STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

Case 11003

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Hal J. Rasmussen Operating, Inc.

Address: 310 W. Wall; Suite 906; Midland, Texas 79701

Contact party: Tyson Dunn Phone: (915) 687-1664

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: Tyson L. Dunn Title Production Engineer

Signature: _____ Date: 4-6-94

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

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.

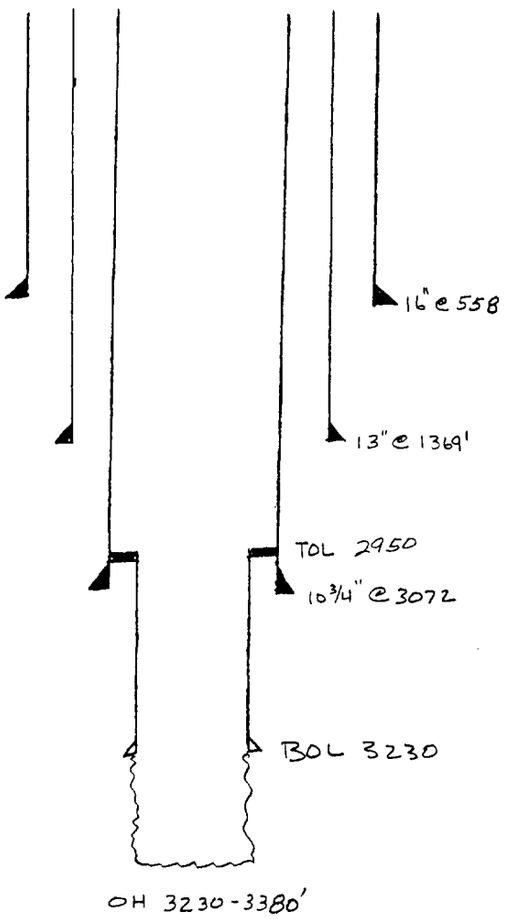
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Hal J. Rasmussen Operating, Inc. (OPERATOR) Farnsworth A (LEASE)

2	330' FSL & 990' FEL	13	26S	36E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 16 " Cemented with 25 sx.

TOC surface feet determined by circulation

Hole size 20"

Intermediate Casing

Size 13 " Cemented with 111 sx.

TOC surface feet determined by circulation

Hole size 14 3/4

Long string

Size 10 3/4 " Cemented with 75 sx.

TOC 2400 feet determined by calculation

Hole size 12 1/4

Total depth 3235' (CURRENT)

Injection interval

3230 feet to 3380 feet
(perforated or open-hole, indicate which)

Proposed Liner

Size 7 5/8" Cement 50 sx

Hole Size 9 5/8

TOL 2950'

BOL 3230

Total Depth 3380'

Tubing size 5 1/2" lined with plastic coated (material) set in a

Baker Model AD-1 (Tension) (brand and model) packer at 3230 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Seven Rivers

2. Name of Field or Pool (if applicable) Scarborough Yates Seven Rivers

3. Is this a new well drilled for injection? / / Yes /X/ No

If no, for what purpose was the well originally drilled? Oil Well

4. 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)

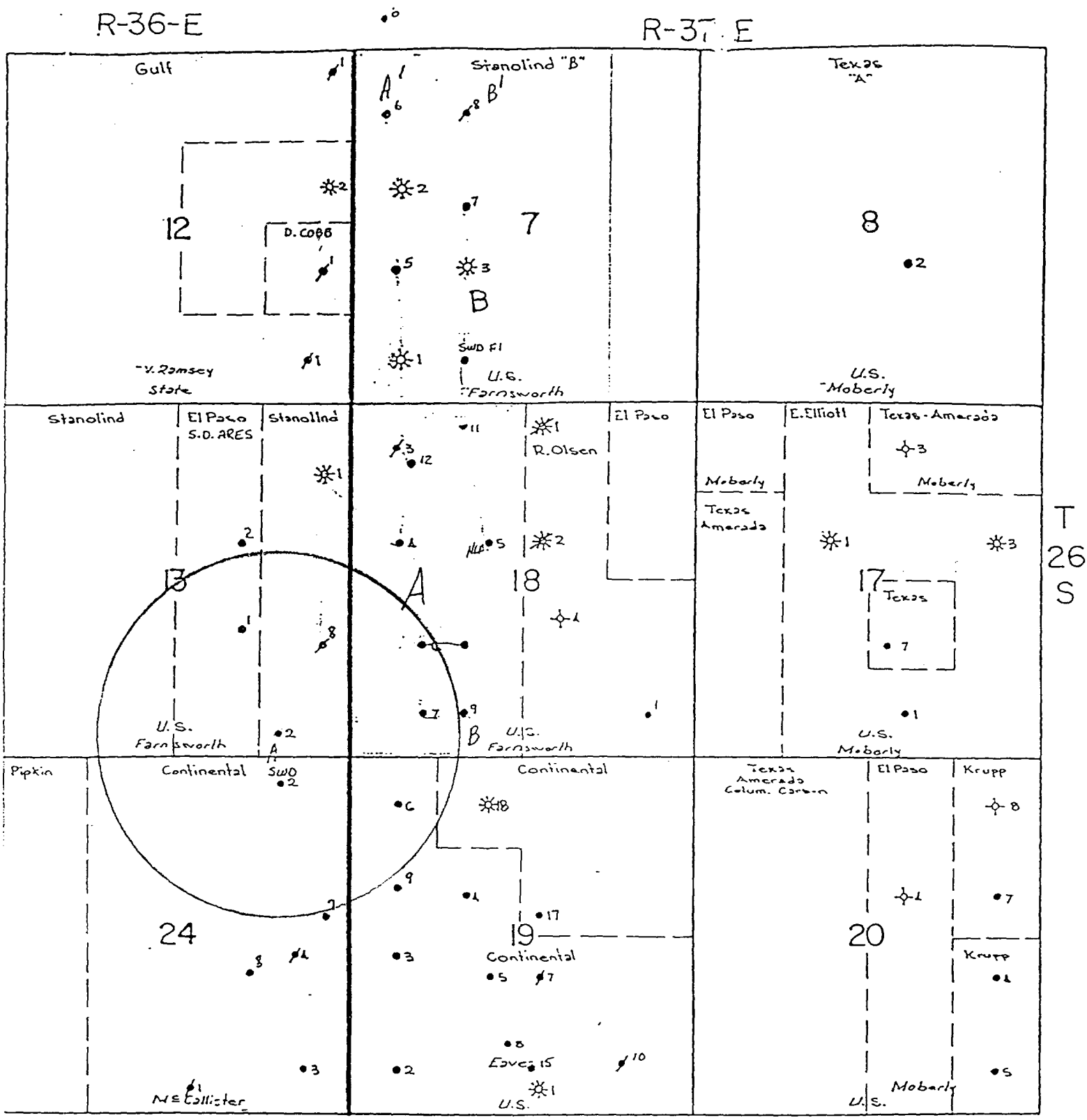
Produced from OH @ 3072-3235'

Perf @ 2984-3054'. 5/89 - Set 75 sx plug @ 2864'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Overlying zone: Yates 2980-3218'.

No known underlying oil or gas zones.



HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-2
SEC. 13-T26S-R36E
LEA COUNTY, NM

Wells in Area of Review
Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc.

Farnsworth A-6

1650' FSL & 990' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 2/41
Total Depth: 3010'

Casing Record:

Size	Depth	Sacks Cement
13"	54	50
9 5/8	1231	430
5 1/2	2809	215

Completion:

3/41 OH 2809-3010'
4/58 INPE
12/86 Install submersible pump.
1/94 Put back on production - submersible pump.

Farnsworth A-7

660' FSL & 990' FWL

Section 18 T26S R37E
Date Drilled: 5/41
Total Depth: 3223

Casing Record:

Size			Depth	Sacks Cement
13			50	50
8 5/8			1228	400
5 1/2			2869	215
4" liner	TOL @ 2823'		BOL @ 3223'	150

Completion:

6/41 OH 2896-2965'
1/54 Deepened well to 3223'. Run 400' 4" liner. Perf @ 3188-96'.
6/62 INPE
6/93 Install submersible pump.
4/94 Proposed workover. Install submersible pump.

Farnsworth A-8

1650' FSL & 330' FEL
Type : P & A
Date Plugged: 7/63

Section 13 T26S R37E
Date Plugged: 2/63
Total Depth: 3306

Casing Record:

Size	Depth	Sacks Cement
8 5/8	329	100
4 1/2	3306	200

Plugging Record:

1) Spotted 25 sx across perfs @ 3080-97'.
2) Pulled 4 1/2" casing from 2530'.
3) Spotted 25 sx plug in and out stub.
4) Spotted 25 sx plugs @ 1290' and 329'.
5) Spotted 10 sx cement plug at surface & installed marker.

El Paso Natural Gas #1

1980' FSL & 1650' FEL
Type: Oil

Section 13 T26S R37E
Date Drilled: 12/62
Total Depth: 3259'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	352	200
4 1/2"	4699	450

Completion:

12/62 Perf @ 3206-10'

Eaves A-6

660' FNL & 660' FWL
Type: Oil

Section 19 T26S R37E
Date Drilled: 3/50
Total Depth: 3305'

Casing Record:

Size	Depth	Sacks Cement
7 5/8	1179	500
5 1/2	3299	780

Completion:

3/50	Retainer @ 3283'.	Cmt w/50 sx
	Retainer @ 3265'.	Cmt w/50 sx
	Retainer @ 3255'.	Cmt w/50 sx
	Retainer @ 3237'.	Cmt w/50 sx
	Retainer @ 3201'.	Cmt w/50 sx
	Perf @ 3190-3200'.	
9/70	Perf @ 3132-79'.	
2/81	Perf @ 3121-96'.	Ran submersible pump.
5/94	Proposed workover.	Install submersible.

McCallister A-2

330' FNL & 990' FEL
Type: SWD

Section 24 T26S R36E
Date Drilled: 10/33
Total Depth: 3238'

Casing Record:

Size	Depth	Sacks Cement
15 1/2	247	40
10	1316	100
8 1/4	1525	100
7	3076	100

10/33	OH 3076-3236'
7/46	PBTD 3218'
7/65	Perf @ 3045-63'.
9/70	Converted to injection well.
	New Mexico OCD Order No. R-4026.
	Set packer @ 3007'.
4/94	Proposed workover. Deepen well for injection in same zone.

VII Proposed Operation

The Farnsworth A #2 well will be used to inject produced water for pressure maintenance from other wells on the Farnsworth lease via a closed disposal system.

Proposed average injection rate and pressure: 8000 BWPD @ Vacuum.
Proposed maximum injection rate and pressure: 10000 BWPD @ 100 psi.

VIII Geological Data

This produced water will be injected into the Seven Rivers formation which is located from 3230' to 3380'. The Seven Rivers formation consists mostly of sand and lime.

The source of underground drinking water in the area is the Ogallala formation (base at ±200').

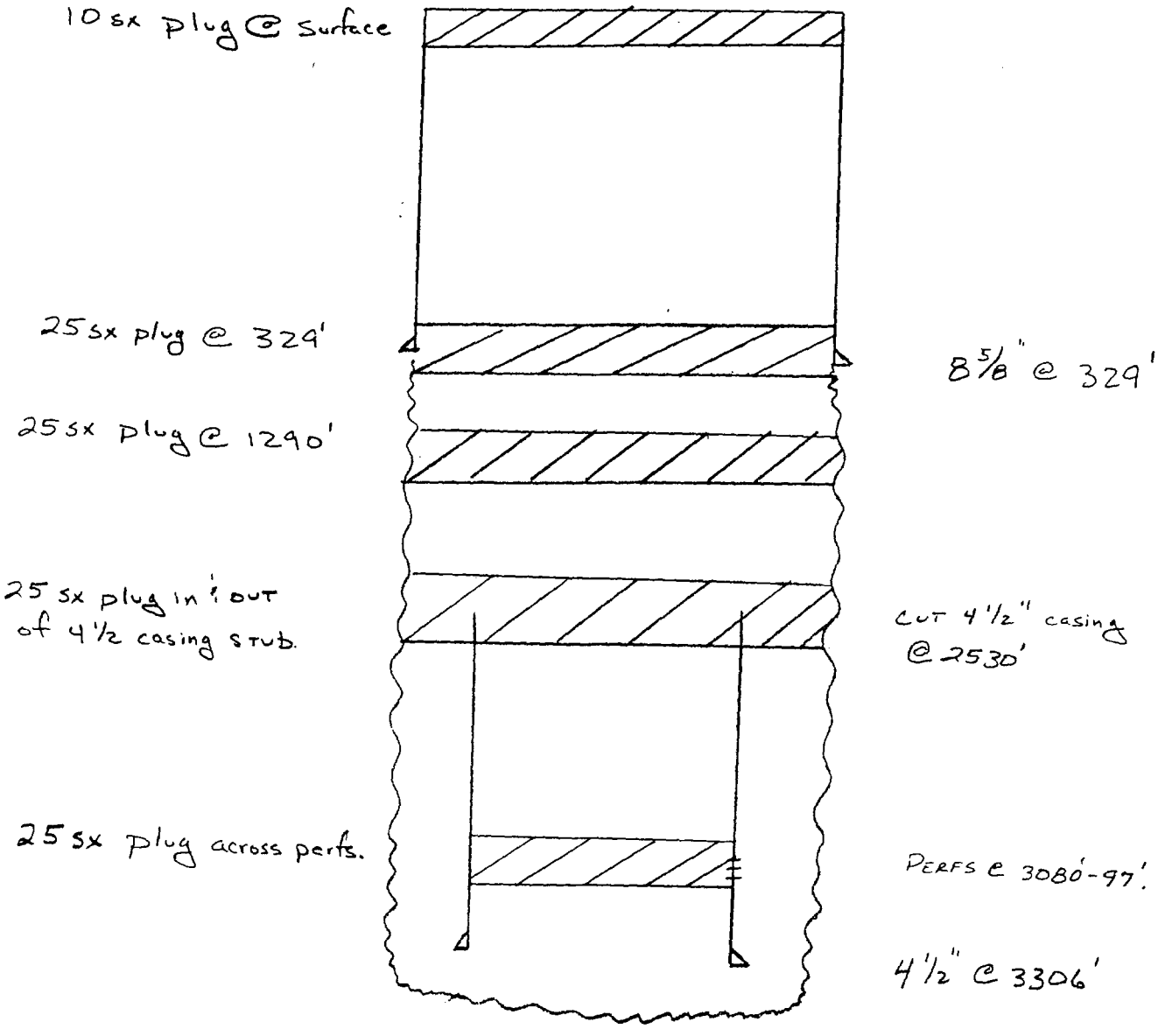
IX Proposed Stimulation

We will clean out the wellbore, set a Baker Model AD-1 packer at 3230', and acidize with 5000 gallons of acid if necessary.

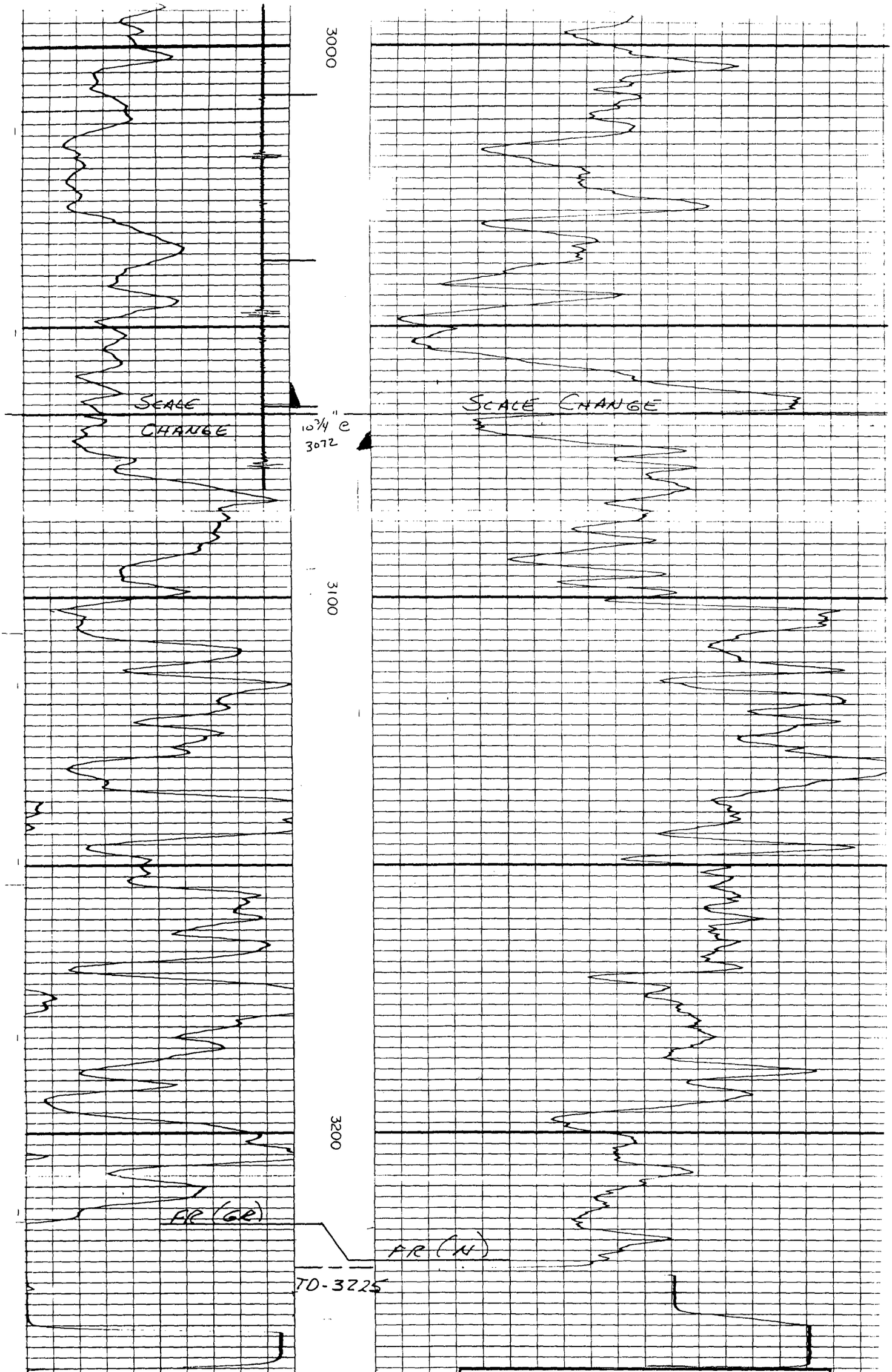
FARNSWORTH A-8

1650' FSL & 330' FEL

Section 13-T26S-R36E

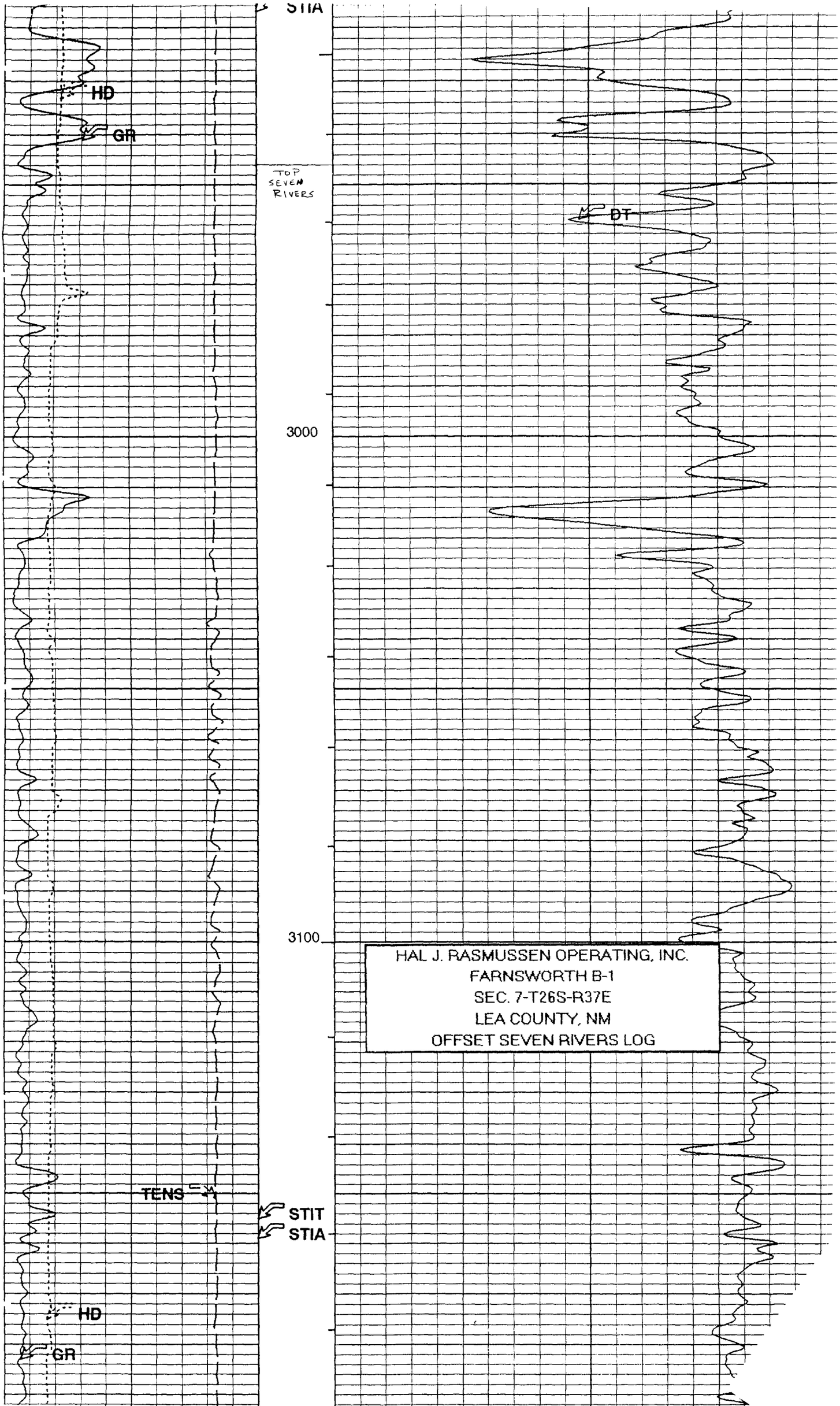


P & A : 7/63



HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-2
SEC. 13-T26S-R36E
LEA COUNTY, NM

3


STIA
HD
GR
TOP
SEVEN
RIVERS
DT
3000
3100
HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH B-1
SEC. 7-T26S-R37E
LEA COUNTY, NM
OFFSET SEVEN RIVERS LOG
TENS
STIT
STIA
HD
GR

UNICHEM INTERNATIONAL
P.O. BOX 61427 4312 County Road 1298 S.
Midland, Texas 79711

Hal J. Rasmussen

Report Date: September 23, 1993
Lab In Date: September 22, 1993
Sample Date: September 17, 1993

WINDMILL LOCATION: 250' FSL & 2500' FWL
Sec. 19 T26S R37E

Listed below please find our water analysis report from Windmill

Specific Gravity:	1.001
Total Dissolved Solids:	1018
PH:	7.81
Ionic Strength:	.020

CATIONS:		mg/liter
Calcium:	(Ca++)	44
Magnesium:	(Mg++)	44
Sodium:	(Na+)	194
Iron (Total)	(Fe++)	3.10
Barium	(Ba++)	0.00
Manganese:	(Mn++)	.18
Resistivity:		
ANIONS:		
Bicarbonate:	(HCO3-)	368
Carbonate:	(CO3--)	0
Hydroxide:	(OH-)	0
Sulfate:	(SO4--)	295
Chloride:	(Cl-)	73

GASES:		
Carbon Dioxide:	(CO2)	******
Oxygen:	(O2)	*******
Hydrogen Sulfide:	(H2S)	******

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.55	-21.21
104F	40.0C	.84	-21.37
122F	50.0C	.98	-21.37
140F	60.0C	1.14	-21.21
168F	70.0C	1.31	-20.25
176F	80.0C	1.49	-19.07

If you have any questions or require further information, please contact us.

Sincerely,

Jeanne M. McMurray

Laboratory Technician

cc:

bc:
Charlie Vaden

Hal J. Rasmussen Operating, Inc.
Farnsworth A-2
Application for Authorization to Inject

Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

April 5, 1994

Gentlemen:

I 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 other underground source of drinking water.

Sincerely,

Tyson L. Dunn
Hal J. Rasmussen Operating, Inc.

MAILING LIST

Surface Owner

Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

Offset Operator

Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

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:
Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

4. Article Number
P 080 275 171

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X Mel Forbes

7. Date of Delivery
4-7-94

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

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

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☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

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4-7-94

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

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

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

of _____

one weeks.
Beginning with the issue dated

April 8, 19 94
and ending with the issue dated

April 8, 19 94

Kathi Bearden
General Manager
Sworn and subscribed to before

me this 11 day of
April, 19 94

Charlene Perrin
Notary Public.

My Commission expires
March 15, 1997
(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
April 8, 1994

Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc.
310 W. Wall; Suite 906
Midland, Texas 79701
(915) 687-1664 Tyson Dunn

Farnsworth A #2 salt water injection well for pressure maintenance located at 330' FSL & 990' FEL of Section 13-T26S-R36E. The water will be injected through an open hole completion into the Seven Rivers formation at 3230'-3380'. The expected maximum injection rates and pressures are 10,0000 BWPD & 100 psi, respectively. 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.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
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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: Tyson L. Dunn Title Production Engineer

Signature: [signature] Date: 4-6-94

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INJECTION WELL DATA SHEET

OPERATOR	LEASE
Hal J. Rasmussen Operating, Inc.	Farnsworth A

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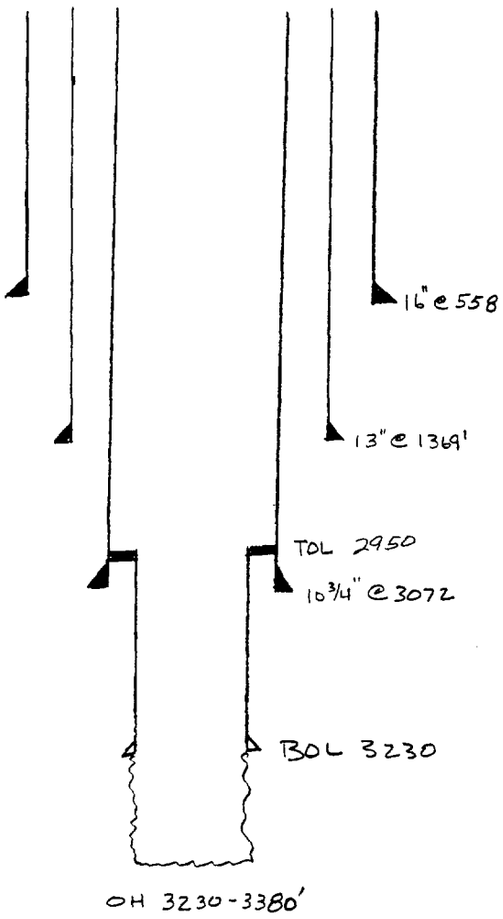

Tabular Data

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TOC surface feet determined by circulation

Hole size 20"

Intermediate Casing

Size 13 " Cemented with 111 sx.

TOC surface feet determined by circulation

Hole size 14 3/4

Long string

Size 10 3/4 " Cemented with 75 sx.

TOC 2400 feet determined by calculation

Hole size 12 1/4

Total depth 3235' (CURRENT)

Injection interval

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(perforated or open-hole, indicate which)

Proposed Liner

Size 7 5/8" Cement 50 sx

Hole Size 9 5/8

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BOL 3230

Total Depth 3380'

Tubing size 5 1/2" lined with plastic coated (material) set in a

Baker Model AD-1 (Tension) (brand and model) packer at 3230 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Seven Rivers

2. Name of Field or Pool (if applicable) Scarborough Yates Seven Rivers

3. Is this a new well drilled for injection? / / Yes /X/ No

   If no, for what purpose was the well originally drilled? Oil Well

4. 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)

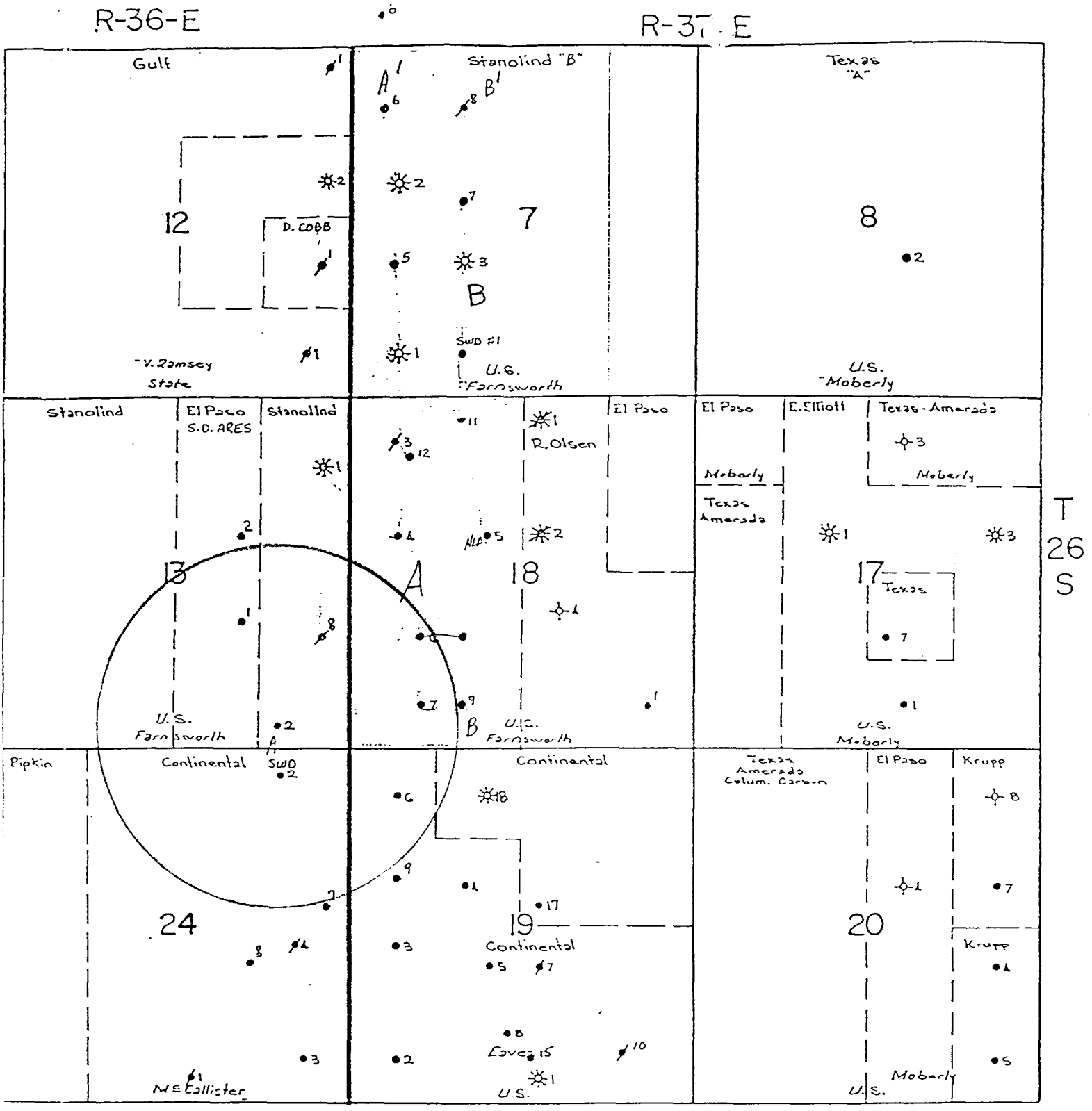
   Produced from OH @ 3072-3235'

   Perf @ 2984-3054'. 5/89 - Set 75 sx plug @ 2864'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Overlying zone: Yates 2980-3218'.

   No known underlying oil or gas zones.



HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-2
SEC. 13-T26S-R36E
LEA COUNTY, NM

Wells in Area of Review
Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc.

Farnsworth A-6

1650' FSL & 990' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 2/41
Total Depth: 3010'

Casing Record:

Size	Depth	Sacks Cement
13"	54	50
9 5/8	1231	430
5 1/2	2809	215

Completion:

3/41 OH 2809-3010'
4/58 INPE
12/86 Install submersible pump.
1/94 Put back on production - submersible pump.

Farnsworth A-7

660' FSL & 990' FWL

Section 18 T26S R37E
Date Drilled: 5/41
Total Depth: 3223

Casing Record:

Size	Depth	Sacks Cement
13	50	50
8 5/8	1228	400
5 1/2	2869	215
4" liner TOL @ 2823'	BOL @ 3223'	150

Completion:

6/41 OH 2896-2965'
1/54 Deepened well to 3223'. Run 400' 4" liner. Perf @ 3188-96'.
6/62 INPE
6/93 Install submersible pump.
4/94 Proposed workover. Install submersible pump.

Farnsworth A-8

1650' FSL & 330' FEL
Type : P & A
Date Plugged: 7/63

Section 13 T26S R37E
Date Plugged: 2/63
Total Depth: 3306

Casing Record:

Size	Depth	Sacks Cement
8 5/8	329	100
4 1/2	3306	200

Plugging Record:

1) Spotted 25 sx across perfs @ 3080-97'.
2) Pulled 4 1/2" casing from 2530'.
3) Spotted 25 sx plug in and out stub.
4) Spotted 25 sx plugs @ 1290' and 329'.
5) Spotted 10 sx cement plug at surface & installed marker.

El Paso Natural Gas #1

1980' FSL & 1650' FEL
Type: Oil

Section 13 T26S R37E
Date Drilled: 12/62
Total Depth: 3259'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	352	200
4 1/2"	4699	450

Completion:

12/62 Perf @ 3206-10'

Eaves A-6

660' FNL & 660' FWL
Type: Oil

Section 19 T26S R37E
Date Drilled: 3/50
Total Depth: 3305'

Casing Record:

Size	Depth	Sacks Cement
7 5/8	1179	500
5 1/2	3299	780

Completion:

3/50 Retainer @ 3283'. Cmt w/50 sx
Retainer @ 3265'. Cmt w/50 sx
Retainer @ 3255'. Cmt w/50 sx
Retainer @ 3237'. Cmt w/50 sx
Retainer @ 3201'. Cmt w/50 sx
Perf @ 3190-3200'.
9/70 Perf @ 3132-79'.
2/81 Perf @ 3121-96'. Ran submersible pump.
5/94 Proposed workover. Install submersible.

McCallister A-2

330' FNL & 990' FEL
Type: SWD

Section 24 T26S R36E
Date Drilled: 10/33
Total Depth: 3238'

Casing Record:

Size	Depth	Sacks Cement
15 1/2	247	40
10	1316	100
8 1/4	1525	100
7	3076	100

10/33 OH 3076-3236'
7/46 PBTD 3218'
7/65 Perf @ 3045-63'.
9/70 Converted to injection well.
New Mexico OCD Order No. R-4026.
Set packer @ 3007'.
4/94 Proposed workover. Deepen well for injection in same zone.

VII Proposed Operation

The Farnsworth A #2 well will be used to inject produced water for pressure maintenance from other wells on the Farnsworth lease via a closed disposal system.

Proposed average injection rate and pressure: 8000 BWPD @ Vacuum.
Proposed maximum injection rate and pressure: 10000 BWPD @ 100 psi.

VIII Geological Data

This produced water will be injected into the Seven Rivers formation which is located from 3230' to 3380'. The Seven Rivers formation consists mostly of sand and lime.

The source of underground drinking water in the area is the Ogallala formation (base at ±200').

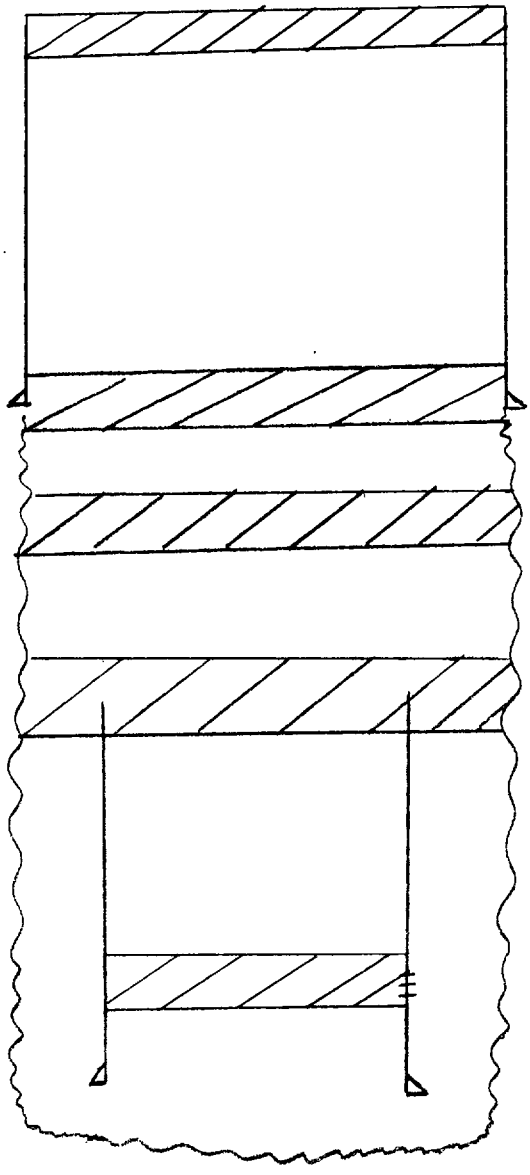
IX Proposed Stimulation

We will clean out the wellbore, set a Baker Model AD-1 packer at 3230', and acidize with 5000 gallons of acid if necessary.

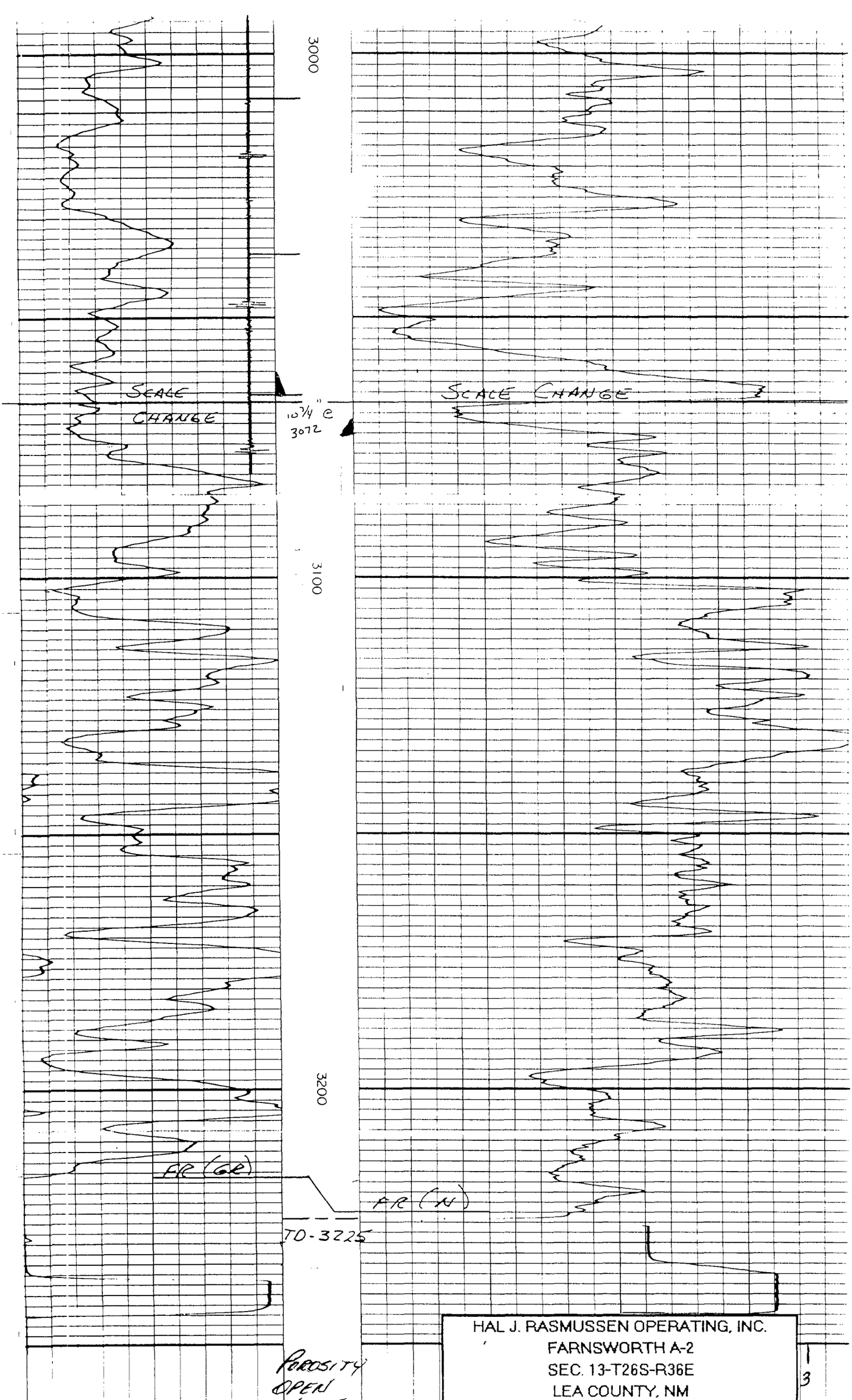
FARNSWORTH A-8

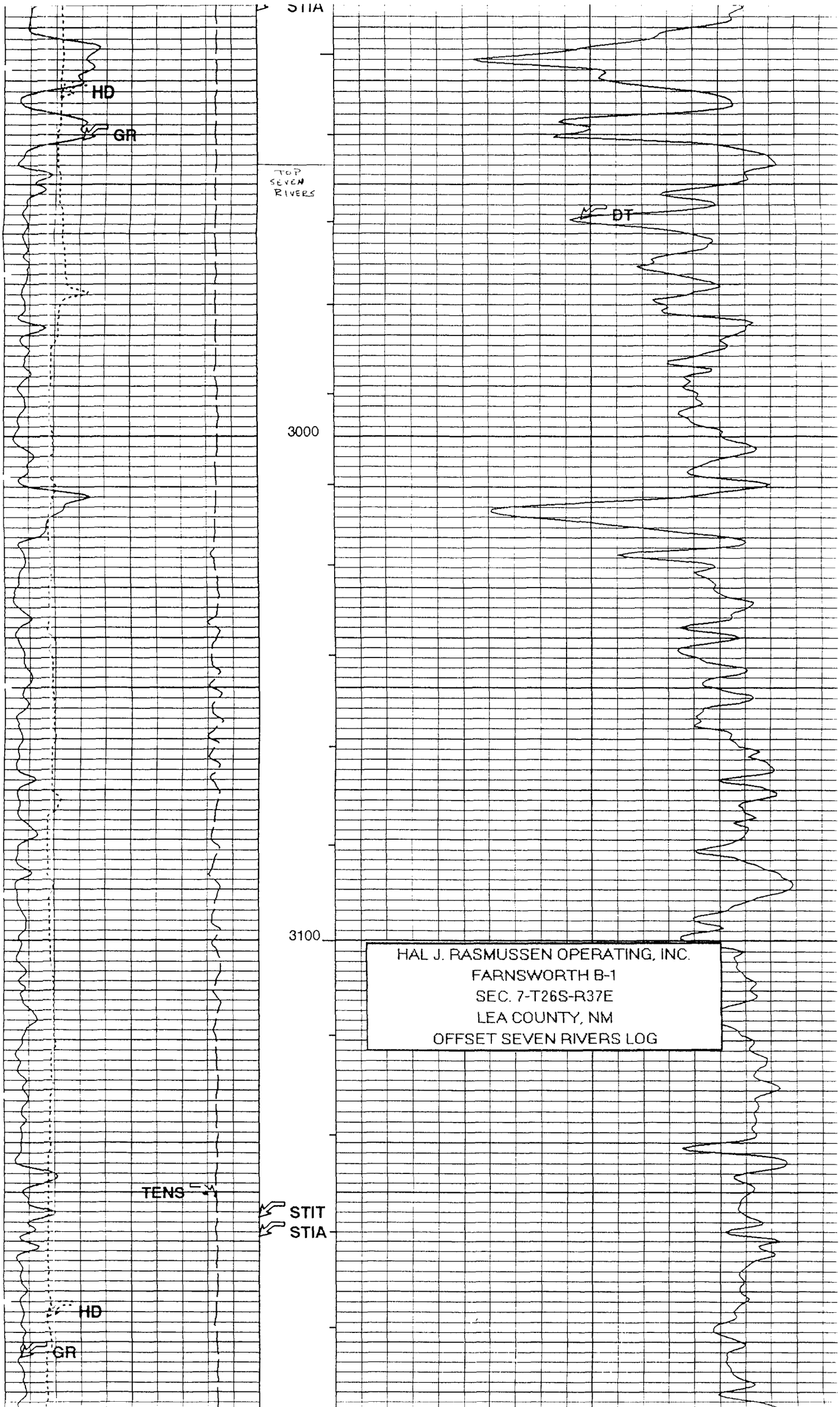
1650' FSL & 330' FEL

Section 13-T26S-R36E



P & A : 7/63


3000
SCALE CHANGE
10 3/4" @ 3072
SCALE CHANGE
3100
3200
FR (GR)
FR (N)
TD-3225
POROSITY OPEN HOLE
HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-2
SEC. 13-T26S-R36E
LEA COUNTY, NM
3


STIA
HD
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TOP
SEVEN
RIVERS
DT
3000
3100
HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH B-1
SEC. 7-T26S-R37E
LEA COUNTY, NM
OFFSET SEVEN RIVERS LOG
TENS
STIT
STIA
HD
GR

UNICHEM INTERNATIONAL
P.O. BOX 61427 4312 County Road 1298 S.
Midland, Texas 79711

Hal J. Rasmussen

Report Date: September 23, 1993
Lab In Date: September 22, 1993
Sample Date: September 17, 1993

WINDMILL LOCATION: 250' FSL & 2500' FWL
Sec. 19 T26S R37E

Listed below please find our water analysis report from Windmill

Specific Gravity:	1.001
Total Dissolved Solids:	1018
PH:	7.81
Ionic Strength:	.020

CATIONS:		mg/liter
Calcium:	(Ca++)	44
Magnesium:	(Mg++)	44
Sodium:	(Na+)	194
Iron (Total)	(Fe++)	3.10
Barium	(Ba++)	0.00
Manganese:	(Mn++)	.18
Resistivity:		

ANIONS:		
Bicarbonate:	(HCO3-)	368
Carbonate:	(CO3--)	0
Hydroxide:	(OH-)	0
Sulfate:	(SO4--)	295
Chloride:	(Cl-)	73

GASES:		
Carbon Dioxide:	(CO2)	******
Oxygen:	(O2)	*******
Hydrogen Sulfide:	(H2S)	******

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.55	-21.21
104F	40.0C	.84	-21.37
122F	50.0C	.98	-21.37
140F	60.0C	1.14	-21.21
168F	70.0C	1.31	-20.25
176F	80.0C	1.49	-19.07

If you have any questions or require further information, please contact us.

Sincerely,

Jeanne M. McMurray

Laboratory Technician

cc:

bc:
Charlie Vaden

Hal J. Rasmussen Operating, Inc.
Farnsworth A-2
Application for Authorization to Inject

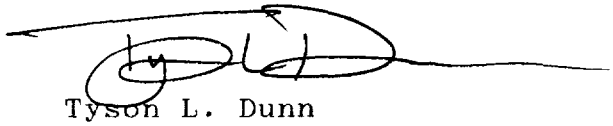
Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

April 5, 1994

Gentlemen:

I 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 other underground source of drinking water.

Sincerely,



Tyson L. Dunn
Hal J. Rasmussen Operating, Inc.

MAILING LIST

Surface Owner

Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

Offset Operator

Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

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:

Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

4. Article Number

P 080 275 171

Type of Service:

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address

X

6. Signature — Agent

X Mel Forbes

7. Date of Delivery

4-7-94

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

8

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:

Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

4. Article Number

P 080 275 170

Type of Service:

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address

X

6. Signature — Agent

X Amy Mynick

7. Date of Delivery

4-7-94

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

8

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

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

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

of _____

one weeks.

Beginning with the issue dated

April 8, 19 94

and ending with the issue dated

April 8, 19 94

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 11 day of

April, 19 94

Charlene Perrin
Notary Public.

My Commission expires
March 15, 1997
(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
April 8, 1994

Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc..
310 W. Wall; Suite 906
Midland, Texas 79701
(915) 687-1664 Tyson Dunn

Farnsworth A #2 salt water injection well for pressure maintenance located at 330' FSL & 990' FEL of Section 13-T26S-R36E. The water will be injected through an open hole completion into the Seven Rivers formation at 3230'-3380'. The expected maximum injection rates and pressures are 10,0000 BWPD & 100 psi, respectively. 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.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

Case 11003

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Hal J. Rasmussen Operating, Inc.

Address: 310 W. Wall; Suite 906 Midland, Texas 79701

Contact party: Tyson Dunn Phone: (915) 687-1664

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: Tyson L. Dunn Title Production Engineer

Signature: _____ Date: 4-5-94

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

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

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.

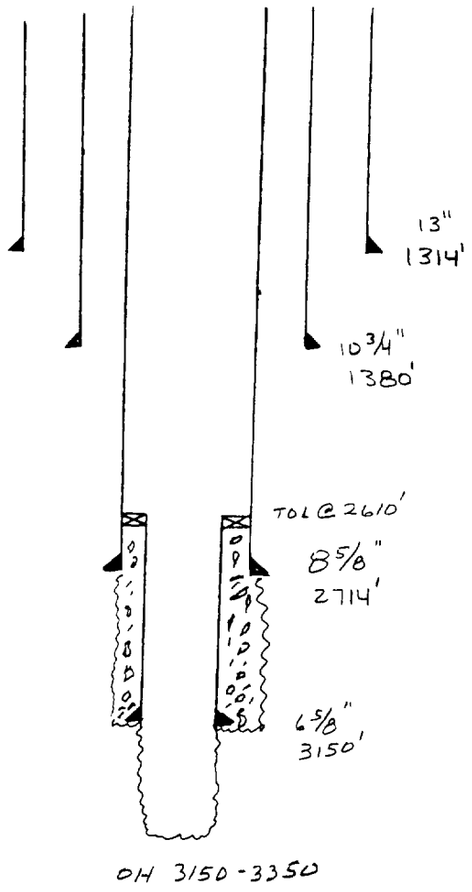
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Hal J. Rasmussen Operating, Inc. (OPERATOR) Farnsworth A (LEASE)

1	990' FNL & 330' FEL	13	26S	36E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13" Cemented with 75 sx.

TOC surface feet determined by circulation

Hole size 17½"

Intermediate Casing

Size 10 3/4" Cemented with Mudded sx.

TOC - feet determined by -

Hole size 12¼

Long string

Size 8 5/8" Cemented with 60 sx.

TOC 2050 feet determined by calculation

Hole size 9 7/8

Total depth 3125 (CURRENT)

Injection interval

3150 feet to 3350 feet OH
(perforated or open-hole, indicate which)

Proposed Liner

Size 6 5/8 Cement 50 sx

Hole Size 7 7/8

TOL 2610'

Bottom of Liner 3150'

Total Depth 3350'

Tubing size 5 lined with Plastic Coated (material) set in a Baker Model AD-1 (Tension) (brand and model) packer at 3140 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Seven Rivers

2. Name of Field or Pool (if applicable) Scarborough Yates Seven Rivers

3. Is this a new well drilled for injection? / / Yes /X/ No

   If no, for what purpose was the well originally drilled? Oil

4. 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)

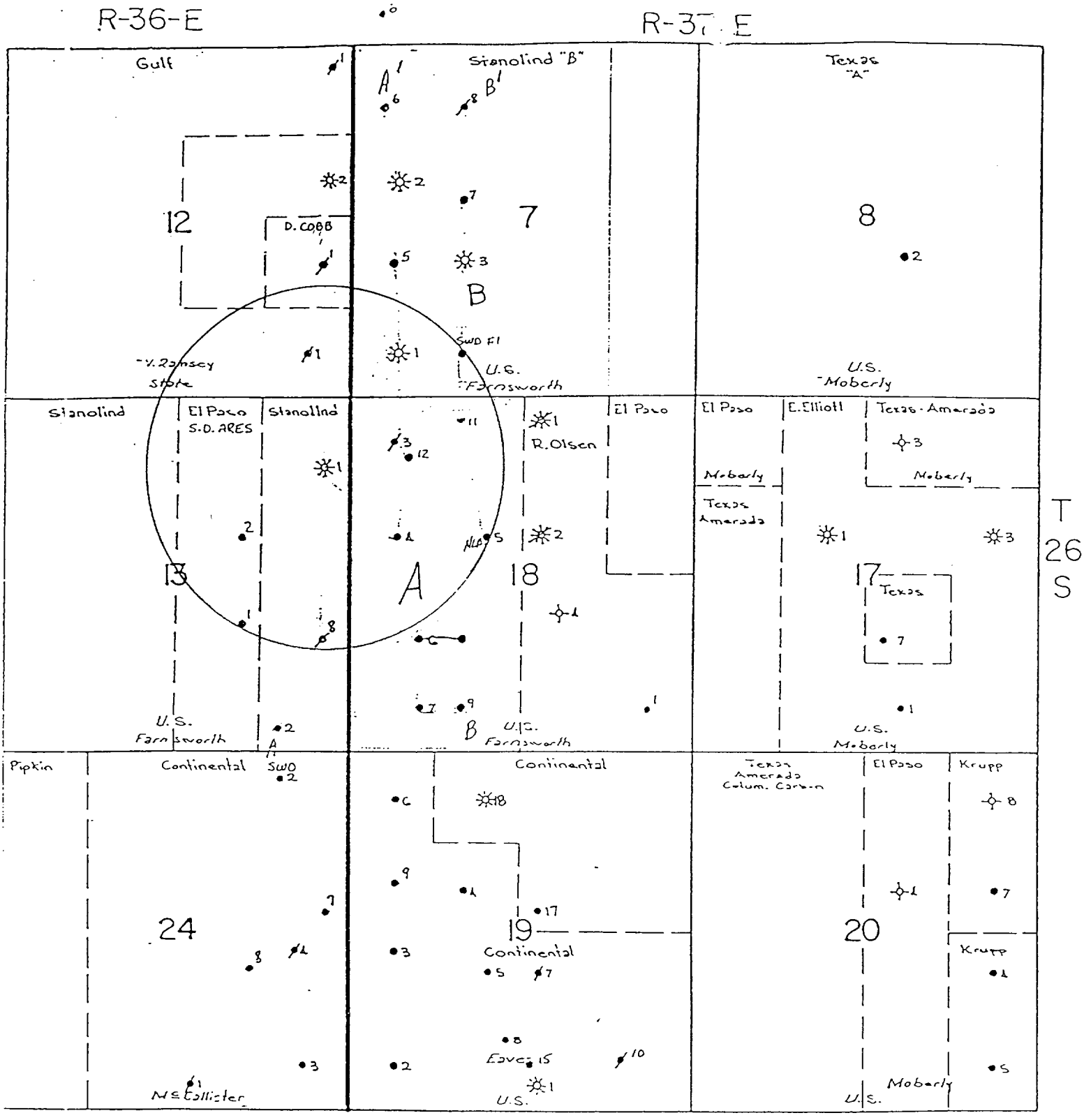
   No other perforations

   Produced through OH intervals between 2714'-3125'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Next higher formation: Yates 2846-3085'

   No known underlying oil & gas zones



HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-1
SEC. 13-T26S-R36E
LEA COUNTY, NM

Wells in Area of Review
Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc.

Farnsworth B-1

660' FSL & 660' FWL
Type: Oil

Section 7 T26S R37E
Date Drilled: 4/34
Total Depth: 2980'

Casing Record:

Size	Depth	Sacks Cement
13"	505	210
8 5/8	2830'	425

Completion:

5/34 OH 2830'-2980'
12/65 INPE
4/94 Proposed WO. Put on submersible pump.

Farnsworth #1 SWD

660' FSL & 1660' FWL
Type: SWD

Section 7 T26S R37E
Date Drilled: 10/65
Total Depth: 3029'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	357	200
5 1/2	3029	150

Completion:

10/65 Perf @ 3020'-26'. Sqz w/150 sx. Perf @ 3006-11
11/65 SI as TA. Dry hole.
2/67 Sqz perfs @ 3006-11. Cleaned out to TD @ 3029'. Drilled 4 3/4" new Hole @ 3029-92'. Set packer @ 3027'.

Farnsworth A-3

680' FNL & 660' FWL — Section 18 T26S R37E
Type : P & A — Date Plugged: 8/64

P & A Operations:

1) Spotted 25 sx across perfs @ 3122-28'.
2) Cut & pulled 7" casing from approx. 1600'.
3) Spotted 30 sx cement plug in and out of 7" casing stub @1600'.
4) Cut & pulled 9 5/8" casing from approx. 1200'.
5) Spotted 30 sx cement in and out of 9 5/8" stub @ 1200'.
6) Spotted 30 sx cement plug in and out of 13 3/8" shoe at 482'.
7) Spotted 10 sx cement plug at surface & erected P&A marker.

Farnsworth A-4

1980' FNL & 660' FWL — Section 18 T26S R37E
Type: Oil — Date Drilled: 3/36
Total Depth: 3205'

Casing Record:

Size	Depth	Sacks Cement
13"	510	300
9 5/8"	2645'	700
7"	3028'	125
5 1/2" T.L. 2884'	TD 3200'	150

4/36 PBTD 2975'. Perfs @ 2946-49
2/38 Put on gas lift
10/45 Drilled out cement plug. PBTD 3030'.
8/48 PB w/cmt to 3019'. Perf @ 2996-3004'. Sqz perfs. Perf @ 2950-70'.
1/56 Deepen to 3200'. Run 316' 5 1/2" liner to TD. Perf @ 3162 -84'. Sqz perfs. Set BP @ 3195'. Perf 2 2755-2865'.
11/65 Set CIBP @ 2995'. Perf @ 2987-93'. POP
1994 Shut-in.

Farnsworth A-5

1980' FNL & 1980' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 8/37
Total Depth: 3146'

Casing Record:

Size	Depth	Sacks Cement
15 1/2"	49'	40
10 3/4"	502'	200
7"	2785'	400

Completion:

9/37 PBTD 3134'
6/52 INPE
5/82 SI

Farnsworth A-8

1650' FSL & 330' FEL
Type: P & A
Date Plugged: 7/63

Section 13 T26S R36E
Date Drilled: 2/63
Total Depth: 3306'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	329	100
4 1/2"	3306	200

Plugging Record:

1) Spotted 25 sx cement plug across perfs @ 3080-97'.
2) Pulled 4 1/2" casing from 2530'.
3) Spotted 25 sx plug in and out of stub.
4) Spotted 25 sx plugs @ 1290' and 329'.
5) Spotted 10 sx cement plug at surface & installed marker.

Farnsworth A-11

330' FNL & 1660' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 10/65
Total Depth: 3318'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	372	200
5 1/2"	3318	270

10/65 Perf @ 3204-08'. Sqz perfs. PBTD 3071. Perf @ 3041-45'.
11/65 Add perfs @ 3024-32'.
5/70 Set RBP @ 3019'. Perf @ 2869-3016' & test. POOH w/RBP. Return tbg & pkr. Set @ 3020'.
2/90 POP
1994 Shut-in.

Farnsworth A-12

890' FNL & 890' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 1/79
Total Depth: 3350'

Casing Record:

Size	Depth	Sacks Cement
9 55/8"	1133	700
7"	3350	950

Completion:

1/79 Perf @ 3181-89'. INPE.
2/79 Set CIBP @ 3148'. Perf @ 3081-87'.
3/79 Set CIBP @ 3060'. Perf @ 2989-94'. INPE
4/79 SI
1/85 Set CIBP @ 2960'. Perf @ 2743-2911'.
5/89 Spotted cement plug. Tagged @ 2623'. Partial plug & abandon.
5/90 Drilled cement to 2870'. Acidize & frac perfs @ 2743-848'.
5/94 SI. Proposed workover & put back on production.

El Paso Natural Gas #1

1980' FSL & 1650' FEL
Type: Oil

Section 13 T26S R36E
Date Drilled: 12/62
Total Depth: 3259'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	352	200
4 1/2	4699	450

Completion:

12/62 Perf @ 3206-10'.

El Paso Natural Gas #2

1980' FNL & 1650' FEL
Type: Oil

Section 13 T26S R36E
Date Drilled: 1/63
Total Depth: 3371'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	374	375
5 1/2	3371	125

3/63 Perf @ 3322-26'. Set CIBP @ 3300'. Perf @ 3165-77'.
10/71 Set CIBP @ 3150'. Perf @ 3116-30'.

VII Proposed Operation

The Farnsworth A #1 well will be used to inject produced water for pressure maintenance from other wells on the Eaves lease via a closed disposal system.

Proposed average injection rate and pressure: 8000 BWPD @ Vacuum.
Proposed maximum injection rate and pressure: 10000 BWPD @ 100 psi.

VIII Geological Data

This produced water will be injected into the Seven Rivers formation which is located from 3150' to 3350'. The Seven Rivers formation consists mostly of sand and lime.

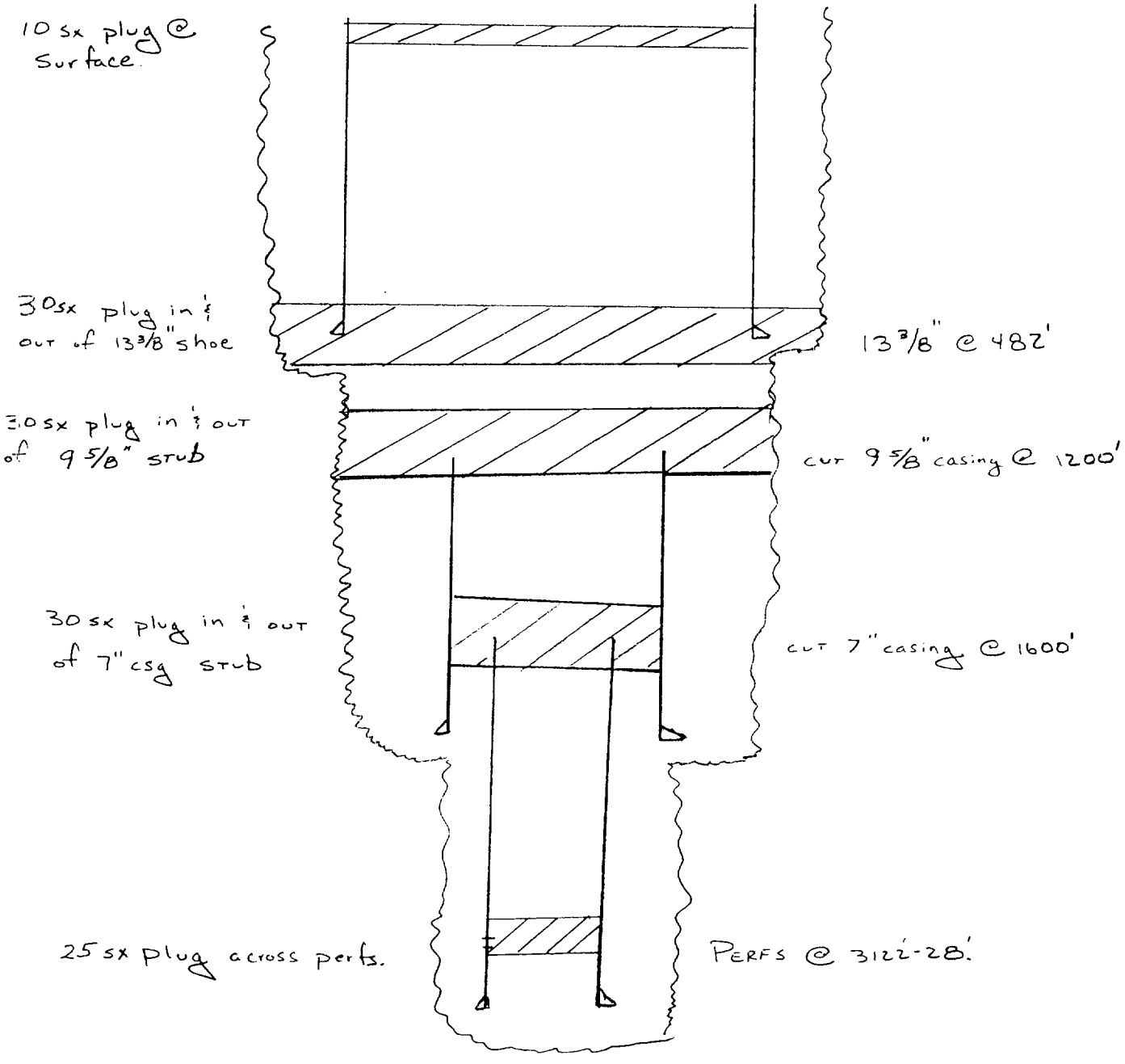
The source of underground drinking water in the area is the Ogallala formation (base at $\pm$200').

IX Proposed Stimulation

We will clean out the wellbore, set a Baker Model AD-1 packer at 3140', and acidize with 5000 gallons of acid if necessary.

FARNSWORTH A-3

680' FNL & 660' FWL
Section 18 - T26S - R37E

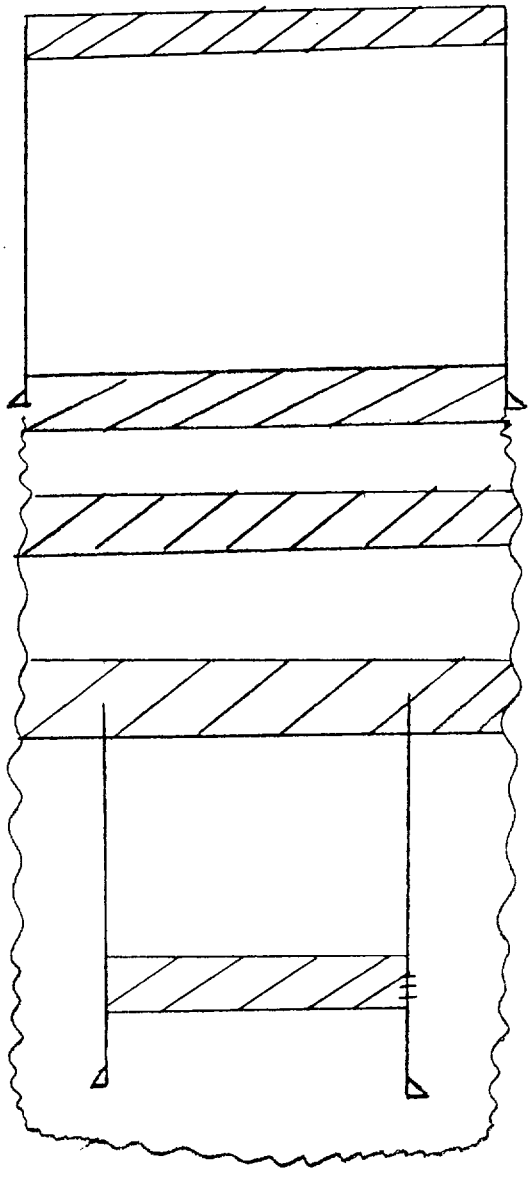


P & A 8/64

FARNSWORTH A-8

1650' FSL & 330' FEL

Section 13-T26S-R36E



P & A : 7/63

UNICHEM INTERNATIONAL
P.O. BOX 61427 4312 County Road 1298 S.
Midland, Texas 79711

Hal J. Rasmussen

Report Date: September 23, 1993
Lab In Date: September 22, 1993
Sample Date: September 17, 1993

WINDMILL LOCATION: 250' FSL & 2500' FWL
Sec. 19 T26S R37E

Listed below please find our water analysis report from Windmill

	Specific Gravity:		1.001
	Total Dissolved Solids:		1018
	PH:		7.81
	Ionic Strength:		.020
CATIONS:			mg/liter
	Calcium:	(Ca++)	44
	Magnesium:	(Mg++)	44
	Sodium:	(Na+)	194
	Iron (Total)	(Fe++)	3.10
	Barium	(Ba++)	0.00
	Manganese:	(Mn++)	.18
	Resistivity:		
ANIONS:			
	Bicarbonate:	(HCO3-)	368
	Carbonate:	(CO3--)	0
	Hydroxide:	(OH-)	0
	Sulfate:	(SO4--)	295
	Chloride:	(Cl-)	73
GASES:			
	Carbon Dioxide:	(CO2)	******
	Oxygen:	(O2)	*******
	Hydrogen Sulfide:	(H2S)	******

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.55	-21.21
104F	40.0C	.84	-21.37
122F	50.0C	.98	-21.37
140F	60.0C	1.14	-21.21
168F	70.0C	1.31	-20.25
176F	80.0C	1.49	-19.07

If you have any questions or require further information, please contact us.

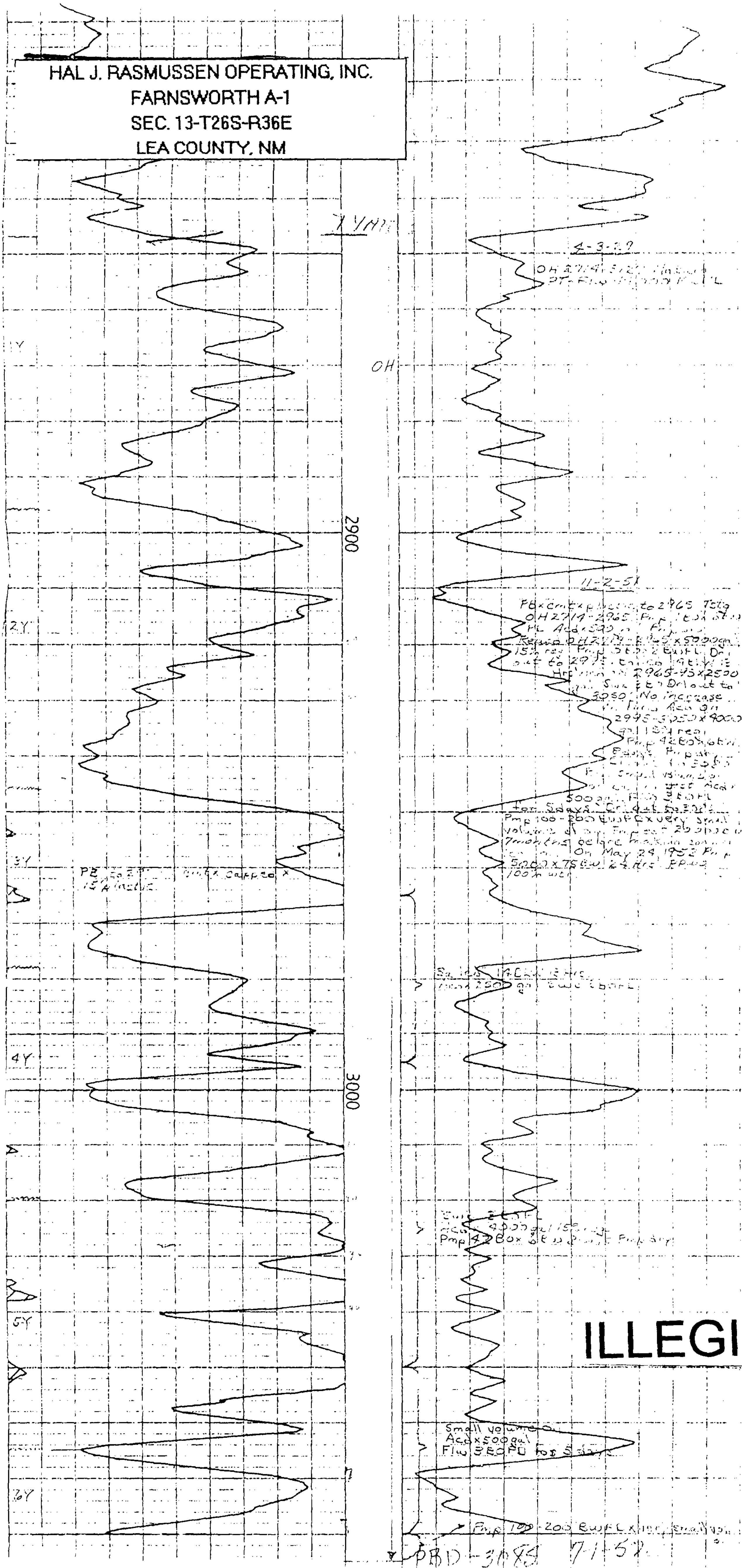
Sincerely,

Jeanne M. McMurray

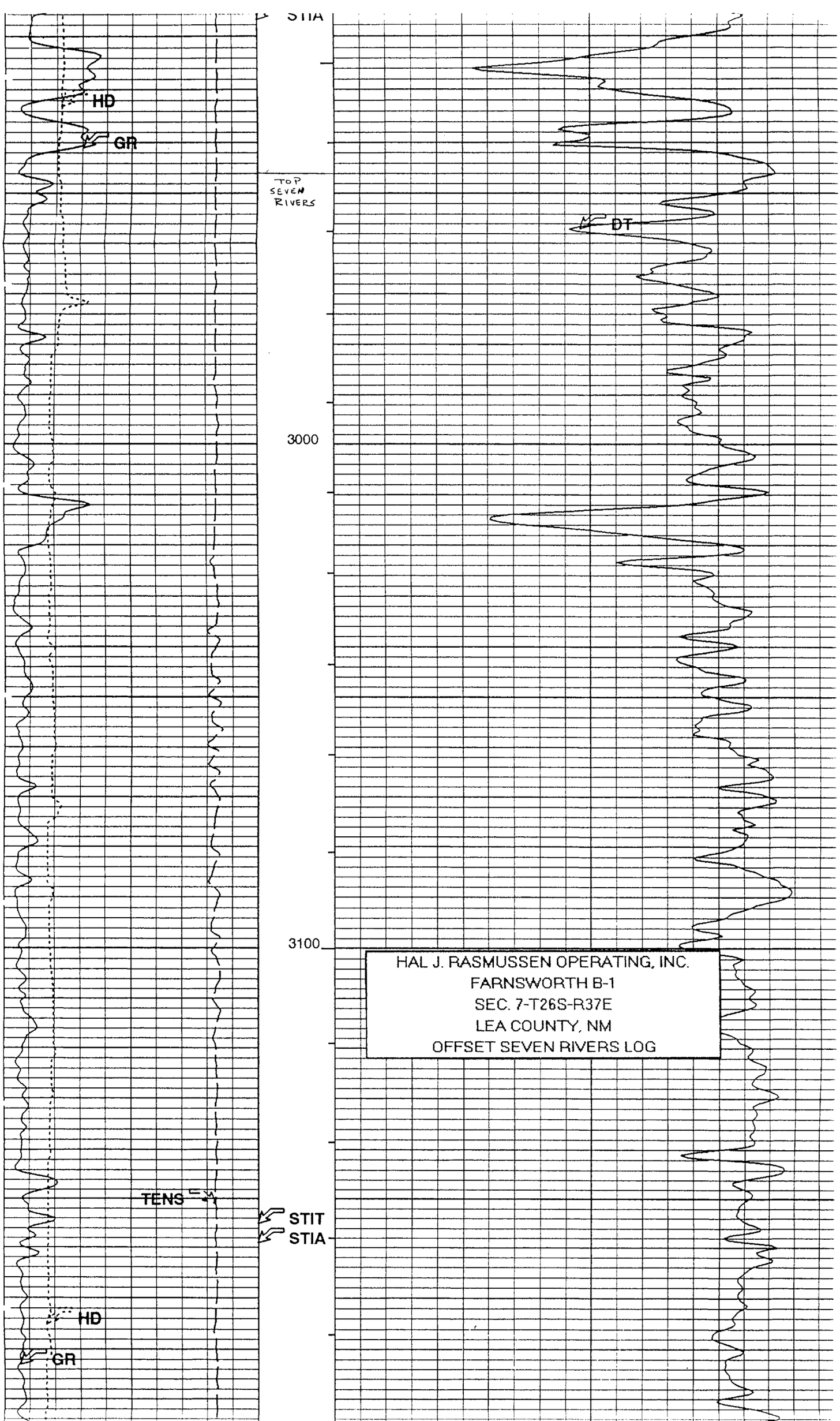
Laboratory Technician

cc:

bc:
Charlie Vaden


HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-1
SEC. 13-T26S-R36E
LEA COUNTY, NM
OH
2900
3000
PBD-3085

ILLEGIBLE


STIA
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HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH B-1
SEC. 7-T26S-R37E
LEA COUNTY, NM
OFFSET SEVEN RIVERS LOG
TENS
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GR

Hal J. Rasmussen Operating, Inc.
Farnsworth A-1
Application for Authorization to Inject

Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

April 5, 1994

Gentlemen:

I 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 other underground source of drinking water.

Sincerely,

Tyson L. Dunn
Hal J. Rasmussen Operating, Inc.

MAILING LIST

Surface Owner

Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

Offset Operators

Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

Chevron USA
P.O. Box 688
Eunice, New Mexico 88231

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:
Chevron USA
P.O. Box 688
Eunice, New Mexico 88231

4. Article Number
P 080 275 172

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X B.B. Macias Chevron USA

6. Signature — Agent
X

7. Date of Delivery
4-7-94

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

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:
Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

4. Article Number
P 080 275 171

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X Wel Forbes

7. Date of Delivery
4-7-94

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

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3. Article Addressed to:
Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

4. Article Number
P 080 275 170

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X

7. Date of Delivery
4-7-94

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

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

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

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

of _____

one weeks.

Beginning with the issue dated

April 8, 19 94

and ending with the issue dated

April 8, 19 94

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 11 day of

April, 19 94

Charlene Terrell
Notary Public.

My Commission expires
March 15, 1997
(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
April 8, 1994

Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc..
310 W. Wall; Suite 906
Midland, Texas 79701
(915) 687-1664 Tyson Dunn

Farnsworth A #1 salt water injection well for pressure maintenance located at 990' FNL & 330' FEL of Section 13-T26S-R36E. The water will be injected through an open hole completion into the Seven Rivers formation at 3150'-3350'. The expected maximum injection rates and pressures are 10,0000 BWPD & 100 psi, respectively. 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.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

Case 11003

APPLICATION FOR AUTHORIZATION TO INJECT

OIL CONSERVATION DIVISION

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

II. Operator: Hal J. Rasmussen Operating, Inc.

Address: 310 W. Wall; Suite 906 Midland, Texas 79701

Contact party: Tyson Dunn Phone: (915) 687-1664

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: Tyson L. Dunn Title Production Engineer

Signature: _____ Date: 4-5-94

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

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.

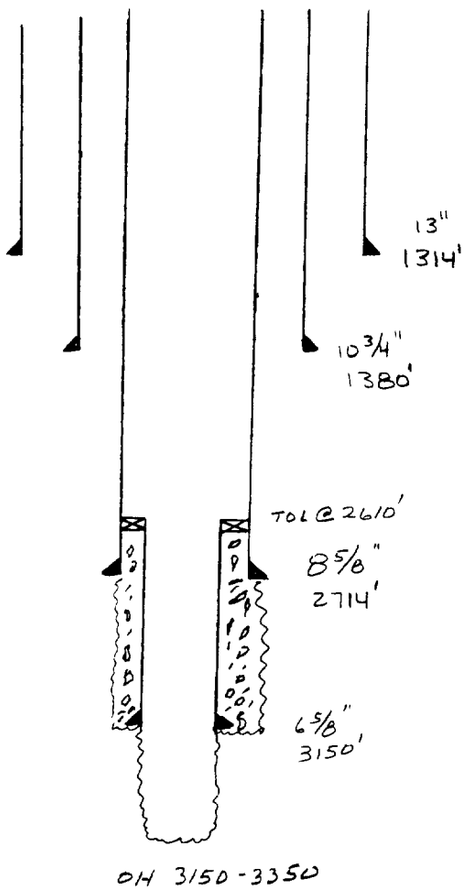
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Hal J. Rasmussen Operating, Inc.	Farnsworth A			
1	990' FNL & 330' FEL	13	26S	36E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13 " Cemented with 75 sx.

TOC surface feet determined by circulation

Hole size 17½"

Intermediate Casing

Size 10 3/4 " Cemented with Mudded sx.

TOC - feet determined by -

Hole size 12¼

Long string

Size 8 5/8 " Cemented with 60 sx.

TOC 2050 feet determined by calculation

Hole size 9 7/8

Total depth 3125 (CURRENT)

Injection interval

3150 feet to 3350 feet OH

(perforated or open-hole, indicate which)

Proposed Liner

Size 6 5/8 Cement 50 sx

Hole Size 7 7/8

TOL 2610'

Bottom of Liner 3150'

Total Depth 3350'

Tubing size 5 lined with Plastic Coated (material) set in a

Baker Model AD-1 (Tension) (brand and model) packer at 3140 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Seven Rivers

2. Name of Field or Pool (if applicable) Scarborough Yates Seven Rivers

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? Oil

4. 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)

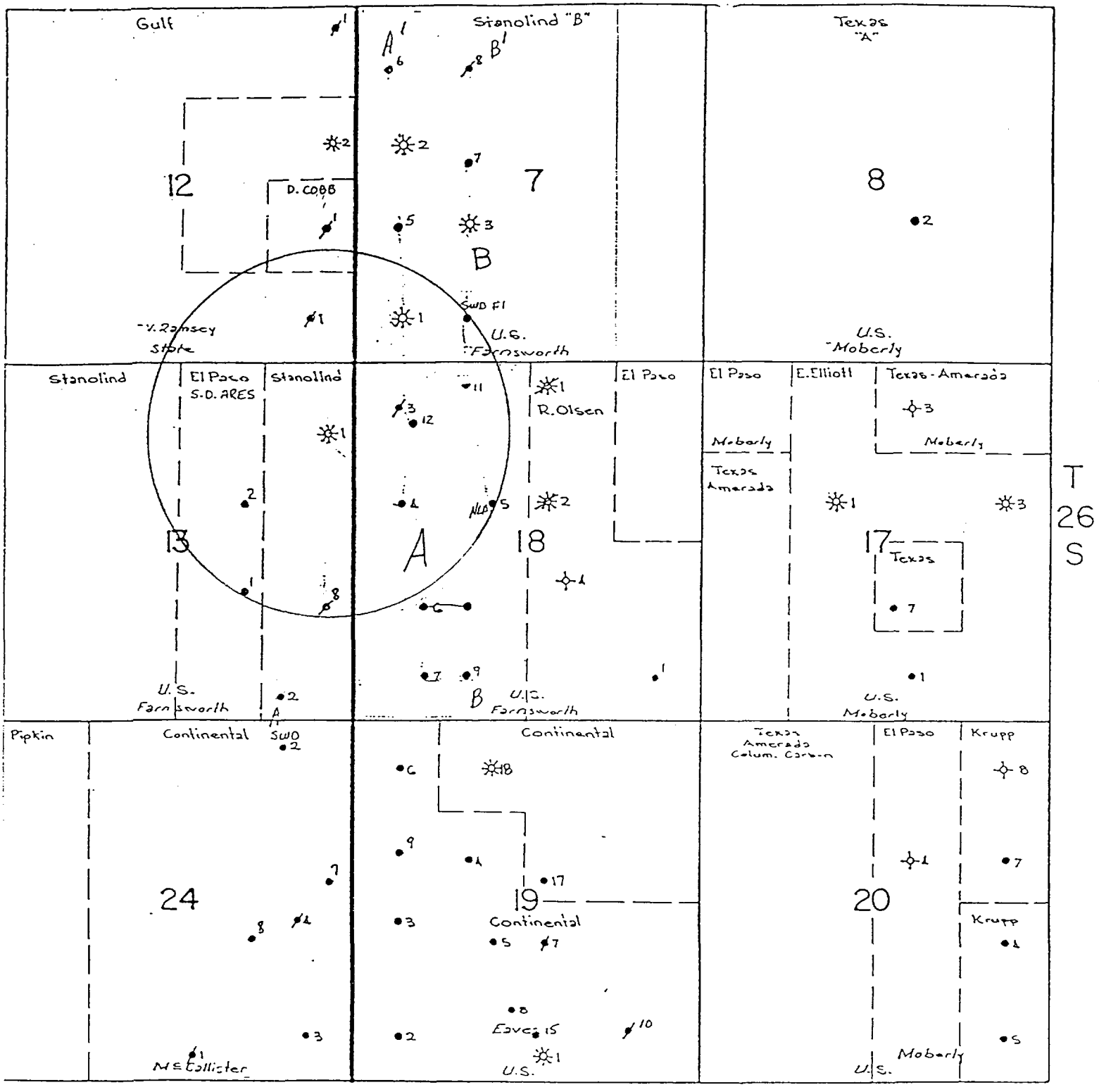
   No other perforations

   Produced through OH intervals between 2714'-3125'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Next higher formation: Yates 2846-3085'

   No known underlying oil & gas zones



HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-1
SEC. 13-T26S-R36E
LEA COUNTY, NM

Wells in Area of Review
Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc.

Farnsworth B-1

660' FSL & 660' FWL
Type: Oil

Section 7 T26S R37E
Date Drilled: 4/34
Total Depth: 2980'

Casing Record:

Size	Depth	Sacks Cement
13"	505	210
8 5/8	2830'	425

Completion:

5/34 OH 2830'-2980'
12/65 INPE
4/94 Proposed WO. Put on submersible pump.

Farnsworth #1 SWD

660' FSL & 1660' FWL
Type: SWD

Section 7 T26S R37E
Date Drilled: 10/65
Total Depth: 3029'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	357	200
5 1/2	3029	150

Completion:

10/65 Perf @ 3020'-26'. Sqz w/150 sx. Perf @ 3006-11
11/65 SI as TA. Dry hole.
2/67 Sqz perfs @ 3006-11. Cleaned out to TD @ 3029'. Drilled 4 3/4" new Hole @ 3029-92'. Set packer @ 3027'.

Farnsworth A-3

680' FNL & 660' FWL — Section 18 T26S R37E
Type : P & A — Date Plugged: 8/64

P & A Operations:

1) Spotted 25 sx across perfs @ 3122-28'.
2) Cut & pulled 7" casing from approx. 1600'.
3) Spotted 30 sx cement plug in and out of 7" casing stub @1600'.
4) Cut & pulled 9 5/8" casing from approx. 1200'.
5) Spotted 30 sx cement in and out of 9 5/8" stub @ 1200'.
6) Spotted 30 sx cement plug in and out of 13 3/8" shoe at 482'.
7) Spotted 10 sx cement plug at surface & erected P&A marker.

Farnsworth A-4

1980' FNL & 660' FWL — Section 18 T26S R37E
Type: Oil — Date Drilled: 3/36
Total Depth: 3205'

Casing Record:

Size	Depth	Sacks Cement
13"	510	300
9 5/8"	2645'	700
7"	3028'	125
5 1/2" T.L. 2884'	TD 3200'	150

4/36 PBTD 2975'. Perfs @ 2946-49
2/38 Put on gas lift
10/45 Drilled out cement plug. PBTD 3030'.
8/48 PB w/cmt to 3019'. Perf @ 2996-3004'. Sqz perfs. Perf @ 2950-70'.
1/56 Deepen to 3200'. Run 316' 5 1/2" liner to TD. Perf @ 3162 -84'. Sqz perfs. Set BP @ 3195'. Perf 2 2755-2865'.
11/65 Set CIBP @ 2995'. Perf @ 2987-93'. POP
1994 Shut-in.

Farnsworth A-5

1980' FNL & 1980' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 8/37
Total Depth: 3146'

Casing Record:

Size	Depth	Sacks Cement
15 1/2"	49'	40
10 3/4"	502'	200
7"	2785'	400

Completion:

9/37 PBTD 3134'
6/52 INPE
5/82 SI

Farnsworth A-8

1650' FSL & 330' FEL
Type: P & A
Date Plugged: 7/63

Section 13 T26S R36E
Date Drilled: 2/63
Total Depth: 3306'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	329	100
4 1/2"	3306	200

Plugging Record:

1) Spotted 25 sx cement plug across perfs @ 3080-97'.
2) Pulled 4 1/2" casing from 2530'.
3) Spotted 25 sx plug in and out of stub.
4) Spotted 25 sx plugs @ 1290' and 329'.
5) Spotted 10 sx cement plug at surface & installed marker.

Farnsworth A-11

330' FNL & 1660' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 10/65
Total Depth: 3318'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	372	200
5 1/2"	3318	270

10/65 Perf @ 3204-08'. Sqz perfs. PBTD 3071. Perf @ 3041-45'.
11/65 Add perfs @ 3024-32'.
5/70 Set RBP @ 3019'. Perf @ 2869-3016' & test. POOH w/RBP. Return tbg & pkr. Set @ 3020'.
2/90 POP
1994 Shut-in.

Farnsworth A-12

890' FNL & 890' FWL
Type: Oil

Section 18 T26S R37E
Date Drilled: 1/79
Total Depth: 3350'

Casing Record:

Size	Depth	Sacks Cement
9 55/8"	1133	700
7"	3350	950

Completion:

1/79 Perf @ 3181-89'. INPE.
2/79 Set CIBP @ 3148'. Perf @ 3081-87'.
3/79 Set CIBP @ 3060'. Perf @ 2989-94'. INPE
4/79 SI
1/85 Set CIBP @ 2960'. Perf @ 2743-2911'.
5/89 Spotted cement plug. Tagged @ 2623'. Partial plug & abandon.
5/90 Drilled cement to 2870'. Acidize & frac perfs @ 2743-848'.
5/94 SI. Proposed workover & put back on production.

El Paso Natural Gas #1

1980' FSL & 1650' FEL
Type: Oil

Section 13 T26S R36E
Date Drilled: 12/62
Total Depth: 3259'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	352	200
4 1/2	4699	450

Completion:

12/62 Perf @ 3206-10'.

El Paso Natural Gas #2

1980' FNL & 1650' FEL
Type: Oil

Section 13 T26S R36E
Date Drilled: 1/63
Total Depth: 3371'

Casing Record:

Size	Depth	Sacks Cement
8 5/8	374	375
5 1/2	3371	125

3/63 Perf @ 3322-26'. Set CIBP @ 3300'. Perf @ 3165-77'.
10/71 Set CIBP @ 3150'. Perf @ 3116-30'.

VII Proposed Operation

The Farnsworth A #1 well will be used to inject produced water for pressure maintenance from other wells on the Eaves lease via a closed disposal system.

Proposed average injection rate and pressure: 8000 BWPD @ Vacuum.
Proposed maximum injection rate and pressure: 10000 BWPD @ 100 psi.

VIII Geological Data

This produced water will be injected into the Seven Rivers formation which is located from 3150' to 3350'. The Seven Rivers formation consists mostly of sand and lime.

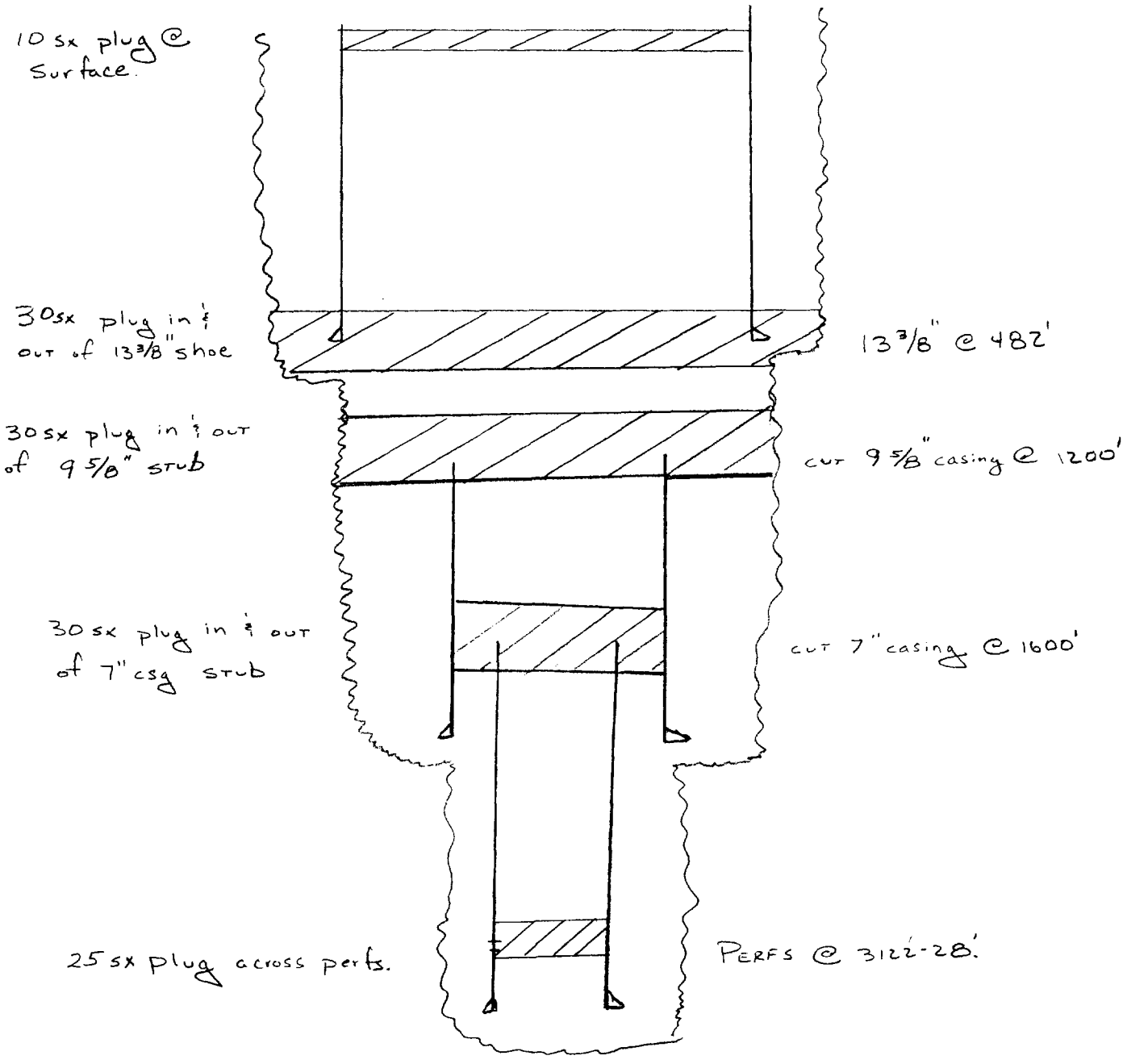
The source of underground drinking water in the area is the Ogallala formation (base at ±200').

IX Proposed Stimulation

We will clean out the wellbore, set a Baker Model AD-1 packer at 3140', and acidize with 5000 gallons of acid if necessary.

FARNSWORTH A-3

680' FNL & 660' FWL
Section 18 - T26S - R37E

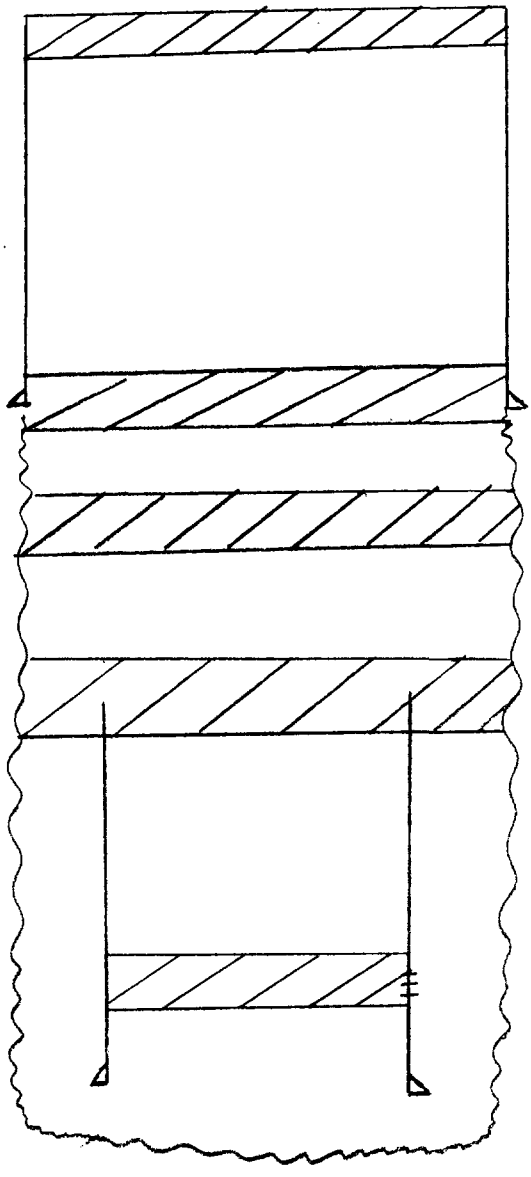


P & A 8/64

FARNSWORTH A-8

1650' FSL & 330' FEL

Section 13-T26S-R36E



P & A : 7/63

UNICHEM INTERNATIONAL
P.O. BOX 61427 4312 County Road 1298 S.
Midland, Texas 79711

Hal J. Rasmussen

Report Date: September 23, 1993
Lab In Date: September 22, 1993
Sample Date: September 17, 1993

WINDMILL LOCATION: 250' FSL & 2500' FWL
Sec. 19 T26S R37E

Listed below please find our water analysis report from Windmill

	Specific Gravity:		1.001
	Total Dissolved Solids:		1018
	PH:		7.81
	Ionic Strength:		.020

CATIONS:			mg/liter
	Calcium:	(Ca++)	44
	Magnesium:	(Mg++)	44
	Sodium:	(Na+)	194
	Iron (Total)	(Fe++)	3.10
	Barium	(Ba++)	0.00
	Manganese:	(Mn++)	.18
	Resistivity:		
ANIONS:			
	Bicarbonate:	(HCO3-)	368
	Carbonate:	(CO3--)	0
	Hydroxide:	(OH-)	0
	Sulfate:	(SO4--)	295
	Chloride:	(Cl-)	73

GASES:		
Carbon Dioxide:	(CO2)	******
Oxygen:	(O2)	*******
Hydrogen Sulfide:	(H2S)	******

SCALE INDEX (Positive Value Indicates Scale Tendency) * indicates tests were not run.

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	.55	-21.21
104F	40.0C	.84	-21.37
122F	50.0C	.98	-21.37
140F	60.0C	1.14	-21.21
168F	70.0C	1.31	-20.25
176F	80.0C	1.49	-19.07

If you have any questions or require further information, please contact us.

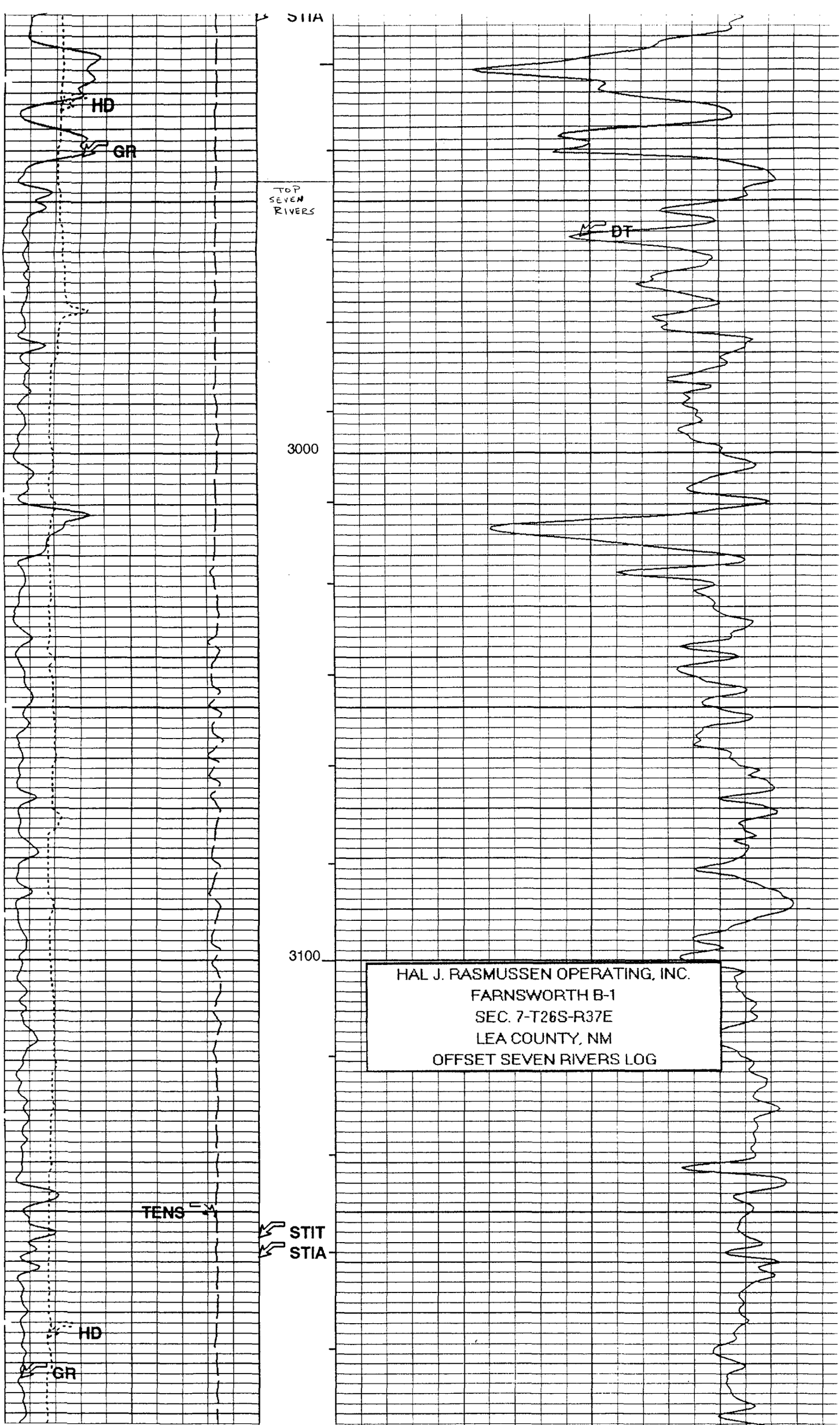
Sincerely,

Jeanne M. McMurray

Laboratory Technician

cc:

bc:
Charlie Vaden


STIA
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GR
TOP
SEVEN
RIVERS
DT
3000
3100
HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH B-1
SEC. 7-T26S-R37E
LEA COUNTY, NM
OFFSET SEVEN RIVERS LOG
TENS
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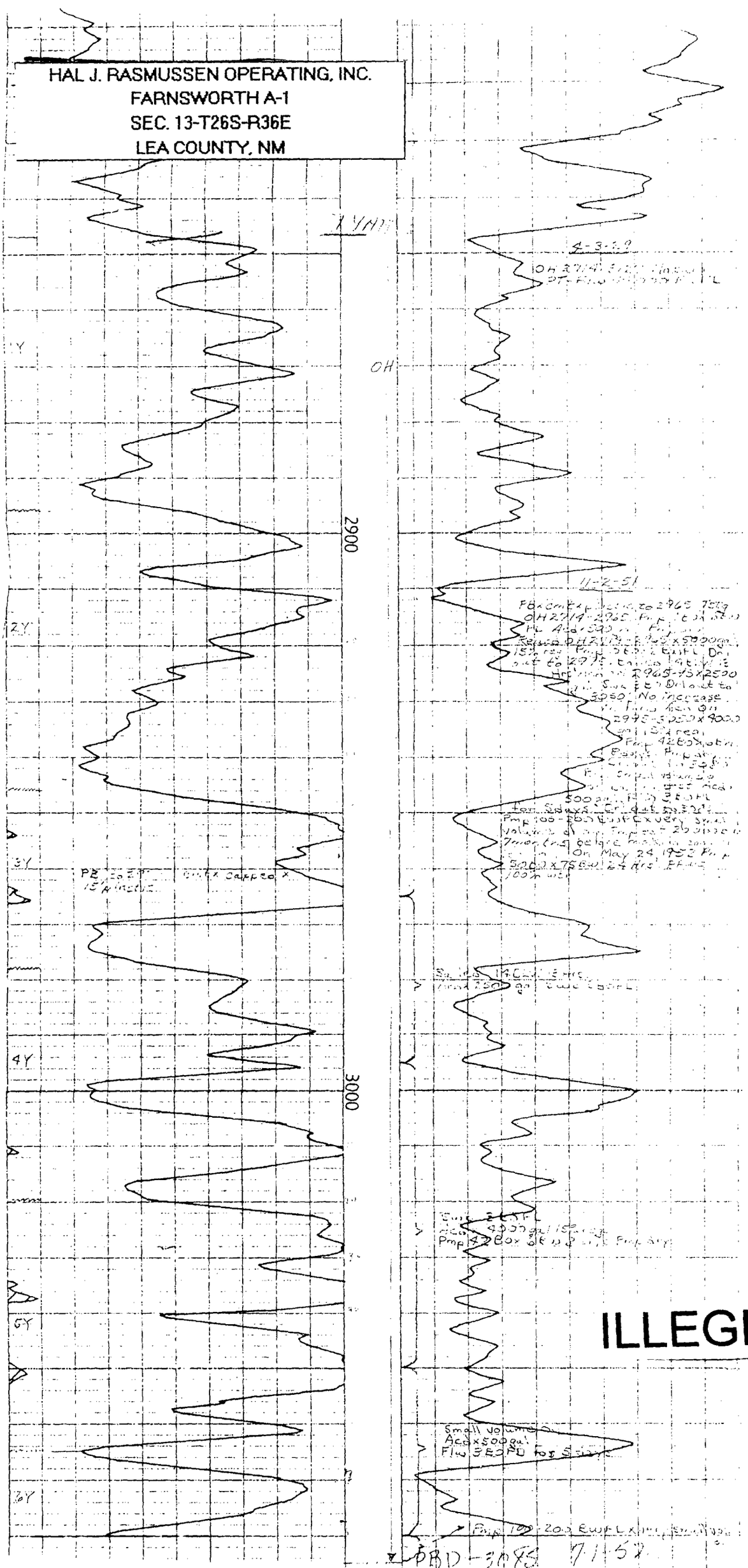
STIA
HD
GR

HAL J. RASMUSSEN OPERATING, INC.
FARNSWORTH A-1
SEC. 13-T26S-R36E
LEA COUNTY, NM



ILLEGIBLE

PBD - 3085 7-1-52

Hal J. Rasmussen Operating, Inc.
Farnsworth A-1
Application for Authorization to Inject

Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

April 5, 1994

Gentlemen:

I 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 other underground source of drinking water.

Sincerely,

Tyson L. Dunn
Hal J. Rasmussen Operating, Inc.

MAILING LIST

Surface Owner

Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

Offset Operators

Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

Chevron USA
P.O. Box 688
Eunice, New Mexico 88231

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:
Chevron USA
P.O. Box 688
Eunice, New Mexico 88231

4. Article Number
P 080 275 172

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X

7. Date of Delivery
4-7-94

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

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:
Frank Anthony
P.O. Box 1512
Monahans, Texas 79756

4. Article Number
P 080 275 171

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X

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

3. Article Addressed to:
Ambett Oil Company
P.O. Box 1589
Hobbs, New Mexico 88241

4. Article Number
P 080 275 170

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X

7. Date of Delivery
4-7-94

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

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

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

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

of _____

one weeks.

Beginning with the issue dated

April 8, 19 94

and ending with the issue dated

April 8, 19 94

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 11 day of

April, 19 94

Charlene Kerrin
Notary Public.

My Commission expires
March 15, 1997
(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.

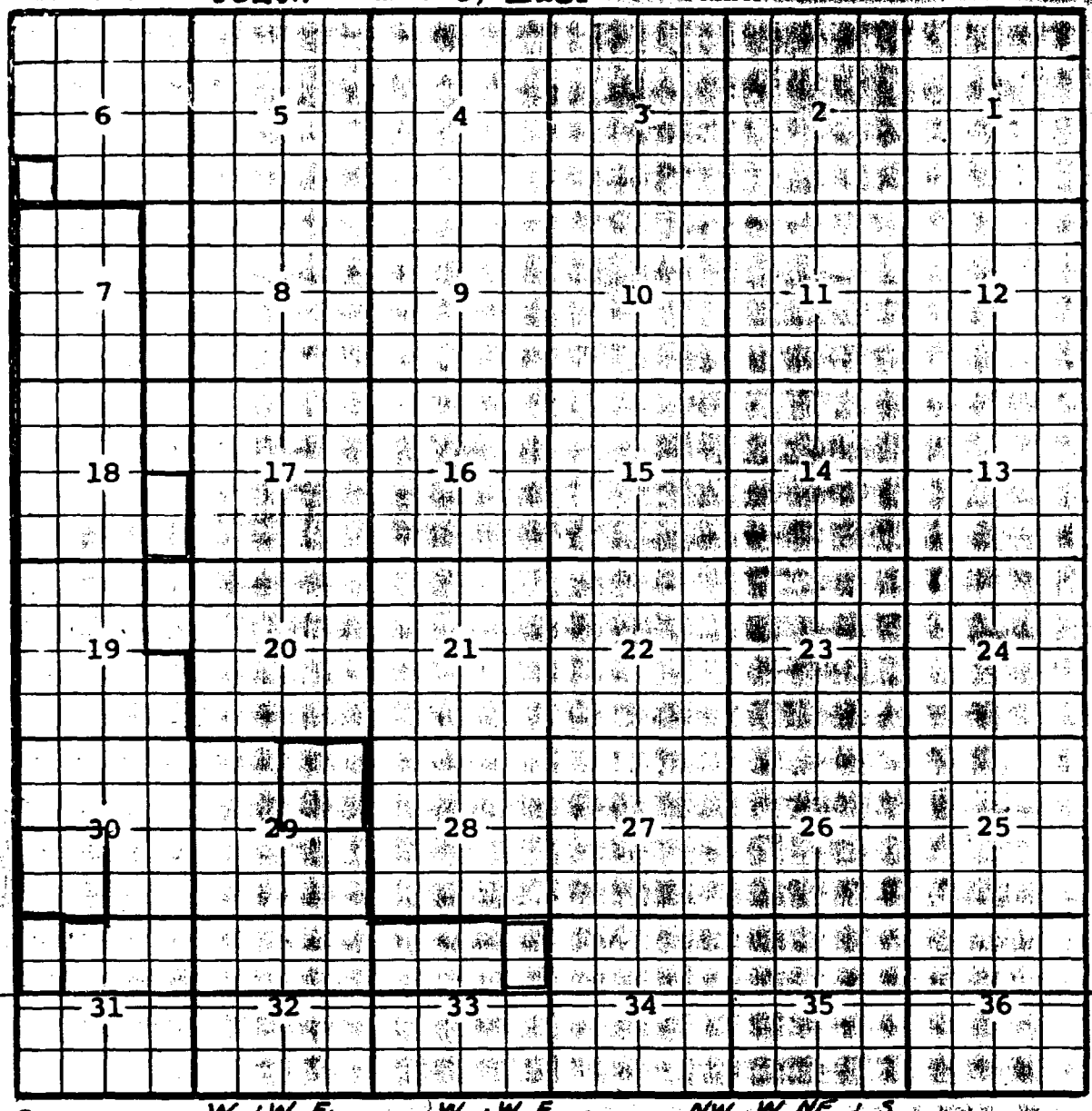
LEGAL NOTICE
April 8, 1994

Application for Authorization to Inject
Hal J. Rasmussen Operating, Inc..
310 W. Wall; Suite 906
Midland, Texas 79701
(915) 687-1664 Tyson Dunn

Farnsworth A #1 salt water injection well for pressure maintenance located at 990' FNL & 330' FEL of Section 13-T26S-R36E. The water will be injected through an open hole completion into the Seven Rivers formation at 3150'-3350'. The expected maximum injection rates and pressures are 10,0000 BWPD & 100 psi, respectively. 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.

COUNTY Lea POOL Scarborough Yates-Seven Rivers

TOWNSHIP 26 South RANGE 37 East NMPM



Description: W/2 & W/2 E/2 Sec. 7; W/2 & W/2 E/2 Sec. 18; NW/4, W/2 NE/4, & S/2 Sec. 19; W/2 & SE/4 Sec. 29; N/2 & SE/4 Sec. 30; E/2 & E/2 W/2 Sec. 31; All Sec. 32; W/2 & W/2 E/2 Sec. 33 (R-2999, 11-23-65)

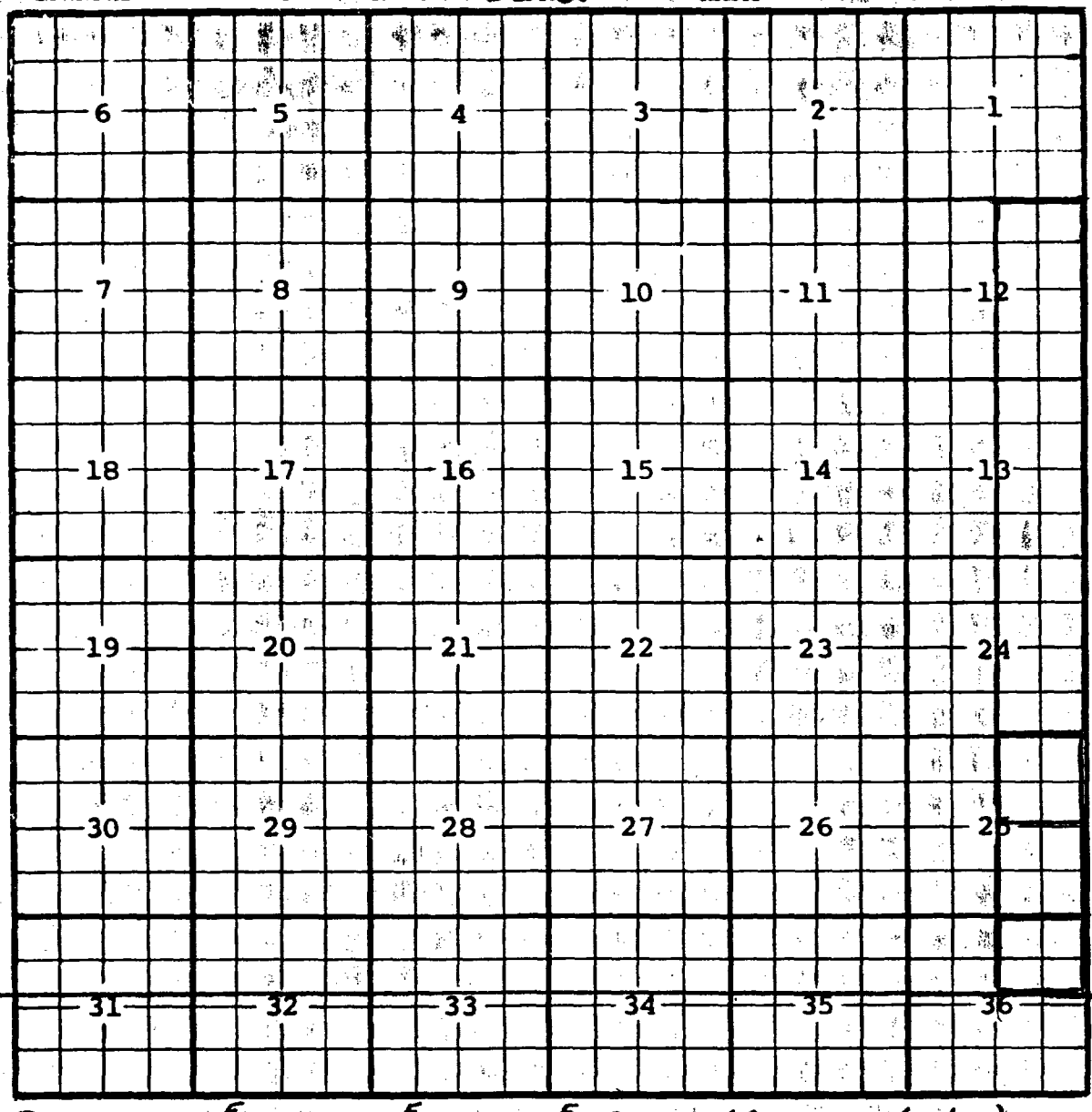
Ext: SW/4 Sec. 30 (R-3056, 5-1-66) - W/2 W/2 Sec. 31 (R-3182, 2-1-67) Ext: SW/4 SW/4 sec 6, NE/4 sec 29 (R-6891, 2-1-82) E/2 SE/4 Sec. 18 (R-5131, 11-30-82)

Ext: E/2 E/2 Sec. 33 (R-2432, 2-6-84)

ILLEGIBLE

COUNTY Lea POOL Scarborough Yates-Seven Rivers

TOWNSHIP 26 South RANGE 36 East NMPM



Description: E/2 Sec. 12; E/2 Sec. 13; E/2 Sec. 24 (R-2999, 11/23/65)
Ext: NE/4 Sec. 36 (R-3562, 12-1-68) - NE/4 Sec. 25 (R-3843, 10-1-69)
- SE/4 Sec. 25 (R-4106, 3-1-71)

ILLEGIBLE

(SOUTH HOSPAH-UPPER SAND (TESORO SANTA FE HANSON WATERFLOOD) POOL - Cont'd.)

IT IS THEREFORE ORDERED:

(1) (As Corrected by Order No. R-6227-A, January 9, 1980.) That the applicant, Tesoro Petroleum Corporation, is hereby authorized to institute a waterflood project on its Hanson Federal and Santa Fe Pacific Railroad Leases, South Hospah-Upper Sand Oil Pool, by the injection of water into the Upper Hospah Sand formation through the following-described wells in Township 17 North, Range 8 West, NMPM, McKinley County, New Mexico:

Lease	Well No.	Unit Letter	Section
Santa Fe Pacific Railroad	35	E	5
Santa Fe Pacific Railroad	38	M	5
Hanson Federal	24	I	6

(2) That injection into each of said wells shall be through tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the injection wells herein authorized or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 1000 psi, provided however, that the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(4) That the operator shall immediately notify the supervisor of the Division's Aztec district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the subject waterflood project is hereby designated the Tesoro Santa Fe Hanson Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

(6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(7) That prior to commencement of water injection into the herein authorized wells, applicant shall consult with the supervisor of the Aztec District Office of the Division, and shall take such remedial action as the District Supervisor shall require on the Tesoro Santa Fe Pacific Railroad "B" Well No. 32 located in Unit P of Section 5 and the Burr and Cooley Coleman Well No. 2 located in Unit C of Section 8, both in Township 17 North, Range 8 West, NMPM, McKinley County, New Mexico.

(8) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SCARBOROUGH YATES-SEVEN RIVERS POOL
(Conoco Scarborough Eaves Pressure Maintenance Expansion)
Lea County, New Mexico

Order No. R-6277, Authorizing Conoco Inc. to Expand its Scarborough Eaves Pressure Maintenance Project in the Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, March 11, 1980.

Application of Conoco Inc. for Pressure Maintenance Expansion, Lea County, New Mexico.

CASE NO. 6728
Order No. R-6277

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 9 a.m. on November 14, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of March, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Conoco Inc., is the operator of a pressure maintenance project in the Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, and in this case seeks approval for the expansion of said project by the conversion to water injection into the Yates and Seven Rivers formations of its Eaves "A" Well No. 7 located in Unit J of Section 19, Township 26 South, Range 37 East, NMPM.

(3) That applicant proposes to inject water in said well through 3-1/2 inch internally coated tubing set in a packer at approximately 3030 feet, with perforations from 3082 feet to 3210 feet.

(4) That approval of the proposed pressure maintenance expansion should result in the recovery of additional oil which would otherwise remain unproduced, thereby preventing waste, and will not impair correlative rights, and should be given, provided however, that such expansion should be subject to certain provisions to ensure that underground fresh water supplies in the area are not impaired.

(5) That the casing-tubing annulus should be filled with an inert fluid, and that a pressure gauge or other approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(6) That the applicant should be permitted to use its Eaves "A" Well No. 7 for water injection as described above only after the applicant has submitted to the Hobbs District Office and the Santa Fe Office of the Division those items required by the Division pursuant to the provisions of Division Memorandum 3-77, dated August 24, 1977, and only after taking any remedial action deemed necessary by the Hobbs District Supervisor of the Division on wells within one-half mile of said Eaves "A" Well No. 7.

(SCARBOROUGH YATES-SEVEN RIVERS (CONOCO SCARBOROUGH EAVES PRESSURE MAINTENANCE EXPANSION) POOL - Cont'd.)

(7) That the injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to 620 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant, and if such pressure increase can be accomplished safely.

(8) That subject to the above conditions, the subject application should be approved, and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Conoco Inc., is hereby authorized to expand its Scarborough Eaves Pressure Maintenance Project by the injection of water into the Yates and Seven Rivers formations through the perforated interval from 3082 to 3210 feet in its Eaves "A" Well No. 7, located in Unit J of Section 19, Township 26 South, Range 37 East, NMPM, Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico.

(2) That injection shall be through internally coated 3-1/2-inch tubing set in a packer at approximately 3030 feet, and the casing-tubing annulus shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the injection well herein authorized or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 620 psi, provided however, that the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(4) That the operator shall immediately notify the Hobbs District Office of the Division of the failure of the tubing, casing, or packer in any of the project's injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around any plugged and abandoned well within the project area, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the Conoco Scarborough Eaves Pressure Maintenance Project shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations, and monthly reports of the project shall be submitted to the Division in accordance with Rules 704 and 1115 thereof.

(6) That prior to commencement of water injection into its Eaves "A" Well No. 7, applicant shall have submitted to the Hobbs District Office and the Santa Fe Office of the Division those items required pursuant to Division Memorandum No. 3-77 dated August 24, 1977, and shall have taken such remedial action as may be deemed necessary by the Hobbs District Office of the Division on any well within one-half mile of said Eaves "A" Well No. 7.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SAN LUIS-MESAVERDE POOL
(Waterflood Project)
Sandoval County, New Mexico

Order No. R-6304, Authorizing Torreon Oil Company to Institute a Waterflood Project in the 1000-Foot Sand of the Menefee Formation in the San Luis-Mesaverde Pool, Sandoval County, New Mexico, March 31, 1980.

Application of Torreon Oil Company for a Waterflood Project, Sandoval County, New Mexico.

CASE NO. 6795
Order No. R-6304

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 9 a.m. on February 13, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st day of March, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Torreon Oil Company, seeks authority to institute a waterflood project on its San Luis Lease, San Luis-Mesaverde Oil Pool, by the injection of water into the 1000-foot sand of the Menefee formation through its San Luis Federal Well No. 1, located 1650 feet from the South line and 1980 feet from the West line, and its San Luis Federal Well No. 2, located 2278 feet from the South line and 2296 feet from the West line, both in Section 21, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) That injection into each of the proposed injection wells should be accomplished through tubing set in a packer as close as is practicable to the uppermost perforations in the 1000-foot sand of the Menefee formation. The casing-tubing annulus in each injection

SCARBOROUGH YATES-SEVEN RIVERS POOL
(Continental Pressure Maintenance-Order No. R-4026)
Lea County, New Mexico

Order No. R-4026, Authorizing Continental Oil Company to Institute a Pressure Maintenance Project in the Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, September 10, 1970.

Application of Continental Oil Company for a Pressure Maintenance Project, Lea County, New Mexico.

CASE NO. 4412
Order No. R-4026

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9:30 a.m. on August 19, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of September, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:
(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Continental Oil Company, seeks authority to institute a pressure maintenance project in the Scarborough Yates-Seven Rivers Pool on its McCallister "A" Lease in Section 24, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of water into the Yates and Seven Rivers formations through its McCallister "A" Well No. 2, located 330 feet from the North line and 990 feet from the East line of said Section 24, and through its McCallister "A" Well No. 3, located 660 feet from the South line and 660 feet from the East line of said Section 24.

(3) That the proposed pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(4) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:
(1) That the applicant, Continental Oil Company, is hereby authorized to institute a pressure maintenance project in the Scarborough Yates-Seven Rivers Pool on its McCallister "A" Lease in Section 24, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of produced salt water into the Yates and Seven Rivers formations through its following-described wells in said Section 24:

McCallister "A" Well No. 2, located 330 feet from the North line and 990 feet from the East line, injection to be accomplished through 2-3/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3045 feet to 3063 feet and into the open-hole interval from 3076 feet to 3217 feet; and

McCallister "A" Well No. 3, located 660 feet from the South line and 660 feet from the East line, injection to be accomplished through 2-3/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3039 feet to 3100 feet and into the open-hole interval from 3133 feet to 3245 feet;

PROVIDED HOWEVER, that the casing-tubing annulus shall be filled with an inert fluid and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the tubing, casing, or packer.

(2) That the subject pressure maintenance project is hereby designated the Continental McCallister "A" Scarborough Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the pressure maintenance project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

(LANGLIE-MATTIX (LANGLIE-MATTIX QUEEN UNIT WATERFLOOD) POOL - Cont'd.)

(7) That, subject to Finding No. 6, the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(8) That, subject to Finding No. 6, the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection, and provided further, that said injection wells are drilled no closer than 330 feet to the outer boundary of the Langlie Mattix Queen Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

IT IS THEREFORE ORDERED:

(1) That the applicant, Mobil Oil Corporation, is hereby authorized to institute a waterflood project in the Langlie Mattix Queen Unit Area, Langlie-Mattix Pool, by the injection of water into the Queen sand formation through the following-described wells at orthodox and unorthodox locations in Township 25 South, Range 37 East, NMPM, Lea County, New Mexico:

Unit Well No.	Previous Well Name and Number	Unit	Section
7	Mobil-Stuart Tr. 1 Well No. 2	P	10
3	To be drilled - 990' FSL & 890' FWL		10
2	To be drilled - 1440' FSL & 1220' FWL		11
13	Mobil-Stuart Tr. 5 Well No. 1	D	14
21	Pan American-Langlie "B" Well No. 4	L	14
27	Pan American-Langlie "B" Well No. 3	M	14
11	Mobil-Stuart Tr. 9 Well No. 1	B	15
17	Mobil-Stuart Tr. 9 Well No. 4	H	15
19	Gulf-Westfall Well No. 2	J	15
25	Gulf-Elliott Well No. 1	P	15
15	To be drilled - 1980' FNL & 1730' FWL		15
30	Mobil-Stuart Comm. Well No. 1	A	22
28	To be drilled - 500' FNL & 2540' FEL		22
32	To be drilled - 2530' FNL & 2600' FEL		22
31	Cities Service - Dabbs Well No. 1	D	23
35	Cities Service - Dabbs Well No. 2	E	23

(2) That the subject waterflood project is hereby designated the Mobil Langlie Mattix Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve such additional injection wells at orthodox and unorthodox locations within said waterflood project area as may be necessary to complete an efficient injection pattern; provided said wells are drilled no closer than 330 feet to the outer boundary of the Langlie Mattix Queen Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all offset operators, if any there be, and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That that portion of Order No. R-3426, dated June 5, 1968, which approved certain water injection wells in the Langlie Mattix Queen Unit Area is hereby superseded.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SCARBOROUGH YATES-SEVEN RIVERS POOL
(Continental Pressure Maintenance)
Lea County, New Mexico

Order No. R-3487-A, Authorizing Continental Oil Company to Institute a Pressure Maintenance Project in the Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, September 8, 1969.

Application of Continental Oil Company for Amendment of Order No. R-3487, Lea County, New Mexico.

CASE NO. 4198
Order No. R-3487-A

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on August 27, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 8th day of September, 1969, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(SCARBOROUGH YATES-SEVEN RIVERS (CONTINENTAL PRESSURE MAINTENANCE) POOL - Cont'd.)

(2) That by Order No. R-3487, dated September 9, 1968, the Commission authorized the applicant, Continental Oil Company, to utilize its Eaves "A" Well No. 10, located in Unit P of Section 19, Township 26 South, Range 37 East, NMPM, Scarbrough Yates-Seven Rivers Pool, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation, injection to be accomplished through 3-1/2-inch tubing installed in a packer set at approximately 3195 feet, with injection into the perforated interval from approximately 3208 feet to 3255 feet.

(3) That the applicant now seeks the reclassification of the aforesaid Eaves "A" Well No. 10 to a pressure maintenance project injection well for the injection of produced salt water into the Yates and Seven Rivers formations in the perforated and open-hole interval from approximately 3107 feet to 3410 feet.

(4) That the subject well should be reclassified as a pressure maintenance project injection well.

(5) That the proposed pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(7) That Order No. R-3487 should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to institute a pressure maintenance project in the Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, by the injection of produced salt water into the Yates and Seven Rivers formations through its Eaves "A" Well No. 10, located in Unit P of Section 19, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That said injection shall be accomplished through 3-1/2-inch tubing installed in a packer set at approximately 3080 feet, and into the perforated and open-hole interval from approximately 3107 feet to 3410 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the tubing, casing, or packer.

(3) That the subject pressure maintenance project is hereby designated the Continental Scarborough Eaves Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the pressure maintenance project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That Order No. R-3487, dated September 9, 1968, is hereby superseded.

(6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SAUNDERS;PERMO UPPER PENN (cont.)
YATES PETROLEUM CORP.(cont.)
WOODPECKER "ST" STATE(cont.)
" 8 E 21-14-33 M

SAUNDERS;SAN ANDRES
Top Allowable 80 GOR Limit 2000 Top Casinghead Gas Limit 160 MCF

********* GILLESPIE, CHARLES B JR **********
\STATE "Q"(18) 1 L 4-15-33 M 56
\ " 2 K 4-15-33 NCT

SAWYER;SAN ANDRES (ASSOC)
Spacing: Oil - 40 Gas - 160 Top Oil Allowable 80 GOR Limit 2000 Top Gas Allowable MCFD Oil - 160 Gas - 640

********** BEACH EXPLORATION INC. **********
ARCO "A" FEDERAL
" (6) 1 A 25-9-37 M 12931
ARCO FEDERAL
" (6) 1 G 25-9-37 M 15172
********** BISON PETROLEUM CORP. **********
MCCORMICK FEDERAL
" (6) 1 E 29-9-38 M 16786
SINCLAIR FEDERAL
" 2 B 5-10-38 MGW AF 1.00
********** DAVCRO INC. **********
AIKMAN FEDERAL
" (3) 1 A 24-9-37 M 3929
BELL "B" FEDERAL
\ " (2) 2 P 20-9-38 M 6500
BELL FEDERAL COM
\ " 3 N 20-9-38 MGW AF 1.00
BROWN "17"
\ " 1 F 17-9-38 AF 1.00
BYERS 59 2 K 30-9-38 MGW AF 1.00
DAVENPORT 1 N 17-9-38 AF 1.00
GANDY 59 1 E 28-9-38 MGW AF 1.00
GREAT WESTERN "B" FEDERAL
" 1 I 30-9-38 MGW AF 1.00
GREAT WESTERN "C" FEDERAL
\ " 1 M 21-9-38 MGW AF 1.00
GREAT WESTERN FEDERAL
" (7) 1 M 28-9-38 M 11803
GULF FEDERAL
" 1 O 29-9-38 MGW AF 1.00
" (2) 2 G 29-9-38 59167
Acreage Factor 1.000
*Acreage Factor Limits
" (5) 5 I 29-9-38 M 10426
HARTIN 1 N 9-9-38 MGW AF 1.08
MCDERMOTT FEDERAL
" (1) 1 F 30-9-38 M 5000
\ " 2 N 19-9-38 MGW AF 1.00
STATE "16" A COM
\ " 1 D 16-9-38 AF 1.05
STATE "16" B COM
" 1 L 16-9-38 MGW AF 1.05
STATE "32" COM
" 1 B 32-9-38 AF 1.00
********** DUGAN PRODUCTION CORP. **********
ALLIED 93(3) 1 D 24-9-37 M 3667
" (3) 3 K 24-9-37 M 2667
" (4) 4 E 24-9-37 M 2250
" (4) 5 F 24-9-37 M 2500
BILBREY 51
" (2) 2 H 23-9-37 M 3500
" (2) 3 G 23-9-37 M 3000
" (1) 4 B 23-9-37 M 6000
BROWN 35 1 P 13-9-37 MGW AF 1.00

SAWYER;SAN ANDRES (ASSOC) (cont.)
DUGAN PRODUCTION CORP.(cont.)
BROWN 84 (8) 1 N 13-9-37 M 5000
" (2) 2 M 13-9-37 M 4000
BROWN 93 (10) 1 C 24-9-37 M TSTM
********** I T PROPERTIES **********
OHIO FEDERAL
" 1 O 24-9-37 NO C115/C116
********** MILFORD OIL CO. **********
TOLES FEDERAL
" 1 N 13-9-37 MGW AF 0.25
********** O K OPERATING CO. **********
ARCO FEDERAL
" (4) 1 E 4-10-38 M 2857
" (2) 2 F 4-10-38 *68 4167
Acreage Factor 0.850
*Acreage Factor Limits
********** ORBIT ENTERPRISES INC. **********
BROWN 51 (1) 1 D 19-9-38 M TSTM
" (1) 2 F 19-9-38 M TSTM
********** PRIME OPERATING CO. **********
ARCO "19" FEDERAL
" 1 I 19-9-38 MGW AF 1.00
HOLCOMB "18" FEDERAL
" 1 C 18-9-38 MGW AF 0.25
" 2 G 18-9-38 MGW AF 1.00
YATES "18" FEDERAL
" (2) 1 I 18-9-38 M 20175
********** SAMSON RESOURCES CO. **********
FEDERAL "33"
" (7) 2 K 33-9-38 *72 2000
Acreage Factor 0.900
*Acreage Factor Limits

SAWYER;SAN ANDRES, WEST
(80 Acre Spacing) Top Allowable 160 GOR Limit 2000 Top Casinghead Gas Limit 320 MCF

********** ARD, JULIAN **********
HARTON STATE
" (1) 2 N 32-9-37 M 64000
********** BRECK OPERATING CORP. **********
NEW MEXICO "S" STATE
" (2) 1 N 32-9-37 M 60432
********* COASTAL OIL & GAS CORP. **********
ADLONG " 5"
" (6) 2 A 5-10-37 M 1667
FEDERAL " 4"
" (5) 2 C 4-10-37 M TSTM
PEARL MARR
" (3) 3 I 33-9-37 M 2000
" (4) 4 M 34-9-37 M 1750
SANTA FE (3) 3 J§33-9-37 M 3333
" (3) 4 N§33-9-37 M 3333
" (3) 5 A§33-9-37 M 3667
" (3) 6 O§33-9-37 M 3667
SAWYER STATE
\ " 1 B§4-10-37 SI
" (7) 2 A§4-10-37 M TSTM
********** COX, JOHN L **********
FEDERAL (4) 1 P§22-9-37 M 1750
" (3) 2 I§22-9-37 M 1667
FEDERAL "A"
" (4) 1 J§22-9-37 M 2750
" (3) 2 O§22-9-37 M 3000
T.P. (6) 1 F§27-9-37 M 1000
\ " (3) 2 C§27-9-37 M 1333
U.S.M (3) 3 A 27-9-37 M 1000
" (2) 4 G 27-9-37 *80 1000
Acreage Factor 0.500
*Acreage Factor Limits
********** DUGAN PRODUCTION CORP. **********
BILBREY "23"
" (3) 1 L§23-9-37 M 2667

SAWYER;SAN ANDRES, WEST (cont.)
DUGAN PRODUCTION CORP.(cont.)
BILBREY "23"(cont.)
" (3) 2 J§23-9-37 M 4000
" (6) 3 N§23-9-37 M 3000
" (2) 4 I§23-9-37 M 4500
" (5) 5 O§23-9-37 M 3800
" (3) 6 P§23-9-37 M 4000
MARATHON FEDERAL
" (1) 1 F 23-9-37 M 15000
YATES 69 FEDERAL
" (4) 1 N§23-9-37 M 4500
" (3) 2 K§23-9-37 M 3667
********** MEADCO PROPERTIES LTD **********
ARCO (5) 1 D 26-9-37 M 200
********** PERMIAN RESOURCES INC. **********
\FEDERAL (7) 1 D 4-10-37 M 1286
FEDERAL "22"
\ " 1 N 22-9-37 SI
FEDERAL "27"
" (3) 1 D§27-9-37 M 2800
RICH UNIT(2) 1 L 34-9-37 M TSTM
SFPRR (4) 1 N§33-9-37 M 2162
" (2) 2 D§34-9-37 M 1538
" (1) 3 P§28-9-37 M 2000
" (2) 4 B§33-9-37 M 2222
" (2) 5 J 28-9-37 M 2143
" (5) 7 F§34-9-37 M 2174
" (3) 12 L§27-9-37 M 2143
" (6) 13 N§27-9-37 M 2203
" (3) 14 J§27-9-37 M 2593
" (2) 16 E§34-9-37 M 2105
" (5) 17 K§27-9-37 M 2174
" (1) 18 I§28-9-37 M 2000
" (3) 19 M§27-9-37 M 2381
" (3) 20 C§34-9-37 M 2143
" (4) 21 O§27-9-37 M 2500
" (2) 22 G§33-9-37 M 3077
" (6) 23 K§33-9-37 M 2069
STATE " 5"
\ " (10) 1 N 5-10-37 M 100
STATE "32"
\ " (8) 2-T P 32-9-37 M 1125
SUSCO " 3" STATE
\ " (5) 1 D 3-10-37 *80 TSTM
Acreage Factor 0.500
*Acreage Factor Limits
********** PRIME OPERATING CO. **********
BASS "A" STATE
" (5) 1 N 5-10-37 M 213
********** TAHOE ENERGY INC. **********
ARCO (4) 1 B 28-9-37 M 13000
ARCO FEDERAL
" (2) 2 A 28-9-37 M 16000
SCHWALBE (3) 2 O 21-9-37 M 11333
T P FEDERAL
" (4) 1 N 22-9-37 M 1750

SCARBOROUGH;YATES-SEVEN RIVERS
Top Allowable 128 GOR Limit 10000 Top Casinghead Gas Limit 1280 MCF

********** BRININSTOOL, W H **********
SHEARN STATE
" (3) 1 G 32-26-37 *106 1000
Acreage Factor 0.825
*Acreage Factor Limits
********** BURLESON, LEWIS B INC. **********
DALE FEDERAL
" 1 A 29-26-37 MGW
********** MCCASLAND, DALLAS **********
FEDERAL "F"
" (1) 2 I 29-26-37 M 7000
" (1) 3 O 29-26-37 M 3000

SCARBOROUGH;YATES-SEVEN RIVERS (cont.)
MCCASLAND, DALLAS(cont.)
FEDERAL "F"(cont.)
" (1) 4 J 29-26-37 M 3000
" (1) 5 P 29-26-37 M 2000
STATE "O"(1) 3 F 32-26-37 *106 TSTM
Acreage Factor 0.825
*Acreage Factor Limits
\ " 4 B 32-26-37 MGW
Acreage Factor 0.00
*Acreage Factor Limits
" (1) 5 C 32-26-37 M TSTM
" (1) 6 D 32-26-37 M TSTM
********** MERIDIAN OIL INC. **********
FARNSWORTH FEDERAL
" (7) 1 P 18-26-37 M 3286
PARKER "A" FEDERAL
" 1 D 29-26-37 MGW
***** RASMUSSEN, HAL J OPERATING INC. ******
\EAVES B (60) 20 I 30-26-37 M 4750
EAVES B-1(38) 5 N 30-26-37 M 4974
\ " (122) 8 P 30-26-37 M 2254
FARNSWORTH "A" FEDERAL
\ " 1 A 13-26-36 NO C-116
\ " 2 P 13-26-36 NO C-116
\ " 4 E 18-26-37 NO C-116
\ " 5 F 18-26-37 NO C-116
\ " (95) 6 L 18-26-37 M 1474
\ " (122) 7 N 18-26-37 M 1270
\ " 9 N 18-26-37 NO C-116
\ " (10) 10 K 18-26-37 M 1700
" 11 C 18-26-37 NO C-116
\ " 12 D 18-26-37 NO C-116
FARNSWORTH "B" FEDERAL
\ " (15) 1 M 7-26-37 M 2667
\ " 3 K 7-26-37 SI
\ " 5 L 7-26-37 SI
\ " (1) 7 F 7-26-37 M 52000
***** RASMUSSEN, HAL J OPERATING INC. ******
▸▸▸ MCCALLISTER A SCARBOROUGH P.M. PROJ ◂◂◂◂
R- 4026
Maximum Allowable Formula:
4 X 128 = 512
MCCALLISTER "A"
" 2 A 24-26-36 INPUT
" 3 P 24-26-36 WF
" 5 A 25-26-36 INPUT
" 8 J 24-26-36 INPUT
***** RASMUSSEN, HAL J OPERATING INC. ******
▸▸▸▸▸▸ SCARBOROUGH EAVES P.N. PROJECT ◂◂◂◂◂◂
R- 3487
Maximum Allowable Formula:
15 X 128 = 1920
EAVES A 7 J 19-26-37 INPUT
" 8 N 19-26-37 WF
" 10 P 19-26-37 INPUT
" 13 B 30-26-37 WF
" 14 D 30-26-37 WF
" 15 O 19-26-37 WF
********** SEA SAND OIL CO. **********
WILLS FEDERAL
\ " 1 E 33-26-37 SI
\ " 2 F 33-26-37 SI
\ " 3 D 33-26-37 SI
\ " 4 B 33-26-37 SI
\ " 7 C 33-26-37 SI
\ " (42) 8 A 33-26-37 M 1000

SCHARB;BONE SPRING
(80 Acre Spacing) Top Allowable 400 GOR Limit 2000 Top Casinghead Gas Limit 800 MCF

******* DEVON ENERGY CORP. (NEVADA) *******

ANNUAL REPORT

OF THE

NEW MEXICO OIL & GAS ENGINEERING COMMITTEE, INC.

HOBBS, NEW MEXICO

505—393-3411

VOLUME I-B

Southeast New Mexico

1993

ILLEGIBLE

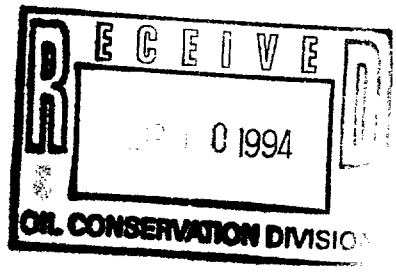
WELL S T R		JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC 1993 PROD MP	ACCUM
LEASE TOTAL	OIL				47	41	35	38	22	15	19	22	15 254	845437
	GAS													336437
	WAT				705	615	525	570	330	225	285	1650	1125 6030	3037315
COMPANY TOTAL	OIL	925	760	885	171	2223	3903	4439	20949	18215	14707	16728	17609 101514	8910091
	GAS	798	836	980	104	3136	7488	6269	27932	27895	26054	39234	47625 188371	5495853
	WAT	90868	41643	87865	11864	44973	243116	264461	298890	198807	254572	668545	956354 3161958	65511625
RBD-SHELBY AGENCY					**********									
EAVES B														
1H3126S37E	OIL	LAST PROD. DATE 04/92											T	323420
	GAS													31
	WAT													2730096
2A3126S37E	OIL	PLUGGING APPROVED 1992												207627
	GAS													2485
	WAT													211290
COMPANY TOTAL	OIL													531047
	GAS													2516
	WAT													2941386
SEA SAND OIL CO					**********									
WILLS FEDERAL														
1E3326S37E	OIL	1	2	1	1	2	1	1	1	1	1	1	1 14P	34502
	GAS													56929
	WAT													5295
2F3326S37E	OIL	1	3	2	2	1	1	1	2	1	1	1	1 17P	29119
	GAS													45369
	WAT													4896
3D3326S37E	OIL	1	1	3	1	1	2	1	1	2	1	1	1 16P	18427
	GAS													49681
	WAT													2
463326S37E	OIL	3	1	1	1	1	2	1	2	1	1	1	1 16P	29838
	GAS													53605
	WAT													22567
6B3326S37E	OIL	INJECTION WELL											I	12519
	GAS													41869
7C3326S37E	OIL	1	1	2	1	2	1	1	1	1	1	1	1 14P	9151
	GAS													40948
	WAT													2
8A3326S37E	OIL	486	443	496	545	560	533	534	531	529	578	568	572 6377F	73637
	GAS	284	255	250	185	127	134	292	399	393	375	351	338 3383	45355
	WAT													578
COMPANY TOTAL	OIL	493	453	505	551	567	540	539	538	535	583	573	577 6454	207193
	GAS	284	255	250	185	127	134	292	399	393	375	351	338 3383	333756
	WAT													33340
TEXACO EXPLORATION & PRODUCTION INC.					**********									
C W SHEPHERD B FEDERAL														
6M 626S37E	OIL	PLUGGING APPROVED 1988												33286
	GAS													168838
	WAT													3830789
TEXAS PACIFIC OIL COMPANY INC					**********									
FARNSWORTH														
1B1826S37E	OIL	PLUGGING APPROVED 1969												8766
	GAS													103082
	WAT													6227
2B1826S37E	OIL	PLUGGING APPROVED 1969												1803
	GAS													180759
COMPANY TOTAL	OIL													10569
	GAS													283841
	WAT													6227
BRUCE A. WILBANKS					**********									
FARNSWORTH A FEDERAL														
1A1326S36E	OIL	LAST PROD. DATE 08/82											S	469153
	GAS													119327
	WAT													3768506
2P1326S36E	OIL	LAST PROD. DATE 06/82											S	575172
	GAS													114487
	WAT													1628162
4E1826S37E	OIL	LAST PROD. DATE 08/88											S	351840
	GAS													1318879
	WAT													1150083
5F1826S37E	OIL	LAST PROD. DATE 10/89											S	370410
	GAS													338278
	WAT													1645771
6L1826S37E	OIL	LAST PROD. DATE 12/89											S	369263
	GAS													197198
	WAT													4358906
7M1826S37E	OIL	75	3	63	107	88	101	57	79	84	131	127	128 1043P	6175560
	GAS	168	16	144	194	194	277	186	161	172	265	182	1959	188104
	WAT	3882	751	3000	2903	2809	2723	2052	1920	1812	1892	1812	1810 27366	2584758
9N1826S37E	OIL	LAST PROD. DATE 11/89											S	86939
	GAS													117604
	WAT													1536629
10K1826S37E	OIL	301	14	252	429	354	406	226	316	337		509	510 3654P	115475
	GAS	674	61	575	777	774	1107	742	644	688		726	6768	156364
	WAT	15530	3006	12024	11636	11260	11255	8262	7728	7248		7248	7240 102437	5927199
11C1826S37E	OIL	LAST PROD. DATE 01/91											S	45115
	GAS													121900
	WAT													308639
12D1826S37E	OIL												S	
LEASE TOTAL	OIL	376	17	315	536	442	507	283	395	421	131	636	638 4697	2800927
	GAS	842	77	719	971	968	1384	928	805	860	265	908	8727	2672341
	WAT	19412	3757	15024	14539	14069	13978	10314	9648	9060	1892	9060	9050 129803	25106613
FARNSWORTH B FEDERAL														
1M 726S37E	OIL	LAST PROD. DATE 11/88											S	483565
	GAS													162760
	WAT													3091653
2E 726S37E	OIL	LAST PROD. DATE 12/86											S	539739
	GAS													119252
	WAT													5349000
3K 726S37E	OIL	LAST PROD. DATE 01/91											S	296030
	GAS													573285
	WAT													1121600
5L 726S37E	OIL	10	6	4	3	5	6	5	78	131	43	14	258 563P	204690
	GAS	512	535	396	256	284	291	383	250	336	298	266	244 4051	161865
	WAT	112	98	108	104	93	103	78	75	83	74	72	82 1082	2710171
6D 726S37E	OIL	LAST PROD. DATE 12/86											S	169670
	GAS													105211
	WAT													4084152
7F 726S37E	OIL	2	2	2	1	2	1	2	17	33		3	46 111P	47041
	GAS	2904	2142	2245	1449	1607	1650	2168	1417	1900		1508	1382 20372	186968
	WAT	23	24	33	31	30	26	31	30	21		18	20 287	541011
LEASE TOTAL	OIL	12	8	6	4	7	7	7	95	164	43	17	304 674	1740735
	GAS	3416	2677	2841	1705	1891	1961	2551	1667	2236	298	1774	1626 24423	1309341
	WAT	135	122	141	135	123	129	109	105	104	74	90	102 1369	16897587
COMPANY TOTAL	OIL	388	25	321	540	449	514	290	490	585	174	653	942 5371	4541662
	GAS	4258	2754	3360	2676	2859	3325	3479	2472	3096	563	2682	1626 33150	3981682
	WAT	19547	3879	15165	14674	14192	14107	10423	9753	9164	1966	9150	9152 131172	40004200
WOLFSON OIL COMPANY					**********									
CASH FEDERAL														
1E2926S37E	OIL	PLUGGING APPROVED 1972												28706
	GAS													59273
	WAT													25832
SCHARB PENN. (ABANDONED)				PN	13H TO 14M									
**********														
MARATHON OIL COMPANY					**********									
STATE NPA														
1L 619S35E	OIL	RECOMPLETED TO SCHARB BONE SPRINGS												4396
SCHARB BONE SPRINGS				BS	10H TO 11M									
**********														
AMERICAN NATIONAL PETRO. CO.					**********									
NEW MEXICO B STATE														
1H 319S34E	OIL	LAST PROD. DATE 01/92											S	1239
	GAS													12236
	WAT													47
AMOCO PRODUCTION CO					**********									
PEOPLES SECURITIES COMPANY														
1J 319S35E	OIL	ZONE ABANDONED												75
2N 319S35E	OIL	PLUGGING APPROVED 1985												26
	GAS													93
	WAT													1703

PADILLA LAW FIRM, P.A.

STREET ADDRESS
1512 ST. FRANCIS DRIVE
SANTA FE, NM 87501
MAILING ADDRESS
P.O. BOX 2523
SANTA FE, NM 87504-2523

TELEPHONE
505-988-7577

FACSIMILE
505-988-7592



August 10, 1994

HAND-DELIVERED

Michael E. Stogner
Hearing Examiner
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87501

RE: APPLICATION OF HAL J. RASMUSSEN OPERATING, INC.
OIL CONSERVATION DIVISION CASE 11003

Dear Mr. Stogner:

Enclosed please find the additional information that you requested at the hearing of the above referenced case last week.

In particular, enclosed are:

1. Supplement to Exhibit 3A which is the casing record for the wells in the area of review;

2. Supplement to Exhibit B which is the casing record for the area of review; and

3. Dates of completion and temporary abandonment of Farnsworth "A" #1 and #2.

Should you require additional information, please let me know.

Very truly yours,

ERNEST L. PADILLA

ELP:clm
Enclosures: As indicated above
xc: Tyson Dunn

Supplement to Exhibit 3A
Oil Conservation Division Case 11003
Hal J. Rasmussen Operating, Inc.

Farnsworth "A" No. 1

Wells in Area of Review

Farnsworth B-1
660' FSL & 660' FWL
Section 7, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
13"	505'	210	surface	circulation
8-5/8"	2830'	425	630'	calculation

Farnsworth #1 SWD
660' FSL & 1660' FWL
Section 7, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	357'	200	surface	circulation
5-1/2"	3029'	150	1635'	calculation

Farnsworth "A" #3
680' FNL & 660' FWL
Section 18, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
13"	510'	300	surface	circulation
9-5/8"	2645'	700	surface	circulation
7"	3028'	125	1730'	calculation
5-1/2"	2884' T.L. 3200' TD	150	2884'	circulation

Supplement to Exhibit 3A
Page Two

Farnsworth "A" #5
1980' FNL & 1980' FWL
Section 18, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
15-1/2"	49'	40	surface	circulation
10-3/4"	502'	200	surface	circulation
7"	2785'	400	790'	calculation

Farnsworth "A" #8
1650' FSL & 330' FEL
Section 13, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	329'	100	surface	circulation
4-1/2"	3306'	200	1940'	calculation

Farnsworth "A" #11
330' FNL & 1660' FWL
Section 18, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	372'	200	surface	circulation
5-1/2"	3318'	270	1260'	calculation

Supplement to Exhibit 3A
Page Three

Farnsworth "A" #12
890' FNL & 890' FWL
Section 18, T-25-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
9-5/8"	1133'	700	surface	circulation
7"	3350'	950	1400'	calculation

El Paso Natural Gas #1
1980' FSL & 1650' FEL
Section 13, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	352'	200	surface	circulation
4-1/2"	4699'	450	1675'	calculation

El Paso Natural Gas #2
1980' FNL & 1650' FEL
Section 13, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	374'	375	surface	circulation
5-1/2"	3371'	125	2210'	calculation

Supplement to Exhibit 3B
Oil Conservation Division Case 11003
Hal J. Rasmussen Operating, Inc.

Farnsworth "A" No. 2

Wells in Area of Review

Eaves "A" #6
660' FNL & 660' FWL
Section 19, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
7-5/8"	1179'	500	surface	circulation
5-1/2"	3299'	780	surface	circulation

McCallister "A" #2
330' FNL & 990' FEL
Section 24, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
15-1/2"	247'	40	surface	circulation
10"	1316'	100	1000'	calculation
8-1/4"	1525'	100	300'	calculation
7"	3076'	100	1465'	calculation

El Paso Natural Gas #1
1980' FSL & 1650' FEL
Section 13, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	352'	200	surface	circulation
4-1/2"	4699'	450	1675'	calculation

Supplement to Exhibit 3B
Page Two

Farnsworth "A" #6
1650' FSL & 990' FWL
Section 18, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
13"	54'	50	surface	circulation
9-5/8"	1231'	430	surface	circulation
5-1/2"	2809'	215	2209'	calculation

Farnsworth "A" #7
660' FSL & 990' FWL
Section 18, T-26-S, R-37-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
13"	50'	50	surface	circulation
8-5/8"	1228'	400	surface	circulation
5-1/2"	2869'	215	870'	calculation
4" liner	2823' TOL 3223' BOL	150	2823'	circulation

Farnsworth "A" #8
1650' FSL & 330' FEL
Section 13, T-26-S, R-36-E

Casing Record:

Size	Depth	Sacks Cement	TOC	Determination
8-5/8"	329'	100	surface	circulation
4-1/2"	3306'	200	1940'	calculation

Oil Conservation Division Case 11003
Hal J. Rasmussen Operating, Inc.

Farnsworth "A" No. 1

Original Completion: 4/2/29
Temporarily Abandoned: 5/89. Casing pressure tested to 500 psi.

Farnsworth "A" No. 2

Original Completion: 7/27/30
Temporarily Abandoned: 5/89. Casing pressure tested to 500 psi.

PADILLA LAW FIRM, P.A.

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December 6, 1994

HAND DELIVERED

Michael Stogner
Hearing Examiner
Oil Conservation Division
Energy, Minerals and Natural
Resources Department
2040 S. Pacheco
Santa Fe, New Mexico 87504

RE: APPLICATION OF HAL J. RASMUSSEN OPERATING INC. FOR A PRESSURE MAINTENANCE PROJECT, LEA COUNTY, NEW MEXICO - OCD CASE NO. 11003

Dear Mr. Stogner:

Enclosed is:

1. A draft of a proposed order in the above referenced case,

2. Transcript of the hearing, and

3. Floppy diskette containing the proposed order.

The floppy is prepared on Microsoft Word (DOS). We have previously submitted a floppy in this manner and your staff has been able to convert to your program.

Very truly yours,

ERNEST L. PADILLA

ELP:clm
Enclosures: As indicated above
xc: Hal J. Rasmussen Operating, Inc., w/encls.

DRAFT

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

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 11003
Order No. R-_____

APPLICATION OF HAL J. RASMUSSEN
OPERATING, INC., FOR A PRESSURE
MAINTENANCE PROJECT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 4, 1994, at Santa Fe, New Mexico, before Examiner Michael Stogner.

NOW, on this _____ day of November, 1994, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Hal J. Rasmussen Operating, Inc. (Rasmussen), seeks authority to institute a pressure maintenance project on its Farnsworth A Lease underlying E/2 E/2 of Section 13 and W/2 of Section 18, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of water into the Seven Rivers Formation in the Scarborough Yates Seven Rivers Pool, through a perforated interval from approximately 3150 feet to 3350 feet in its Farnsworth A No. 1 well located 990 feet from the North line and 330 feet from the East line (Unit A) and its Farnsworth A No. 2 well located 330 feet from the South line and 990 feet from the East line (Unit P) of said Section 13.

(3) Rasmussen is the current operator of the Farnsworth A Lease. It contains approximately 480 acres and is developed with three other oil producing wells. Rasmussen is currently producing the wells on the lease with

submersible pumps and are producing approximately 8000 barrels of water per day which Rasmussen believes is depleting the reservoir pressure. Rasmussen proposes to inject produced water downdip of its producing wells to maintain stabilized pressure in the reservoir.

(4) Rasmussen is requesting pressure maintenance status for the entire lease. It is requesting approval to expand the project administratively.

(5) The proposed injection wells would be used to inject up to 10,000 barrels of water per day downdip of the current productive portions of the Scarborough Yates Seven Rivers Pool from approximately 3150 feet to 3350 feet. Initial injection will be into a vacuum and injection pressure, should it increase, will be maintained within the Division's guideline of 0.2 psi per foot. Form C-108 submitted by Rasmussen indicates that all OCD requirements would be met.

(6) Produced water from the Farnsworth A Lease and Rasmussen's adjoining Eaves A Lease would be the initial source of injection water.

(7) Rasmussen currently operates a pressure maintenance project on its Eaves A lease which adjoins the Farnsworth A lease. Rasmussen's witness testified that production intervals and injection practices for the proposed project are intended to obtain the same level of success as has been achieved on the Eaves A lease.

(8) Rasmussen's witness testified that the project is expected to recover significantly more oil than would be recovered by primary depletion.

(9) At the hearing, a project allowable for the lease equal to the top allowable for a combination of the producing and injection wells was requested.

(10) The project should be approved and should be designated the Farnsworth A Lease Pressure Maintenance Project.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Hal J. Rasmussen Operating, Inc., is hereby authorized to institute a pressure maintenance project on it Farnsworth A Lease, underlying the E/2 E/2 of Section 13 and the W/2 of Section 18, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of water into the Seven Rivers Formation in the Scarborough Yates Seven Rivers Pool, through a perforated interval from approximately 3150 feet to 3350 feet in its Farnsworth A No. 1 well located 990 feet from the North line

and 330 feet from the East line (Unit A) and its Farnsworth A No. 2 well located 330 feet from the South line and 990 feet from the East line (Unit P) of Section 13.

(2) The project is hereby designated the Farnsworth A Pressure Maintenance Project.

(3) The project allowable for the project shall be equal to the top allowable for a combination of producing and injection wells within the project area and lease.

(4) As the project is expanded, administrative approval for additional allowable may be granted by the Division Director upon receipt of an application explaining the reasons additional allowable should be assigned. Notice of an application to increase allowable shall be provided to each leasehold operator within one-half mile of the project.

(5) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(6) Injection into the proposed injection well shall be accomplished through 5 1/2inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing tubing annulus shall be filled with an inert fluid and a gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(7) The injection well or system shall be equipped to limit the surface injection pressure to no more than 0.2 psi per foot should the injection pressure increase beyond injection into a vacuum.

(8) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Seven Rivers Formation.

(9) Prior to commencing injection operations into the injection operations into the injection well, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of the casing.

(10) The operator shall give advance notification to the supervisor of the Division's Hobbs district office of the date and time of the installation of injection equipment, of the mechanical integrity pressure test, and of any injection well remedial work so that these operations

may be witnessed.

(11) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer in the injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around any plugged and abandoned well with the project area and shall take such steps as may be timely and necessary to correct such failure or leakage.

(12) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 and 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(13) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

_____
Director

S E A L

dr/