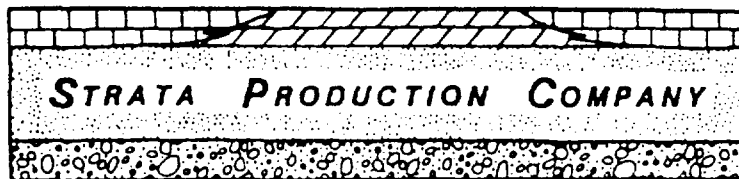


POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



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

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

March 19, 1993

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: Proposed Water Disposal Well  
SPC - Nash Unit #4  
990' FNL & 330' FEL  
Section 13-23S-29E  
Eddy County, New Mexico

Gentlemen:

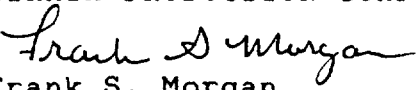
Strata Production Company proposes converting the captioned well for water disposal into the Bell Canyon formation of the Delaware Mountain Group. The well will be used to dispose of produced water from the Brushy Canyon formation in the Nash Delaware field. Please find enclosed the following data pertinent to our application:

1. Form C-108 with information attached.
2. Area of Review Map.
3. Wellbore Diagram - Nash Unit #4.
4. Proposed Wellbore Diagram - Nash Unit #4.
5. Logs of proposed disposal zone - Nash Unit #4.
6. Wellbore Diagrams of plugged wells in Area of Review.
7. Copies of public notice and notices to offset operators.
8. Analysis from fresh water source.

Should you have any questions regarding this matter, please contact this office.

Sincerely,

STRATA PRODUCTION COMPANY

  
Frank S. Morgan  
Vice President

FSM:cjg  
Enclosures

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: P. O. Box 1030, Roswell, New Mexico 88202-1030  
Contact party: Frank S. Morgan, Vice President 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/Operations  
Signature: Frank S. Morgan Date: March 19, 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. \_\_\_\_\_

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

7 2  
AOR = 0 + 0 P&A

**ANSWERS TO FORM C-108:**

III. See attached current and proposed well diagrams.

IV. No.

V. See attached Map.

VI. Table of data of the wells within the Area of Review.

**Proposed Injection Well:**

**Nash Unit #4:** Located 990' FNL and 330' FEL of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 5/9/76. Set 332' of 13 3/8" 48# H-40 ST&C casing. Cemented with 400 sacks Class "C" with 2% CaCL and 1/4# Flocele. Ran 1" with 200 sacks Class "C" with 2% CaCL. Circulated 40 sacks to pit. Set 3200' of 8 5/8" 32# and 24# K-55 ST&C casing. Cemented with 800 sacks Halliburton Lite with 18% salt, 3# Gilsonite and 1/4# Flocele. Tail in with 200 sacks Class "C" with 6# salt and 1/4# Flocele. Circulated 150 sacks to pit. TD 5100'. PBTD 4855'. Set 5100' of 5 1/2" 17# and 15.5# K-55 LT&C casing. Cemented with 560 sacks Class "C" 50/50 Poz with 8# salt, 2% gel, .5% CFR-2 and 1/2# Flocele. Ran CBL. Top of cement at 3420'. Tested casing to 1000# PSI. Held OK. Perforated 4952'-4956' (2 jspf). Acidize with 500 gal 15% HCL. Perforated 4930'-4936' (2 jspf). Acidize with 500 gal 15% HCL. Set CIBP at 4890' with 35' cement on top. Perforated 4785'-4788' (4 jspf). Put on pump 6/7/76.

**Off-Set Wells in Area of Review:**

**Nash Unit #1:** Located 1980' FNL and 660' FEL of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 7/25/74. Set 300' of 16" 65# casing. Cemented with 375 sacks Class "C". Set 3325' of 10 3/4" 40.5# casing. Cemented with 1628 sacks Class "C". Set 10,908 7 5/8" 26.4# and 39.0# casing. Cemented with 1450 sacks Class "H". Set 5" liner to 13,485'. Top of liner at 10,551'. Cemented with 650 sacks

Class "H" with .8% Halaide-22 and 3# KCL per sack. TD 13,850' on 12/3/74. Perforated Morrow from 13,751'-13,776'. Acidize with 2000 gal 7 1/2% MS acid. Set CIBP at 13,695' and place 20 sacks cement on top. PBTB 13,672'. Perforated 13,175'-13,609'. Acidize with 5000 gal 7 1/2% MS acid. Perforated Strawn 12,138'-12,150'. Acidize with 2500 gal 15% HCL. Cut 2 7/8" tubing at 12,103'. Set CIBP at 12,100 with 35' cement on top. Set CIBP at 11,405' with 35 sacks cement on top. Set 7 5/8" CIBP at 10,400' with 35 sacks cement on top. Set 200' plug with 50 sacks Class "H" from 8400'-8600'. Set 200' plug with 50 sacks Class "H" from 6800'-7000'. Perforated Upper Cherry Canyon 4936'-4942' with 4 spf and 4780'-4784' with 4 spf. Acidize with 1000 gal SHA 7 1/2% NEFE. RIH with 2 3/8" 4.7# J-55 tubing and return well to production.

Nash Unit #2: Located 1350' FNL and 1980' FWL Unit F of Section 18, Township 23 South, Range 30 East, Eddy County, New Mexico. Spud 11/6/75. Set 307' 16" 65# H-40 ST&C casing. Cemented with 220 sacks RFC and 100 sacks Class "H" with 2% CaCL. Circulated. Set 3300' 10 3/4" 40.5# and 45.5# K-55 ST&C casing. Cemented with 350 sacks RFC and 1600 sacks DLW with 7# Kolite, 1/4# Celloflakes and 2% CaCL. Tail in with 300 sacks Class "C" with 2% CaCL. Circulated 100 sacks. Set 10,982' 7 5/8" 33.7#, 29.7#, 26.4# S-95 LT&C. DV tool at 6955'. Cemented with 700 sacks DLW with .5% D-60, 3% salt and 1/4# Celloflakes. Cemented second stage with 1300 sacks DLW, .6% D-60, 3% salt and 1/4# Celloflakes, and 150 sacks Class "H" Neat. Ran 1" with 200 sacks Class "C" with 2% CaCL and 1/4# Celloflakes. Circulated. Drilled to 13,946' on 3/3/76. Ran 82 joints 5" 23.20# C-75 Hydrill SFJP with TIW liner hanger and PBP. Top of liner at 10,962'. Cemented with 550 sacks Class "H" with .3% D-65 reducer and .25% D-13 retarder. Squeeze liner with 300 sacks Class "H". Tested liner to 3000#. Held OK. Perforated 13,416'-13,654'. Acidize with 3500 gal 7 1/2% NEFE. Frac with 36,000 gal 3%, 13,000 gal liquid CO2, 42000# 100 mesh and 50000# 20/40 with 10% beads. Perforated 12,576'-12,602'. Acidize with 9000 gal 15% NEFE. Perforated 12,432'-12,441'. Acidize with 2000 gal 7 1/2% NEFE. Put on production 12/18/87.

Nash Unit #3: Located 1980' FSL and 1980' FWL of Section 12, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 5/9/76. Set 317' of 20" 94# casing. Cemented with 525 sacks Class "C". Set 3123' of 13 3/8" 72# casing. Cemented

with 1225 sacks Class "C". Cemented second stage with 2200 sacks Class "H". DV tool at 6475'. Set 5 1/2" liner to 13,770'. Top of liner at 10,622'. Cemented with 1025 sacks Class "H". TD 13,771'. Ran 1" between 9 5/8" and 13 3/8" casing. Perforate 12,314'-12,576'. Acidize with 4000 gal 15% HCL. Producing.

Nash Unit #5: Located 2310' FSL and 330' FEL of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 7/16/76. Set 313' of 13 3/8" 68# and 72# K-55 ST&C casing. Cemented with 350 sacks Class "C" with 1/4# Flocele and 2% CaCL. Tail in with 200 sacks Class "C" with 2% CaCL. Circulated. Set 3169' 8 5/8" 24# and 32# K-55 ST&C casing. Cemented with 800 sacks HLW with 15# salt, 3# Gilsonite and 1/4# Flocele. Tail in with 200 sacks Class "C" with 6# salt and 1/4# Flocele. Drilled 5100' TD. After evaluation well was plugged in the following manner:

Spot 60 sacks Class "H" plug from 4900'-4750'.  
Spot 60 sacks Class "H" plug from 3210'-3060'.  
CIBP set at 3002'. Spot 267 sacks Class "H"  
plug from 3000'-2120'. Spot 267 sacks Class  
"H" plug from 2093'-1213'. Spot 267 sacks  
Class "H" plug from 1186'-306'. Spot 10 sack  
plug at surface. P&A on 7/28/76. Diagram  
attached.

Nash Unit #6: Located 1980' FNL and 330' FWL Unit E of Section 18, Township 23 South, Range 30 East, Eddy County, New Mexico. Spud 7/30/76. Set 276' of 13 3/8" 48# H-40 ST&C casing. Cemented with 550 sacks Class "C" with 1/4# Flocele. Tail in with 350 sacks Class "C". Set 3112' of 8 5/8" 32# and 24# K-55 ST&C casing. Cemented with 800 sacks Howco Lite with 3# Gilsonite, 15# salt and 1/4# Flocele. Tail in with 200 sacks Class "C" with 6# salt per sack. Drilled to 5100' TD. After evaluation, well was plugged in following manner:

Spot 60 sacks Class "H" plug from 4900'-4750'.  
Spot 60 sacks Class "H" plug from 3200'-3050'.  
CIBP at 3000'. Spot 266 sacks Class "H" plug  
from 3000'-2105'. Spot 266 sacks Class "H"  
plug from 2000'-1105'. Spot 266 sacks Class  
"H" plug from 1100'-205'. Spot 10 sack plug  
at surface. P&A on 8/11/76. Diagram  
attached.

Nash Unit #7: Located 685' FNL and 1295' FWL of Section 18, Township 23 South, Range 30 East, Eddy County, New Mexico. Spud 8/2/79. Set 13 3/8" casing to 3265'. Cemented with 3550 sacks Class "C" circulated. Set 8 5/8" casing to 11,111'. Cemented with 3400 sacks Class "H". Circulated. Set 5 1/2" casing to 13,947'. Cemented with 1500 sacks Class "H". Tie back to 8 5/8". Perforated Morrow 13,624'-13,879'. Acidize not available. Producing.

Nash Unit #8: Located 990' FSL and 990' FEL of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Abandoned Location.

Nash Draw Unit #9: Located 860' FNL and 2210' FEL Unit B of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 5/28/92. Set 305' of 13 3/8" 54.5# J-55 casing. Cemented with 475 sacks Premium Plus with .3% Gilsonite and 1/4# Flocele. Circulated. Set 3012' of 8 5/8" 32# and 24# J-55 casing. Cemented with 1150 sacks Halliburton Lite with 10# salt. Tail in with 200 sacks Premium Plus. Circulated. Set 6980' 5 1/2" 17# J-55 casing. Cemented with 550 sacks 50/50 Poz with 5# salt and 1/4# Flocele. Cemented second stage with 500 sacks 50/50 Poz with 5# salt and 1/4# Flocele. DV tool set at 4482'. Perforated 6713'-6749'. Acidize with 2500 gal 7 1/2% NEFE. Frac with 41,000# 16/30. Perforated 6831'-6880'. Acidize with 2000 gal 7 1/2% NEFE. Frac with 74,000# 16/30. Producing.

Nash Draw Unit #10: Located 1750' FNL and 1800' FEL of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico. Spud 12/7/92. Set 310' of 13 3/8" 48# J-55 casing. Cemented with 475 sacks Premium Plus with 5# Gilsonite, 1/4# Flocele and 2% CaCL. Circulated. Set 3015' of 8 5/8" 24# and 32# J-55 casing. Cemented with 1050 sacks Halliburton Lite with 10# salt and 1/4# Kwikseal per sack. Tail in with 200 sacks Premium Plus with 5# salt. Circulated. Set 7198' of 5 1/2" 17# J-55 casing. Cemented with 525 sacks Premium Plus with .6% Halaide-322, 3% salt and 8# Silicalite per sack. Cemented second stage with 600 sacks Halliburton Lite with 1/4# Flocele and 8# salt. Tail in with 100 sacks Class "C". Perforated 6846'-6864'. Acidize with 1200 gal 7 1/2% NEFE. Frac with 35,800# 16/30 RC. Producing.

## VII/VIII. INJECTION ZONE/PROCEDURE

<u>Zones to be injected:</u>	3240'-3268'	3458'-26'
	3292'-3351'	3502'-3654'
	3372'-3380'	3666'-3686'
	3406'-3412'	3716'-3734'

This interval does not produce oil in the vicinity. The lowest injection zone is approximately 1100 feet above the uppermost pay objective in the Nash Delaware field. The uppermost injection zone is 46' below the top of the Delaware. Mudlog shows were not encountered in any of the Nash Unit wells in this interval.

TYPE INJECTION SYSTEM:	Closed
PROPOSED DAILY INJECTION RATE:	400 barrels initial (1 BPM)
MAXIMUM DAILY INJECTION RATE:	600 barrels (1.5 BPM)
AVERAGE INJECTION PRESSURE:	300 psi
MAXIMUM INJECTION PRESSURE:	650 psi

Water Compatibility: The water to be injected will initially come from the Nash Draw Unit #1, #9, #10 and #13 wells producing from 5350' to 7100'. Currently the field produces approximately 360 BOPD and 380 BWPD. Additional drilling and workovers in the Delaware are slated for May, 1993 and should produce more oil and water.

IX. Stimulation Program: None

X. See attached log showing perforations.

XI. Water Analysis

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.







STRATA PRODUCTION CO.  
NASH UNIT #4  
990' FNL & 330' FEL  
Section 13-23S-29E  
Eddy County, New Mexico  
KB: 3014' GL: 3002'

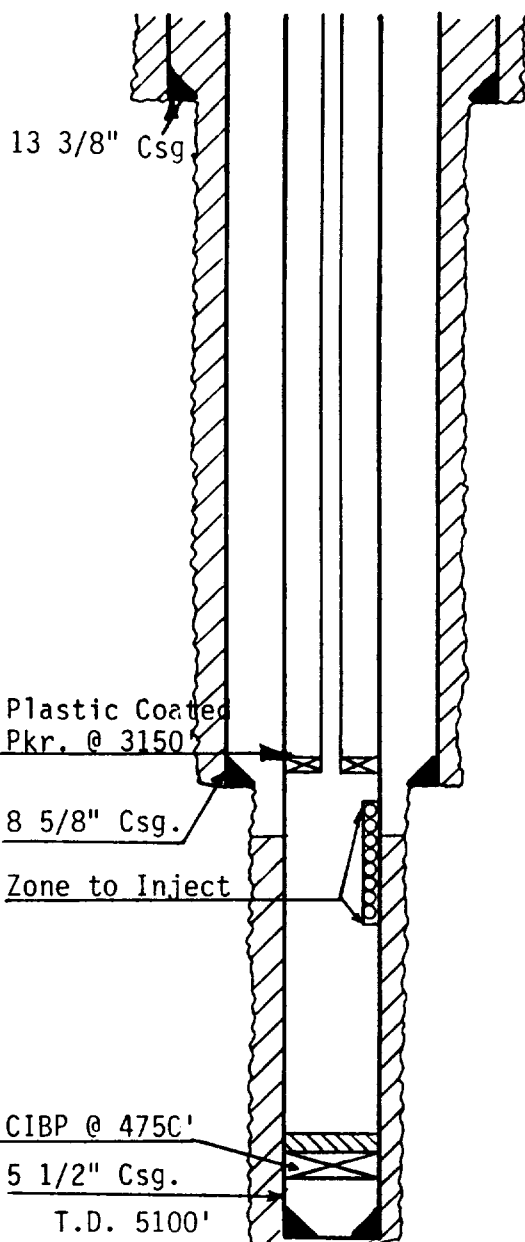
Plugging	Bit	Casing	Depth	Cement
	17 1/2"	13 3/8"	300'	600 sx. Circ. to Pits
	11"	8 5/8"	3200'	1000 sx. Circ. to Pits
			3420'	C.B.L. Top of cmt.
		2 7/8" tubing	4847'	
Perf. 4785'-88' 4 JSPF  35' cmt C.I.B. P.C. 4890'  Perf. 4930'-36' 2 JSPF Perf. 4952'-56' 2 JSPF	7 7/8"	5 1/2"	5100'	560 sx.

## INJECTION WELL DATA SHEET

OPERATOR		LEASE		
Strata Production Company		Nash Draw Unit		
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
#4	990' FNL & 330' FEL	13	23S	29E

Schematic

Tubular Data



## Surface Casing

Size 13 3/8" " Cemented with 600 gx.  
 TOC Circulated feet determined by Circulated  
 Hole size 17 1/2"

## Intermediate Casing

Size 8 5/8" " Cemented with 1000 gx.  
 TOC Circulated feet determined by Circulated  
 Hole size 11"

## Long string

Size 5 1/2" " Cemented with 560 gx.  
 TOC 3420' feet determined by Cement Bond Log  
 Hole size 7 7/8"  
 Total depth 5100'

## Injection Interval

3241' feet to 3784' feet  
 (perforated or open-hole, indicate which)

Indicated on Injection Procedure.

## PROCEDURE FOR INJECTION:

1. Set CIBP @ 4750' w/35 ft on top. Cover perms 4785'-88.
2. Shoot squeeze holes above cement top @ 3420'.
3. Break circ. to bring cement inside Intermediate csg.
4. Run CBL across zone to insure proper cement.
5. Perforate zones from 3250'-3785' and acidize w/7½% acid.
6. Lay down work string and pick-up 2 3/8" plastic coated tubing w/plastic coated 5 1/2" pkr.
7. Circulate hole w/pkr. fluid and set Pkr. @ 3150'
8. Build battery and prepare for injection.

Tubing size 2 3/8" lined with Plastic set in a  
 (material)  
Halliburton Model "R" packer at 3150' feet  
 (brand and model)

(or describe any other casing-tubing seal).

## Other Data

1. Name of the injection formation Bell Canyon Delaware
2. Name of field or Pool (if applicable) Nash Draw Delaware
3. Is this a new well drilled for injection? ☐ Yes ☒ No  
 If no, for what purpose was the well originally drilled? Oil & Gas
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (socks of cement or bridge plug(s) used)  
Perforated at 4930'-36' and 4952'-56'. CIBP set at 4890' with 35' cement.  
Perforated at 4785'-88'.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. The lowest injection zone is approximately 1100' above the uppermost pay objective in the Nash Draw Delaware field. The uppermost injection zone is 46' below the top of the Delaware.

TOP OF DELAWARE  
BELL CANYON FM.

CASING SHOE  
3203'

STRATA PRODUCTION COMPANY

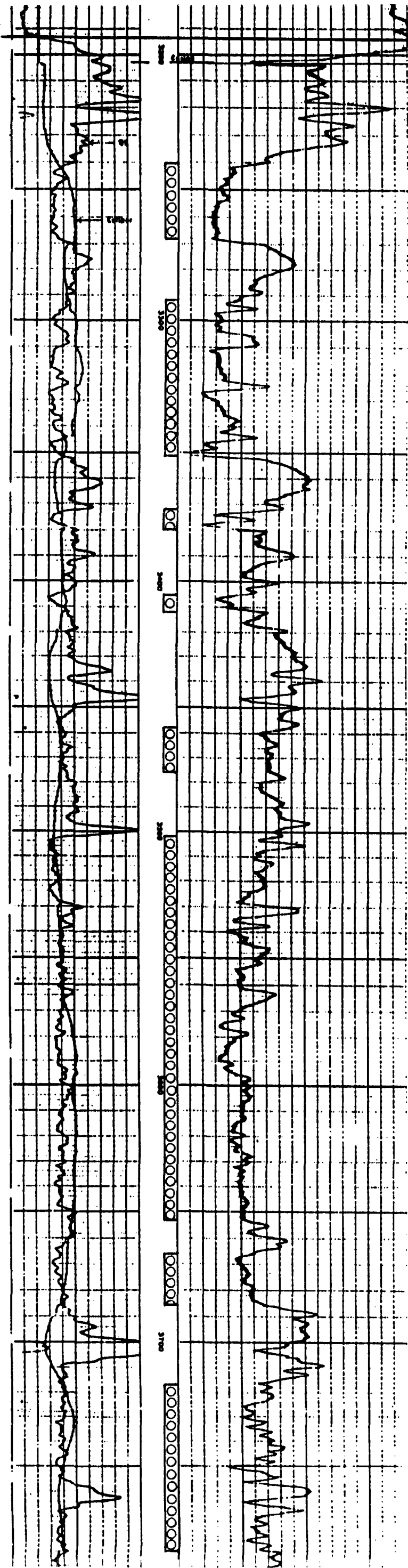
NASH UNIT #4

SECTION 13, T23S, R29E

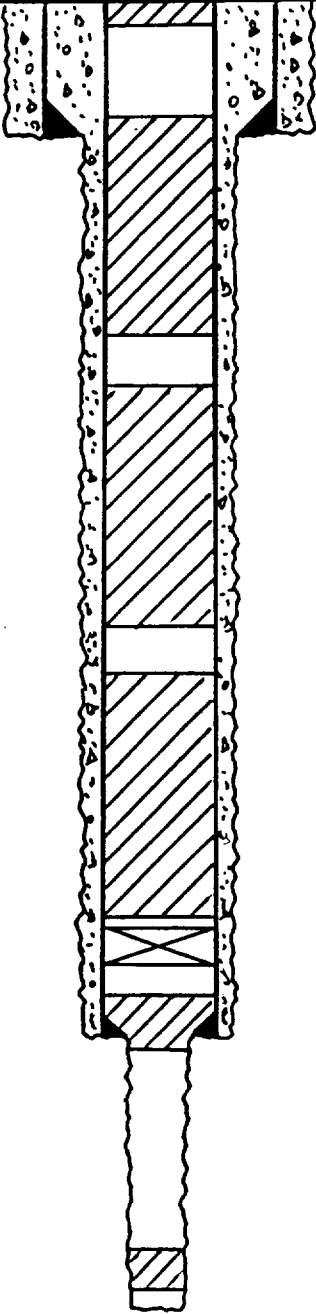
990'FNL & 330'FEL

K.B.=3014'

GROSS PERF. INTERVAL 3241'-3784'



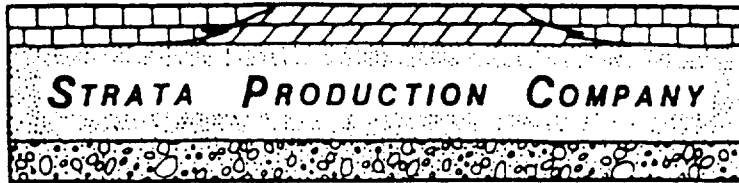
NASH UNIT #5  
 2310' FSL & 330' FEL  
 Section 13-23S-29E  
 Eddy County, New Mexico

Plugging		Bit	Casing	Depth	Cement
10 Sx. @ Surface			13 3/8"	310'	550 Sx. Class "C" Circ. to Surf.
1,186' - 306' 267 Sx Class "H"					
2,093' - 1,213' 267 Sx Class "H"					
3,000' - 2,120' 267 Sx Class "H"					
C.I.B.P.C 3,002'					
3,210' - 3,060' 60 Sx. Class "H"			8 5/8"	3160'	1000 Sx. Class "C" Circ. to Surf.
4,900' - 4,750' 60 Sx Class "H"				TD 5100'	

NASH UNIT #6  
 1980' FNL & 330' FWL  
 Section 18-23S-30E  
 Eddy County, New Mexico

Plugging	Bit	Casing	Depth	Cement
10 Sx. @ Surface				
1,100' - 205' 266 Sx Class "H" + G# Salt		13 3/8"	273'	900 Sx. Class "C" Circ. to Surf.
2,000' - 1,105' 266 Sx Class "H" + G# Salt				
3,000' - 2,105' 266 Sx Class "H" + G# Salt				
C.I.B.P.C. 3,000'				
3,200 - 3,050 60 Sx. Class "H"		8 5/8"	3112	1000 Sx. Class "C" Circ. to Surf.
4,900' - 4,750' 60 Sx Class "H"			TD 5100'	

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 19, 1993

Carlsbad Current-Argus  
620 S. Main  
Carlsbad, New Mexico 88220

Re: Legal Publications

Gentlemen:

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

Please publish the notice one (1) time only and forward an Affidavit of Publication along with your invoice to:

Frank S. Morgan  
Strata Production Company  
P. O. Box 1030  
Roswell, New Mexico 88202-1030

Should you have any questions regarding this matter, please contact this office. Thank you for your cooperation.

Sincerely,

STRATA PRODUCTION COMPANY

A handwritten signature in cursive script that reads "Frank S. Morgan".

Frank S. Morgan  
Vice President

FSM:cjg

Enclosure



## PUBLIC NOTICE

### APPLICATION FOR WATER DISPOSAL

Strata Production Company, P. O. Box 1030, Roswell, New Mexico 88202-1030, (Contact: Frank S. Morgan, 505-622-1127), has filed Application with 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 Nash Unit #4 well located 990' FNL and 330' FEL of Section 13, Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico.

The purpose of the water injection well is to dispose of salt water produced from the Nash 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 Bell Canyon formation of the Delaware Mountain group at an interval between 3240 feet to 3734 feet beneath the surface.

The minimum injection rate is expected to be approximately 400 barrels of water per day. The maximum injection rate is expected to be approximately 600 barrels of water per day.

Minimum injection pressure is expected to be approximately 300 PSI. The maximum injection pressure is expected to be approximately 650 PSI.

Any interested party may file an objection to the 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 publication.

STRATA PRODUCTION COMPANY

By: Frank S. Morgan  
Frank S. Morgan  
P. O. Box 1030  
Roswell, New Mexico 88202-1030  
Telephone 505-622-1127

# HALLIBURTON DIVISION LABORATORY

## HALLIBURTON SERVICES

### ARTESIA DISTRICT

#### LABORATORY REPORT

No. W121, W122, & W123-93

TO Strata Production  
648 Petroleum Building  
Roswell, NM 88201

Date March 25, 1993

This report is the property of Halliburton Services and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management. It may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Services

Submitted by \_\_\_\_\_ Date Rec. \_\_\_\_\_


Well No. \_\_\_\_\_ Depth \_\_\_\_\_ Formation \_\_\_\_\_

Field \_\_\_\_\_ County \_\_\_\_\_ Source \_\_\_\_\_

	3-25-93 Nash Draw #10	3-24-93 Nash Draw #10	3-24-93 Fresh Water
Resistivity .....	0.050 @ 70°	0.051 @ 70°	4.18 @ 70°
Specific Gravity ..	1.204 @ 70°	1.1200 @ 70°	1.0016 @ 70°
pH .....	7.0	7.2	7.0
Calcium .....	33,040	29,901	2,478
Magnesium .....	3,607	4,008	902
Chlorides .....	188,000	184,000	600
Sulfates .....	600	800	200
Bicarbonates .....	275	244	153
Soluble Iron .....	250	250	0
<u>KCL</u> .....	Trace	1/2%	
-----	-----	-----	-----
-----	-----	-----	-----

Remarks:

MAR 19 1993

  
 Respectfully submitted

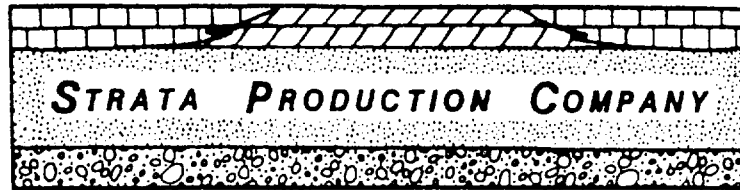
Analyst: Eric Jacobson - Operations Engineer

HALLIBURTON SERVICES

#### NOTICE:

This report is for information only and the content is limited to the sample described. Halliburton makes no warranties, express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage, regardless of cause, including any act or omission of Halliburton, resulting from the use hereof

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

RECEIVED

3 APR 21 AM 8 55

April 15, 1993

Oil Conservation Division  
ATTN: Ben Stone  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

**ILLEGIBLE**

Re: Proposed Water Disposal Well  
SPC - Nash Unit #4  
990' FNL & 330' FEL  
Section 13-23S-29E  
Eddy County, New Mexico

Dear Ben:

Pursuant to our telephone conversation this morning, enclosed herewith please find a copy of the Legal Notice. There are no offset operators.

Should you have any questions regarding this matter, please contact this office.

Sincerely,

STRATA PRODUCTION COMPANY

*Carol J. Garcia*

Carol J. Garcia  
Production Supervisor

CJG:ms

Enclosures

# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,  
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

MARCH 30, 19 93  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_  
\_\_\_\_\_, 19 \_\_\_\_

that the cost of publication is \$ 42.00,  
and that payment thereof has been made  
and will be assessed as court costs.

E C Cantwell

Subscribed and sworn to before me this

30 day of MARCH, 19 93

Ronda X Martin

My commission expires 7/22/96  
Notary Public

March 30, 1993

## PUBLIC NOTICE

### APPLICATION FOR WATER DISPOSAL

Strata Production Company,  
P.O. Box 1030, Roswell, New  
Mexico 88202-1030, (Contact:  
Frank S. Morgan, 505-622-  
1127), has filed Application  
with the Oil Conservation Divi-  
sion, Energy, Minerals and  
Natural Resources Depart-  
ment, State of New Mexico,  
for Administrative Approval  
and authority to inject salt wa-  
ter into the Nash Unit #4 well  
located 990' FNL and 330'  
FEL of Section 13, Township  
23 South, Range 29 East,

NMPM, Eddy County, New  
Mexico.

The purpose of the water in-  
jection well is to dispose of  
salt water produced from the  
Nash Delaware field as cur-  
rently designated by the Oil  
Conservation Division and as  
may be extended by additional  
drilling.

Water to be disposed will be  
injected into the Bell Canyon  
formation of the Delaware  
Mountain group at an interval  
between 3240 feet to 3734  
feet beneath the surface.

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

Minimum injection pressure is  
expected to be approximately  
300 PSI. The maximum injec-  
tion pressure is expected to  
be approximately 650 PSI.

Any interested party may file  
an objection to the Application  
or may request a public hear-  
ing. 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 publication.

### STRATA PRODUCTION COMPANY

By: Frank S. Morgan  
P.O. Box 1030  
Roswell, New Mexico  
88202-1030  
Telephone 505-622-1127