The surface of the Land is owned by the State of New Mexico and we are in the process of obtaining pipeline right-of-ways and the 2½ acre well site easement from the Commissioner of Public Lands. Copy of Letter from Exxon to Mr. Floyd Prando is attached to the C-108. Exxon is the owner of the current valid Oil & Gas Lease covering the land upon which the disposal well is located. To keep the record straight, I am today sending a copy of C-108 by Certified Mail, Return Receipt, to the State Land Office.

Pursuant to "Distribution" noted on C-108 I am also forwarding a copy of this letter and completed form to your Hobbs Office.

Please consider the foregoing, the attachments, and advise if there is anything additional that you need prior to granting approval.

Yours very truly,

  
R. M. Richardson

CC: With Attachments;  
Oil Conservation Division - Dist. 1.  
P. O. Box 1980  
Hobbs, New Mexico 88240-1980  
Strata Production Co.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: Strata Production Company  
Address: 648 Petroleum Bldg., Roswell, NM 88201  
Contact party: Jim McClelland Phone: (505) 622-1127
- 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 \_\_\_\_\_.
- 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: George L. Scott, Jr. Title President

Signature: George L. Scott Jr Date: 17 July 1990

- \* 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.

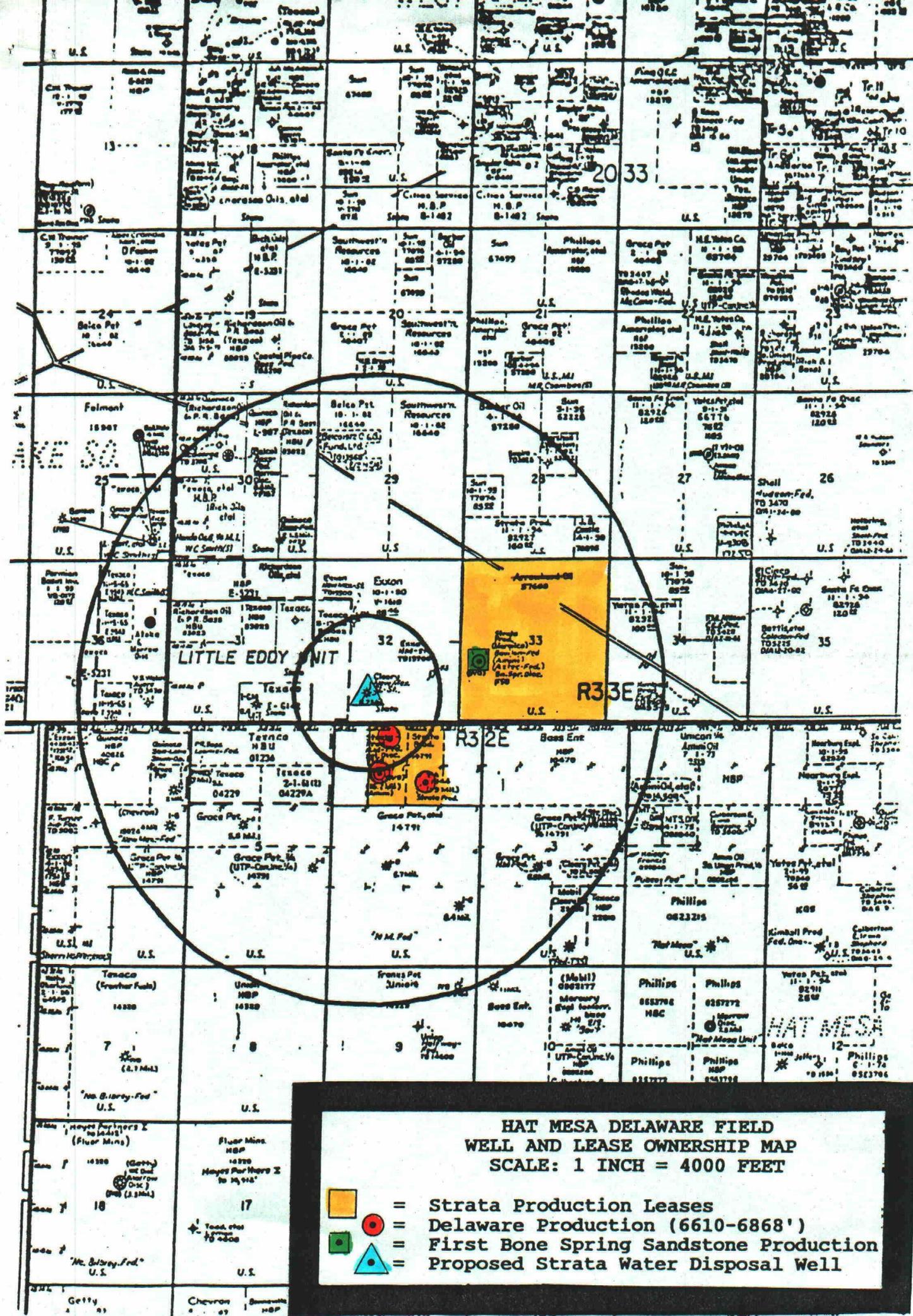
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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.

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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.



**HAT MESA DELAWARE FIELD  
WELL AND LEASE OWNERSHIP MAP  
SCALE: 1 INCH = 4000 FEET**

-  = Strata Production Leases
-  = Delaware Production (6610-6868')
-  = First Bone Spring Sandstone Production
-  = Proposed Strata Water Disposal Well

III. A. Well Data: (1) through (4). See two attached Well Data Sheets; Plugging Data; and Recompletion Data.

B. (1) Injection Formation: Delaware Cherry Canyon "B" sandstone.

(2) Injection interval will be perforated.

(3) The injection well was originally drilled for production of oil and gas.

(4) There are no other perforated intervals in this injection well.

(5) The next possible higher oil or gas zone is the Yates sandstone located (approximately) between 3300' and 3330'. The next lower oil or gas zone in the area of this well is a Delaware sandstone, if present, located between (approximately) 6450' and 6460'.

There is no oil or gas production in these higher and lower zones in the area of the injection well. Logs covering these zones are not available.

V. Area of Review: Plat attached.

VI. Well Data: Wells within area of review.

Section 32-T20S-R33E, Unit "N", SE/4SW/4 (Proposed injection well) Cleary Petroleum, New Mexico "SL" St #1 - Spud 10-3-1973, completed 11-30-1973. T.D. 13,860 feet. 13 3/8" 48# set at 1,125 feet with 900 sacks. 9 5/8" 40# and 43# set at 7,000 feet with 1300 sacks, thru shoe, and 1800 sacks thru DV collar at 3,299 feet. 5 1/2" 17# and 20# set at 13,860 feet with 900 sacks.

P & A 11-28-1978. Shot-off 5 1/2" at 9,680 feet and POOH. Spotted 35 sacks at 9,738 feet, 55 sacks at 8,307 feet, 55 sacks at 7,053 feet, 55 sacks at 3,486 feet, 55 sacks at 2,242 feet, and 55 sacks at 1,527 feet. Cut off 9 5/8" at 1,155 feet and POOH w/same. Spotted 80 sacks at 1,250 feet and 10 sacks at surface.

Section 32-T20S-R33E, Unit "F", SE/4NW/4

E Exxon Corp, New Mexico "FH" State Comm #1 - Spud 5-24-1989, completed 12-30-1989 as D & A. 13 3/8" at 522 feet with 450 sacks, 9 5/8" at 4,910 feet with 2150 sacks, 5 1/2" at 13,358 feet with 1570 sacks.

P & A 12-30-1989. Cut 5 1/2" at 6,560 feet and POOH.

Spotted 15 sacks at 12,550 feet, 25 sacks at 12,175 to 12,375 feet, 25 sacks at 11,160 to 11,360 feet, 25 sacks at 8,190 to 8,390 feet, 55 sacks at 6,476 to 6,660 feet, 70 sacks at 4,350 to 5,000 feet, 70 sacks at 3,600 feet, and 1,110 sacks at 3,200 feet to surface.

Section 4-T21S-R32E, Unit "F", Lot 6, (SE/4NW/4)

Strata Production, New Mexico "A" Fed. #1 - Spud 2-9-1973 by Amini Oil Corporation, completed 8-6-1973 in the Morrow 13,640 to 13,671 feet. 20" at 397 feet with 1000 sacks, 13 3/8" at 3,350 feet with 2800 sacks, 9 5/8" at 8,951 feet with 1825 sacks, 5 1/2" liner 8,805 to 14,000 feet with 1385 sacks.

P & A 6-8-1979. Cut off 9 5/8" at 3,524 feet and POOH.

Re-entered 7-13-1989, drilled out cement to 9 5/8" casing stub at 3,524 feet, ran 9 5/8" casing (43.5#) to 3,524 feet (tie-in) with 35 sacks, DO to 10,656 feet, set CIBP at 9,100 feet. Completed 9-18-1989 in the Delaware from 6,834 to 6,869 feet. Producing.

Section 4-T21S-R32E, Unit "C", Lot 3, (NE/4NW/4)

Strata Production, New Mexico "A" Fed. #3 - Spud 3-15-1990, completed 5-2-1990. 8 5/8" 24# at 1,342 feet with 410 sacks, 5 1/2" 15.5# and 17# set at 7,150 feet with 540 sacks and, second stage cement at 1900 sacks thru D.V. tool at 4,900 feet. Completed in Delaware sandstone at 6,609 to 6,625 feet and 6,719 to 6,723 feet. Producing.

Note: The well shown on the Area of Review Plat located in Unit "I", Sec. 32 was permitted but was never drilled.

VII. Proposed Operation:

1. Average injection rate into the well will be .5 BPM with an average initial daily total of 200 barrels. The maximum rate anticipated is 1.0 BPM with a maximum daily total of 800 barrels.
2. This will be a closed system.
3. Average injection pressure will be approximately 430 psi, and request an operating maximum of 1200 psi. The system will be regulated with Murphy Controls so as not to have a continuous injection of fluid. No deeper aquifers containing usable water are known in this area.
4. and 5. Water compatibility: Refer to attached Geological Report by John G. Worrall.

VIII. Refer to attached Geological Report.

IX. Stimulation Program: None

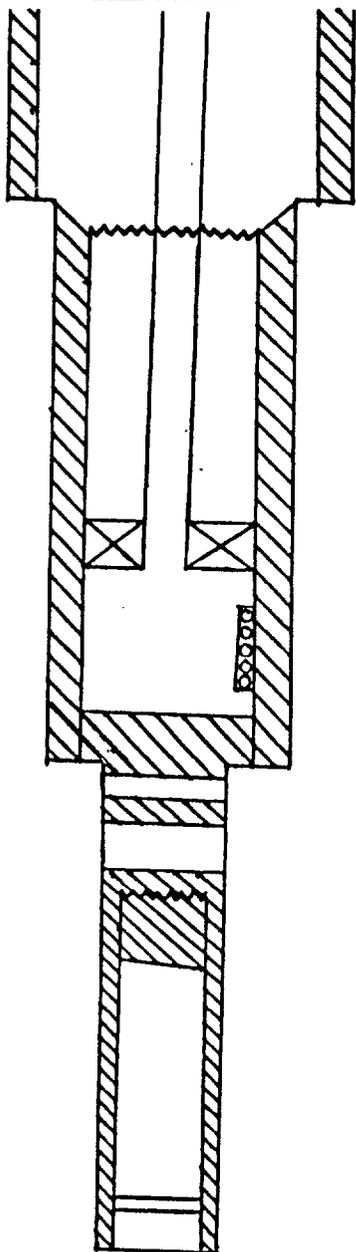
X. Test and Logging Data: Refer to Cleary Petroleum State "SL" #1 well above, Paragraph VI.

XI. Water Analysis: There are no producing fresh water wells within one mile of the Injection well. Also refer to attached Geological Report.

XII. Applicant has examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. See also attached, Geological Report.



Schematic



13 3/8 Casing shoe:  
1125'

Cut off 9 5/8 casing at  
1155'.

Packer to be set at  
5500'. Halliburton type.  
(Lock-Set) Zinc Plated.

Perfs: 5575' - 5615'

Set cement plug at 7053'  
with 55 sx. TOC 6505'

Set cement plug at 8307'  
with 55 sx.

Cut-off 5 1/2 at 9680'

Set CIBP at 13008 and  
capped with 35' cement

Surface Casing

Size 13 3/8" Cement with 900 sx.  
TOC circ.  
Hole size 17 1/2"

Intermediate Casing

Size 9 5/8" Cemented with 3100 sx.  
TOC 1075'; determined by       
Freepoint (DV tool 3299')  
Hole size 12 1/4"  
Total Depth 7000'  
Injection Interval 5575' - 5615'

Production Casing

Size 5 1/2" Cement with 900 sx  
TOC 10,000'; determined by       
Calculated by bond-log  
Hole size 8 1/2"  
Total Depth 13,860'

\*Appears on Public Records as  
the Cleary Petroleum Corp.  
"SL" State Comm #1

Tubing size 2 3/8" lined with Plastic set in a Halliburton Type  
Packer at 5500' feet.  
Describe any other casing-tubing seal     

Additional Data:

- Name of the injection formation Delaware Formation
- Name of Field of Pool (if applicable) Hat Mesa Field
- Is this a new well drilled for injection? YES  NO  
If no, for what purpose was the well originally drilled? Oil & Gas
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or Bridge-Plug(s) used) Information covered in format.
- Give the depth to and name of any overlying and/or underlying oil or gas zones in this area. Information covered in format.

**AFFIDAVIT OF PUBLICATION**

State of New Mexico,  
County of Lea.

I, Don Teer

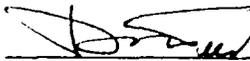
of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of \_\_\_\_\_

One weeks.  
Beginning with the issue dated

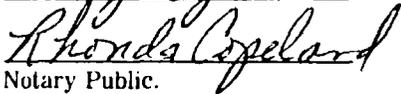
July 2, 1990  
and ending with the issue dated

July 2, 1990

  
Business Manager

Sworn and subscribed to before  
me this 10<sup>th</sup> day of

July, 1990

  
Notary Public.

My Commission expires \_\_\_\_\_

July 24, 1991

(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**

July 2, 1990

**PUBLIC NOTICE  
APPLICATION FOR  
WATER DISPOSAL**

Strata Production Company, 648 Petroleum Building, Roswell, New Mexico 88201, (Contact: James G. McClelland, (505) 622-1127) has made Application to the Oil Conservation Division, Energy, Minerals and Natural Resources Department, State of New Mexico, for Administrative Approval and authority to inject salt water into the Cleary Petroleum Corporation New Mexico "SL" State Comm. #1 Well, located 990 feet from South line, 1980 feet from West line, Section 32, T-20-S, R-33-E, NMPM, Lea County, New Mexico.

The purpose of this water injection well is to dispose of salt water produced from the Hat Mesa Delaware Field and Hat Mesa Bone Springs Field as currently designated by the Oil Conservation Division and as may be extended by additional drilling.

Water to be disposed of will be injected into the Cherry Canyon formation of the Delaware Mountain group at an interval lying between 5575 feet and 5615 feet beneath the surface.

The minimum injection rate is expected to be approximately 200 barrels of water per day. The maximum injection rate is expected to be approximately 800 barrels of water per day.

Minimum injection pressure will be approximately 430 psi. The maximum injection pressure is expected to be 1200 psi.

Any interested party may file an objection to this Application or may request a public hearing. Any objection or request for hearing must be filed with the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87504-2088,

within 15 days from date of this publication.

**STRATA  
PRODUCTION  
COMPANY**  
By James B.  
McClelland  
648 Petroleum Building  
Roswell,  
New Mexico 88201  
Telephone: (505) 622-1127

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. Joe Thomas Exxon Co., USA P.O. Box 1600 Midland, TX 79702-1600	4. Article Number P 907 214 318
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery JUL 5 1990	

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Ms. Kelly Hightower Grace Petroleum Corp. 6501 North Broadway Oklahoma City, OK 73116-8298	4. Article Number P 907 214 320
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid) 
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery	

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. David Sleeper Texaco, Inc. P.O. Box 2100 Denver, CO 80201	4. Article Number P 907 214 319
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery 7/8/90	

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

**EXXON** COMPANY, U.S.A.

POST OFFICE BOX 1600 • MIDLAND, TEXAS 79702-1600

EXPLORATION DEPARTMENT  
WESTERN DIVISION

J. B. THOMAS  
LAND ASSOCIATE

June 11, 1990

State of New Mexico  
Lease V-1618  
Section 32: SESW  
T20S-R33E  
Lea County, NM

Mr. Floyd Prando  
State of New Mexico  
Land Office  
P. O. Box 1148  
Santa Fe, NM 87504-1148

Exxon is the present lessee of the captioned State of New Mexico lease. Exxon does not intend to re-enter the Amini Oil Co. (Cleary) NM State "SL" # 1 for completion as an oil or gas well and we waive our right to do so under the State Oil and Gas lease. We do not object to Strata Production Company converting the Amini well to a water disposal well.

Very truly yours,



✓ c: Mr. Randolph M. Richardson  
P. O. Box 2423  
Roswell, NM 88202-2423

RANDOLPH M. RICHARDSON

OIL AND GAS LAND AND UNIT CONSULTANT

FEDERAL - STATE - FEE

P. O. BOX 2423

ROSWELL, NEW MEXICO 88202-2423

June 29, 1990

ATTORNEY AT LAW  
NEW MEXICO - TEXAS

OFFICE 505 622-8801  
HOME 505 622-7985

In Re: Salt Water Disposal Well  
Hat Mesa Area  
T-20-S, R-33-E, NMPM &  
T-21-S, R-32-E, NMPM  
Lea County, New Mexico

CERTIFIED/RETURN RECEIPT REQUESTED

Mr. Joe Thomas  
Exxon Company, USA  
P.O. Box 1600  
Midland, TX 79702-1600

Dear Mr. Thomas:

You are the operator of an oil and gas lease within one-half mile of the Cleary Petroleum "SL" State Comm #1 well, located in the SE/4SW/4 Sec. 32, T-20-S, R-33-E, NMPM, Lea County, New Mexico

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert this plugged and abandoned hole to a water disposal well for the injection of water produced in the Hat Mesa Delaware and Bone Springs fields.

Consequently, and pursuant to the rules and regulations of the OCD, I am enclosing copy of OCD Form C-108 which is the Application for Administrative Approval of the injection well and authority to inject water.

If you object to this Application, or feel that a public hearing is necessary, please contact the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87504-2088. You may also contact Mr. James G. McClelland, Strata Production Co., 648 Petroleum Bldg., Roswell, NM 88201, Telephone (505) 622-1127.

If you have no objections to the above mentioned Application, please sign one copy of this letter in the space provided and return to the undersigned.

Thank you.

Yours very truly,

R. M. Richardson

RMR/lrs  
Encl.  
cc: Strata Production Co.

We have no objections to the Application:

EXXON COMPANY, USA

By \_\_\_\_\_

Dated: \_\_\_\_\_

RANDOLPH M. RICHARDSON

OIL AND GAS LAND AND UNIT CONSULTANT

FEDERAL - STATE - FEE

P. O. BOX 2423

ROSWELL, NEW MEXICO 88202-2423

June 29, 1990

ATTORNEY AT LAW  
NEW MEXICO - TEXAS

OFFICE 505 622-8801  
HOME 505 622-7985

In Re: Salt Water Disposal Well  
Hat Mesa Area  
T-20-S, R-33-E, NMPM &  
T-21-S, R-32-E, NMPM  
Lea County, New Mexico

CERTIFIED/RETURN RECEIPT REQUESTED

Mr. David Sleeper  
Texaco, Inc.  
P.O. Box 2100  
Denver, CO 80201

Dear Mr. Sleeper:

You are the operator of the Little Eddy Unit, which falls within one-half mile of the Cleary Petroleum "SL" State Comm #1 well, located in the SE/4SW/4 Sec. 32, T-20-S, R-33-E, NMPM, Lea County, NM.

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert this plugged and abandoned hole to a water disposal well for the injection of water produced in the Hat Mesa Delaware and Bone Springs fields.

Consequently, and pursuant to the rules and regulations of the OCD, I am enclosing copy of OCD Form C-108 which is the Application for Administrative Approval of the injection well and authority to inject water.

You, as operator of the Unit, may or may not be obligated to contact the non-operators. If under your Unit Operating Agreement the non-operators must be notified of this water disposal well, and Application to the OCD, please advise.

If you object to this Application, or feel that a public hearing is necessary, please contact the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87504-2088. You may also contact Mr. James G. McClelland, Strata Production Co., 648 Petroleum Bldg., Roswell, New Mexico 88201, Telephone (505) 622-1127.

Mr. David Sleeper  
Page 2  
June 29, 1990

If you have no objections to the above mentioned Application,  
please sign one copy of this letter in the space provided and  
return to the undersigned.

Thank you.

Yours very truly,

R. M. Richardson

RMR/l  
Encl.  
cc: Strata Production Co.

We have no objections to the Application:

TEXACO, INC.

By \_\_\_\_\_  
Dated: \_\_\_\_\_

RANDOLPH M. RICHARDSON

OIL AND GAS LAND AND UNIT CONSULTANT

FEDERAL - STATE - FEE

P. O. BOX 2423

ROSWELL, NEW MEXICO 88202-2423

June 29, 1990

ATTORNEY AT LAW  
NEW MEXICO - TEXAS

OFFICE 505 622-8801  
HOME 505 622-7985

In Re: Salt Water Disposal Well  
Hat Mesa Area  
T-20-S, R-33-E, NMPM &  
T-21-S, R-32-E, NMPM  
Lea County, New Mexico

CERTIFIED/RETURN RECEIPT REQUESTED

Ms. Kelly Hightower  
Grace Petroleum Corp.  
6501 North Broadway  
Oklahoma City, OK 73116-8298

Dear Ms. Hightower:

You are the operator of an oil and gas lease within one-half mile of the Cleary Petroleum "SL" State Comm #1 well, located in the SE/4SW/4 Sec. 32, T-20-S, R-33-E, NMPM, Lea County, New Mexico.

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert this plugged and abandoned hole to a water disposal well for the injection of water produced in the Hat Mesa Delaware and Bone Springs fields.

Consequently, and pursuant to the rules and regulations of the OCD, I am enclosing copy of OCD Form C-108 which is the Application for Administrative Approval of the injection well and authority to inject water.

If you object to this Application, or feel that a public hearing is necessary, please contact the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87504-2088. You may also contact Mr. James G. McClelland, Strata Production Co., 648 Petroleum Bldg., Roswell, NM 88201, Telephone (505) 622-1127.

If you have no objections to the above mentioned Application, please sign one copy of this letter in the space provided and return to the undersigned.

Thank you.

Yours very truly,

R. M. Richardson

RMR/lrs  
Encl.  
cc: Strata Production Co.

We have no objections to the Application:

GRACE PETROLEUM CORPORATION

By \_\_\_\_\_

Dated: \_\_\_\_\_

RANDOLPH M. RICHARDSON

OIL AND GAS LAND AND UNIT CONSULTANT

FEDERAL - STATE - FEE

P. O. BOX 2423

RDSWELL, NEW MEXICO 88202-2423

July 18, 1990

ATTORNEY AT LAW  
NEW MEXICO - TEXAS

OFFICE 505 622-8801  
HOME 505 622-7985

In Re: Application to NM OCD for  
Salt Water Disposal Well  
Lea County, N. M.

CERTIFIED RETURN RECEIPT

Commissioner of Public Lands  
State Land Office  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Dear Mr. Humphries,

The State of New Mexico is the owner of the surface of the land upon which Strata Production Company proposes to locate a salt water disposal well.

Pursuant to the Rules and Regulations of the Oil Conservation Division the "owner" of the surface is to be furnished a copy of OCD Form C-108 by Certified Mail.

Consequently you will find a completed copy of C-108 attached hereto.

We have previously been in contact with your surface division, both Right-of-way and well site easement for disposal wells, as well as the Oil & Gas Division. We have received permission to survey and will be doing so in the near future.

Formal Applications for the well site easement and right-of-way have not yet been furnished to you, but will be shortly.

Please advise if you need any additional information.

Yours very truly,

R. M. Richardson

CC: Strata Production Co.  
Attached to C-108

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

**SENDER: Complete Items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge)      2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Commissioner of Public Lands P. O. Box 1148 Santa Fe, New Mexico 87504-1148	4. Article Number P-907-214-177
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

PS Form 3800, June 1985

Fold at line over top of envelope to the right of the return address

**CERTIFIED**

P 907 214 177

**MAIL**

Sent to Commissioner of Public Lands	
Street and No P. O. Box 1148	
P. O. State and ZIP Code Santa Fe, New Mexico 87504	
Postage	\$
Certified Fee	
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	\$
Postmark or Date	

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

P 907 214 177

## Scott Exploration, Inc.

Suite 648, Petroleum Bldg.  
Roswell, New Mexico 88201  
Tel: (505) 622-5891

June 26, 1990

Oil Conservation Division  
PO Box 2088  
Santa Fe, NM 87051

RE: Proposed Water Disposal Well  
Strata Production Company  
New Mexico "SL" State Comm. #1  
990' FSL, 1980' FWL, Section 32-T20S-R33E  
Lea County, New Mexico

Gentlemen:

Strata Production proposes to convert captioned well into a water disposal. This well was drilled by Cleary Petroleum in 1973. The present operator is Exxon Corp., who has concluded an agreement with Strata Production Company to use the well for water disposal.

The well was originally drilled to a depth of 13,860' and 5 1/2" casing was set. The Morrow was perforated from 13,106-16' and completed as a gas well in November, 1973. The well produced to May, 1978 and was plugged in November, 1978. The 5 1/2" casing was shot off at 9,680' and pulled. The 9 5/8" casing was shot off at 1,155' (freepoint at 1,200') and pulled. An 80-sack plug was then spotted in and out of the casing stub from 1,250 to 1,075'.

Strata Production Company proposes to re-enter this well, run 9 5/8" casing to the stub at 1,155' and tie back to surface. Next, Strata will drill out cement plugs to 6,950' and run a cased-hole gamma ray-neutron log and a cement bond log. (Strata was unable to obtain the original-open hole logs for this well, despite numerable attempts.)

The objective is to inject water into the Delaware Cherry Canyon "B" Sandstone - a 40-foot thick sandstone having porosities of 20 to 23% which should be encountered at 5,575 to 5,615' (see Type Log Exhibit). This laterally extensive sandstone gave up water with no shows on two drill stem tests in updip wells, and has given up no shows in samples or mud logs of nearby wells, including no shows in a recently drilled diagonal offset well - the Strata Production Company NM Federal #3 (see Porosity Isopach

Map Exhibit). The base of this sandstone is 920 feet above the producing Delaware interval at Hat Mesa Delaware field. Vertical fluid communication from (or within) the injection zones is restricted by dense zones of anhydritic dolomite.

The water to be injected is unfit for domestic, stock, irrigation, or any other general use. It is being produced from nearby Delaware and Bone Spring sandstone wells operated by Strata Production Co. Water samples from those wells have shown the waters have fluid chemistries compatible with the zone to be injected. There are no fresh aquifers currently being produced within a two-mile radius of the proposed water disposal well. There is also no evidence of faulting or any other hydrologic connection between potential fresh water aquifers and the proposed injection zone. No wells produce oil or gas from this sandstone within a 2-mile radius of the proposed disposal well.

Exhibits Furnished:

**Exhibit #1.** Type Log Exhibit showing a CNL-FDC profile of the B sandstone with overlying and underlying dolomite beds.

**Exhibit #2.** Structure Map - Top of B Sandstone Interval.

**Exhibit #3.** Gross Isopach Map - B Sandstone Interval.

Respectfully submitted,

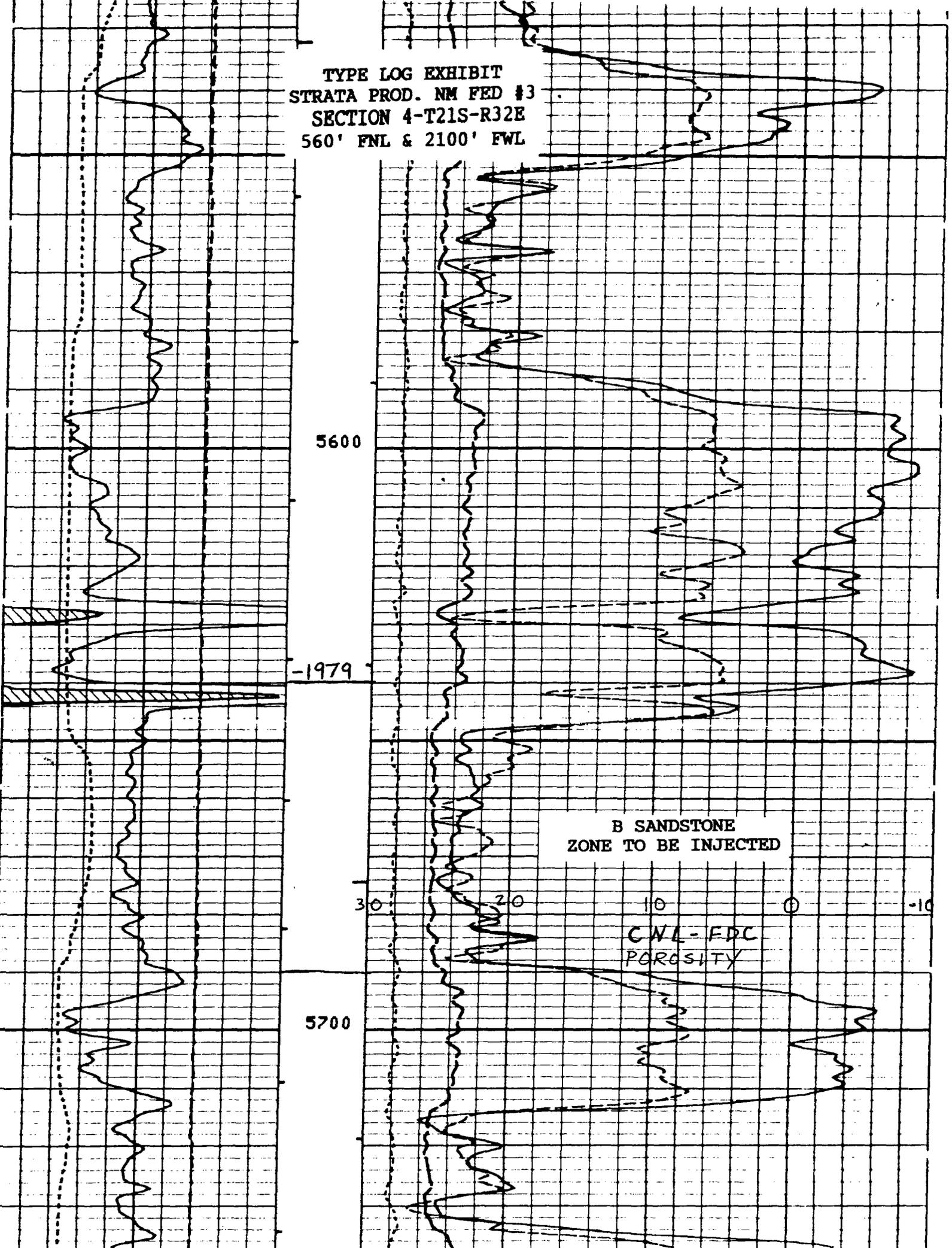


John G. Worrall  
Consulting Geologist

JGW:ss

Enclosures

TYPE LOG EXHIBIT  
STRATA PROD. NM FED #3  
SECTION 4-T21S-R32E  
560' FNL & 2100' FWL



5600

-1979

B SANDSTONE  
ZONE TO BE INJECTED

30

20

10

0

-10

CWL - FDC  
POROSITY

5700

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE