

H. L. BROWN, JR.
POST OFFICE BOX 2237
MIDLAND, TEXAS 79702-2237

OIL CONSERVATION DIVISION
RECEIVED

'92 JUN 24 AM 3 48

June 24, 1992

State of New Mexico
Energy & Minerals Dept.
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. David Katnach

Re: Request Amended Injection Interval
Holly Federal "27" Well No. 1 located
in Unit J of Section 27, T-7-S, R-37-E
Roosevelt County, New Mexico

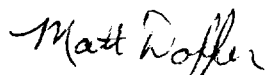
Gentlemen:

We herein request that Administrative Order No. SWD-438 approved on the 16th day of August, 1991 be amended to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4348' to approximately 4930'. The subject order had stated an interval of 4348' to 4500', which is the current injection interval.

As I mentioned during our phone conversation on June 16, 1992 we wish to drill out open hole to include all of the San Andres interval. Attached for your information is an "Injection Well Data Sheet" which includes a schematic of the current completion. We would intend to drill out the plug below the casing from 4632-4700' and set and tag a 50 sack plug across the bottom of the San Andres/top of Glorietta at 4994', plug interval of 4930-5070'.

A response to this request at your earliest convenience would be greatly appreciated. If any additional information or correspondence is required, please contact me at 915/683-5216.

Sincerely,



Matthew A. Doffer
Production Engineer

MAD:ed

INJECTION WELL DATA SHEET

H. L. Brown, Jr.

Holly Federal 27

OPERATOR

LEASE

1

1980' FSL & 1980' FEL

27

T-7-S

R-37-E

WELL NO.

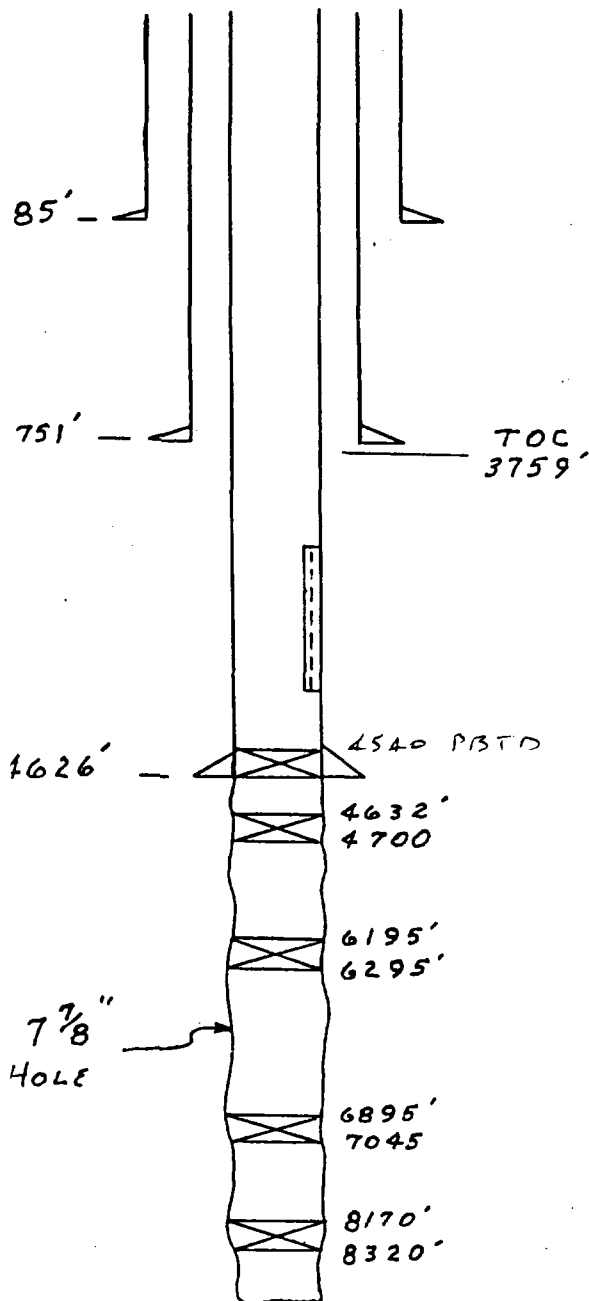
FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Schematic



Tabular Data

Surface Casing

Size 13-3/8 " Cemented with 385 sx.TOC Surface feet determined by Hole size 17-1/2"

Intermediate Casing

Size 8-5/8 " Cemented with 1200 sx.TOC Unknown feet determined by Hole size 12-1/4"

Long string

Size 4-1/2 " Cemented with 450 sx.TOC 3759 feet determined by CBLHole size 7-7/8"Total depth 9202'

Injection interval

4348 feet to 4500 feet
(perforated or open hole, indicate which)Tubing size 2-3/8" J-55 lined with Plastic Coating set in a
(material)Baker Model AD-1 Tension Packer packer at 4300 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (if applicable) -
- Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? Devonian oil well - Dry & plugged back to San Andres - dry.
- 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 perforated intervals. Bottom plugs - 45 sx 8170-8320', 45 sx 6895-7045', 35 sx 6195-6295 and 35 sx 4632-4700'.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
Wolfcamp - 7972'
Siluro Devonian - 8723'

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: H. L. Brown, Jr.

Address: P. O. Box 2237, Midland, Texas 79702

Contact party: Mark Gosch Phone: (915) 683-5216

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: Mark A. Gosch Title: Production Engineer

Signature: Mark A. Gosch Date: 2-20-91

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

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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.

Application for Authorization to Inject
Holly Federal 27 #1

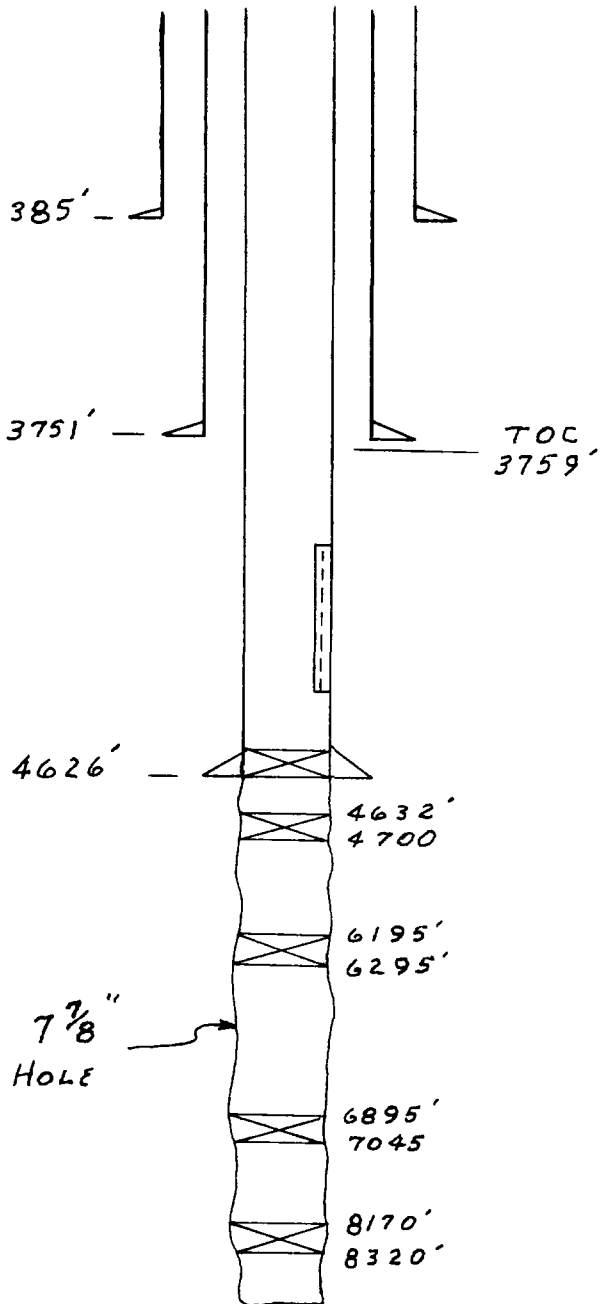
Section III. Well Data

- A.
 - 1. Holly Federal 27 #1, located 1980' FSL, 1980' FEL, Unit J, Section 27, T-7-S, R-37-E.
 - 2. Surface Casing:
 - 13-3/8" @ 385', cemented w/385 sacks
 - 17-1/2" hole. Cement was circulated.Intermediate Casing:
 - 8-5/8" @ 3751', cemented w/1200 sacks
 - 12-1/4" hole. TOC unknown.Production Casing:
 - 4-1/2" @ 4626', cemented w/450 sacks
 - 7-7/8" hole. TOC @ 3759' by CBL.
 - 3. Proposed tubing string:
 - 2-3/8" EUE PC J-55 tubing
 - 4. Baker Model AD-1 tension packer @ 4300'.
- B.
 - 1. Formation - San Andres
 - Field - North Bluit (San Andres)
 - 2. Injection Interval - Perforations from 4348' to 4500'.
 - 3. Original TD - 9202' for the purpose of testing the Siluro-Devonian and Wolfcamp zones.
 - 4. The open hole was plugged back.

INJECTION WELL DATA SHEET

H. L. Brown, Jr.		Holly Federal 27		
OPERATOR		LEASE		
1	1980' FSL & 1980' FEL	27	T-7-S	R-37-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13-3/8 " Cemented with 385 sx.
 TOC Surface feet determined by _____
 Hole size 17-1/2"

Intermediate Casing

Size 8-5/8 " Cemented with 1200 sx.
 TOC Unknown feet determined by _____
 Hole size 12-1/4"

Long string

Size 4-1/2 " Cemented with 450 sx.
 TOC 3759 feet determined by CBL
 Hole size 7-7/8"
 Total depth 9202'

Injection interval

4348 feet to 4500 feet
 (perforated or open hole, indicate which)

Tubing size 2-3/8" J-55 lined with Plastic Coating set in a
 (material)
Baker Model AD-1 Tension Packer packer at 4300 feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (if applicable) -
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Devonian oil well - Dry & plugged back to San Andres - dry.
- 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 perforated intervals. Bottom plugs - 45 sx 8170-8320', 45 sx 6895-7045', 35 sx 6195-6295 and 35 sx 4632-4700'.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
Wolfcamp - 7972'
Siluro Devonian - 8723'

[illegible]

Application for Authorization to Inject
Holly Federal 27 #1

Section VI. Wells within 1/2 mile area of review.

Federal Bluitt #5

1980' FSL, 660' FWL, Section 27, T-7-S, R-37-E
Drilled & P&A'd by Felmont Oil Company 11-27-57

Re-entered by H. L. Brown, Jr. 12-11-59

13-3/8" casing @ 334', cement circulated

9-5/8" casing @ 4112', cement circulated

5-1/2" casing @ 9180'. TOC 7390' by T.S.
TD 9265'

Plugged & Abandoned on 7-22-70

5-1/2" BP @ 8798' w/20' cement on top.

5-1/2" BP @ 7975' w/20' cement on top.

Pulled 4042' of 5-1/2" casing.

50 sacks cement @ 3872-4022'

10 sacks @ surface

PAGE: 1 OF 1

TD: 9265 PBD: _____

Application for Authorization to Inject
Holly Federal 27 #1

Section VII. Proposed Operation of SWD

Average injection rate 1 BPM

Maximum Injection Rate 3 BPM

Daily Fluid Volume less than 1000 BPD through a
closed system

Average Injection Pressure 200 psi

Maximum Injection Pressure 1500 psi

Source of Disposal Water

Wells in North Bluitt (Siluro-Devonian) Field
for H. L. Brown, Jr.

Wells in Bluitt (Wolfcamp) Field for H. L.
Brown, Jr.

A typical water analysis for the San Andres zone is
attached.

709 W INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Mark Gosch
P. O. Box 2237, Midland, TX

LABORATORY NO. _____
SAMPLE RECEIVED _____
RESULTS REPORTED 2-6-91

COMPANY H. L. Brown, Jr. LEASE _____

FIELD OR POOL _____

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Roosevelt STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Typical San Andres water in southeast Roosevelt county.

NO. 2

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1730			
pH When Sampled				
pH When Received	6.5			
Bicarbonate as HCO ₃	500			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	66,500			
Calcium as Ca	19,600			
Magnesium as Mg	4,250			
Sodium and/or Potassium	76,000			
Sulfate as SO ₄	600			
Chloride as Cl	163,600			
Iron as Fe	13.8			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	264,550			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen.				
Hydrogen Sulfide	135			
Resistivity, ohms/m at 77° F.	0.049			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

REC 08 1997

Application for Authorization to Inject
Holly Federal 27 #1

Section VIII. GEOLOGIC DATA

The disposal zone is a dolomite in the San Andres formation from 4348-4500' (152' thick). The only known source of fresh water in the area is from the Ogallalla formation. This formation is not known to occur below a depth of 500' in this area.

Application for Authorization to Inject
Holly Federal 27 #1

Section IX. Proposed Stimulation Program

Current Conditions:

4-1/2" casing @ 4626'. Cemented w/450 sacks
cement. TOC 3759'
Perfs 1 SPF @ 4348, 54, 58, 62, 66, 84, 88, 92,
96, 4424, 30, 33, 76, 78, 80, 84, 87, 94, 96,
98 and 4500'
2-3/8" tubing @ 4303'
Baker Model R packer @ 4303'

Proposed Completion:

1. TOOH w/tubing and packer.
2. Re-perf same interval w/4 SPF.
3. TIH w/2-3/8" PC tubing & Model AD-1
tension packer.
4. Acidize new perfs w/1000 gal. 15% NE FE
acid.
5. Set packer @ 4300', circ inhibited water
in annulus.
6. Install surface equipment and proceed to
dispose of produced water.

Application for Authorization to Inject
Holly Federal 27 #1

Section X. Test Data

An injectivity test performed on 1-14-91 on the well into the perms from 4348' to 4500' resulted in the following data:

<u>Volume Pumped</u>	<u>Rate (BPD)</u>	<u>Pressure (psi)</u>
40 bbls.	1	0- 200
70	1-1/2	350- 700
70	2	700- 900
70	2-1/2	1050-1300
70	3	1100-1400
70	3-1/4	1500

18 hr. SITP 0 psi.

Application for Authorization to Inject
Holly Federal 27 #1

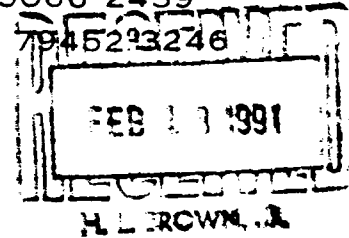
Section XI. Fresh Water Chemical Analysis

A water sample was obtained from the closest water well - a windmill located approximately 1-1/4 miles from the proposed SWD well.

PANTECHS LABORATORIES

Mark G

☐ P. O. BOX 2439 TEL. 806 669-6821 PAMPA, TEXAS 79066-2439
☐ P. O. BOX 3246 TEL. 806 797-4325 LUBBOCK, TEXAS 79452-3246



WATER ANALYSIS

SAMPLING DATA

Lab #.....1214
 Customer.....UNITED COMPANY
 Sample ID.....H L BROWN WINDMILL
 Date sampled.....02-13-91
 Sampling point.....N/A
 Sample temp (deg. F).....75
 Sampled by.....Greg McWilliams
 Analysis date.....02-15-91

REMARKS:

Clear
 No Odor
 No Visible Suspended Solids

DISTRIBUTION

3-United Company: P O Box 10108, Lubbock, Tx 79408
 Mr Jim Latch

1-H L Brown, Jr : C/O G. McWilliams
 P O Box 2237, Midland, Tx 79702

1-Fax # (915) 683 9814

ANALYTICAL DATA

pH.....8.44
 Specific gravity @ 75 deg. F.....1.0015
 Resistivity (ohm-cm).....12.2
 Filterable solids (mg/l).....268.8
 Carbon dioxide (CO2) mg/l.....NA
 Sulfide (as H2S) mg/l.....NA
 Total hardness (as CaCO3) mg/l.....NA

DISSOLVED SOLIDS

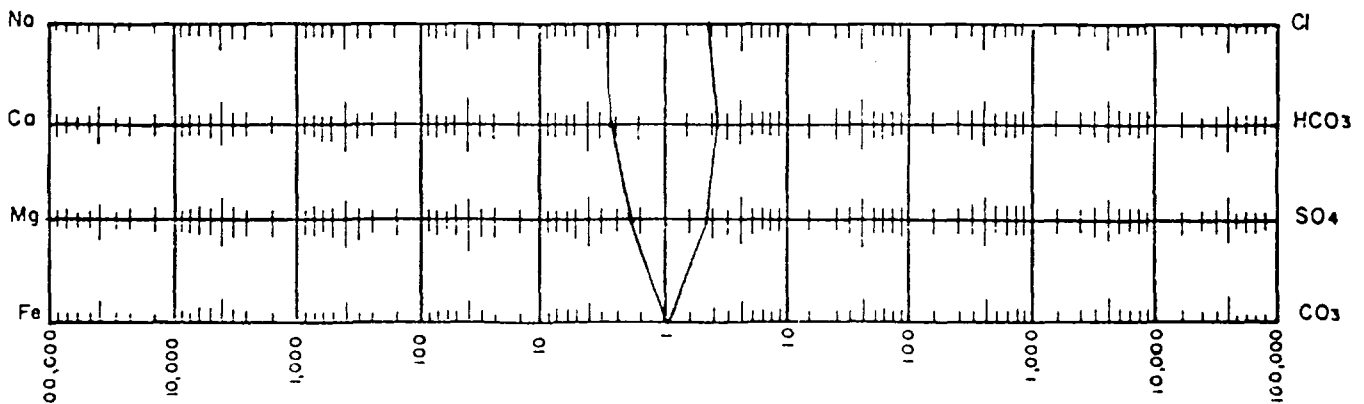
Cations	meq/l	mg/l	ppm
Sodium (Na)	3.3	76	76
Calcium (Ca)	3.1	62	62
Magnesium (Mg)	2.3	28	28
Iron (Fe), total	0	0	0
Potassium (K)	NA	NA	NA
Barium (Ba)	NA	NA	NA

Anions

	meq/l	mg/l	ppm
Chloride (Cl)	2	71	71
Sulfate (SO4)	2.9	139	139
Carbonate (CO3)	.4	12	12
Bicarbonate (HCO3)	3.3	201	201
Hydroxide (OH)	0	0	0
Total dissolved solids (calculated)	17.3	589	589

Analysis by Steve Hopkins

Water Patterns (meq/l)
 Logarithmic



Application for Authorization to Inject
Holly Federal 27 #1

Section XII. It is affirmed that available geologic and engineering data has been examined and there is no evidence of an open fault of any kind nor other hydrologic connection, other than this wellbore, between the proposed disposal zone and the subsurface potable water zones.

Application for Authorization to Inject
Holly Federal 27 #1

Section XIII. Proof of Notice.

The attached certified mail receipts are our proof that the land owners, Mr. Arlon Perkins and Ms. Beverly Moore, were sent a copy of this application. H. L. Brown, Jr. is the leasehold operator for all the area within one-half mile of the wellsite location.

Also attached is a copy of the legal notice of our intentions for the subject well, as it appeared in the Portales News Tribune. A copy of the newspaper's affidavit of publication is also included.

LEGAL NOTICE

H.L. Brown, Jr. proposes to convert a shut-in gas well in Roosevelt County to a salt water disposal well. The Holly Federal 27 #1, located 1900' FSL, 1900' FEE, Unit J, Section 27, T-7-S, R-37-E, will dispose of salt water into the San Andres formation from a depth of 4340' to 4600' at a maximum rate of 3 BPM and a maximum pressure of 1500 psi. Questions pertaining to this application should be directed to Mark A. Gosch, Production Engineer for H.L. Brown, J.R., P.O. Box 2237, Midland, Texas 79702; phone number (915) 683-5216. Interested parties should file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

Published in the Portales News-Tribune February 5, 1991. Legal #0053.

Affidavit of Publication

I, Marshall Stinnett
Business Manager of

THE PORTALES NEWS-TRIBUNE

a newspaper of general paid circulation and entered under second class postal privilege in Roosevelt County, published daily, (except Saturday) at Portales, New Mexico, for the fifty-two (52) consecutive weeks preceding this date, do solemnly swear that a copy of the above notice, as per clipping attached, was published weekly in the regular and entire issue of said

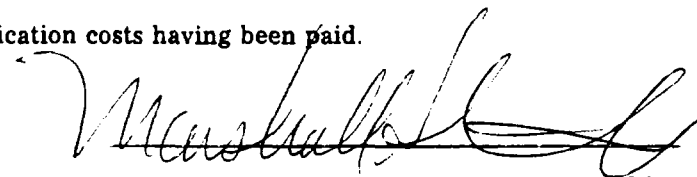
newspaper, and not in any supplement thereof for 1

consecutive weeks commencing with the issue dated _____

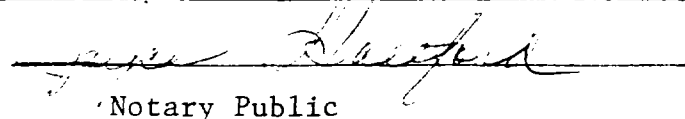
February 5, 1991

and ending with the issue dated February 5, 1991

All publication costs having been paid.



Subscribed and sworn to before me this 5th day of February 1991


Notary Public

My commission expires 4/3/93 1993

P 087 295 628

RECEIPT FOR CERTIFIED MAIL

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

PS Form 3800, June 1985

Sent to <i>Beverly Moore</i>	
Street and No. <i>1825 South Main Ave.</i>	
P.O. State and ZIP Code <i>Portales, NM 88130</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

P 355 207 395

RECEIPT FOR CERTIFIED MAIL

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

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

PS Form 3800, June 1985

Sent to <i>Arlan Perkins</i>	
Street and No. <i>Rt. 1, Box 323</i>	
P.O. State and ZIP Code <i>Odessa TX 79765</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION

RECEIVED

OIL CONSERVATION DIVISION

HOBBS DISTRICT OFFICE

'91 JUL 26 AM 10 51

7-16 91

BRUCE KING
GOVERNOR

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

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

RE: Proposed:

MC	_____
DHC	_____
NSL	_____
NSP	_____
SWD	<u>X</u> _____
WFX	_____
PMX	_____

Gentlemen:

I have examined the application for the:

W L Brown Jr. Hobbs 21 Federal 11-2 21-37
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed