

**Hondo Oil & Gas Company**

Box 2208

Roswell, New Mexico 88202

(505) 625-8700



August 11, 1988

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Application for permit to convert to Salt Water Disposal  
Ballard DE Federal Well No. 3  
990' FNL & 990' FWL, Section 27, T-20S, R-34E  
Lea County, New Mexico

Gentlemen:

Please find enclosed Hondo Oil & Gas Company's application for permit to convert the above captioned well into a salt water disposal.

Copies have been submitted to the surface owner and the offset operators.

If you should have any questions, please contact E. L. Buttross, Jr. at 505/625-8760.

Sincerely,



Lisa Bohannon  
Engineering Technician

:lb

Enclosures

**Hondo Oil & Gas Company**

Box 2208

Roswell, New Mexico 88202

(505) 625-8700



August 11, 1988

TO: Offset Operators

RE: Application for permit to convert to Salt Water Disposal  
Ballard DE Federal Well No. 3  
990' FNL & 990' FWL, Section 27, T-20S, R34E  
Lea County, New Mexico

Gentlemen:

According to the Oil Conservation Division Rule 701, a copy of any injection well permit application must be sent to the offset operators and surface owner. Enclosed is our application for administrative approval to convert the above captioned well to a salt water disposal.

If you should have any questions, please contact E. L. Buttross, Jr. at 505/625-8760.

Sincerely,

A handwritten signature in cursive script that reads "Lisa Bohannon". The signature is written in dark ink and is positioned above the typed name.

Lisa Bohannon  
Engineering Technician

:1b

Enclosures

**Hondo Oil & Gas Company**

Box 2208

Roswell, New Mexico 88202

(505) 625-8700



August 11, 1988

Dan and Ron Berry  
Box 160  
Eunice, New Mexico 88231

RE: Application for permit to convert to Salt Water Disposal  
Ballard DE Federal Well No. 3  
990' FNL & 990' FWL, Section 27, T-20S, R-34E  
Lea County, New Mexico

Gentlemen:

According to the Oil Conservation Division Rule 701, a copy of any injection well permit application must be sent to the offset operators and surface owner. Enclosed is a our application for administrative approval to convert the above captioned well to a salt water disposal.

If you should have any questions, please contact E. L. Buttross, Jr. at 505/625-8760.

Sincerely,

A handwritten signature in cursive script that reads "Lisa Bohannon". The signature is written in dark ink and is positioned above the typed name.

Lisa Bohannon  
Engineering Technician

:lb

Enclosures

Ballard DE Federal #3  
(D) Sec.27-T20S-R34E  
Lea County, New Mexico

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: Hondo Oil & Gas Company  
Address: P. O. Box 2208, Roswell, New Mexico 88202  
Contact party: E. L. Buttross, Jr. Phone: (505)625-8760
- 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: E. L. Buttross, Jr. Title Petroleum Engineer  
Signature: E. L. Buttross Jr. Date: 8/11/88
- \* 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 2080, 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.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
SUPPLEMENTAL INFORMATION  
BALLARD DE FEDERAL WELL NO. 3  
LEA COUNTY, NEW MEXICO

ITEM:

III. Well Data

- A. (1) Well Name: Ballard DE Federal #3  
990' FNL & 990' FWL  
Section 27, T-20S, R-34E  
Lea County, New Mexico

- (2) Casing Data: (Also see Exhibit "B".)

Conductor:

13 3/8" csg. set @ 66' in a 16" hole. Cemented with  
50 sx. Circulated cement to surface.

Intermediate Casing:

8 5/8" csg. set @ 1588' in a 10" hole. Cemented with  
350 sx. Circulated cement to surface.

Production Casing:

5 1/2" csg. set @ 3615' in an 8 1/8" & 6 1/4" hole.  
Cemented with 370 sx. Calculated TOC to be @ 1050'.

- (3) Injection Tubing:

2 7/8", 6.5#, 8rd EUE, internally plastic coated or fiber-  
glass tbg., set @ approximately ±3450'.

We also plan to drill a 4 3/4" OH from 3710-4000' with a  
3" perforated fiberglass liner @ 3500-4000'.

- (4) Packer:

Packer set @ ±3450'.

- B. (1) Injection Formation: Seven Rivers

- (2) Injection Interval:

Injection will be open hole from 3615-4000'.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 2

(3) Original Purpose of Well:

This well was originally drilled, completed and tested in the Seven Rivers open hole interval 3615-3669'.

(4) Added Perforated Intervals: (Also see Exhibit "B".)

For additional oil recovery, well was later perforated in the Yates: first @ 3579-3589'; then @ 3495-3500', 3526-3536' and 3554-3559'.

Plans are to cement squeeze the Yates perfs. 3495-3589' with approximately 200 sx. of cement.

(5) Higher/Lower Oil Zones:

The top of the Yates is @  $\pm 3500'$  and there is no lower oil zone.

V. Map: See Exhibit "A".

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 3

VI. Wells in Area of Review:

Operator: Wilson Oil Company

Well Name: Muse Federal #2

Location: 660' FSL & 660' FEL, (P) Section 21, T-20S, R-34E

Spud Date: 11/57

Conductor: 13 3/8" set @ 73', cemented with 100 sx.

Surface Casing: 10 3/4" set @ 689. Cut and pulled.

Intermediate Casing: 8 5/8" set @ 1227'. Cut and pulled.

Production Casing: 5 1/2" set @ 3530', cemented with 50 sx. Cut @ 3205' and pulled.

Total Depth: 3703'

Completion: This well was drilled, tested and abandoned. D&A'd 1/2/58.

Operator: Wallen Production Company

Well Name: Wallen Bass #3

Location: 660' FSL & 330' FEL, (P) Section 21, T-20S, R-34E

Spud Date: 10/78

Completion Date: 1/13/79

Surface Casing: 13 3/8" set @ 259', cemented with 350 sx.

Production Casing: 7" set @ 3385', cemented with 1000 sx.

Liner: 4 1/2" set from 3072-3667', cemented with 60 sx.

TD: 3681'

PBTD: 3667'

Completion: Completed in the Yates-Seven Rivers from perfs. 3480-3642'.



HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 4

Operator: Hondo Oil & Gas Company

Well Name: Ballard DE Federal #5

Location: 330' FSL & 990' FWL, (M) Section 22, T-20S, R-34E

Spud Date: 10/22/62                      Completion Date: 11/29/62

Conductor: 13 3/8" set @ 72', cemented with 50 sx.

Intermediate Casing: 8 5/8" set @ 1568', cemented with 350 sx.

Production Casing: 7" set @ 3505', cemented with 450 sx.

Liner: 4 1/2" set @ 3637', cemented with 480 sx.

TD: 3637'

Completion: Completed open hole in the Seven Rivers from 3505-3637'. Later, ran 4 1/2" csg. and perforated from 3503-3570'.

Operator: Robert O. Goza

Well Name: D & E Federal #1

Location: 660' FSL & 1980' FWL, (N) Section 22, T-20S, R-34E

Spud Date: 1/22/60                      Completion Date: 5/16/60

Conductor: 13 3/8" set @ 145'. Cut and pulled.

Surface Casing: 10 3/4" set @ 690'. Cut and pulled.

1st Intermediate Casing: 8 5/8" set @ 1572', cemented with 375 sx.

2nd Intermediate Casing: 7" set @ 3285'. Cut and pulled.

Production Casing: 5 1/2" set @ 3554', cemented with 440 sx.

TD: 3690'

Completion: Completed open hole in the Yates from 3555-3690'. Plugged back to 3683'. Perforated 3478-3525'. Later converted to salt water disposal into the Seven Rivers formation from 3478-3690'.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 5

Operator: Roger O. Goza

Well Name: R & B Federal #1

Location: 330' FSL & 2310' FEL, (O) Section 22, T-20S, R-34E

Spud Date: 6/3/60

Completion Date: 6/28/60

Surface Casing: 8 5/8" set @ 219', cemented with 100 sx.

Production Casing: 5 1/2" set @ 3642', cemented with 150 sx.

TD: 3685'

PBTD: 3630'

Completion: Completed open hole in the Yates from 3642-3685'.  
Plugged back to 3630'. Perforated from 3514-3610'.

Operator: Drilling & Exploration

Well Name: Ballard #1

Location: 1980' FNL & 1980' FWL, (F) Section 27, T-20S, R-34E

Spud Date: 11/20/58

Conductor: 13 3/8" set @ 67', cemented with 50 sx.

Surface Casing: 10 3/4" set @ 701'. Cut and pulled.

Intermediate Casing: 8 5/8" set @ 1227'. Cut and pulled.

Production Casing: 5 1/2" set @ 3642', cemented with 150 sx.  
Cut @ 3205' and pulled.

TD: 3799'

Completion: Completed open hole from 3642-3775' and tested.  
Plugged back to 3767'. Then perforated from 3595-3606' and tested. Perforated 3522-3526' and tested.  
Well D&A'd 1/22/59.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 6

Operator: Hondo Oil & Gas

Well Name: Ballard DE Federal #2

Location: 330' FNL & 2310' FWL, (C) Section 27, T-20S, R-34E

Spud Date: 9/12/61

Completion Date: 12/7/61

Conductor: 13 3/8" set @ 68', cemented with 50 sx.

1st Intermediate Casing: 8 5/8" set @ 1562', cemented with 350 sx.

2nd Intermediate Casing: 7" set @ 3444', cemented with 75 sx. Cut off @ 2933' and pulled.

Production Casing: 5 1/2" set @ 3648', cemented with 300 sx.

TD: 3685'

Completion: Completed open hole in the Seven Rivers from 3648-3685'. Later, perforated from 3596-3608'.

Operator: Roger O. Goza

Well Name: D & E Federal #2

Location: 330' FNL & 2310' FEL, (B) Section 27, T-20S, R-34E

Spud Date: 9/14/60

Completion Date: 10/18/60

Surface Casing: 8 5/8" set @ 237', cemented with 125 sx.

Production Casing: 5 1/2" set @ 3665', cemented with 125 sx.

TD: 3701'

Completion: Completed open hole in the Yates from 3665-3701'.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 7

Operator: Harvard Petroleum Corporation

Well Name: Fletcher Federal #1

Location: 1650' FSL & 660' FWL, (L) Section 27, T-20S, R-34E

Spud Date: 6/7/77

Completion Date: 8/30/77

Surface Casing: 9 5/8" set @ 363', cemented with 175 sx.

Production Casing: 7" set @ 3480', cemented with 1300 sx.

Liner: 4 1/2" set from 3450-3717', cemented with 50 sx.

TD: 3718'

PBTD: 3606'

Completed: Plugged back to 3709'. Perforated the Seven Rivers from 3614-3708'. Plugged back to 3600'. Perforated the Yates from 3558-3568'. Later, cleaned out to 3606' and perforated from 3542-3548' and 3584-3590'.

Operator: Carper Drilling - T. J. Sivley

Well Name: Threlkeld, etal #1

Location: 500' FNL & 825' FEL, (A) Section 28, T-20S, R-34E

Spud Date: 10/17/62

Intermediate Casing: 7" set @ 1641', cemented with 225 sx.

TD: 3775'

Completion: Tested and D&A'd 10/26/62.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 8

VII. Proposed Operations Data:

- (1) Average Daily Injection Rate - 2000 BWPD  
Maximum Daily Injection Rate - 4000 BWPD
- (2) Type of System - Closed
- (3) Average Injection Pressure - 800 psi  
Maximum Injection Pressure - 1500 psi
- (4) Source of Injection Water - Water produced from the Hondo leases Ballard DE Federal, Fletcher "A" DE Federal and Gulf "DE" Federal. Water analyses are attached.
- (5) Chemical Analysis of Disposal Zone Formation - See attached water analysis.

VIII. Geological Data:

The proposed injection zone is the Seven Rivers from 3615-4000'. This formation consists primarily of dolomite and limestone with some interbedded sand and anhydrite.

The underground source of drinking water overlying the proposed injection zone is where the bottom of the Triassic and the top of the Rustler interface @ 1600' (obtained from the State Engineers Office).

There are no known sources of drinking water underlying the injection interval.

IX. Proposed Stimulation Program:

Plans are to acidize the Seven Rivers OH @ 3615-4000' with approximately 8000 gals. 15% NE-FE acid in stages using rock salt as a diverter.

X. Well Logs:

Copies of the well logs have been filed with the Commission.

HONDO OIL & GAS COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
BALLARD DE FEDERAL WELL NO. 3  
Page 9

XI. Chemical Analysis of Fresh Water:

There are no known producing fresh water wells within one mile of the proposed injection well.

- XII. Upon examination of the available geologic and engineering data no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water was found.

SURFACE OWNER:

Dan & Ron Berry  
Box 160  
Eunice, NM 88231

OFFSET OPERATORS:

Wallen Production  
Box 1960  
Midland, TX 79702

Roger O. Goza  
Box 1313  
Monahans, TX 79756

Harvard Petroleum  
P. O. Box 936  
Roswell, NM 88201

T. J. Sivley  
1st National Bank Bldg.  
Artesia, NM 88210

**AFFIDAVIT OF PUBLICATION**

State of New Mexico,  
County of Lea.

I, William H. Shearman, Jr.

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

August 3, 19 88  
and ending with the issue dated

August 3, 19 88

Bill Shearman  
Publisher.

Sworn and subscribed to before

me this 5 day of

August, 19 88

Eva Murphy  
Notary Public.

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

November 14, 19 88  
(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 3, 1988**

Hondo Oil & Gas Company has applied for authority to convert the Ballard DE Federal Well No. 3, located 990' FNL & 990' FWL, Section 27, T-20S, R-34E, Lea County, New Mexico, into a salt water disposal well. Water produced from the Hondo leases Ballard DE Federal, Fletcher "A" DE Federal and Gulf DE Federal will be disposed into the Seven Rivers OH formation from 3615-4000'. The maximum daily injection rates will be 4000 BWPD with a maximum pressure of 1500 psi.

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 of this notice.

E.L. Buttross, Jr.  
Petroleum Engineer  
Hondo Oil &  
Gas Company  
P.O. Box 2208  
Roswell,  
New Mexico 88202  
(505) 625-8760

PS Form 3811, July 1983

DOMESTIC RETURN RECEIPT

<b>SENDER: Complete items 1, 2, 3 and 4.</b> 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. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to:  Wallen Production Co. Box 1960 Midland, TX 79702	
4. 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	Article Number  P310155731
Always obtain signature of addressee <u>or</u> agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee X	
6. Signature - Agent X	
7. Date of Delivery	
8. Addressee's Address (ONLY if requested and fee paid)	

PS Form 3811, July 1983

DOMESTIC RETURN RECEIPT

<b>SENDER: Complete items 1, 2, 3 and 4.</b> 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. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to:  Dan & Ron Berry Box 160 Eunice, NM 88231	
4. 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	Article Number  P310155730
Always obtain signature of addressee <u>or</u> agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee X	
6. Signature - Agent X	
7. Date of Delivery	
8. Addressee's Address (ONLY if requested and fee paid)	

<b>SENDER: Complete items 1, 2, 3 and 4.</b> 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. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to:  Roger O. Goza Box 1313 Monahans, TX 79756	
4. 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	Article Number  P310155732
Always obtain signature of addressee <u>or</u> agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee X	
6. Signature - Agent X	
7. Date of Delivery	
8. Addressee's Address (ONLY if requested and fee paid)	



**SENDER: Complete items 1, 2, 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 service(s) requested.

- ☒ Show to whom, date and address of delivery.
- ☐ Restricted Delivery.

3. Article Addressed to:

T. J. Sivley  
1st National Bank Bldg.  
Artesia, NM 88210

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P310155734

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X

6. Signature - Agent  
X

7. Date of Delivery

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

**SENDER: Complete items 1, 2, 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 service(s) requested.

- ☒ Show to whom, date and address of delivery.
- ☐ Restricted Delivery.

3. Article Addressed to:

Harvard Petroleum  
P. O. Box 936  
Roswell, NM 88201

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P310155733

Always obtain signature of addressee or agent and **DATE DELIVERED.**

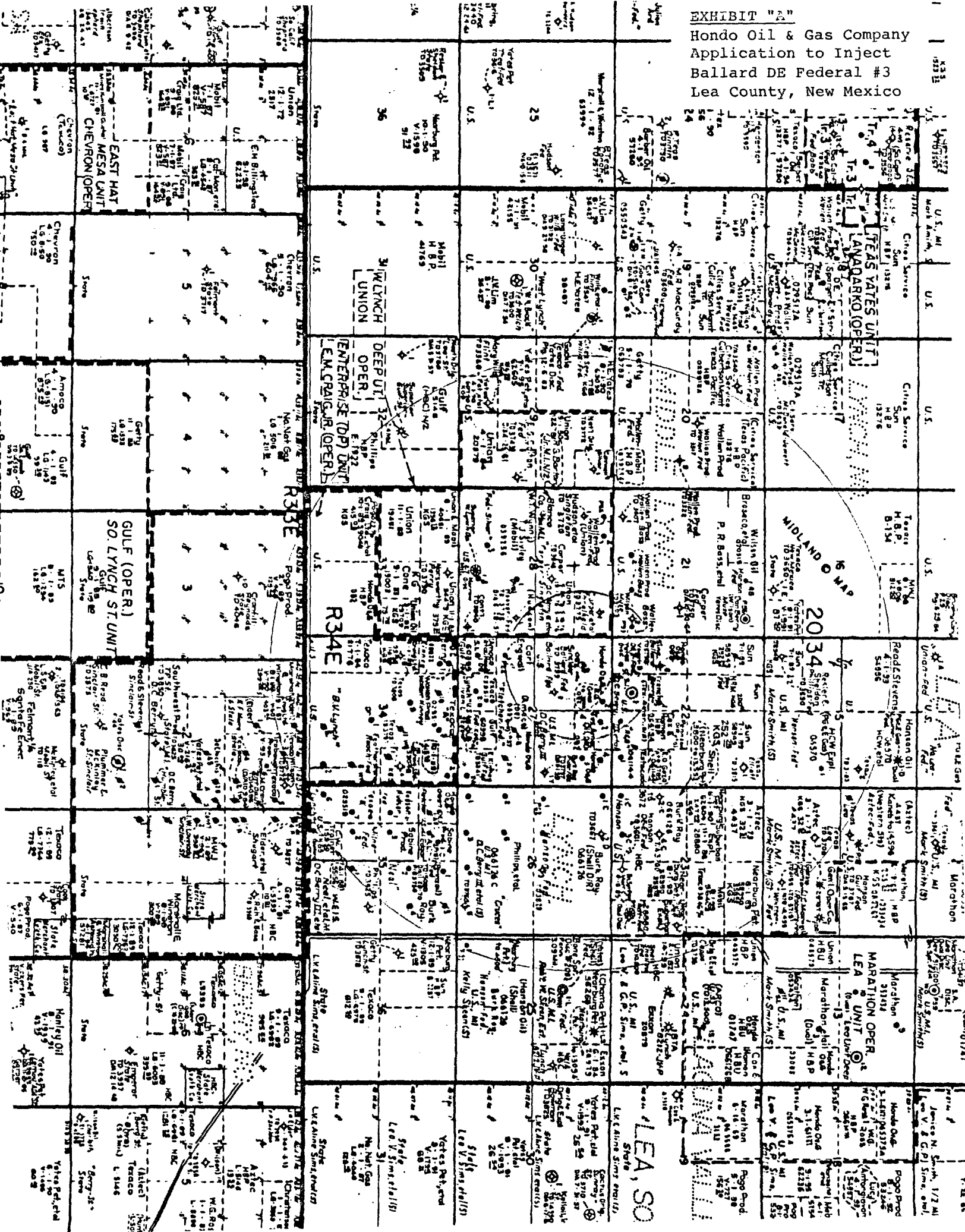
5. Signature - Addressee  
X

6. Signature - Agent  
X

7. Date of Delivery

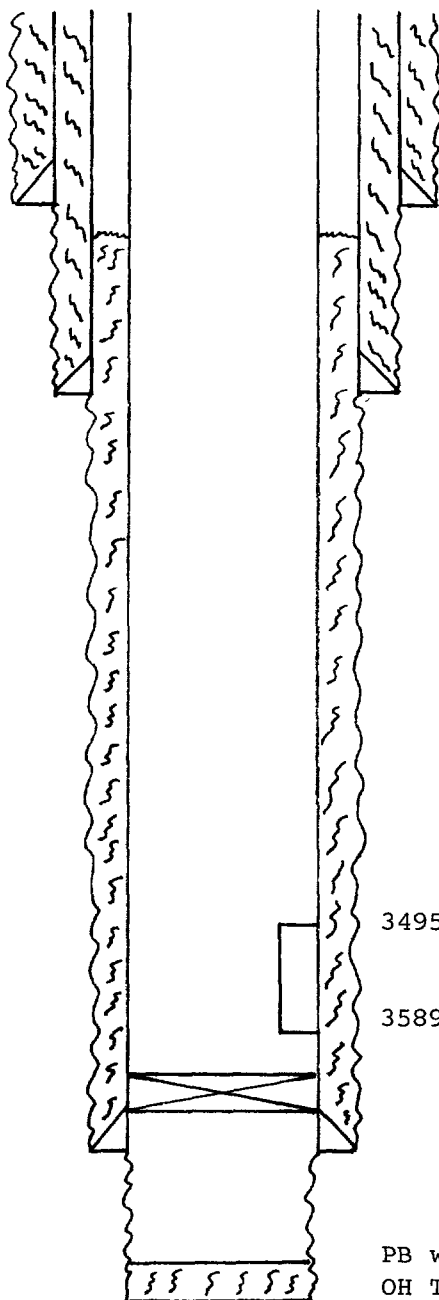
8. Addressee's Address (ONLY if requested and fee paid)

EXHIBIT "A"  
Hondo Oil & Gas Company  
Application to Inject  
Ballard DE Federal #3  
Lea County, New Mexico



BALLARD DE FEDERAL #3

PRESENT



13 3/8" Csg. set @  
66' (TOC @ Surf.)

8 5/8" Csg. set @  
1588' (TOC @ Surf.)

2 7/8" 6.5# 8rd  
EUE Intern.  
Plastic Coated  
Tbg.

Yates Perfs.

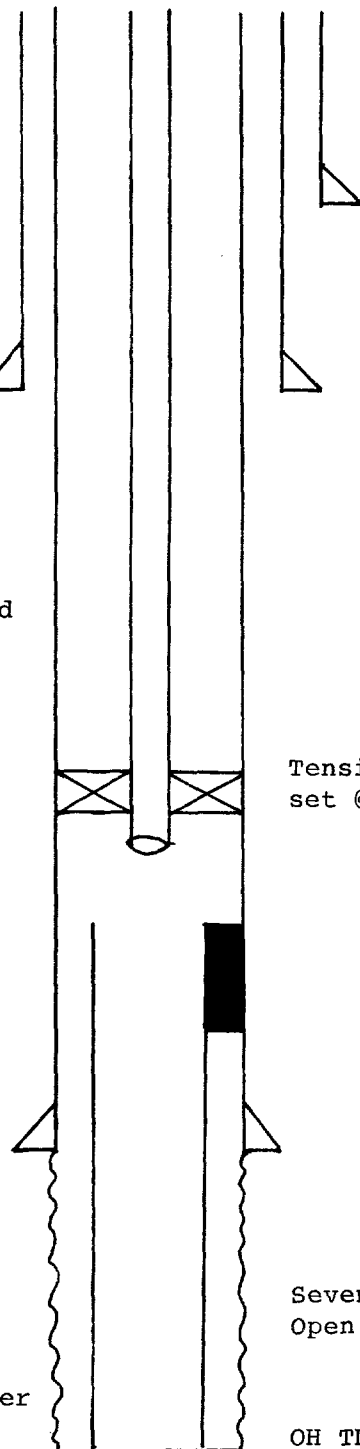
3495' 3495-3500' (6 holes)  
3526-3536' (11 holes)  
3554-3559' (6 holes)  
3589' 3579-3589' (21 holes)  
CIBP @ 3600'

5 1/2" Csg. set @  
3615' (TOC @ 1050')

PB w/Hydromite @ 3670'  
OH TD @ 3710'

3" Slotted  
Fiberglass Liner  
@ 3500-4000'

PROPOSED



Tension Pkr.  
set @ ±3450'

Seven Rivers  
Open Hole

OH TD @ ±4000'

EXHIBIT "B"

Hondo Oil & Gas Company

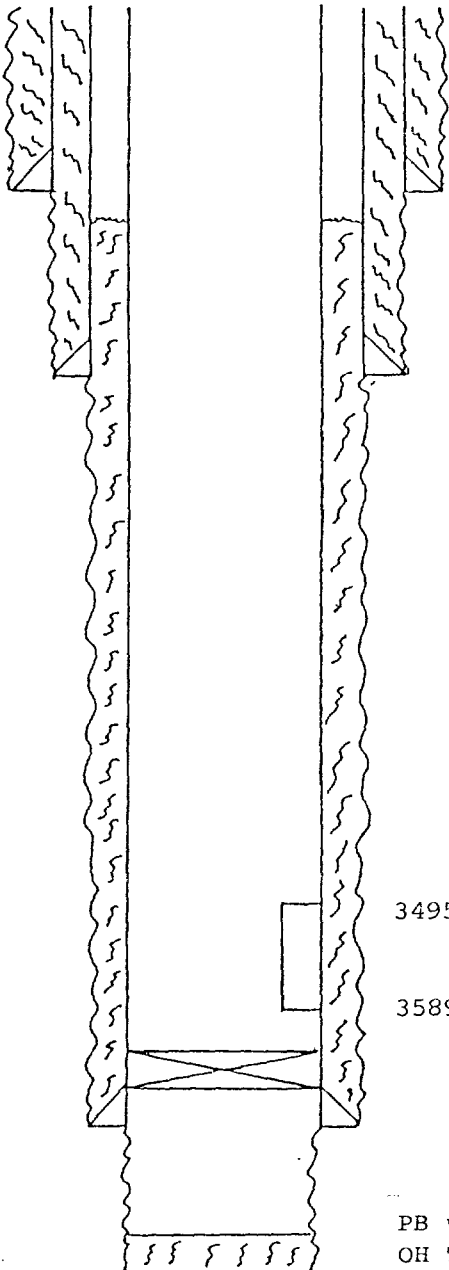
Application to Inject

Ballard DE Federal #3

Lea County, New Mexico

BALLARD DE FEDERAL #3

PRESENT



13 3/8" Csg. set @  
66' (TOC @ Surf.)

8 5/8" Csg. set @  
1588' (TOC @ Surf.)

2 7/8" 6.5# 8rd  
EUE Internally  
Plastic Coated Tbg.

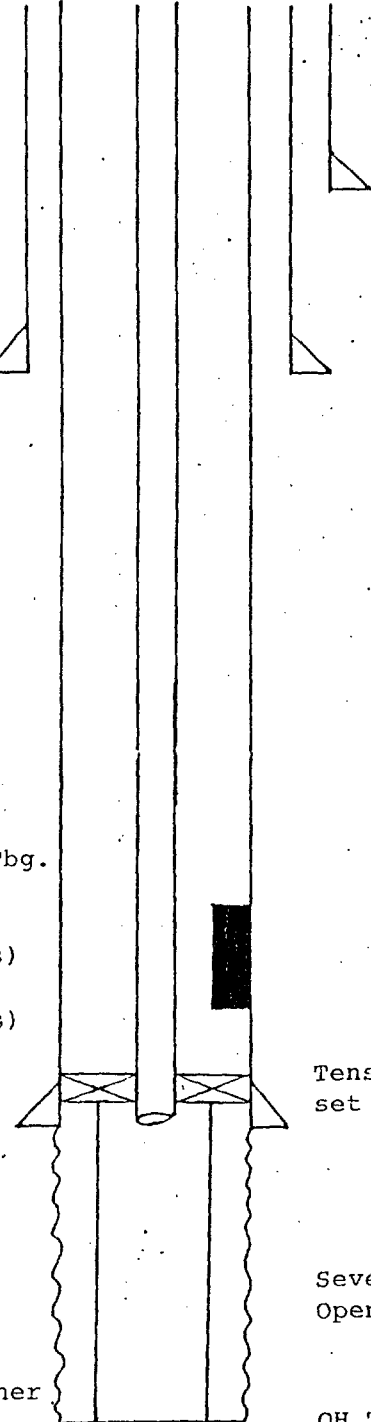
3495' Yates Perfs.  
3495-3500' (6 holes)  
3526-3536' (11 holes)  
3554-3559' (6 holes)  
3589' 3579-3589' (21 holes)  
CIBP @ 3600'

5 1/2" Csg. set @  
3615' (TOC @ 1050')

PB w/Hydromite @ 3670'  
OH TD @ 3710'

3" Slotted  
Fiberglass Liner  
@ 3600-4000'

PROPOSED

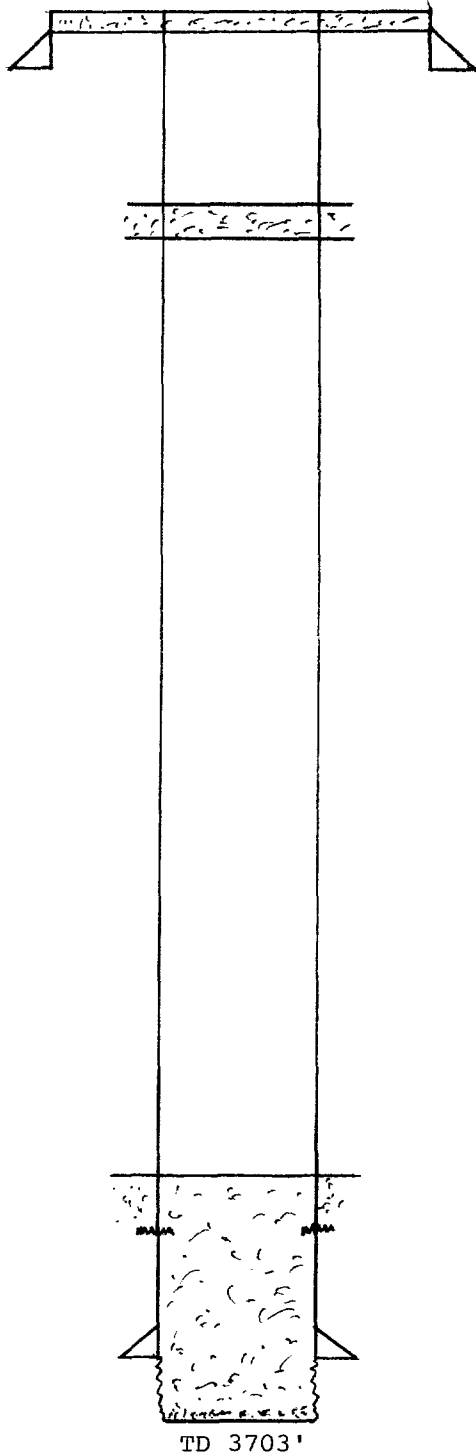


Tension Pkr.  
set @  $\pm$ 3600'

Seven Rivers  
Open Hole

OH TD  $\pm$ 4000'

WILSON OIL COMPANY  
MUSE FEDERAL #2  
660' FSL & 660' FEL  
Section 21, T-20S, R-34E  
Lea County, New Mexico



35 sx. cmt. plug set @ surface  
13 3/8" csg. set @ 73', cmt. w/100 sx.  
Cmt. circ.

60 sx. cmt. plug set from 500-580'

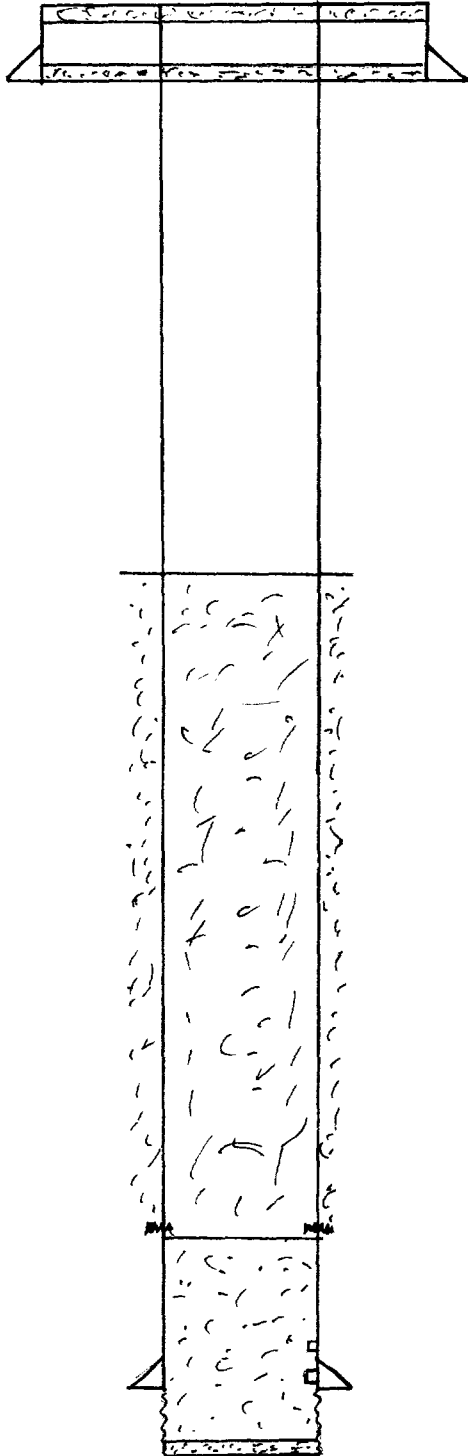
NOTE: 10 3/4" & 8 5/8" csg. pulled

425 sx. cmt. pumped from PBTD

5 1/2" cut @ 3205' and pulled

5 1/2" csg. set @ 3532', cmt. w/50 sx.  
Plugged back to 3691' w/lead wool

DRILLING & EXPLORATION  
 BALLARD #1  
 1980' FNL & 1980' FWL  
 Section 27, T-20S, R-34E  
 Lea County, New Mexico



5 sx. cmt. plug @ surface  
 13 3/8" csg. set @ 67', cmt. w/50 sx.  
 10 sx. cmt. plug across bottom of  
 13 3/8" csg.

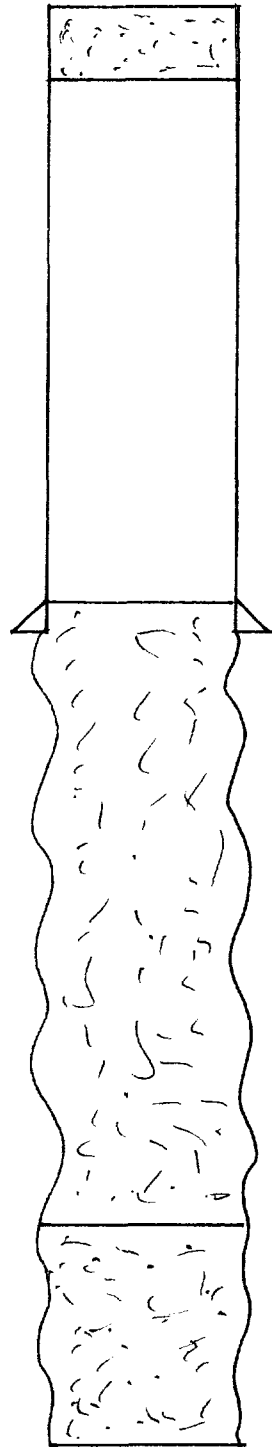
400 sx. cmt. plug from 1490-3200'

NOTE: 10 3/4" & 8 5/8" csg. pulled

Cut 5 1/2" csg. @ 3205' and pulled  
 Sqz. perfs. w/50 sx. cmt. plug (top of  
 plug @ 3228')  
 Perf. 3522-3526'  
 Perf. 1395-3606'  
 5 1/2" csg. set @ 3642', cmt. w/150 sx.  
 Plugged back to 3767'

TD 3799'

CARPER DRILLING - T. J. SIVLEY  
THRELKELD, ETAL #1  
550' FNL & 825' FEL  
Section 28, T-20S, R-34E  
Lea County, New Mexico



30 sx. cement plug set @ surface

7" csg. set @ 1641', cmt. w/225 sx.

175 sx. cmt. plug from 1550-3200'

130 sx. cmt. plug from 3200-3775'

TD 3775'

# CHEMLINK WATER ANALYSIS REPORT

Lab ID No. : 060188B

Analysis Date: June 1, 1988

Company : Hondo Oil & Gas  
Field :  
Lease/Unit : Ballard "DE"  
Well ID. :  
Sample Loc.:

Sampled By : Don Bammert  
Sample Date: \*  
Salesperson: Don Bammert  
Formation :  
Location : Hobbs, New Mexico

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
Calcium as Ca++	955	47.8	Hydroxyl as OH-	0	0.0
Magnesium as Mg++	289	23.7	Carbonate as CO3=	70	2.3
Sodium as Na+ (Calc)	5,648	245.6	Bicarbonate as HCO3-	630	10.3
Barium as Ba++	Not Determined		Sulfate as SO4=	1,075	22.4
Other	0		Chloride as Cl-	9,998	282.0

Total Dissolved Solids, Calculated: 18,665 mg/L.

Calculated Resistivity: 0.320 ohm-meters  
mg/L. Hydrogen Sulfide: Present  
mg/L. Carbon Dioxide: Not Determined  
mg/L. Dissolved Oxygen: Not Determined

pH: 8.020  
Specific Gravity 60/60 F.: 1.013  
Saturation Index @ 80 F.: +1.488  
@ 140 F.: +2.328

Total Hardness: 3,573 mg/L. as CaCO3  
Total Iron: 10 mg/L. as Fe++

## PROBABLE MINERAL COMPOSITION

	COMPOUND	MG/L	MEQ/L
	Ca(HCO3)2	837	10
Calcium Sulfate Scaling Potential Not Present	CaSO4	1,524	22
	CaCl2	835	15
Estimated Temperature of Calcium Carbonate Instability is 52 F.	Mg(HCO3)2	0	0
	MgSO4	0	0
	MgCl2	1,130	24
	NaHCO3	0	0
	Na2SO4	0	0
Analyst	NaCl	14,219	243
10:11 AM			



# CHEMLINK WATER ANALYSIS REPORT

Lab ID No. : 060188A

Analysis Date: June 1, 1988

Company : Hondo Oil & Gas  
Field :  
Lease/Unit : Fletcher  
Well ID. :  
Sample Loc. :

Sampled By : Don Bammert  
Sample Date: \*  
Salesperson: Don Bammert  
Formation :

exico

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
Calcium as Ca++	1,337	66.9	Hydroxyl as OH-	0	0.0
Magnesium as Mg++	232	19.0	Carbonate as CO3=	0	0.0
Sodium as Na+ (Calc)	3,531	153.5	Bicarbonate as HCO3-	1,102	18.1
Barium as Ba++	Not Determined		Sulfate as SO4=	2,500	52.1
Other	0		Chloride as Cl-	5,999	169.2

Total Dissolved Solids, Calculated:

14,700 mg/L.

Calculated Resistivity: 0.365 ohm-meters  
mg/L. Hydrogen Sulfide: Present  
mg/L. Carbon Dioxide: Not Determined  
mg/L. Dissolved Oxygen: Not Determined

pH: 7.710  
Specific Gravity 60/60 F.: 1.013  
Saturation Index @ 80 F.: +1.529  
@ 140 F.: +2.389

Total Hardness: 4,288 mg/L. as CaCO3  
Total Iron: 2.5 mg/L. as Fe++

## PROBABLE MINERAL COMPOSITION

COMPOUND	MG/L	MEQ/L
Ca(HCO3)2	1,464	18
CaSO4	3,322	49
CaCl2	0	0
Mg(HCO3)2	0	0
MgSO4	197	3
MgCl2	748	16
NaHCO3	0	0
Na2SO4	0	0
NaCl	8,974	154

Calcium Sulfate Scaling Potential  
Mild to Moderate

Estimated Temperature of Calcium  
Carbonate Instability is  
52 F.

Analyst 10:11 AM

# CHEMLINK WATER ANALYSIS REPORT

Lab ID No. : 060188D

Analysis Date: June 1, 1988

Company : Hondo Oil & Gas  
Field :  
Lease/Unit : Gulf "DE" Fed.  
Well ID. :  
Sample Loc.:

Sampled By : Don Bammert  
Sample Date: \*  
Salesperson: Don Bammert  
Formation :  
Location : Hobbs, New Mexico

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
Calcium as Ca++	1,051	52.5	Hydroxyl as OH-	0	0.0
Magnesium as Mg++	232	19.0	Carbonate as CO3=	0	0.0
Sodium as Na+ (Calc)	2,632	114.4	Bicarbonate as HCO3-	582	9.5
Barium as Ba++	Not Determined		Sulfate as SO4=	1,700	35.4
Other	0		Chloride as Cl-	4,999	141.0

Total Dissolved Solids, Calculated: 11,196 mg/L.

Calculated Resistivity: 0.396 ohm-meters  
mg/L. Hydrogen Sulfide: Present  
mg/L. Carbon Dioxide: Not Determined  
mg/L. Dissolved Oxygen: Not Determined

pH: 7.580  
Specific Gravity 60/60 F.: 1.009  
Saturation Index @ 80 F.: +1.188  
                                  @ 140 F.: +2.028

Total Hardness: 3,573 mg/L. as CaCO3  
Total Iron: 5 mg/L. as Fe++

## PROBABLE MINERAL COMPOSITION

	COMPOUND	MG/L	MEQ/L
	Ca(HCO3)2	774	10
Calcium Sulfate Scaling Potential Marginal	CaSO4	2,411	35
	CaCl2	420	8
Estimated Temperature of Calcium Carbonate Instability is 53 F.	Mg(HCO3)2	0	0
	MgSO4	0	0
	MgCl2	904	19
	NaHCO3	0	0
	Na2SO4	0	0
Analyst 10:11 AM	NaCl	6,691	114



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

GARREY CARRUTHERS  
GOVERNOR

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	<input checked="" type="checkbox"/>
WFX	_____
PMX	_____

Gentlemen:

I have examined the application for the:

*Hondo Oil & Gas Co.*      *Ballard DE Federal #3-D 27-20-34*  
Operator      Lease & Well No.      Unit      S-T-R

and my recommendations are as follows:

*OK*

Yours very truly,

*Jerry Sexton*  
Jerry Sexton  
Supervisor, District 1

/ed

**Hondo Oil & Gas Company**

Box 2208  
Roswell, New Mexico 88202  
(505)625-8700



August 16, 1988

Oil Conservation Division  
P. O. Box 2208  
Santa Fe, New Mexico 87501

RE: SWD Application  
Ballard DE Federal Well No. 3  
990' FNL & 990' FWL, Section 27, T-20S, R-34E  
Lea County, New Mexico

Gentlemen:

Please find enclosed copies of the signed return receipts for notification of the above captioned matter as required by Oil Conservation Division Rule 701.

If any more information is needed, please contact E. L. Buttross, Jr. at 505/625-8760.

Sincerely,

Lisa Bohannon  
Engineering Technician

:lb

Enclosures

**SENDER: Complete items 1, 2, 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 service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
Dan & Ron Berry  
Box 160  
Eunice, NM 88231

4. Type of Service: Article Number  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155730  
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X *Thomas & Ron O Berry*

6. Signature - Agent  
X

7. Date of Delivery  
8/13/88

8. Addressee's Address (ONLY if requested and fee paid)  
*B*

**SENDER: Complete items 1, 2, 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 service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
Harvard Petroleum  
P. O. Box 936  
Roswell, NM 88201

4. Type of Service: Article Number  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155733  
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X

6. Signature - Agent  
X *Jeff Kane*

7. Date of Delivery  
8/15/88

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

**SENDER: Complete items 1, 2, 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 service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
Wallen Production Co.  
Box 1960  
Midland, TX 79702

4. Type of Service: Article Number  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155731  
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X

6. Signature - Agent  
X *Louise Barker*

7. Date of Delivery  
AUG 12 1988

8. Addressee's Address (ONLY if requested and fee paid)  
*FREE NOT PAID*

**SENDER: Complete items 1, 2, 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 service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
  
Roger O. Goza  
Box 1313  
Monahans, TX 79756

4. Type of Service: Article Number:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155732  
☐ Express Mail

Always obtain signature of addressee or agent and  
**DATE DELIVERED.**

5. Signature - Addressee  
*[Signature]*  
6. Signature - Agent  
X  
7. Date of Delivery  
8-15-88  
8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

**SENDER: Complete items 1, 2, 3 and 4.**  
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1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
  
T. J. Sivley  
1st National Bank Bldg.  
Artesia, NM 88210

4. Type of Service: Article Number:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155734  
☐ Express Mail

Always obtain signature of addressee or agent and  
**DATE DELIVERED.**

5. Signature - Addressee  
*[Signature]*  
X  
6. Signature - Agent  
X  
7. Date of Delivery  
8-15-88  
8. Addressee's Address (ONLY if requested and fee paid)  
Box 66  
88210

DOMESTIC RETURN RECEIPT

**SENDER: Complete items 1, 2, 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 service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

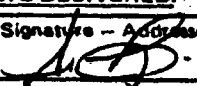
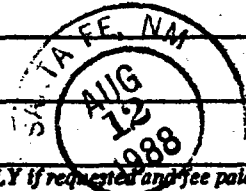
3. Article Addressed to:  
  
NMOCD  
P. O. Box 1980  
Hobbs, NM 88240

4. Type of Service: Article Number:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD P310155738  
☐ Express Mail

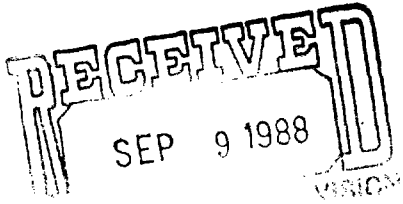
Always obtain signature of addressee or agent and  
**DATE DELIVERED.**

5. Signature - Addressee  
*[Signature]*  
X  
6. Signature - Agent  
*[Signature]*  
X  
7. Date of Delivery  
8-15-88  
8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, July 1983

<b>SENDER: Complete items 1, 2, 3 and 4.</b> 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. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to:  Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501	
4. 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	Article Number  P310155735
Always obtain signature of addressee or agent and <b>DATE DELIVERED:</b>	
5. Signature - Addressee X 	
6. Signature - Agent X	
7. Date of Delivery 	
8. Addressee's Address (ONLY if requested and fee paid)	

DOMESTIC RETURN RECEIPT



**Hondo Oil & Gas Company**

Box 2208

Roswell, New Mexico 88202

(505) 625-8700



September 7, 1988

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

ATTN: David Catanach

RE: SWD Application  
Ballard DE Federal #3  
Sec.27-T20S-R34E  
Lea County, New Mexico

Gentlemen:

Enclosed you will find an amended proposed well diagram for the above captioned application. Please note we are making the following changes: the packer will be set @  $\pm 3600'$  instead of  $\pm 3450'$ , and the 3" fiberglass liner will be placed from 3600-4000' rather than 3500-4000'.

Copies of the amended diagram have also been sent to the offset operators.

If you should have any questions, please contact E. L. Buttross, Jr. at 505/625-8760.

Sincerely,

Lisa Bohannon  
Engineering Technician

:lb

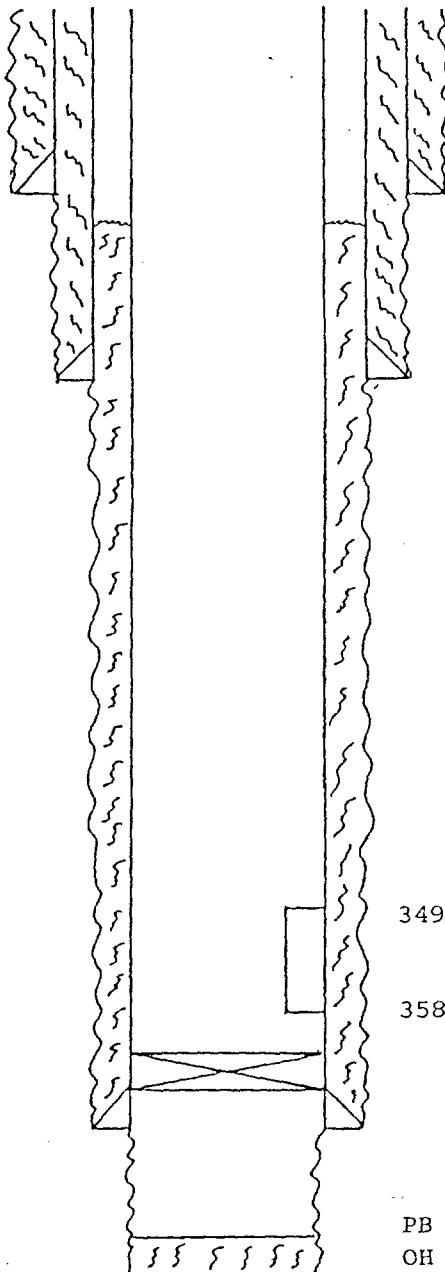
Enclosure



EXHIBIT "B"  
Hondo Oil & Gas Company  
Application to Inject  
Ballard DE Federal #3  
Lea County, New Mexico

BALLARD DE FEDERAL #3

PRESENT



13 3/8" Csg. set @  
66' (TOC @ Surf.)

8 5/8" Csg. set @  
1588' (TOC @ Surf.)

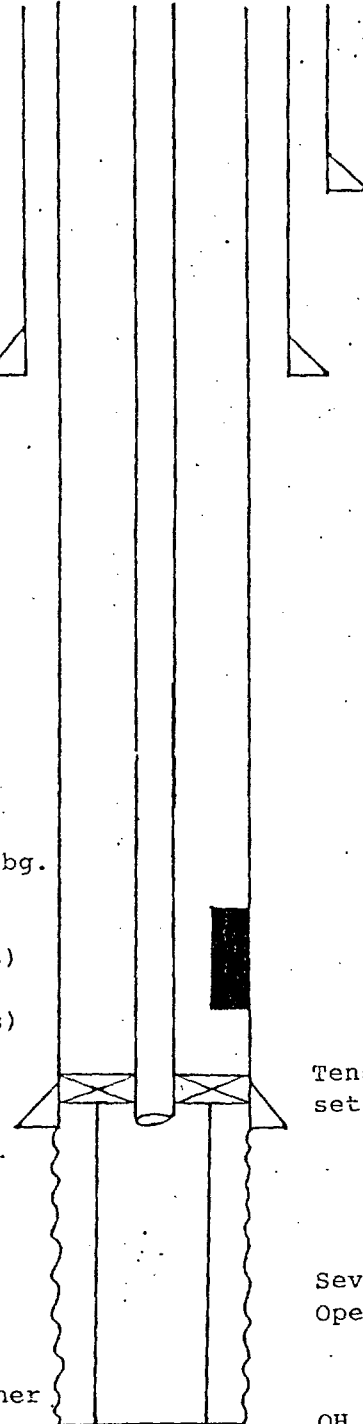
2 7/8" 6.5# 8rd  
EUE Internally  
Plastic Coated Tbg.

3495' Yates Perfs.  
3495-3500' (6 holes)  
3526-3536' (11 holes)  
3589' 3554-3559' (6 holes)  
3579-3589' (21 holes)  
CIBP @ 3600'  
5 1/2" Csg. set @  
3615' (TOC @ 1050')

PB w/Hydromite @ 3670'  
OH TD @ 3710'

3" Slotted  
Fiberglass Liner  
@ 3600-4000'

PROPOSED



Tension Pkr.  
set @ ±3600'

Seven Rivers  
Open Hole

OH TD ±4000'