

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]  
 [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]  
 [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply  
 [A]  Working, Royalty or Overriding Royalty Interest Owners  
 [B]  Offset Operators, Leaseholders or Surface Owner  
 [C]  Application is One Which Requires Published Legal Notice  
 [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

_____ Print or Type Name	_____ Signature	_____ Title	_____ Date
_____ e-mail Address			

~~5/11/04~~ ~~5/22/04~~ ~~WJ~~ ~~SWD7~~  
devon

SWD-925

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

RECEIVED

MAY -7 2004

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

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

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*

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

### 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

Side 1

OPERATOR: Devon Energy Production Company, LP

WELL NAME & NUMBER: North Pure Gold 8 Federal 11

WELL LOCATION: 1400 FSL & 1540 FEL      J      Sec 8      T23S      R31E  
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 SHEETTubing 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**

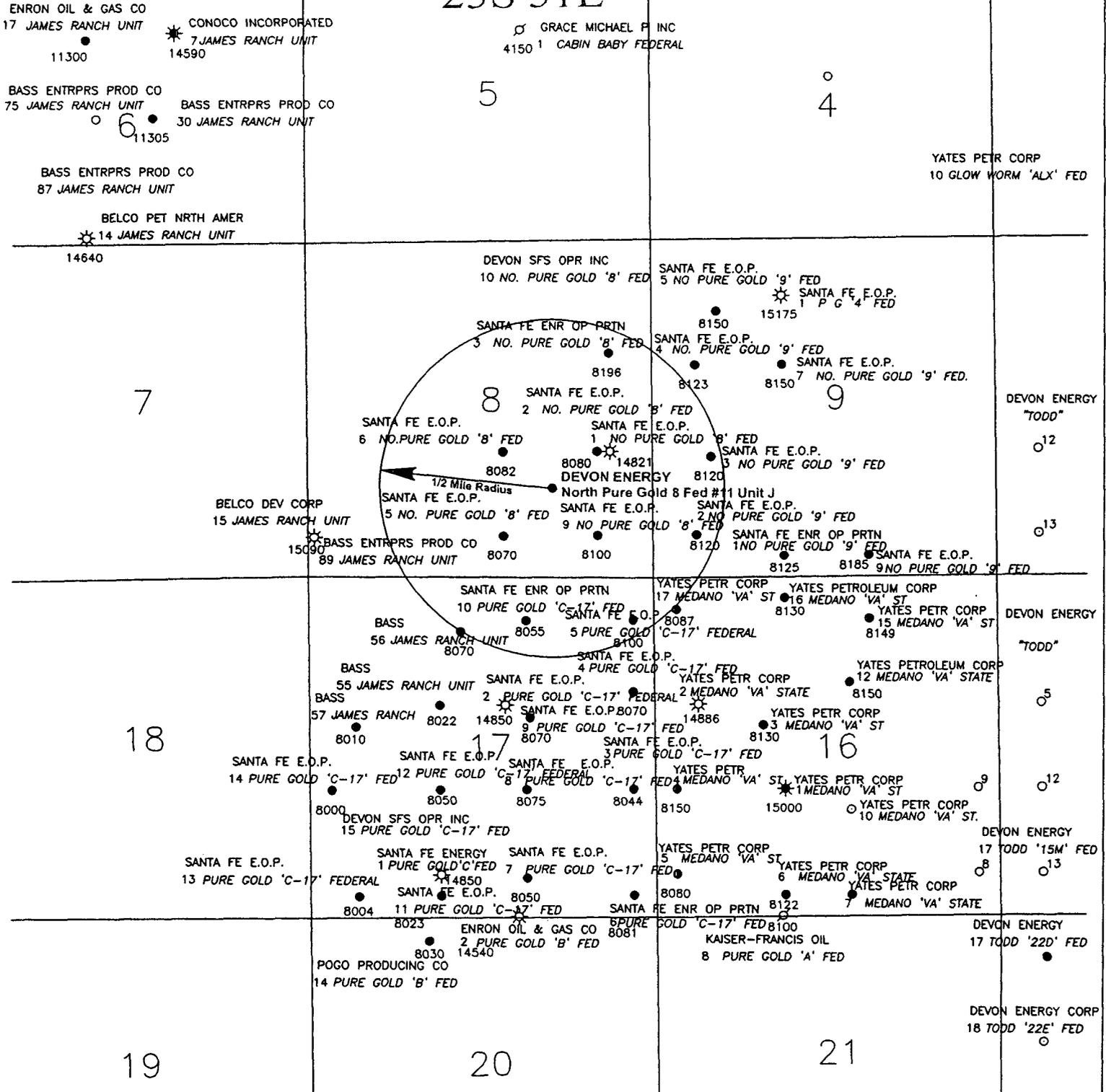
**A. Injection Well Information**

- (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



**devon**

Eddy County, New Mexico

North Pure Gold 8 Federal #11 Unit  
Sec 8, T23 S R31E  
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	8 T23S R31E	Gas	ACT	3/24/1990	7/4/1990	14821	14703	Morrow	13966' - 13986'	13-3/8", 48#, @ 628, w/ 800 sxs 9-5/8", 40#, @ 4125, w/2500 sx 7", 29&26#, @ 11718, w/1100 sxs 4-1/2", @ 11380 to 14820, w/510 sxs	Surf Surf 5140' liner top
2	Devon Energy Prod Co LP	North Pure Gold 8 Fed 2	8 T23S R31E	Oil	ACT	1/28/1994	2/25/1994	8080	8035	Delaware	7870' - 7910'	13-3/8", 48#, @ 605, w/ 600 sxs 8-5/8", 32#, @ 4096, w/1850 sx 5-1/2", 15.5&17#, @ 8080, w/1700 sxs	Surf Surf 3520-log
3	Devon Energy Prod Co LP	North Pure Gold 8 Fed 3	8 T23S R31E	Oil	ACT	2/12/1994	3/27/1994	8196	8134	Delaware	7864' - 7930'	13-3/8", 48#, @ 582, w/ 600 sxs 8-5/8", 32#, @ 4068, w/1900 sx 5-1/2", 15.5&17#, @ 8196, w/1150 sxs	Surf Surf 3050-log
4	Devon Energy Prod Co LP	North Pure Gold 8 Fed 5	8 T23S R31E	Oil	ACT	10/18/1993	11/13/1993	8070	8023	Delaware	7860' - 7900'	13-3/8", 48#, @ 584, w/ 600 sxs 8-5/8", 32#, @ 4045, w/2200 sx 5-1/2", 15.5&17#, @ 8070, w/895 sxs	Surf Surf 3416-log
5	Devon Energy Prod Co LP	North Pure Gold 8 Fed 6	8 T23S R31E	Oil	ACT	2/10/1994	3/24/1994	8082	8000	Delaware	7822' - 7890'	13-3/8", 48#, @ 585, w/ 600 sxs 8-5/8", 32#, @ 4016, w/1900 sx 5-1/2", 15.5&17#, @ 8082, w/900 sxs	Surf Surf 3456-log
6	Devon Energy Prod Co LP	North Pure Gold 8 Fed 9	8 T23S R31E	Oil	ACT	10/5/1993	11/1/1993	8100	7999	Delaware	7880' - 7910'	13-3/8", 48#, @ 585, w/ 600 sxs 8-5/8", 32#, @ 4072, w/2100 sx 5-1/2", 15.5&17#, @ 8010, w/1095 sxs	Surf Surf 2800-log
7	Devon Energy Prod Co LP	North Pure Gold 8 Fed 11	8 T23S R31E	Oil	SI	2/10/2003	3/20/2003	8160	8056	Delaware-Cherry Canyon Delaware-Brushy Canyon	7256' - 7530' 7900' - 7933'	13-3/8", 48#, @ 461, w/490 sxs 8-5/8", 32#, @ 4056, w/ 1090 sxs 5-1/2", 15.5# & 17#, @ 8160, w/800 sxs	Surf Surf 3900-log
8	Devon Energy Prod Co LP	North Pure Gold 9 Fed 2	9 T23S R31E	Oil	ACT	5/29/1994	6/23/1994	8120	8076	Delaware	7900' - 7940'	13-3/8", 48#, @ 425, w/ 351 sxs 8-5/8", 32#, @ 3998, w/1000 sx 5-1/2", 15.5&17#, @ 8120, w/675 sxs	Surf Surf 3500-log
9	Devon Energy Prod Co LP	North Pure Gold 9 Fed 3	9 T23S R31E	Oil	ACT	6/19/1993	7/15/1993	8120	8073	Delaware	7920' - 7976'	13-3/8", 48#, @ 590, w/800 sxs 8-5/8", 32#, @ 4090, w/ 1800 sxs 5-1/2", 15.5# & 17#, @ 8120, w/1160 sxs	Surf Surf 2720-log
10	Devon Energy Prod Co LP	North Pure Gold C-17 Fed 5	17 T23S R31E	Oil	ACT	5/6/1993	5/30/1993	8100	8080	Delaware	7904' - 7954'	13-3/8", 48#, @ 588, w/800 sxs 8-5/8", 32#, @ 4084, w/ 2100 sxs 5-1/2", 15.5# & 17#, @ 8100, w/1160 sxs	Surf Surf 3210-log
11	Devon Energy Prod Co LP	North Pure Gold C-17 Fed 10	17 T23S R31E	Oil	ACT	7/15/1993	8/8/1993	8055	8007	Delaware	7854' - 7900'	13-3/8", 48#, @ 570, w/ 800 sxs 8-5/8", 32#, @ 4082, w/2300 sx 5-1/2", 15.5&17#, @ 8055, w/1000 sxs	Surf Surf 2972-log
12	Basess Enterprises Prod Co	James Ranch Unit 56	17 T23S R31E	Oil	ACT	5/13/1994	6/15/1994	8070	8025	Delaware	7830' - 7870'	13-3/8", 48#, @ 425, w/350 sxs 8-5/8", 32#, @ 3920, w/ 1000 sxs 5-1/2", 15.5# & 17#, @ 8070, w/750 sxs	Surf Surf 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 T23S R31E	Oil	ACT	4/26/1993	5/25/1993	8087	8026	Delaware	7757' - 7945'	13-3/8", 54.5#, @ 505' w/475 sxs 9-5/8", 36# & 40#, @ 3995' w/ 1450 sxs 5-1/2", 15.5# & 17#, @ 8087' w/1205 sxs	Surf Surf 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

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

**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'

**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
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API#: 30-015-32619	Prepared by: R.G. Slack	Date: 3/29/04	Rev:

PROPOSED     CURRENT

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

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

<u>Geological Markers</u>	<u>Top-MD</u>
Rustler Anhydrite	368'
Top Salt	700'
Base of Salt	3818'
Bell Canyon	4051'
Cherry Canyon	5014'
BrushyCanyon	6652'
Bone Spring	7973'

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

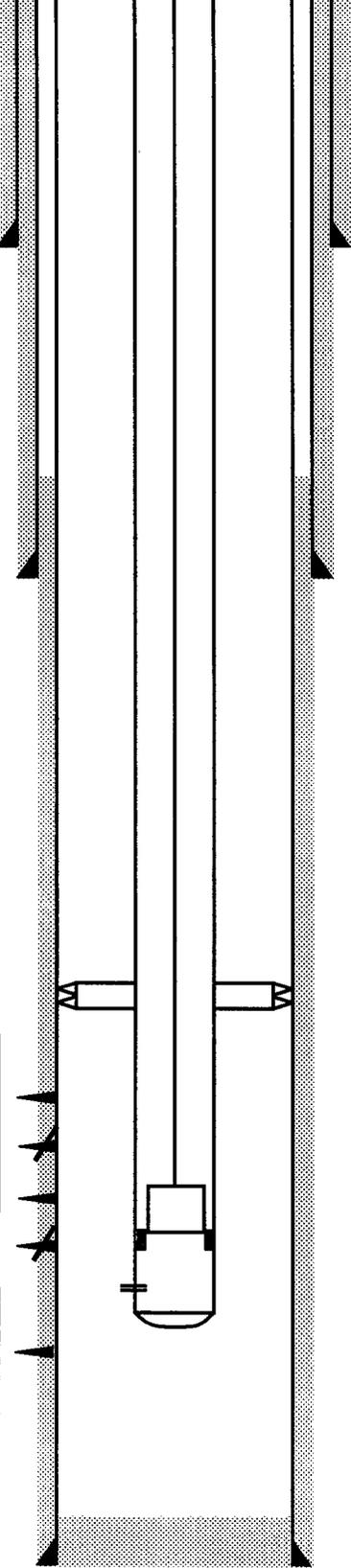
**Delaware-Cherry Canyon** (perfed 3/4/04)  
 7256' - 7267' acidized w/ 1000 gals  
 (Sqz perfs @ 7446'. Sqzd 690 sxs)  
 7520' - 7530' acidized w/ 1000 gals

(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

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:

<u>March 31</u>	<u>2004</u>
_____	<u>2004</u>
_____	<u>2004</u>
_____	<u>2004</u>

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 B 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 Blount 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 @ 60 °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	290,962	in PPM	243,036
Equivalent NaCl Concentration	in Mg/L	241,990	in PPM	202,130

### Scaling Tendencies

*Calcium Carbonate Index	5,797,440
<i>Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable</i>	
*Calcium Sulfate (Gyp) Index	7,920,000
<i>Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable</i>	

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

Remarks IW=.08@71f

Report # 1288

MAR-31-2003 (MON)

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SERVICES-HOBBS DISTRICT

(X) 505 392 7307

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P. 001



BJ SERVICES

## 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	50,280	in PPM	43,419
Calcium	in Mg/L	19,200	in PPM	16,580
Magnesium	in Mg/L	10,080	in PPM	8,705
Soluable Iron (FE2)	in Mg/L	5.0	in PPM	4

### Anions

Chlorides	in Mg/L	140,000	in PPM	120,898
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
<i>Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable</i>	
*Calcium Sulfate (Gyp) Index	4,800,000
<i>Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable</i>	

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

Remarks      TW= .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