

UNITED STATES **N.M. Oil Cons. DIV-Dist. 2**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**1301 W. Grand Avenue**  
**Artesia, NM 88210**

**FORM APPROVED**  
Budget Bureau No. 1004-0135  
Expires March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other \_\_\_\_\_

**RECEIVED**

2. Name of Operator

**DEVON ENERGY PRODUCTION COMPANY, LP.**

**SEP 08 2004**

**OFF-ARTESIA**

3. Address and Telephone No.

**20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405) 552-4615**

4. Location of Well (Footage. Sec., T., R., M., or Survey Description)

**SEC 8 T23S R31E NWSE 1400' FSL 1540 FEL**

5. Lease Designation and Serial No.

**NMNM77046**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**NORTH PURE GOLD 8  
FEDERAL 11**

9. API Well No.

**30-015-32619**

10. Field and Pool, or Exploratory Area

**LOS MEDANOS DELAWARE**

11. County or Parish, State

**EDDY COUNTY, NM**

**CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other \_\_\_\_\_

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☒ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

DEPCO is submitting a request to convert this well to salt water injection for pressure maintenance. Please find a copy of C108 application attached and letter of approval from Santa Fe, New Mexico dated June 2, 2004.

**APPROVED**

**SEP - 7 2004**

**LES BABYAK  
PETROLEUM ENGINEER**

14. I hereby certify that the foregoing is true and correct

Signed Ronnie Slack

Ronnie Slack

Title Engineering Technician

Date 9/3/04

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations to any matter within its jurisdiction.



Devon Energy Corporation  
20 North Broadway  
Oklahoma City, Oklahoma 73102-8260

May 4, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

RE: Form C-108, Application for Authorization to Inject  
North Pure Gold 8 Federal 11  
Eddy County, NM  
Section 8, T23S, R31E

**RECEIVED**

SEP 09 2004

**OCD-ARTESIA**

Gentlemen:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject. Devon wishes to take produced waters from the Delaware sand and re-inject back into the Delaware sand for pressure maintenance purposes using the North Pure Gold 8 Federal 11.

If you have any questions, please contact Jim Blount at (405)-228-4301 or myself at (405)-552-4615.  
Thank you for your cooperation in this matter.

Sincerely,

Ronnie Slack  
Engineering Technician

RS/rs

Enclosure  
cc: OCD, Artesia Office

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ Yes ☐ No
- II. OPERATOR: Devon Energy Production Company, LP  
ADDRESS: 20 North Broadway, Suite 1500, Oklahoma City, Oklahoma 73102  
CONTACT PARTY: Ronnie Slack PHONE: 405-552-4615
- 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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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 sources 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: Ronnie Slack TITLE: Engineering Technician  
SIGNATURE: Ronnie Slack DATE: 5/4/04  
E-MAIL ADDRESS: Ronnie.Slack@DVN.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

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

RECEIVED

SEP 09 2004

ODD-ARTESIA

### 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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

INJECTION WELL DATA SHEET

OPERATOR: Devon Energy Production Company, LP

WELL NAME & NUMBER: North Pure Gold 8 Federal 11

WELL LOCATION: 1400 FSL & 1540 FEL J  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 490 sx. or ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circ. cement

Intermediate Casing

Hole Size: 11" Casing Size: 8-5/8"

Cemented with: 1090 sx. or ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circ cement

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"

Cemented with: 800 sx. or ft<sup>3</sup>

Top of Cement: 3900' Method Determined: Temp Survey

Total Depth: 8160'

Injection Interval

7900' feet to 7933'

(Perforated or Open Hole; indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 2-7/8", 6.5#          Lining Material: IPC         

Type of Packer: 5-1/2" Lok Set         

Packer Setting Depth: 7850'         

Other Type of Tubing/Casing Seal (if applicable):         

Additional Data

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

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

2. Name of the Injection Formation: Delaware-Lower Brushy Canyon         

3. Name of Field or Pool (if applicable): Los Medanos         

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.         

The well is perforated in the Delaware-Cherry Canyon from 7256' to 7530'. The Cherry Canyon perfs will be squeezed with cement. The well is also perforated in the Delaware-Lower Brushy Canyon from 7900' to 7933'. The Delaware-Lower Brushy Canyon is the proposed injection zone.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:         

Delaware-Cherry Canyon at 5014', Delaware-Brushy Canyon at 6652, Bone Spring at 7973', Morrow at 13966'. The Bone Spring is not productive in the area of review.

North Pure Gold 8 Federal 11  
APPLICATION FOR INJECTION  
Form C-108 Section III

III. Well Data--On Injection Well

A. Injection Well Information

- (1) Lease North Pure Gold 8 Federal  
Well No 11  
Location 1400' FSL & 1540' FEL  
Sec.Twn.Rnge Section 8, T23S, R31E  
Cnty. State Eddy County, New Mexico
- (2) Casing 13-3/8", 48#, H40, @ 461' in 17-1/2" hole. Cmt'd w/ 490 sxs.  
TOC @ surface. Cement circulated.  
8-5/8", 32#, J55, @ 4056' in 11" hole. Cmt'd w/ 1090 sxs.  
TOC @ surface. Cement circulated.  
5-1/2", 15.5# & 17#, J55, LT&C, @ 8160'. Cmt'd w/ 800 sxs.  
TOC @ 3900', determined by Temp Survey (3/7/03)
- (3) Injection Tubing 2-7/8", 6.5#, IPC run to +/- 7850'
- (4) Packer 5-1/2" Lok Set @ +/- 7850'

B. Other Well Information

- (1) Injection Formation: Delaware-Lower Brushy Canyon  
Field Name: Los Medanos
- (2) Injection Interval: 7900' to 7933' (cased hole, perforated)
- (3) Original Purposed of Wellbore:  
The North Pure Gold 8 Federal 11 was drilled and completed 3/20/03 as an oil producer in the Delaware-Lower Brushy Canyon formation at 7900' to 7933'. The well tested 5 BO, 9 MCFD, & 226 BWD. The well was producing 6 BOD, 37 MCFD, and 21 BWD by March 2004. Perforations were added in the Delaware-Cherry Canyon from 7256' to 7267' and 7520' to 7530' in March 2004. Only 1% oil cut was swabbed after adding perforations. The well is currently shut in.
- (4) Other perforated intervals:  
The well is currently perforated in the Delaware-Cherry Canyon from 7256' to 7267' and 7520' to 7530'. The well is also perforated in the Delaware-Lower Brushy Canyon at 7900' to 7933'. TOC on the 5-1/2" production casing is at 3900' determined by Temp. Survey. The Delaware-Cherry Canyon perforations will be squeezed with cement and isolated from Delaware-Lower Brushy Canyon injection perfs with a packer at +/- 7850'.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well if any.  
The next lower oil zone is the Bone Spring at 7973', but is unproductive in the area of the proposed well.

23S 31E

ENRON OIL & GAS CO  
17 JAMES RANCH UNIT  
11300

CONOCO INCORPORATED  
7 JAMES RANCH UNIT  
14590

GRACE MICHAEL F INC  
4150 1 CABIN BABY FEDERAL

BASS ENTRPRS PROD CO  
75 JAMES RANCH UNIT  
11305

BASS ENTRPRS PROD CO  
30 JAMES RANCH UNIT

BASS ENTRPRS PROD CO  
87 JAMES RANCH UNIT

BELCO PET NRTH AMER  
14 JAMES RANCH UNIT  
14640

YATES PETR CORP  
10 GLOW WORM 'ALX' FED

DEVON SFS OPR INC  
10 NO. PURE GOLD '8' FED

SANTA FE E.O.P.  
5 NO PURE GOLD '9' FED  
SANTA FE E.O.P.  
1 P G 4 FED

SANTA FE ENR OP PRTN  
3 NO. PURE GOLD '8' FED

SANTA FE E.O.P.  
4 NO. PURE GOLD '9' FED

SANTA FE E.O.P.  
2 NO. PURE GOLD '8' FED

SANTA FE E.O.P.  
7 NO. PURE GOLD '9' FED.

SANTA FE E.O.P.  
6 NO. PURE GOLD '8' FED

SANTA FE E.O.P.  
1 NO PURE GOLD '8' FED

SANTA FE E.O.P.  
3 NO PURE GOLD '9' FED

SANTA FE E.O.P.  
5 NO. PURE GOLD '8' FED

SANTA FE E.O.P.  
9 NO PURE GOLD '8' FED

SANTA FE ENR OP PRTN  
1 NO PURE GOLD '9' FED

BELCO DEV CORP  
15 JAMES RANCH UNIT

BASS ENTRPRS PROD CO  
89 JAMES RANCH UNIT

SANTA FE ENR OP PRTN  
10 PURE GOLD 'C-17' FED

YATES PETR CORP  
17 MEDANO 'VA' ST

YATES PETROLEUM CORP  
16 MEDANO 'VA' ST

BASS  
56 JAMES RANCH UNIT

SANTA FE E.O.P.  
5 PURE GOLD 'C-17' FEDERAL

YATES PETR CORP  
15 MEDANO 'VA' ST

BASS  
55 JAMES RANCH UNIT

SANTA FE E.O.P.  
2 PURE GOLD 'C-17' FEDERAL

YATES PETR CORP  
2 MEDANO 'VA' STATE

YATES PETROLEUM CORP  
12 MEDANO 'VA' STATE

BASS  
57 JAMES RANCH

SANTA FE E.O.P.  
9 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
3 PURE GOLD 'C-17' FED

YATES PETR CORP  
3 MEDANO 'VA' ST

SANTA FE E.O.P.  
14 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
12 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
8 PURE GOLD 'C-17' FED

YATES PETR CORP  
4 MEDANO 'VA' ST

YATES PETR CORP  
10 MEDANO 'VA' ST

DEVON SFS OPR INC  
15 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
1 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
7 PURE GOLD 'C-17' FED

YATES PETR CORP  
5 MEDANO 'VA' ST

YATES PETR CORP  
6 MEDANO 'VA' STATE

SANTA FE E.O.P.  
13 PURE GOLD 'C-17' FEDERAL

SANTA FE E.O.P.  
11 PURE GOLD 'C-17' FED

SANTA FE E.O.P.  
8 PURE GOLD 'C-17' FED

YATES PETR CORP  
7 MEDANO 'VA' STATE

YATES PETR CORP  
8 MEDANO 'VA' STATE

POGO PRODUCING CO  
14 PURE GOLD 'B' FED

ENRON OIL & GAS CO  
2 PURE GOLD 'B' FED

SANTA FE ENR OP PRTN  
5 PURE GOLD 'C-17' FED

KAISER-FRANCIS OIL  
8 PURE GOLD 'A' FED

DEVON ENERGY  
17 TODD '15M' FED

DEVON ENERGY  
18 TODD '22E' FED

DEVON ENERGY  
17 TODD '22D' FED

DEVON ENERGY  
17 TODD '22D' FED

DEVON ENERGY  
18 TODD '22E' FED

0 1000' 2000' 3000' 4000'  
Scale



|  |                |
|--|----------------|
| <b>devon</b>   |                |
| Eddy County, New Mexico  |                |
| North Pure Gold 8 Federal #11 Unit<br>Sec 8, T23 S R31E<br>1400 FSL & 1540 FEL |                |
| Scale: 1" = 2000'  | Date: 04-01-04 |

N-Pure-Gold-8-#11.dwg



| DEVON ENERGY PRODUCTION COMPANY, LP          |                          |                             |              |                    |      |        |            |            |       |       |  |                                |  |                                    |
|--|--------------------------|-----------------------------|--------------|--------------------|------|--------|------------|------------|-------|-------|--|--------------------------------|--|------------------------------------|
| C108 ITEM VI--Well Tabulation in Review Area |                          |                             |              |                    |      |        |            |            |       |       |  |                                |  |                                    |
|  | Operator                 | Well Name                   | API NO       | Sec Twn Range      | Type | Status | Spud Date  | Comp Date  | TD    | PBTD  | Comp Zone  | Comp Interval                  | Casing Program   | TOC                                |
| 1  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 1     | 30-015-26296 | 8<br>T23S<br>R31E  | Gas  | ACT    | 3/24/1990  | 7/4/1990   | 14821 | 14703 | Morrow   | 13966' - 13986'                | 13-3/8", 48#, @ 628, w/ 800 sxs<br>9-5/8", 40#, @ 4125, w/2500 sx<br>7", 29&26#, @ 11718', w/1100 sxs<br>4-1/2", @ 11380 to 14820, w/510 sxs | Surf<br>Surf<br>5140'<br>liner top |
| 2  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 2     | 30-015-27597 | 8<br>T23S<br>R31E  | Oil  | ACT    | 1/28/1994  | 2/25/1994  | 8080  | 8035  | Delaware   | 7870' - 7910'                  | 13-3/8", 48#, @ 605, w/ 600 sxs<br>8-5/8", 32#, @ 4096', w/1850 sx<br>5-1/2", 15.5&17#, @ 8080', w/1700 sxs                                  | Surf<br>Surf<br>3520-log           |
| 3  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 3     | 30-015-27610 | 8<br>T23S<br>R31E  | Oil  | ACT    | 2/12/1994  | 3/27/1994  | 8196  | 8134  | Delaware   | 7864' - 7930'                  | 13-3/8", 48#, @ 582, w/ 600 sxs<br>8-5/8", 32#, @ 4068', w/1900 sx<br>5-1/2", 15.5&17#, @ 8196', w/1150 sxs                                  | Surf<br>Surf<br>3050-log           |
| 4  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 5     | 30-015-27598 | 8<br>T23S<br>R31E  | Oil  | ACT    | 10/18/1993 | 11/13/1993 | 8070  | 8023  | Delaware   | 7860' - 7900'                  | 13-3/8", 48#, @ 590, w/ 350 sxs<br>8-5/8", 32#, @ 4045', w/2200 sx<br>5-1/2", 15.5&17#, @ 8070', w/895 sxs                                   | Surf<br>Surf<br>3416-log           |
| 5  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 6     | 30-015-27618 | 8<br>T23S<br>R31E  | Oil  | ACT    | 2/10/1994  | 3/24/1994  | 8082  | 8000  | Delaware   | 7822' - 7890'                  | 13-3/8", 48#, @ 584, w/ 600 sxs<br>8-5/8", 32#, @ 4016', w/1900 sx<br>5-1/2", 15.5&17#, @ 8082', w/900 sxs                                   | Surf<br>Surf<br>3456-log           |
| 6  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 9     | 30-015-27600 | 8<br>T23S<br>R31E  | Oil  | ACT    | 10/5/1993  | 11/1/1993  | 8100  | 7999  | Delaware   | 7880' - 7910'                  | 13-3/8", 48#, @ 585, w/ 600 sxs<br>8-5/8", 32#, @ 4072', w/2100 sx<br>5-1/2", 15.5&17#, @ 8010', w/1095 sxs                                  | Surf<br>Surf<br>2800-log           |
| 7  | Devon Energy Prod Co LP  | North Pure Gold 8 Fed 11    | 30-015-32619 | 8<br>T23S<br>R31E  | Oil  | SI     | 2/10/2003  | 3/20/2003  | 8160  | 8056  | Delaware-Cherry Canyon<br>Delaware-Brushy Canyon | 7256' - 7530'<br>7900' - 7933' | 13-3/8", 48#, @ 461' w/490 sxs<br>8-5/8", 32#, @ 4056' w/ 1090 sxs<br>5-1/2", 15.5# & 17#, @ 8160' w/800 sxs                                 | Surf<br>Surf<br>3900'-log          |
| 8  | Devon Energy Prod Co LP  | North Pure Gold 9 Fed 2     | 30-015-27479 | 9<br>T23S<br>R31E  | Oil  | ACT    | 5/29/1994  | 6/23/1994  | 8120  | 8076  | Delaware   | 7900' - 7940'                  | 13-3/8", 48#, @ 425, w/ 351 sxs<br>8-5/8", 32#, @ 3998', w/1000 sx<br>5-1/2", 15.5&17#, @ 8120', w/675 sxs                                   | Surf<br>Surf<br>3500-log           |
| 9  | Devon Energy Prod Co LP  | North Pure Gold 9 Fed 3     | 30-015-27442 | 9<br>T23S<br>R31E  | Oil  | ACT    | 6/19/1993  | 7/15/1993  | 8120  | 8073  | Delaware   | 7920' - 7976'                  | 13-3/8", 48#, @ 590' w/800 sxs<br>8-5/8", 32#, @ 4090' w/ 1800 sxs<br>5-1/2", 15.5# & 17#, @ 8120' w/1160 sxs                                | Surf<br>Surf<br>2720-log           |
| 10   | Devon Energy Prod Co LP  | North Pure Gold C-17 Fed 5  | 30-015-27392 | 17<br>T23S<br>R31E | Oil  | ACT    | 5/6/1993   | 5/30/1993  | 8100  | 8080  | Delaware   | 7904' - 7954'                  | 13-3/8", 48#, @ 588' w/800 sxs<br>8-5/8", 32#, @ 4084' w/ 2100 sxs<br>5-1/2", 15.5# & 17#, @ 8100' w/1160 sxs                                | Surf<br>Surf<br>3210-log           |
| 11   | Devon Energy Prod Co LP  | North Pure Gold C-17 Fed 10 | 30-015-27393 | 17<br>T23S<br>R31E | Oil  | ACT    | 7/15/1993  | 8/8/1993   | 8055  | 8007  | Delaware   | 7854' - 7900'                  | 13-3/8", 48#, @ 570, w/ 800 sxs<br>8-5/8", 32#, @ 4082', w/2300 sx<br>5-1/2", 15.5&17#, @ 8055', w/1000 sxs                                  | Surf<br>Surf<br>2972-log           |
| 12   | Bass Enterprises Prod Co | James Ranch Unit 56         | 30-015-27886 | 17<br>T23S<br>R31E | Oil  | ACT    | 5/13/1994  | 6/15/1994  | 8070  | 8025  | Delaware   | 7830' - 7870'                  | 13-3/8", 48#, @ 425' w/350 sxs<br>8-5/8", 32#, @ 3920' w/ 1000 sxs<br>5-1/2", 15.5# & 17#, @ 8070' w/750 sxs                                 | Surf<br>Surf<br>3410'-log          |

| DEVON ENERGY PRODUCTION COMPANY, LP          |                     |                 |              |                    |      |        |           |           |      |      |           |               |   |                           |
|--|---------------------|-----------------|--------------|--------------------|------|--------|-----------|-----------|------|------|-----------|---------------|---|---------------------------|
| C108 ITEM VI--Well Tabulation in Review Area |                     |                 |              |                    |      |        |           |           |      |      |           |               |   |                           |
|  |                     |                 |              |                    |      |        |           |           |      |      |           |               |   |                           |
|  | Operator            | Well Name       | API NO       | Sec Twn Range      | Type | Status | Spud Date | Comp Date | TD   | PBTD | Comp Zone | Comp Interval | Casing Program  | TOC                       |
| 13   | Yate Petroleum Corp | Medano VA ST 17 | 30-015-27325 | 16<br>T23S<br>R31E | Oil  | ACT    | 4/26/1993 | 5/25/1993 | 8087 | 8026 | Delaware  | 7757' - 7945' | 13-3/8", 54.5#, @ 505' w/475 sxs<br>9-5/8", 36# & 40#, @ 3995' w/ 1450 sxs<br>5-1/2", 15.5# & 17#, @ 8087' w/1205 sxs | Surf<br>Surf<br>718'-calc |

**North Pure Gold 8 Federal 11**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section VII to XII**

**VII Attach data on the proposed operation, including:**

- (1) Proposed average injection rate: 500 BWPD  
Proposed maximum injection rate: 800 BWPD
- (2) The system will be a closed system.
- (3) Proposed average injection pressure: 800 psi  
Proposed max injection pressure: 1000 psi
- (4) The proposed injection fluid is produced water from the Delaware that will be re-injected into the Delaware.
- (5) Disposal zone formation water analysis: Delaware-Lower Brushy Canyon water analysis is attached.

**VIII** The proposed injection interval is located in the Delaware formation. This Permian age reservoir is approximately 250 feet thick in this area. The injection interval is from 7900' to 7933'.

No wells using fresh water drinking aquifers are reported in the proposed well review area. The closest well used for commercial purposes is the Mills Ranch #2492 located in Section 6, T23S, R31E. This well encounters water at a depth of 85 feet. The well depth is 135 feet. The Well / Surface Data Report is attached as obtained from the New Mexico Office of the State Engineer.

**IX** There is no proposed stimulation program for the injection interval.

**X** Logging & test data have previously been submitted to the OCD.

**XI** No fresh water wells are reported within one mile of proposed conversion well. This information per New Mexico Office of the State Engineer is attached.

**XII** An examination of this area has determined there are no open faults or other hydrologic connection between the disposal zone and any underground drinking water.

DEVON ENERGY PRODUCTION COMPANY LP

|   |                         |                    |                     |
|---|-------------------------|--------------------|---------------------|
| Well Name: North Pure Gold 8 Federal 11           |                         | Field: Los Medanos |                     |
| Location: Sec 8, T23S-R31E, 1400' FSL & 1540' FEL |                         | County: Eddy       | State: NM           |
| Elevation: 3334 GL                                |                         | Spud Date: 2/10/03 | Compl Date: 3/20/03 |
| API#: 30-015-32619                                | Prepared by: R.G. Slack | Date: 3/29/04      | Rev: 4/27/04        |

☒ PROPOSED ☐ CURRENT

17-1/2" hole  
13-3/8", 48#, H40, @ 461'  
Cmt'd w/ 490 sxs.

TOC @ 3900'. Temp survey. (3/7/03)

11" Hole  
8-5/8", 32#, J55, @ 4056'  
Cmt'd w/ 1090 sxs

Proposed:  
Cement Sqz Delaware-Cherry Canyon Perfs  
from 7256' to 7530'.

Proposed: 2-7/8", 6.5#, IPC Tubing

Delaware-Cherry Canyon (perfed 3/4/04)

7256' - 7267' acidized w/ 1000 gals

(Sqz perfs @ 7446'. Sqzd 690 sxs)

7520' - 7530' acidized w/ 1000 gals

(Sqz perfs @ 7630'. Sqzd 200 sxs)

Delaware-Lower Brushy Canyon (perfed 3/11/03)

7900' - 7933'  
acidized w/2000 gals 7%. Frac'd w/172,000# sand  
4/8/03: 5 bo, 9 Mcf, 226 bw

Proposed 5-1/2" Lok Set Packer @ +/- 7850'

Proposed Injection Zone:  
Delaware-Lower Brushy Canyon 7900' to 7933'

7-7/8" Hole size  
5-1/2", 15.5# & 17#, J55, LT&C, @ 8160'  
Cmt'd w/ 800 sxs

TD @ 8160'

| Geological Markers | Top-MD |
|--------------------|--------|
| Rustler Anhydrite  | 368'   |
| Top Salt           | 700'   |
| Base of Salt       | 3818'  |
| Bell Canyon        | 4051'  |
| Cherry Canyon      | 5014'  |
| Brushy Canyon      | 6652'  |
| Bone Spring        | 7973'  |

DEVON ENERGY PRODUCTION COMPANY LP

|   |                         |                    |                     |
|---|-------------------------|--------------------|---------------------|
| Well Name: North Pure Gold 8 Federal 11           |                         | Field: Los Medanos |                     |
| Location: Sec 8, T23S-R31E, 1400' FSL & 1540' FEL |                         | County: Eddy       | State: NM           |
| Elevation: 3334 GL                                |                         | Spud Date: 2/10/03 | Compl Date: 3/20/03 |
| API#: 30-015-32619                                | Prepared by: R.G. Slack | Date: 3/29/04      | Rev:                |

☐ PROPOSED    ☒ CURRENT

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13-3/8", 48#, H40, @ 461'  
Cmt'd w/ 490 sxs.

TOC @ 3900'. Temp survey (3/7/03)

11" Hole  
8-5/8", 32#, J55, @ 4056'  
Cmt'd w/ 1090 sxs

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| Cherry Canyon      | 5014'  |
| Brushy Canyon      | 6652'  |
| Bone Spring        | 7973'  |

245 Jts 2-7/8" tbq  
4' perf sub  
bull plug  
EOT @ 7878'

Delaware-Cherry Canyon (perfed 3/4/04)  
  
7256' - 7267'    acidized w/ 1000 gals  
  
                  (Sqz perms @ 7446'. Sqzd 690 sxs)  
  
7520' - 7530'    acidized w/ 1000 gals  
  
                  (Sqz perms @ 7630'. Sqzd 200 sxs)

Delaware-Lower Brushy Canyon (perfed 3/11/03)  
  
7900' - 7933'  
acidized w/2000 gals 7%. Frac'd w/172,000# sand  
4/8/03: 5 bo, 9 Mcf, 226 bw

7-7/8" Hole size  
5-1/2", 15.5# & 17#, J55, LT&C, @ 8160'  
Cmt'd w/ 800 sxs

TD @ 8160'



# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

Dawn Higgins, being first duly sworn, on oath says:

That she is Business Manager 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 31 | 2004 |
|          | 2004 |
|          | 2004 |
|          | 2004 |

That the cost of publication is \$ 38.37  
and that payment thereof has been made and will be  
assessed as court costs.

Dawn Higgins

Subscribed and sworn to before me this

31 day of March, 2004

Stephanie Dobson

My commission expires 12-13-05

Notary Public

March 31, 2004

## Legal Notice

Devon Energy Production Company, LP, 20 North Broadway, Ste 1500, Oklahoma City, OK 73102 has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well North Pure Gold 8 Federal #11, located 1400' FSL & 1540' FEL of Unit J, Section 8, Township 23 South, Range 31 East of Eddy County, New Mexico, will be used for saltwater disposal. Disposal waters from the Delaware Sand will be re-injected into the Delaware Sand at a depth of 7900'-7933' with a maximum pressure of 1000 psi and a maximum rate of 500 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505-5472, within 15 days. Additional information can be obtained by contacting Jim Bloum at (405) 228-4301.



## Water Analysis

Date: 02-Jun-03

2708 West County Road, Hobbs NM 88240  
Phone (505) 392-5556 Fax (505) 392-7307

### Analyzed For

| Company | Well Name      | County | State      |
|---------|----------------|--------|------------|
| Devon   | Pure Gold 8-11 | Lea    | New Mexico |

| Sample Source    | Swab Sample | Sample #        | 1      |
|------------------|-------------|-----------------|--------|
| Formation        |             | Depth           |        |
| Specific Gravity | 1.195       | SG @ 80 °F      | 1.197  |
| pH               | 7.37        | Sulfides        | Absent |
| Temperature (°F) | 71          | Reducing Agents |        |

### Cations

|                    |         |        |        |        |
|--------------------|---------|--------|--------|--------|
| Sodium (Calc)      | in Mg/L | 70,031 | in PPM | 58,496 |
| Calcium            | in Mg/L | 39,600 | in PPM | 33,077 |
| Magnesium          | in Mg/L | 960    | in PPM | 802    |
| Soluble Iron (FE2) | in Mg/L | 25.0   | in PPM | 21     |

### Anions

|              |         |         |        |         |
|--------------|---------|---------|--------|---------|
| Chlorides    | in Mg/L | 180,000 | in PPM | 150,351 |
| Sulfates     | in Mg/L | 200     | in PPM | 167     |
| Bicarbonates | in Mg/L | 146     | in PPM | 122     |

|                               |         |         |        |         |
|-------------------------------|---------|---------|--------|---------|
| Total Hardness (as CaCO3)     | in Mg/L | 103,000 | in PPM | 86,034  |
| Total Dissolved Solids (Calc) | in Mg/L | 230,862 | in PPM | 243,038 |
| Equivalent NaCl Concentration | in Mg/L | 241,990 | in PPM | 202,130 |

### Scaling Tendencies

\*Calcium Carbonate Index 5,797,440

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

\*Calcium Sulfate (Gyp) Index

7,920,000

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks rw=08@71f

Report # 1288



MAR-31-2003(MON) 17:27 B SERVICES-HOBBS DISTRICT

(X) 505 392 7307

0002

P.001

**Water Analysis**

Date: 31-Mar-03

2708 West County Road, Hobbs NM 88240  
Phone (505) 392-5556 Fax (505) 392-7307

**Analyzed For**

| Company | Well Name            | County | State      |
|---------|----------------------|--------|------------|
| Devon   | North Pure Gold 8-11 | Lea    | New Mexico |

| Sample Source | Swab Sample | Sample # | 1 |
|---------------|-------------|----------|---|
| Formation     |             | Depth    |   |

|                  |       |                 |        |
|------------------|-------|-----------------|--------|
| Specific Gravity | 1.155 | SG @ 60 °F      | 1.158  |
| pH               | 8.14  | Sulfides        | Absent |
| Temperature (°F) | 75    | Reducing Agents |        |

**Cations**

|                    |         |        |        |        |
|--------------------|---------|--------|--------|--------|
| Sodium (Calc)      | in Mg/L | 50,200 | in PPM | 43,419 |
| Calcium            | in Mg/L | 19,200 | in PPM | 16,580 |
| Magnesium          | in Mg/L | 10,080 | in PPM | 8,705  |
| Soluble Iron (FE2) | in Mg/L | 5.0    | in PPM | 4      |

**Anions**

|              |         |         |        |         |
|--------------|---------|---------|--------|---------|
| Chlorides    | in Mg/L | 140,000 | in PPM | 120,896 |
| Sulfates     | in Mg/L | 250     | in PPM | 216     |
| Bicarbonates | in Mg/L | 917     | in PPM | 792     |

|                               |         |         |        |         |
|-------------------------------|---------|---------|--------|---------|
| Total Hardness (as CaCO3)     | in Mg/L | 90,000  | in PPM | 77,720  |
| Total Dissolved Solids (Calc) | in Mg/L | 220,732 | in PPM | 190,615 |
| Equivalent NaCl Concentration | in Mg/L | 197,800 | in PPM | 170,812 |

**Scaling Tendencies**

|  |            |
|--|------------|
| *Calcium Carbonate Index   | 17,614,848 |
| Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable |            |

|  |           |
|--|-----------|
| *Calcium Sulfate (Gyp) Index   | 4,800,000 |
| Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable |           |

\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

**Remarks** rw=22@75f**Report #** 1233

Application For Injection  
Devon Energy Prod Co LP  
North Pure Gold 8 Federal 11  
Form C-108 Section XIV

Proof of Notice to Surface Owner

J.C. & Francis Mills Family Partnership  
P.O. Box 190  
Abernathy, TX 79311

A copy of this application has been mailed to the above surface land owner by certified mail, pertaining to Devon Energy's application for salt water disposal in the North Pure Gold 8 Federal 11.

Date Mailed: 5/4/04

Signature: Ronnie Slack

Date: 5/4/04

Ronnie Slack, Engineering Technician  
Devon Energy Production Co., L.P.  
20 N. Broadway, Suite 1500  
Oklahoma City, OK 73102

- Application For Injection
- Devon Energy Prod Co LP
- North Pure Gold 8 Federal 11
- Form C-108 Section XIV

Proof of Notice to Leasehold Operators within 1/2 mile of North Pure Gold 8 Federal 11

Bass Enterprises Production Company  
P.O. Box 916110  
Fort Worth, TX 76191-6110

Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, NM 88210

A copy of this application has been mailed to the above leasehold operators by certified mail, pertaining to Devon Energy's application for salt water disposal in the North Pure Gold 8 Federal 11.

Date Mailed: 5/4/04

Signature: Ronnie Slack

Date: 5/4/04

Ronnie Slack, Engineering Technician  
Devon Energy Production Co., L.P.  
20 N. Broadway, Suite 1500  
Oklahoma City, OK 73102



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**RECEIVED**

SEP 09 2004

~~OOD-ARTESIA~~ ADMINISTRATIVE ORDER SWD-925

**Mark Fesmire, P.E.**

Director

**Oil Conservation Division**

## ***APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, LP FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.***

### **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Devon Energy Production Company, LP made application to the New Mexico Oil Conservation Division on May 7, 2004, for permission to utilize for produced water disposal its North Pure Gold 8 Federal Well No. 11 (API No. 30-015-32619) located 1,400 feet from the South line and 1,540 feet from the East line of Section 8, Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico.

#### **THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

#### **IT IS THEREFORE ORDERED THAT:**

The applicant is hereby authorized to utilize its North Pure Gold 8 Federal Well No. 11 (API No. 30-015-32619) located 1,400 feet from the South line and 1,540 feet from the East line of Section 8, Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Lower Brushy Canyon member of the Delaware formation from 7,900 feet to 7,933 feet through 2-7/8 inch plastic-lined tubing set in a packer located within 100 feet above the top perforation.

IT IS FURTHER ORDERED THAT:

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

**As preparation and prior to injection, the existing Cherry Canyon perforations at 7256 to 7530 shall be squeezed with cement, the squeeze plug drilled out, and the casing pressure tested to the satisfaction of the Artesia office of the Division.**

After installing injection tubing and prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The wellhead injection pressure on the well shall be limited to **no more than 1,580 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

**The operator shall provide written notice of the date of commencement of injection to the Artesia district office of the Division.** The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 2nd day of June 2004.



MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia  
Bureau of Land Management – Carlsbad