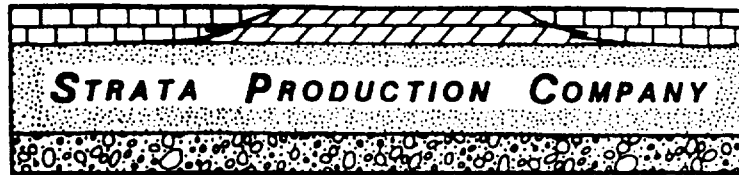


POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

March 11, 1988

New Mexico Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

OIL CONSERVATION DIVISION  
RECEIVED  
MAR 24 1988 10 06

RE: Application for Authorization to Inject  
Gilmore Federal #1  
Section 21 T22N R34E  
1980' FSL & 660' FSL  
Lea County, New Mexico

Gentlemen:

Strata Production Company is seeking a Permit to convert the above referenced well to a produced water disposal well into the lower Bell Canyon formation of the Precambrian Mountain Group. This well will be used to dispose of produced water from the East Livingston Ridge Delaware field from Bell Canyon formation sandstones. Please find enclosed the following data pertinent to our application:

- 1) Form C-108
- 2) Area of Review Map
- 3) Wellbore diagram-Gilmore Federal #1
- 4) Proposed Wellbore diagram-Gilmore Federal #1
- 5) Logs of the Gilmore Federal #1 showing proposed injection interval
- 6) Wellbore diagrams of wells in Area of Review
- 7) Copies of public notice and notices to offset operations
- 8) Water analysis (fresh and produced water samples)

If you have any questions, please contact Strata Production Company at the above address or phone number.

Respectfully yours,

Frank B. Morgan  
v.p. Field Operations

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Strata Production Company  
Address: 700 Petroleum Bldg. Roswell, New Mexico 88201  
Contact party: Frank S. Morgan Phone: (505) 622-1127
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Frank S. Morgan Title: Vice-President Field Operations  
Signature: Frank S. Morgan Date: 03/11/92
- \* 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:

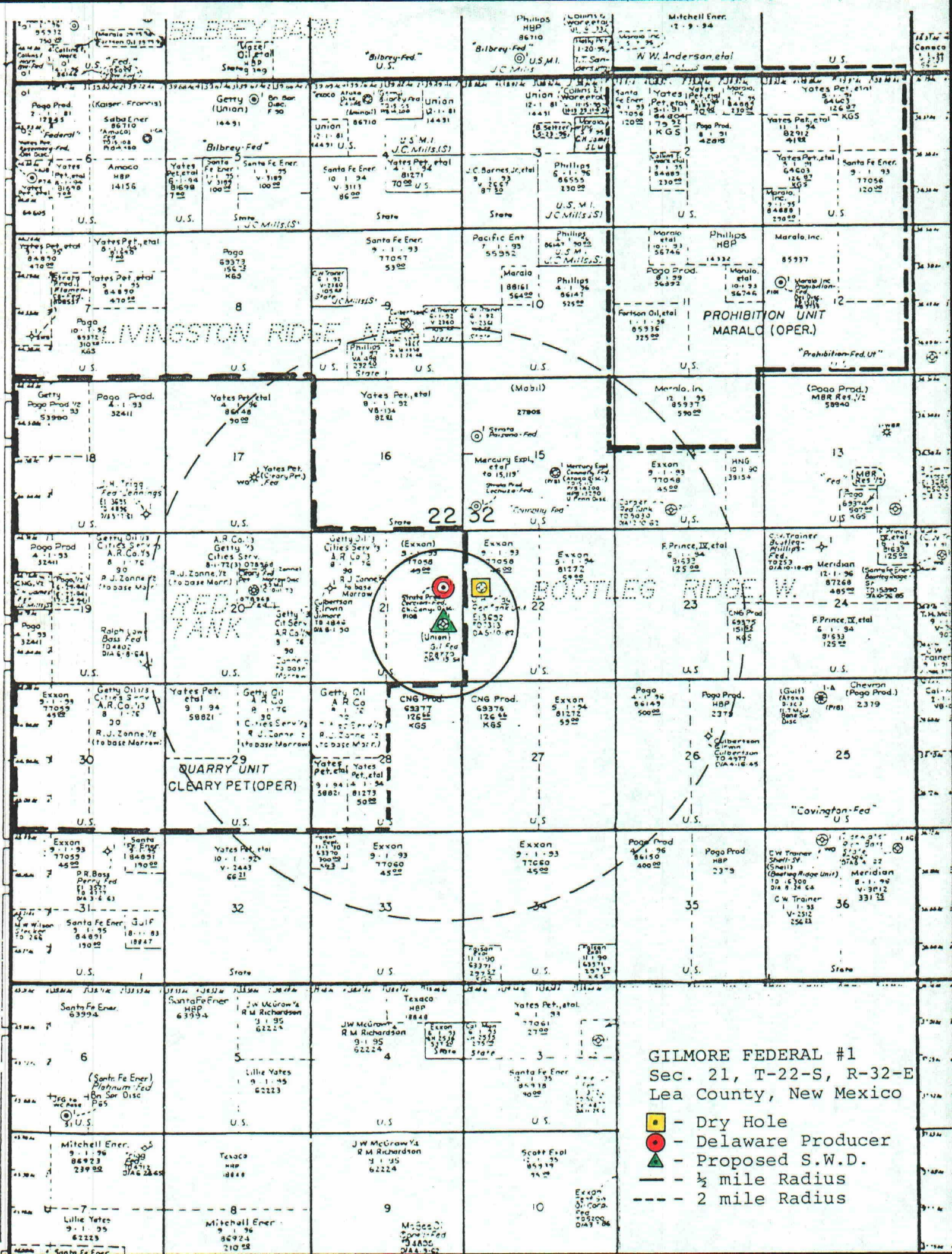
- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates 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.





ANSWERS TO FORM C-108:

III. See Current and proposed well diagrams.

IV. No

V. See Map.

VI. Table of data on the wells within the area of review.

- 1) Cercion Federal #1: Strata Production Company operator. Located Sec. 21 T22S R32E. 660' FEL & 1980' FNL. Ut. H. Producing oil and gas. Spudded 10/29/91. 13 3/8" J-55 54.5# to 600'. Cemented with 300 sx Lite; 200 sx Cl "C" Circ. 135 sx to pit. 8 5/8" J-55 32# to 4466'. Cement with 375 sx P.P., 2% CaCl. 5 1/2" J-55 17.5# to 8963'. Cement with 750 sx 50/50 Poz; 550 sx "H" Poz. Set D.V. tool at 5989'. Perf: 7077'-7283' and acidize with 2000 gal 7 1/2% NeFe; Frac with 40000# 16/30. Perf: 7455'-7469' and acidize with 2000 gal 7 1/2% NeFe. Completed 12/27/91.
- 2) Federal Red Tank Unit #1-22: Exxon operator. Located Sec. 22 T22S R32E. 1980' FNL & 660' FWL. Spudded 04/14/62. 8 5/8" 24# csg. to 634'. Cemented with 375 sx Cl "C". Circ. Plugged and Abandoned 05/10/62. See plugging diagram.

VII/VIII. Injection zone / Procedure

Zones to be Injected: Lower Bell Canyon Formation sandstones, Delaware Mountain Group. 4807'-5900'. Open-hole.

This interval does not produce oil in this part of Lea County. The lowest injection zone is 1200 feet above the uppermost pay objective in the East Livingston Ridge Delaware field. The uppermost injection zone is 750' below the Ramsey sandstone which produces 7.5 miles to the south. Mudlog shows were not encountered in either the Lechuza Federal #1 or the Cercion Federal #1 above 6600'. The nearest water wells indicate potable water present at 550 to 630 feet.

<u>TYPE INJECTION SYSTEM:</u>	Closed
<u>PROPOSED DAILY INJECTION RATE:</u>	250 BPD initial (.75 BPM)
<u>MAXIMUM DAILY INJECTION RATE:</u>	900 BPD (1.5 BPM)
<u>AVERAGE INJECTION PRESSURE:</u>	450 PSI
<u>MAXIMUM INJECTION PRESSURE:</u>	950 PSI



Water Compatibility: The water to be injected will initially come from the Cercion Federal #1 and Lechuza Federal #1. These wells are completed from the Cherry and Brushy Canyon Formations of the Delaware Mountain Group from 7000' to 7900'. Combined production is 275 BOPD + 200 BWPD. A test of the water is enclosed. It has a similar chemistry to other Delaware waters that we have tested and presumably is similar to water in the overlying Delaware sandstones to be injected. Strata Production has 640 acres under lease in this vicinity and ultimately plans to inject water from multiple Delaware wells.

IX. See Procedure

X. See attached log

XI. Nearest water wells are located 1 1/2 miles east in Section 14 of T22S, R32E., Lea County, NM.

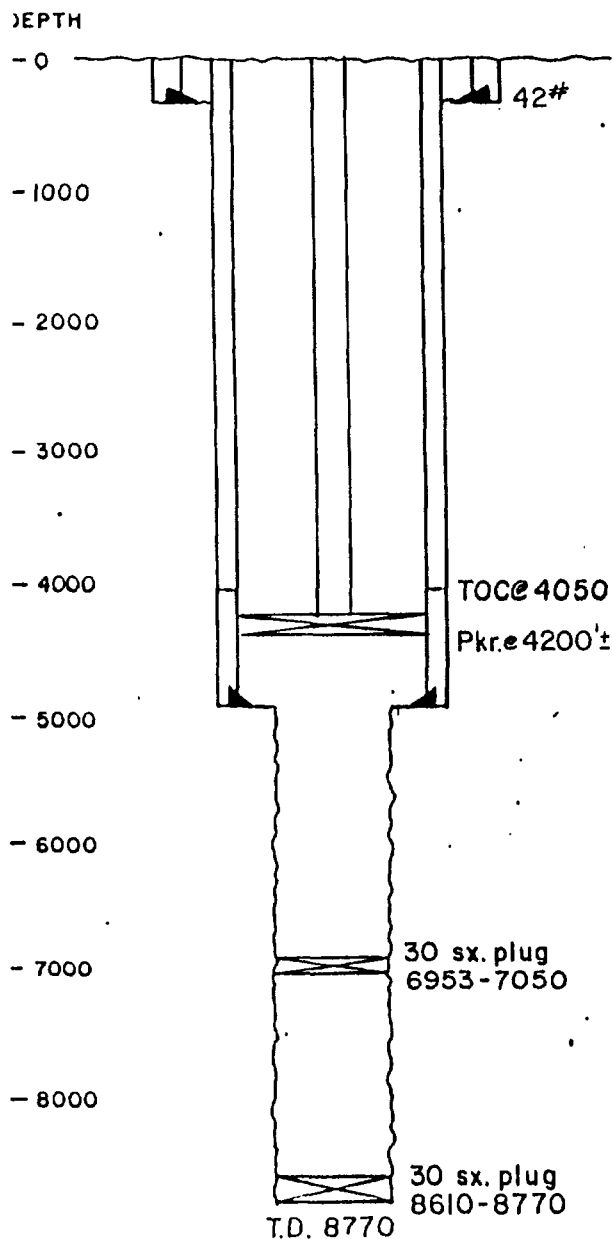
XII. Strata Production Company has examined all available geologic and engineering data in this area and finds no evidence of open faults or other hydrologic connections between the disposal zone and any potable aquifers.

#### PROCEDURE:

Strata Production Company plans to re-enter reference well in the following manner:

- 1) Make cut-off and flange up well-head.
- 2) Rig-up and drill out plug at 4620'-4812'.
- 3) Circulate down and tag plug at 6953'-7050'. TDH with work string.
- 4) TIH with plastic coated 2 3/8" tubing and plastic coated 8 5/8" Pkr. Set pkr. and test casing. State and Federal offices will be notified of csg. integrity test.
- 5) If csg. Integrity test fail, steps will taken to rectify problems to assure proper csg. test.
- 6) Circulate hole with pkr. fluid, set pkr. at 4500'. Flange up well head.
- 7) Set in tank battery for SWD purpose.

OPERATOR Union LEASE Gilmore Federal  
WELL NO. 1 SURFACE LOCATION 1980 FSL, 660 FEL SECTION 21 TOWNSHIP T22S RANGE R32E  
Spud: 4-17-1954 TA: 7-16-1954  
Schematic Tabular Data



Surface Casing  
Size 11 3/4 @ 316' " Cemented with 175 sx.  
TOC Surface feet determined by Circulated  
Hole size 15"  
Intermediate Casing  
Size 8 5/8 @ 4807' " Cemented with 150 sx.  
TOC 4050' feet determined by report  
Hole size 10 5/8"  
Long string  
Size Not Run " Cemented with \_\_\_\_\_ sx.  
TOC \_\_\_\_\_ feet determined by \_\_\_\_\_  
Hole size \_\_\_\_\_  
Total depth 8770  
Injection interval Proposed  
4755 feet to 5110 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with Plastic set in a  
(material)  
8 5/8 Loc - Set (Plastic coated) packer at 4200± feet  
(brand and model)  
(or describe any other casing-tubing seal).

#### Other Data

- Name of the injection formation Bell Canyon Formation-Delaware Mtn. Grp.
- Name of field or pool (if applicable) East Livingston Ridge Delaware Pool
- Is this a new well drilled for injection? ☐ Yes ☒ No  
If no, for what purpose was the well originally drilled? To test the Delaware Mountain Group.
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (bags of cement or bridge plug(s) used) production casing was never run. Intermediate casing was never perforated. Plugging details are shown.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. The Strata Production Company Cercion Federal #1  
(Section 21-T22S-R32E, 1980 FNL, 660 FEL) produces from the Brushy Canyon Fm at 7075-8520, 2000 feet below the proposed injection interval.

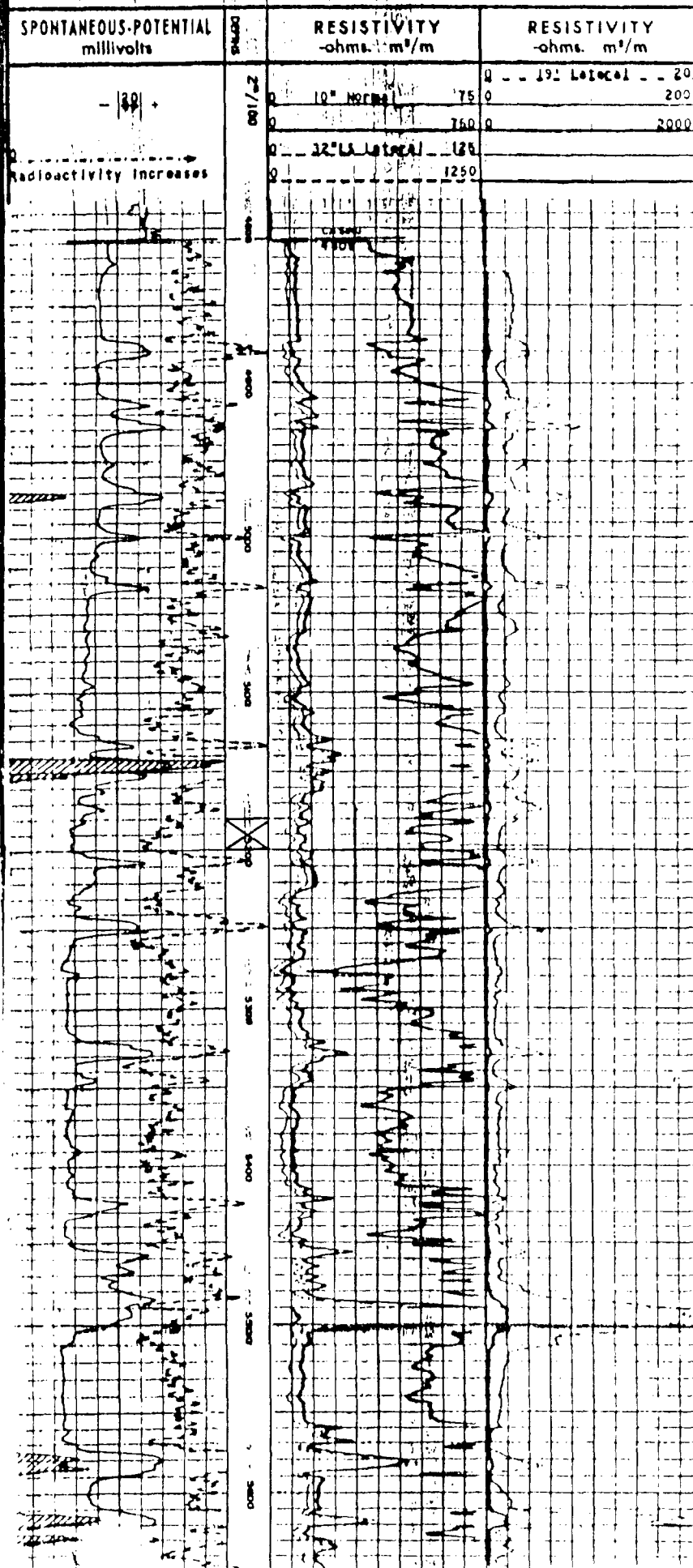
# STANDARD WELL SERVICES CORP.



LOCATION: Mildred Federal Oilmore #1  
 COMPANY: J. P. Oil Co. of  
 FIELD: MILDRED  
 LOCATION SEC: 21-23-32E  
 COUNTY: LEA  
 STATE: NEW MEXICO  
 LOCATION OF WELL: 1980' T SL, 560' T EL, SEC. 21-23-32E  
 EST-GRIL (DW)

DATE	TIME	DEPTH	TEMP	PRESS	WELL	LOG	REMARKS
10/1/54	10:00	0	75	150	10" N.P.M.	75	
10/1/54	10:05	10	75	150	10" N.P.M.	75	
10/1/54	10:10	20	75	150	10" N.P.M.	75	
10/1/54	10:15	30	75	150	10" N.P.M.	75	
10/1/54	10:20	40	75	150	10" N.P.M.	75	
10/1/54	10:25	50	75	150	10" N.P.M.	75	
10/1/54	10:30	60	75	150	10" N.P.M.	75	
10/1/54	10:35	70	75	150	10" N.P.M.	75	
10/1/54	10:40	80	75	150	10" N.P.M.	75	
10/1/54	10:45	90	75	150	10" N.P.M.	75	
10/1/54	10:50	100	75	150	10" N.P.M.	75	
10/1/54	10:55	110	75	150	10" N.P.M.	75	
10/1/54	11:00	120	75	150	10" N.P.M.	75	
10/1/54	11:05	130	75	150	10" N.P.M.	75	
10/1/54	11:10	140	75	150	10" N.P.M.	75	
10/1/54	11:15	150	75	150	10" N.P.M.	75	
10/1/54	11:20	160	75	150	10" N.P.M.	75	
10/1/54	11:25	170	75	150	10" N.P.M.	75	
10/1/54	11:30	180	75	150	10" N.P.M.	75	
10/1/54	11:35	190	75	150	10" N.P.M.	75	
10/1/54	11:40	200	75	150	10" N.P.M.	75	
10/1/54	11:45	210	75	150	10" N.P.M.	75	
10/1/54	11:50	220	75	150	10" N.P.M.	75	
10/1/54	11:55	230	75	150	10" N.P.M.	75	
10/1/54	12:00	240	75	150	10" N.P.M.	75	
10/1/54	12:05	250	75	150	10" N.P.M.	75	
10/1/54	12:10	260	75	150	10" N.P.M.	75	
10/1/54	12:15	270	75	150	10" N.P.M.	75	
10/1/54	12:20	280	75	150	10" N.P.M.	75	
10/1/54	12:25	290	75	150	10" N.P.M.	75	
10/1/54	12:30	300	75	150	10" N.P.M.	75	
10/1/54	12:35	310	75	150	10" N.P.M.	75	
10/1/54	12:40	320	75	150	10" N.P.M.	75	
10/1/54	12:45	330	75	150	10" N.P.M.	75	
10/1/54	12:50	340	75	150	10" N.P.M.	75	
10/1/54	12:55	350	75	150	10" N.P.M.	75	
10/1/54	13:00	360	75	150	10" N.P.M.	75	
10/1/54	13:05	370	75	150	10" N.P.M.	75	
10/1/54	13:10	380	75	150	10" N.P.M.	75	
10/1/54	13:15	390	75	150	10" N.P.M.	75	
10/1/54	13:20	400	75	150	10" N.P.M.	75	
10/1/54	13:25	410	75	150	10" N.P.M.	75	
10/1/54	13:30	420	75	150	10" N.P.M.	75	
10/1/54	13:35	430	75	150	10" N.P.M.	75	
10/1/54	13:40	440	75	150	10" N.P.M.	75	
10/1/54	13:45	450	75	150	10" N.P.M.	75	
10/1/54	13:50	460	75	150	10" N.P.M.	75	
10/1/54	13:55	470	75	150	10" N.P.M.	75	
10/1/54	14:00	480	75	150	10" N.P.M.	75	
10/1/54	14:05	490	75	150	10" N.P.M.	75	
10/1/54	14:10	500	75	150	10" N.P.M.	75	
10/1/54	14:15	510	75	150	10" N.P.M.	75	
10/1/54	14:20	520	75	150	10" N.P.M.	75	
10/1/54	14:25	530	75	150	10" N.P.M.	75	
10/1/54	14:30	540	75	150	10" N.P.M.	75	
10/1/54	14:35	550	75	150	10" N.P.M.	75	
10/1/54	14:40	560	75	150	10" N.P.M.	75	
10/1/54	14:45	570	75	150	10" N.P.M.	75	
10/1/54	14:50	580	75	150	10" N.P.M.	75	
10/1/54	14:55	590	75	150	10" N.P.M.	75	
10/1/54	15:00	600	75	150	10" N.P.M.	75	
10/1/54	15:05	610	75	150	10" N.P.M.	75	
10/1/54	15:10	620	75	150	10" N.P.M.	75	
10/1/54	15:15	630	75	150	10" N.P.M.	75	
10/1/54	15:20	640	75	150	10" N.P.M.	75	
10/1/54	15:25	650	75	150	10" N.P.M.	75	
10/1/54	15:30	660	75	150	10" N.P.M.	75	
10/1/54	15:35	670	75	150	10" N.P.M.	75	
10/1/54	15:40	680	75	150	10" N.P.M.	75	
10/1/54	15:45	690	75	150	10" N.P.M.	75	
10/1/54	15:50	700	75	150	10" N.P.M.	75	
10/1/54	15:55	710	75	150	10" N.P.M.	75	
10/1/54	16:00	720	75	150	10" N.P.M.	75	
10/1/54	16:05	730	75	150	10" N.P.M.	75	
10/1/54	16:10	740	75	150	10" N.P.M.	75	
10/1/54	16:15	750	75	150	10" N.P.M.	75	
10/1/54	16:20	760	75	150	10" N.P.M.	75	
10/1/54	16:25	770	75	150	10" N.P.M.	75	
10/1/54	16:30	780	75	150	10" N.P.M.	75	
10/1/54	16:35	790	75	150	10" N.P.M.	75	
10/1/54	16:40	800	75	150	10" N.P.M.	75	
10/1/54	16:45	810	75	150	10" N.P.M.	75	
10/1/54	16:50	820	75	150	10" N.P.M.	75	
10/1/54	16:55	830	75	150	10" N.P.M.	75	
10/1/54	17:00	840	75	150	10" N.P.M.	75	
10/1/54	17:05	850	75	150	10" N.P.M.	75	
10/1/54	17:10	860	75	150	10" N.P.M.	75	
10/1/54	17:15	870	75	150	10" N.P.M.	75	
10/1/54	17:20	880	75	150	10" N.P.M.	75	
10/1/54	17:25	890	75	150	10" N.P.M.	75	
10/1/54	17:30	900	75	150	10" N.P.M.	75	
10/1/54	17:35	910	75	150	10" N.P.M.	75	
10/1/54	17:40	920	75	150	10" N.P.M.	75	
10/1/54	17:45	930	75	150	10" N.P.M.	75	
10/1/54	17:50	940	75	150	10" N.P.M.	75	
10/1/54	17:55	950	75	150	10" N.P.M.	75	
10/1/54	18:00	960	75	150	10" N.P.M.	75	
10/1/54	18:05	970	75	150	10" N.P.M.	75	
10/1/54	18:10	980	75	150	10" N.P.M.	75	
10/1/54	18:15	990	75	150	10" N.P.M.	75	
10/1/54	18:20	1000	75	150	10" N.P.M.	75	

REMARKS

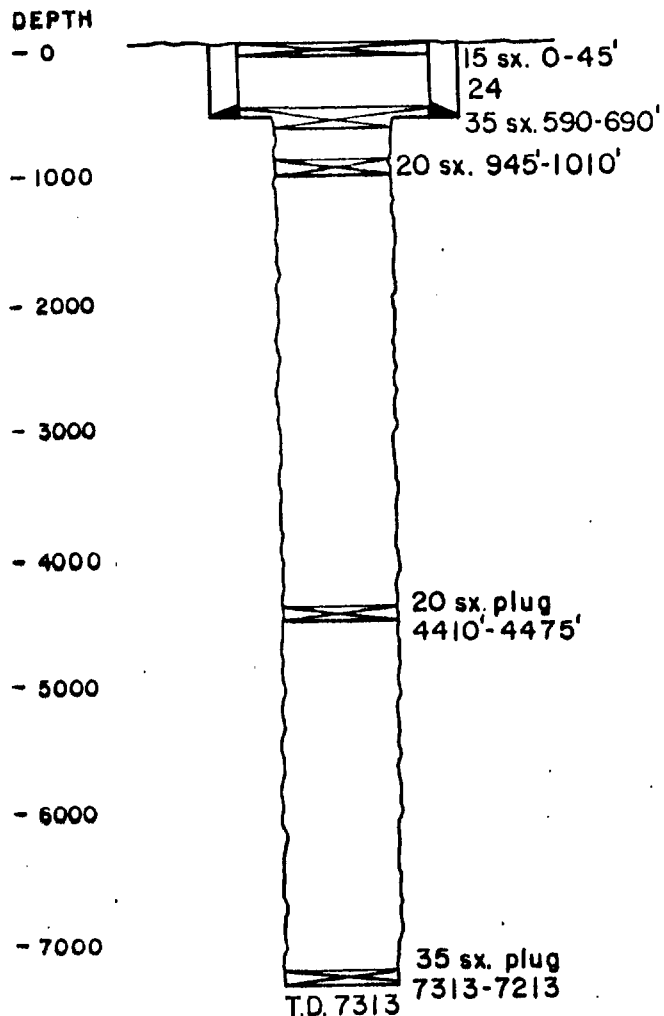




OPERATOR		LEASE		
John H. Trigg		Federal Red Tank Unit		
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
1-22	1980 FNL, 660 FWL	22	T22S	R32E

Spud: 4-14-1962  
Schematic

P & A 5-10-1962  
Tabular Data



Surface Casing

Size 8 5/8" to 6 3/4" Cemented with 325 ex.  
 TOC Surface feet determined by Circulated  
 Hole size Not Shown

Intermediate Casing

Size Not Run Cemented with \_\_\_\_\_ ex.  
 TOC \_\_\_\_\_ feet determined by \_\_\_\_\_  
 Hole size \_\_\_\_\_

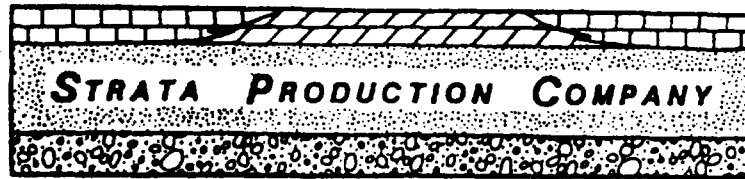
Long string

Size Not Run Cemented with \_\_\_\_\_ ex.  
 TOC \_\_\_\_\_ feet determined by \_\_\_\_\_  
 Hole size 7 3/4" (Estimated)  
 Total depth 7313 Feet

Injection interval -proposed

4790 feet to 5075 feet  
 (perforated or open-hole, indicate which)

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

March 11, 1992

CERTIFIED/RETURN RECEIPT REQUESTED ARTICLE # P 340 891 299

Mr. J.C. Mills  
Box 190  
Abernathy, Texas 79311

**ILLEGIBLE**

Re: Salt Water Disposal Well  
East Livingston Ridge Delaware  
Gilmore Federal #1  
Section 21, T22S, R32E  
Lea County, New Mexico

Dear Mr. Mills:

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert the above captioned dry hole well to a water disposal well for the injection of water produced in the East Livingston Ridge Delaware field into porous zones in the Delaware formation.

As the surface lease owner of the oil and gas lease covering the location of the Gilmore Federal #1 well, located 1980' FSL & 860' FEL of Section 21, T22S, R32E, Lea County, New Mexico, Strata Production Company requests your approval of the above.

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

If you object to this Application, or feel that a public hearing is necessary, please contact the NMDCD, P.O. Box 2088, Santa Fe, NM 87504-2088. You may also contact Frank S. Morgan Strata Production Company, 700 Petroleum Bldg., Roswell, New Mexico 88201, telephone 505-622-1127.

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

Respectfully yours,

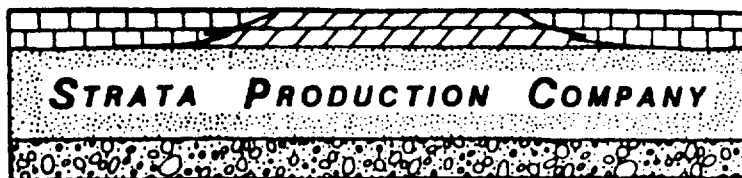
Frank S. Morgan,  
Vice President, Field Operations

ORNL APPROVE THE AFOREMENTIONED APPLICATION.

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

March 13, 1992

Hobbs Daily News Sun  
P. O. Box 860  
Hobbs, New Mexico 88241

Re: Legal Publication

Gentlemen:

Enclosed herewith is a Legal Notice to be published in your newspaper at the earliest possible date.

This notice should be published one (1) time only.

Please publish and forward an Affidavit of Publication, as well as your invoice, to:

Regina Finley  
Strata Production Company  
700 Petroleum Building  
Roswell, New Mexico 88201

Thank you.

STRATA PRODUCTION COMPANY

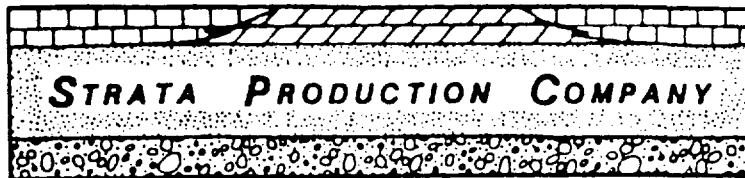
A handwritten signature in cursive script, appearing to read "Frank S. Morgan".

Frank S. Morgan  
Vice President Field Operations

FSM:cjg

Enclosure

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

## PUBLIC NOTICE

### APPLICATION FOR WATER DISPOSAL

Strata Production Company, 700 Petroleum Building, Roswell, New Mexico 88201, (Contact: Frank S. Morgan, 505-622-1127) has made Application to the Oil Conservation Division, Energy, Minerals and Natural Resources Department, State of New Mexico, for Administrative Approval and authority to inject salt water into the Gilmore Federal #1 well, located 1980' FSL and 660' FEL of Section 21, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico.

The purpose of this water injection well is to dispose of salt water produced from the Red Tank Delaware field as currently designated by the Oil Conservation Division and as may be extended by additional drilling.

Water to be disposed will be injected into the Lower Bell Canyon formation of the Delaware Mountain group at an interval lying between 4800' - 5900' beneath the surface.

The minimum injection rate is expected to be approximately 200 barrels of water per day. The maximum injection rate is expected to be approximately 900 barrels of water per day.

Minimum injection pressure will be approximately 450 psi. The maximum injection pressure is expected to be 950 psi.

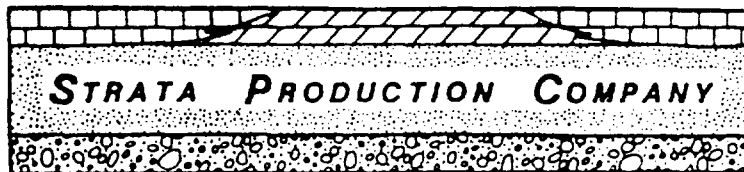
Any interested party may file an objection to this Application or may request a public hearing. Any objection or request for hearing must be filed with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, within 15 days from the date of this publication.

STRATA PRODUCTION COMPANY

A handwritten signature in cursive script, appearing to read "Frank S. Morgan".

By: Frank S. Morgan  
700 Petroleum Building  
Roswell, New Mexico 88201  
Telephone: 505-622-1127

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



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200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

March 11, 1992

VIA CERTIFIED MAIL/RETURN RECEIPT

CNG Producing Company  
1450 Paydras Street  
New Orleans, Louisiana 70112

Re: Salt Water Disposal Well  
Livingston Ridge East, Field  
Section 21, T-22-S, R-32-E, NMPM  
Lea County, New Mexico

Gentlemen:

You are the operator of an oil and gas lease within one-half mile of the Union Gilmore Federal Well #1, located in the NE/4SE/4 Sec. 21, T-22-S, R-32-E, NMPM, Lea County, New Mexico.

Strata Production Company has submitted an Application for Authorization to Inject (Form C-108) to the New Mexico Oil Conservation Division ("OCD") for authority to convert this plugged and abandoned well for the purpose of water disposal. This well will serve as a salt water disposal well for wells located in the Livingston Ridge East, Delaware Field area.

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


If you object to this Application, or feel that a public hearing is necessary, please contact the Oil Conservation Division, Post Office Box 2088, Santa Fe, New Mexico 87504-2088. You may also contact Ms. Regina Finley, Strata Production Co., 700 Petroleum Building, Roswell, New Mexico 88201, Telephone 505-622-1127, Fax 505-623-3533.

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

Thank you.

Sincerely,

STRATA PRODUCTION COMPANY

  
Mark B. Murphy  
President

MBM/ck

Enclosure: OCD Form C-108 dated March 11, 1992 with attachments.



We do not object to the Application.

**CNG Producing Company**

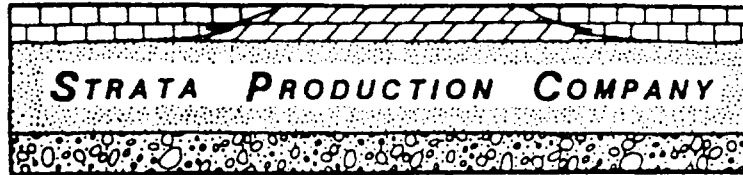
Signature: \_\_\_\_\_

Name & Title: \_\_\_\_\_

Entity: \_\_\_\_\_

Date: \_\_\_\_\_

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

March 11, 1992

VIA CERTIFIED MAIL/RETURN RECEIPT

Mr. Joe Thomas  
Exxon Company, USA  
Post Office Box 1600  
Midland, Texas 79702-1600

Re: Salt Water Disposal Well  
Livingston Ridge East, Field  
Section 21, T-22-S, R-32-E, NMPM  
Lea County, New Mexico

Dear Mr. Thomas:

You are the operator of an oil and gas lease within one-half mile of the Union Gilmore Federal Well #1, located in the NE/4SE/4 Sec. 21, T-22-S, R-32-E, NMPM, Lea County, New Mexico.

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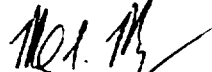
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Thank you.

Sincerely,

STRATA PRODUCTION COMPANY

  
Mark B. Murphy  
President

MBM/ck

Enclosure: OCD Form C-108 dated March 11, 1992 with attachments.

We do not object to the Application.

**Exxon Company, USA**

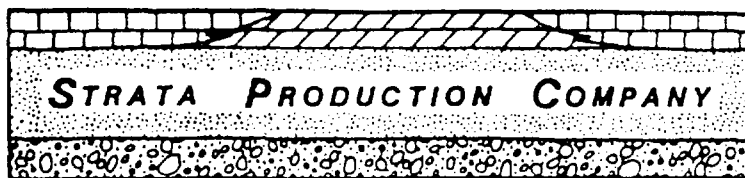
Signature: \_\_\_\_\_

Name & Title: \_\_\_\_\_

Entity: \_\_\_\_\_

Date: \_\_\_\_\_

POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

March 11, 1992

VIA CERTIFIED MAIL/RETURN RECEIPT

Ms. Kelly Hightower  
Grace Petroleum Corporation  
Broadway Executive Park  
6501 North Broadway  
Oklahoma City, Oklahoma 73116-8298

Re: Salt Water Disposal Well  
Livingston Ridge East, Field  
Section 21, T-22-S, R-32-E, NMPM  
Lea County, New Mexico

Dear Ms. Hightower:

You are the operator of an oil and gas lease within one-half mile of the Union Gilmore Federal Well #1, located in the NE/4SE/4 Sec. 21, T-22-S, R-32-E, NMPM, Lea County, New Mexico.

Strata Production Company has submitted an Application for Authorization to Inject (Form C-108) to the New Mexico Oil Conservation Division for authority to convert this plugged and abandoned well for the purpose of water disposal. This well will serve as a salt water disposal well for wells located in the Livingston Ridge East, Delaware Field area.

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Thank you.

Sincerely,

STRATA PRODUCTION COMPANY

  
Mark B. Murphy  
President

MBM/ck

Enclosure: OCD Form C-108 dated March 11, 1992 with attachments.

We do not object to the Application.

**GRACE PETROLEUM CORPORATION**

Signature: \_\_\_\_\_

Name & Title: \_\_\_\_\_

Entity: \_\_\_\_\_

Date: \_\_\_\_\_



# TRETOLITE

Chemicals and Services

PETROLITE

16010 Barker's Point Lane • Houston, Texas 77079  
713 558-5200 • Telex: 4620346 • FAX: 713 589-4737

Reply to: P.O. Box FF  
Artesia, New Mexico 88210  
(505) 746-3588 Phone  
(505) 746-3580 Fax

## WATER ANALYSIS REPORT

Company : STRATA PRODUCTION  
Address : LOCO HILLS, NM  
Lease : J. C. MILL RANCH  
Well : RED TANK SEC 14  
Sample Pt. : WELLHEAD

Date : 03/18/92  
Date Sampled : 03/016/92  
Analysis No. : 001

ANALYSIS		mg/L		* meq/L
1. pH	7.5			
2. H2S	-			
3. Specific Gravity	1.000			
4. Total Dissolved Solids		104.9		
5. Suspended Solids				
6. Dissolved Oxygen				
7. Dissolved CO2		24 PPM		
8. Oil In Water				
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	6.1	HCO3	0.1
12. Chloride	Cl	43.0	Cl	1.2
13. Sulfate	SO4	0.0	SO4	0.0
14. Calcium	Ca	48.0	Ca	2.4
15. Magnesium	Mg	19.5	Mg	1.6
16. Sodium (calculated)	Na	-61.7	Na	-2.7
17. Iron	Fe	0.0		
18. Barium	Ba	50.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		200.0		

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt X meq/L	= mg/L
2 *Ca <----- *HCO3	0	Ca(HCO3)2	81.0	0.1
----- /----->	-----	CaSO4	68.1	
2 *Mg -----> *SO4	0	CaCl2	55.5	1.2
----- <----- /	-----	Mg(HCO3)2	73.2	67
-3 *Na -----> *Cl	1	MgSO4	60.2	
-----	-----	MgCl2	47.6	
Saturation Values Dist. Water 20 C		NaHCO3	84.0	
CaCO3	13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O	2090 mg/L	NaCl	58.4	
BaSO4	2.4 mg/L			

## REMARKS:

----- D. CANADA / MLAB / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
DON CANADA

