

RELEASE 7-15-75

RICE Engineering Corporation

122 WEST TAYLOR TELEPHONE (505) 393-9174

HOBBS, NEW MEXICO 88240

RECEIVED OIL CONSERVATION DIVISION
JUN 29 1993

June 29, 1993

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

Re: Western Reserves Oil Company, Inc.
State "26" No. 1
Salt Water Disposal Application

Gentlemen:

Please find enclosed a copy of form C-108, Application for Authority to inject, for the purposes of converting the Western Reserves Oil Company, Inc. State "26" No. 1 in Section 26, Township 10 South, Range 33 East, Lea County, New Mexico to a Salt Water Disposal. Also enclosed are the various attachments called for by the application including copies of certified mail receipts wherein this application was mailed to oil and gas leaseholders within the area of review and the surface owner at the well site. A copy of the application and attachments has been forwarded to the Oil Conservation Division Office in Hobbs.

If there are any additional items or information needed or questions, please contact Rice Engineering Corporation at the above address or phone number.

Yours very truly,

RICE ENGINEERING CORPORATION



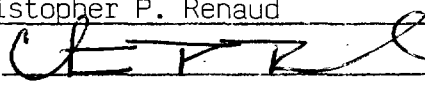
Jerry D. Hillard
Division Manager

JDH/cp

Enclosures

531.93

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: WESTERN RESERVES OIL COMPANY INC.
Address: P. O. Box 993, Midland, Tx 79702
Contact party: Christopher P. Renaud Phone: (915) 685-3211
- 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: Christopher P. Renaud Title Engineer
Signature:  Date: JUNE 30, 1993
- * 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.

ACR = 12 total 11 pages

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.

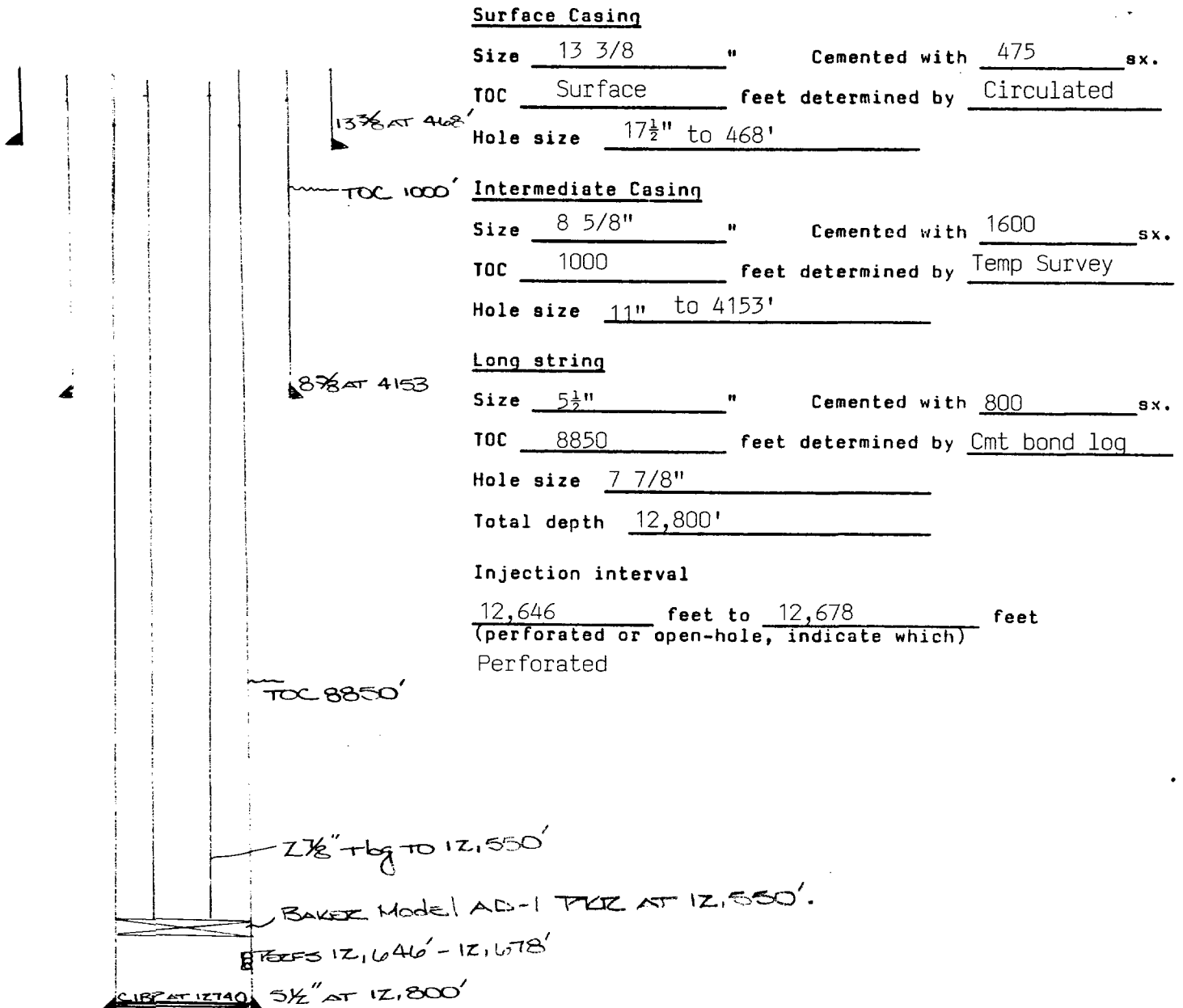
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

WESTERN RESERVES OIL COMPANY INC.

STATE "26"

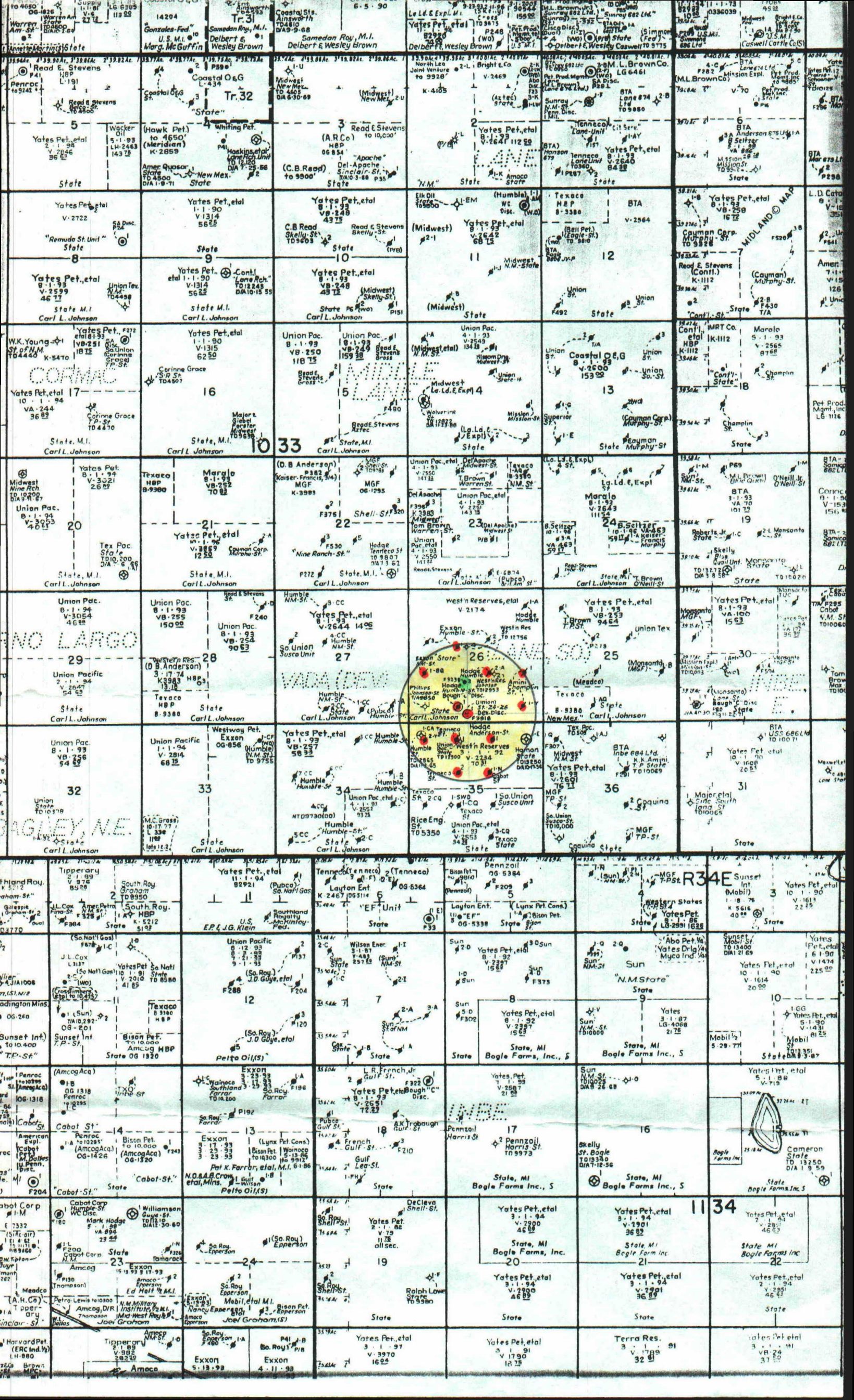
OPERATOR	LEASE			
1	330' FSL & 2310' FWL	26	10S	33E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

SchematicTabular Data

Tubing size 2 7/8" lined with ICO SC650 (material) set in a
Baker Model AD-1 packer at 12,550 feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Devonian
- Name of Field or Pool (if applicable) Vada (Devonian)
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Discovery well for Vada
(Devonian) Pool.
- 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.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. 9,650' Lane (Bough "C") Pool



RICE Engineering Corporation

122 WEST TAYLOR TELEPHONE (505) 393-9174

HOBBS, NEW MEXICO 88240

June 29, 1993

Yates Petroleum Corporation
105 S. 4th
Artesia, NM 88210

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

Carl Lane Johnson
P. O. Box 917
Tatum, NM 88267

Re: Western Reserves
Oil Company, Inc.
State "26" No. 1
SWD Application


Gentlemen:

Please find enclosed a copy of the application of Western Reserves Oil Company, Inc. to convert its State "26" No. 1 well located 330' FSL and 2310' FWL of Section 26, Township 10 South, Range 33 East, Lea County, New Mexico to Salt Water Disposal.

If there is any request for information or hearing of this case or objective to the application, it must be filed with the New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of the mailing of this application.

Yours very truly,

RICE ENGINEERING CORPORATION


Jerry D. Hillard
Division Manager

JDH/cp
Enclosures

531.93

Western Reserves Oil Company, Inc. proposes to recomplate the State "26" No. 1 well located 330' FSL and 2310' FWL of Section 26, Township 10 South, Range 33 East, Lea County, New Mexico to a Salt Water Disposal. Injection will be into the Devonian formation. The well is located in the Vada Devonian Pool.

VI. Tabulation of Data on Wells

OPERATOR	LEASE	WELL NO.	LOCATION
Western Reserves Oil Co., Inc.	State "26"	2	1980 FEL & 1910 FSL Sec. 26, T10S, R33E
Western Reserves Oil Co., Inc.	State "26"	4	2310 FNL & 2310 FWL Sec 26, T10S, R33E
Western Reserves Oil Co., Inc.	State "26"	3	1650 FSL & 2310 FWL Sec 26, T10S, R33E
Union Pacific Resources Co.	State "35"	1	725 FNL & 2040 FWL Sec. 35, T10S, R33E
Jake L. Hamon	State "E" 873	1	660 FNL & 660 FEL Sec 35, T10S, R33E
Southern Union Exploration Co.	South Lane SWD	D-35	500 FNL & 500 FWL Sec 35, T10S, R33E

VII. It is proposed that a maximum of 5,000 barrels of produced water will be disposed per day while the average rate is expected to approach 3000 Barrels per day. Waters to be disposed will come entirely from Western Reserves Oil Company's nearby producing wells. Water to be disposed initially will come from the State "26" lease, Well, No. 3.

It is expected that injection will take place under gravity, however a maximum injection pressure of 1250 psi is requested to be approved.

An analysis of waters from the State "26" lease is enclosed. This well is producing from the Devonian formation as will be used for disposal in the No. 1 well.

VIII. Disposal will be into the Devonian formation at a depth of 12,646' to 12,678'. The Devonian formation in this wellbore has a gross thickness of 160' with the top at 12,640' and is a lime and dolomitic formation with shale and chert stringers.

The fresh water aquifer in this area is the Ogallalla at a depth of near surface to 300'. Analysis of waters from a New Mexico State Engineers observation well is included.

IX. No stimulation treatment is expected.

X. Logging and test data was submitted by the original operator of the well, Union Pacific Resources Company, when the well was originally completed in February, 1988.

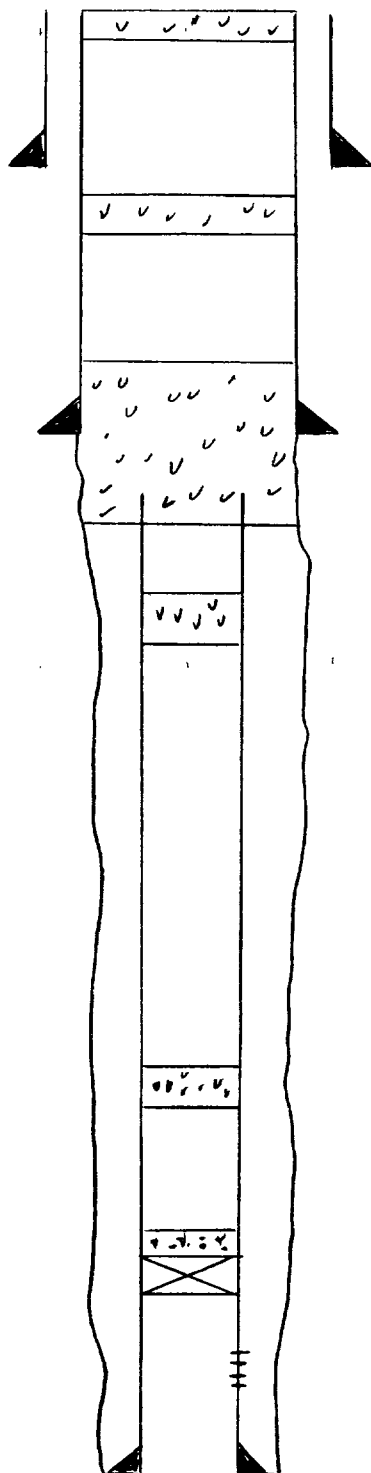
XI. Analysis of fresh waters in the area are included. Locations of wells and total depths are on the analysis sheets.

XII. There is no evidence of open faults or hydrologic connection between the disposal zone and any underground source of drinking water at this time.

XIII. There has been publication of the application by a legal advertisement in the Hobbs News Sun. A copy of the Notice as well as the publishers affidavit is enclosed.

The only other active producing well in the area of review is the State "26" #3 operated also by Western Reserves Oil Company, Inc. Notification of the application has therefore been sent to the Oil and Gas Lessees within the area of review as no wells are currently operated on said leases. Copies of the certified mail receipts are enclosed. A copy of the application has also been sent to Carl Lane Johnson, owner of the surface of the subject well site.

OPERATOR WESTERN RESERVES OIL COMPANY, INC.		DATE 6/29/93	
LEASE STATE 26	WELL No. 2	LOCATION 1980' FEL & 1910 FSL SEC 26-T10S R33E	



12 SX SURFACE PLUG 0-32'

13 3/8" CASING SET AT 457' WITH 530 SX OF "C" CEMENT
HOLESIZE 17 1/2"
35 SX PLUG 1850' - 1950'

100 SX PLUG 4,019 - 4,400'

8 5/8" CASING SET AT 4,212' WITH 1300 SX LITE AND
200 SX "C" CEMENT HOLE SIZE 11"
5 1/2" CASING STUB 4,350'

25 SX PLUG 5160-5410'

25 SX PLUG 8,600 - 8850'

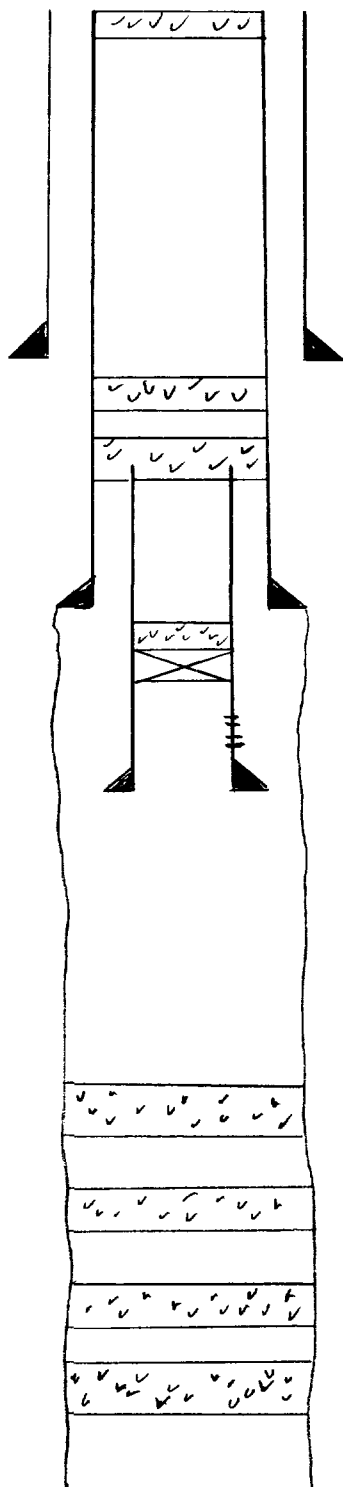
10 SX CMT PLUG ON CIBP
CIBP AT 12,490'

PERFS 12,592 - 12,610'
12,680 - 12,726'

5 1/2" CASING SET AT 12,948' WITH 500 SX 50/50/POZH
CEMENT. HOLE SIZE 7 7/8"

TOTAL DEPTH. 12,953'

OPERATOR WESTERN RESERVES OIL COMPANY, INC.		DATE 6/29/93
LEASE STATE "26"	WELL No. 4	LOCATION 2310 FNL & 2310 FWL SEC 26-10S-R33E



10 sx surface plug

13 3/8" casing set at 445' with 500 sx
Hole size 17 1/2"
40 sx plug 1810-1910
35 sx plug 3291-3410
4 1/2" casing cut at 3357'

8 5/8" casing set 4195' with 1450 sx
Hole size 11"
CIBP at 4560
35' cmt plug 4525'-4560'
perforations 4632-38
4 1/2" casing set at 4815' with 360 sx
Hole size 7 7/8"

35 sx plug 8640-8740'

35 sx plug 9500-9600'

35 sx plug 10510-10610'

35 sx plug 12620-12720'

T. D. 12756

OPERATOR WESTERN RESERVES OIL COMPANY, INC.		DATE 6/29/93
LEASE STATE "26"	WELL No 3	LOCATION 1650 FSL & 2310 FWL SEC. 26-T10S-R33E

13 3/8 " casing set at 450 ' with 500 sx of _____ cement

Hole size 17 1/2 "

8 5/8 " casing set at 4200 ' with 1700 sx of _____ cement

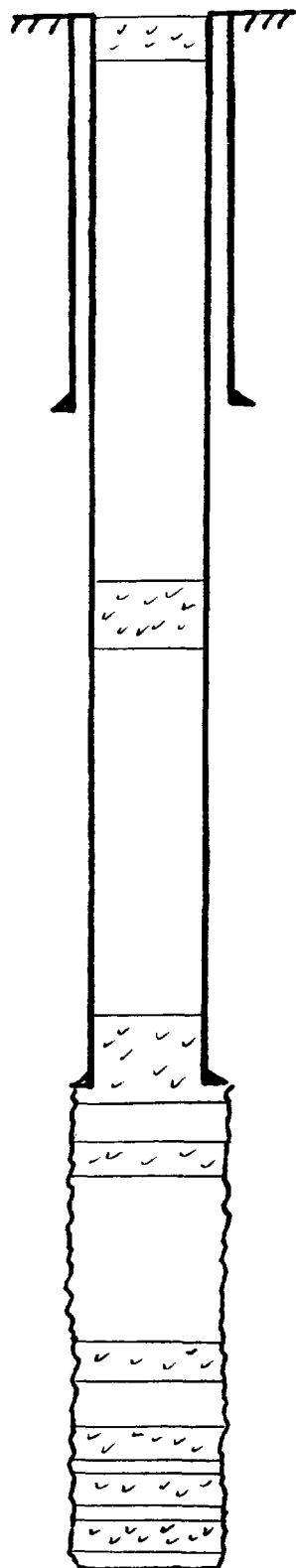
Hole size 11 "

PERFS 12620-12660

5 1/2 " casing set at 12679 ' with 875 sx of _____ cement

Total depth 12680 ' Hole size 7 7/8 "

OPERATOR UNION PACIFIC RESOURCES COMPANY		DATE 6/29/93
LEASE STATE 35	WELL No 1	LOCATION 725' FNL +2040 FWL SEC 35-T10S-R33E



15 sx surface plug

13 3/8" casing set at 467' with 530 sx of neat cement
Hole size 17 1/2"

35 sx plug 1866-2000'

65 sx plug 4008-4259'

8 5/8" casing set at 4206' with 1450 sx of light and neat cement
Hole size 12 1/4"

50 sx plug 5210-5326'

55 sx plug 6640-6791'

100 sx plug 7645-8900'

55 sx plug 11050-11200'

55 sx plug 12570-12750'

Total Depth 12900' Hole size 7 7/8"

OF ERATOR

JAKE L. HAMON

DATE

6/29/93

LEASE

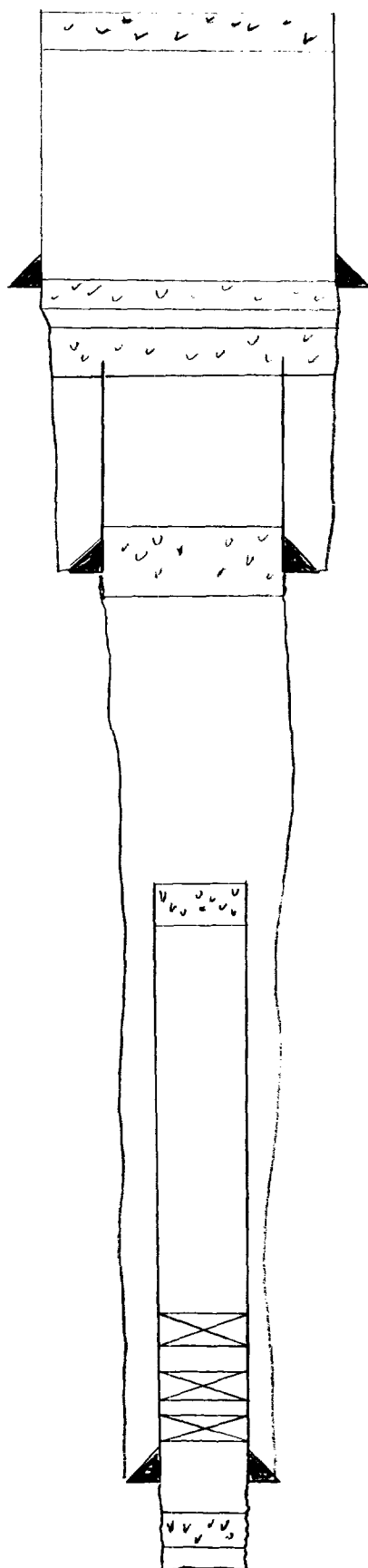
STATE "E" 873

WELL No

1

LOCATION

660' FNL & 660' FEL SEC 35-T10S R33E



10 sx Surface plug

25 sx plug 315-350'

13 3/8" casing set at 317' with 350 sx of cement
Hole size 17 1/2"

Casing stub 600'

15 sx plug 590-619'

30 sx plug 4,181' - 4259'

9 5/8" casing set at 4,219' with 100 sx cement
Hole size 12 1/4"

Casing stub 5,514'

20 sx plug 5,514-5,768'

CIBP AT 9,820'

CIBP AT 9,895'

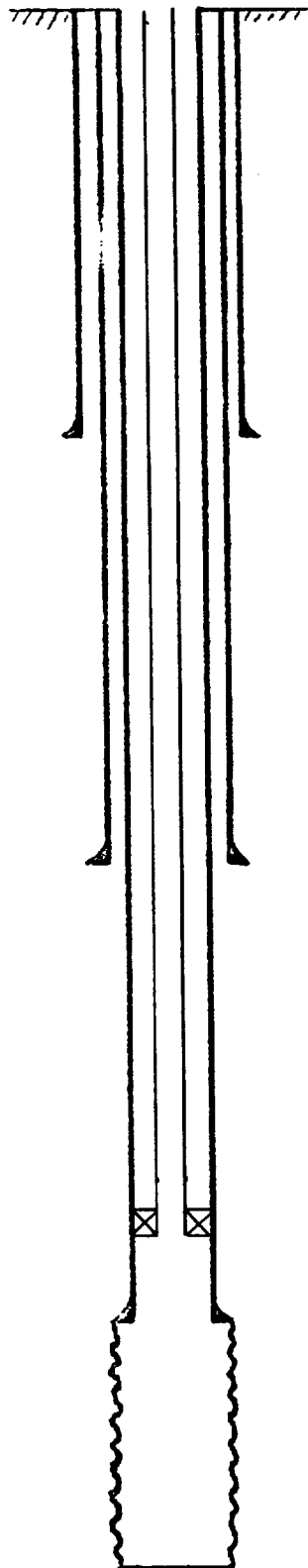
CIBP AT 10,090'

5 1/2" casing set at 10,330' with 500 sx cement
Hole size 8 3/4"

100 sx plug 12,564' -12,700'

T.D. 13,250'

OPERATOR SOUTHERN UNION EXPLORATION COMPANY		DATE JUNE 29, 1993
LEASE SOUTHLANE SWD	WELL No. D-35	LOCATION 500' FNL+500' FWL SEC 35-T10S-R33E



13 3/8" casing set at 347 ' with 400 sx of _____ cement
Hole size 17 1/2 "

8 5/8" casing set at 4,088 ' with 1700 sx of _____ cement
Hole size 11 "

2 7/8" LINED TUBING
PACKER SET AT 11,762'
5 1/2" casing set at 12,819 ' with 750 sx of _____ cement
Hole size 7 7/8 "

Open hole from 12,819 ' to 12,990 ' Hole size _____ "

Total depth 12,990 '

PRODUCED WATER ANALYSIS
Western Reserves Oil Co.
State "26" Well #3
Devonian Formation

Total Dissolved Solids	41,000 ppm
Specific Gravity at 60 F	1.047
pH	6.99
Calcium	3,612 ppm
Magnesium	4,988 ppm
Total Hardness (CaCO ₃)	8,600 ppm
Chlorides	27,534 ppm
Sulfate	1,425 ppm
Iron	495 ppm
Resistivity - Ohms	0.1216 at 22.5 C
Carbonate (CO ₃)	11.75 ppm
Bicarbonate	465 ppm
Nitrate	24.2 ppm
Potassium	9.0 ppm

FRESH WATER ANALYSES

State Engineers Observation Well 22321

NW/4 NE/4 SW/4 NE/4 NE/4 Sec 26, T10S, R33E
Total Depth 78' Cretaceous
November 1976
Chlorides 22,980 mg/l
Conductivity 55,148 Micro Mhos
Total Dissolved Solids 36,000 mg/l

State Engineers Observation Well 42321

NW/4 NE/4 SW/4 NE/4 SE/4 Sec 26, T10S, R33E
Total Depth 49'
1984
Chlorides 3,750 mg/l
Conductivity 12,166 Micro Mhos
Total Dissolved Solids 7,908 mg/l

State Engineers Observation Well 44321

NW/4 NE/4 SW/4 SE/4 SE/4 Sec 26, T10S, R33E
Total Depth 45'
1968
Chlorides 135 mg/l
Conductivity 1,420 Micro Mhos
Total Dissolved Solids 923 Mg/l

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

June 29, 1993

and ending with the issue dated

June 29, 1993

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 29 day of

June 1993

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

June 29, 1993

Notice of Application
for Oil and Gas Waste
Disposal Well Permit

Western Reserves Oil Company, Inc. hereby gives public notice that it has made application to the New Mexico Oil Conservation Division to convert its' State "26" No. 1 well to Salt Water Disposal. The well is located 330' FSL and 2310' FWL of Section 26, Township 10 South, Range 33 East of Lea County, New Mexico.

The applicant proposes to dispose 5000 Bbls per day of oil and gas produced waters into the Devonian formation at depths of 12,646' to 12,678'.

The applicant may be contacted at: Western Reserves Oil Company, Inc., P.O. Box 993, Midland, TX 79702. Phone Number is (915) 685-3211.

All parties requesting information or a hearing must file requests and objections with the New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87501 within 15 days of this publication.

P 309 852 087

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)



PS Form 3800, June 1991

Sent To <i>Carl Gene Johnson</i>	
Street and No. <i>P.O. Box 917</i>	
P.O. State and ZIP Code <i>Idaho, 21 M. 88267</i>	
Postage <i>\$.52</i>	
Certified Fee <i>2.00</i>	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees <i>\$2.52</i>	
Postmark or Date	

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

CERTIFIED

P 309 852 087

MAIL

P 309 852 088

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)



PS Form 3800, June 1991

Sent To <i>W.M. State Road Office</i>	
Street and No. <i>P.O. Box 1148</i>	
P.O. State and ZIP Code <i>Idaho, N.M. 8344-1148</i>	
Postage <i>\$.52</i>	
Certified Fee <i>2.00</i>	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees <i>\$ 2.52</i>	
Postmark or Date	

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

CERTIFIED

P 309 852 088

MAIL

P 309 852 093

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)



PS Form 3800, June 1991

Sent To <i>Walter Helmsman Corp</i>	
Street and No. <i>105 24th</i>	
P.O. State and ZIP Code <i>Idaho, 21 M. 88210</i>	
Postage <i>\$ 1.52</i>	
Certified Fee <i>2.00</i>	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees <i>\$2.52</i>	
Postmark or Date	

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

CERTIFIED

P 309 852 093

MAIL



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

93 JUL 7 AM 9 29

7-2-83

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

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

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD X _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Western Reserves Oil Co Inc State 26 #1-N 26-10-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed