

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. DIV-Dist. 2  
1801 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 \_\_\_\_\_

2. Name of Operator

DEVON ENERGY PRODUCTION COMPANY, LP.

3. Address and Telephone No.

20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102

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

Sec 13, T23S, R31E NWNE 990 FNL & 1930 FEL

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5. Lease Designation and Serial No.

NMNM0404441

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

TODD 13B FED 2

9. API Well No.

30-015-28904-00-S1

10. Field and Pool, or Exploratory Area

INGLE WELLS

11. County or Parish, State

EDDY COUNTY, NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

SUBJECT TO  
LIKE APPROVAL  
BY STATE

TYPE OF ACTION

- ☐ 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 SWD as noticed to BLM on EC 30873. Please find copy of C108 application attached.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED

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

Signed Ronnie Slack

Ronnie Slack

Title Engineering Technician

Date 7/7/04

(This space for Federal or State office use)

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA

Title PETROLEUM ENGINEER

Date JUL 14 2004

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 representation or any matter within its jurisdiction.

\*See Instruction on Reverse Side



N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

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

June 9, 2004

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

RE: Form C-108, Application for Authorization to Inject  
Todd 13B Fed #2  
API#: 30-015-28904  
Lease: NMNM0404441  
Eddy County, NM  
Section 13, 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 salt water disposal purposes using the Todd 13B Fed #2. A copy of this application has been filed with the OCD-Atesia office, appropriate surface land owner, and leasehold operators.

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

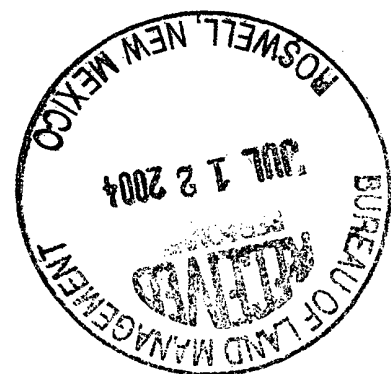
RS/rs

Enclosure  
cc: OCD, Artesia Office

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OCD-ARTESIA



**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: 6/9/04  
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: \_\_\_\_\_

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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

OPERATOR: Devon Energy Production Company, LP

WELL NAME & NUMBER: Todd 13B Fed #2

WELL LOCATION: 990' FNL & 1930' FEL B Sec 13 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: 775 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: 1120 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: 970 sx. *or*                      ft<sup>3</sup>  
Top of Cement: 3338' Method Determined: CBL Log  
Total Depth: 8,741'

Injection Interval (Perforated)

5,780' feet to 5,862'

(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: 5,710'

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

3. Name of Field or Pool (if applicable): Ingle Wells ( Delaware )

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.

Perforated intervals for the Todd 13B Federal #2 are as follows:

Delaware: 8134' – 8329' (CIBP was set above these perforatons at 8078' on 6/8/2000)

Delaware: 8510' – 8521' (CIBP was set above these perforations at 8460' on 5/10/97)

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

The Delaware at 6129' underlies the proposed Delaware injection interval at 5760' – 5862' in the Todd 13K Federal #11 wellbore. There are no productive oil or gas zones above the proposed injection zone in this wellbore.

**TODD 13B FED #2**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section III**

**III. Well Data--On Injection Well**

**A. Injection Well Information**

- (1) Lease Todd 13B Fed (NMNM0404441)  
Well No #2  
Location 990' FNL & 1930' FEL  
Sec,Twn,Rnge Sec 13, T23S-R31E, Unit B  
Cnty, State Eddy County, New Mexico
- (2) Casing 13-3/8", 48#, H40, @ 894' in 17-1/2" hole. Cmt'd w/ 775 sxs.  
TOC @ surface. Cement circulated.  
8-5/8", 32#, J55, @ 4,364' in 11" hole. Cmt'd w/ 1120 sxs.  
TOC @ surface. Cement circulated.  
5-1/2", 15.5 & 17#, J55, @ 8,740'. Cmt'd w/ 970 sxs.  
TOC @ 3338', determined by Cement Bond Log
- (3) Injection Tubing 2-7/8" , 6.5#, IPC tubing run to 5,710"
- (4) Packer 5-1/2" Lok Set @ 5,710'

**B. Other Well Information**

- (1) Injection Formation: Delaware  
Field Name: Ingle Wells (Delaware)
- (2) Injection Interval: 5,760' to 5,862' (cased hole, perforated)
- (3) Original Purpose of Wellbore:

The Todd 13B Fed #2 was spud on March 12, 1997. The well was drilled to 8,741' and tested wet in the Delaware at 8,510' to 8,521'. These perms were abandoned with a CIBP at 8,460'. The well was then completed as an oil well in the Delaware at 8,134' to 8,329' on May 15, 1997. The well last produced April 1999 and was shut in. The Delaware perms at 8,134' to 8,329' were abandoned with a CIBP at 8,078' on June 8, 2000. Temporary abandonment status was approved on November 21, 2000.

- (4) Other perforated intervals:

Delaware: 8,134' to 8,329' (abandoned with CIBP at 8,078')  
Delaware: 8,510' to 8,521' (abandoned with CIBP at 8,460')

- (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 in the area of review is the Delaware at 6,129' in the Todd 13K Federal #11, which is approximately 2600' to the south west. There are no productive oil / gas zones in the area of review above the proposed injection interval at 5,760' to 5,862'

# 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:

May 30	2004
_____	2004
_____	2004
_____	2004

That the cost of publication is \$ 37.64  
and that payment thereof has been made and will be  
assessed as court costs.

Dawn Higgins

Subscribed and sworn to before me this

2 day of June, 2004  
Stephanie Robson

My commission expires 12-13-05

Notary Public

May 30, 2004

## Legal Notice

Devon Energy Production Company, LP, 20 North Broadway, Oklahoma City, OK 73102-8260 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 is the Todd 13B Federal #2, located 990' FNL & 1930 FEL, Unit B, Section 13, Township 23 South, Range 31 East, in Eddy County, New Mexico, will be used for salt water disposal. Disposal waters from the Delaware will be injected into the Delaware formation at a depth of 5760' to 5862' with a maximum pressure of 1150 psi and a maximum rate of 1000 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.



Application For Injection  
Devon Energy Prod Co LP  
Todd 13B Fed #2  
Form C-108 Section XIV

Proof of Notice to Leasehold Operators within 1/2 mile of Todd 13B Fed #2

Myco Industries  
P.O. Box 840  
Artesia, NM 88211

Strata Production Company  
P.O. Box 1030  
Roswell, NM 88202

Forest Oil Corporation  
1600 Broadway  
Suite 2200  
Denver, CO 80202-000

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 Todd 13B Fed #2.

Date Mailed: 6/9/04

Signature: Ronnie Slack

Date: 6/9/04

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  
Todd 13B Fed #2  
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 Todd 13B Fed #2.

Date Mailed: 6/9/04

Signature: Ronnie Slack

Date: 6/9/04

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



DEVON ENERGY PRODUCTION COMPANY, LP														
C108 ITEM VI--Well Tabulation in Review Area														
Todd 13B Federal #2 - Application to inject salt water														
Operator	Well Name	API NO	County	Sec Twn Range	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval	Casing Program	TOC
Devon Energy Prod Co LP	Todd 13B Federal #2	30-015-28904	Eddy	13 T23S R31E	Oil	TA	03/12/97	05/15/97	8741	8460	Delaware Delaware	8134' - 8329' (abdn) 8510' - 8521' (abdn)	13-3/8", 48#, H40, at 894', w/775 sxs 8-5/8", 32#, J55, at 4364', w/ 1120 sxs 5-1/2", 17# & 15.5#, at 8740', w/970 sxs	Surf (cir) Surf (circ) 3338' (cbl)
Devon Energy Prod Co LP	Todd 13F Federal #27	30-015-31879	Eddy	13 T23S R31E	Oil	Producing	11/12/01	12/17/01	8520	8487	Delaware Delaware Delaware	6114' - 6127' (sqzd) 7100' - 7120' 7464' - 7518' 8295' - 8312'	13-3/8", 48#, H40, at 870', w/ 700 sxs 8-5/8", 32#, J55, @ 4495', w/1500 sxs 5-1/2", 15.5-17#, J55, @ 8520', w/950 sxs	Surf (cir) Surf (cir) 1936' (cbl)
Devon Energy Prod Co LP	Todd 13G Federal #21	30-015-31514	Eddy	13 T23S R31E	Oil	Producing	9/13/2001	10/31/01	8560	8510	Delaware Delaware	7145' - 7156' 8318' - 8338'	13-3/8", 48#, H40, at 830', w/ 750 sxs 8-5/8", 32#, J55, at 4520', w/ 1200 sxs 5-1/2", 15.5-17#, J55, at 8560', w/ 1150 sxs	Surf (circ) Surf (circ) 1594' (cbl)
Devon Energy Prod Co LP	Todd 13H Federal #8	30-015-28646	Eddy	13 T23S R31E	Oil	Producing	02/10/96	03/28/96	8759	8675	Delaware	8154' - 8374'	13-3/8", 48#, H40, at 890', w/ 700 sxs 8-5/8", 32#, J55, at 4398', w/ 1250 sxs 5-1/2", 15.5-17#, J55, at 8758', w/ 1220 sxs	Surf (circ) Surf (circ) 3500' (calc)
Devon Energy Prod Co LP	Todd 13J Federal #10	30-015-27858	Eddy	13 T23S R31E	Oil	Producing	05/02/95	06/16/95	8749	8696	Delaware	6784' - 8360'	13-3/8", 48#, H40, at 858', w/ 700 sxs 8-5/8", 32#, J55, at 4348', w/ 1500 sxs 5-1/2", 15.5-17#, J55, at 8749', w/ 1260 sxs	Surf (circ) Surf (circ) 1500' (cbl)
Devon Energy Prod Co LP	Todd 13I Federal #9	30-015-28647	Eddy	13 T23S R31E	Oil	Producing	09/26/95	11/05/95	8650	8556	Delaware Delaware	7111' - 7138' 8118' - 8385'	13-3/8", 48#, H40, at 850', w/ 700 sxs 8-5/8", 32#, J55, at 4379', w/ 1225 sxs 5-1/2", 15.5-17#, at 8649', w/ 775 sxs	Surf (circ) Surf (circ) 2059' (cbl)
Devon Energy Prod Co LP	Todd 13K Federal #11	30-015-27859	Eddy	13 T23S R31E	Oil	Producing	04/10/95	02/28/96	8650	7205	Delaware Delaware Delaware	6129' - 6141' (open) 7274' - 7292' (abnd) 8156' - 8302' (abnd)	13-3/8", 48#, H40, at 854', w/ 700 sxs 8-5/8", 32#, J55, at 4349', w/ 1500 sxs 5-1/2", 15.5-17#, J55, at 8650', w/ 1300 sxs	Surf (circ) Surf (circ) 4000' (cbl)
Forest Oil Corp	Barclay Federal #2	30-015-29683	Eddy	12 T23S R31E	Oil	Producing	07/19/97	08/23/97	8450	8384	Delaware (LBC)	8191' - 8341'	13-3/8", 48#, @ 850'. Cmt vol not available. 8-5/8", 32#, @ 4525'. Cmt vol not available. 5-1/2", 17#, @ 8450'. Cmt vol not available	Surf (circ) Surf (circ) 3700' (TS)
Forest Oil Corp	Barclay Federal #3	30-015-29694	Eddy	12 T23S R31E	Oil	Producing	11/27/97	01/14/98	8465	8421	Delaware	6718' - 8367'	13-3/8", 48#, @ 845', w/ 700 sxs 8-5/8", 32#, @ 4465', w/1800 sxs 5-1/2", 17#, J55, @ 8465', w/1140 sxs	Surf (circ) Surf (circ) 3700' (calc)

**Todd 13B Fed #2**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section VII to XII**

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

- (1) Proposed average injection rate: 800 BWPD  
Proposed maximum injection rate: 1500 BWPD
- (2) The system will be a closed system.
- (3) Proposed average injection pressure: 1000 psi  
Proposed max injection pressure: 1150 psi
- (4) The proposed injection fluid is produced water from the Delaware that will be re-injected into the Delaware formation.
- (5) Disposal zone formation water analysis: Attached is a water analysis for Delaware produced waters from the Todd Federal lease. Similar Delaware waters will be injected into the Todd 13B Fed #2.

**VIII** The proposed injection interval is located in the Delaware formation. This Permian age reservoir is approximately 102 feet thick in this area. The injection interval is from 5,760' to 5,862'.

The base of surface fresh water sands (Upper Permian Sands) are reported at 800'. No wells using fresh water drinking aquifers are reported in the proposed well review area. See attached Well / Surface Data Report per New Mexico Office of the State Engineer.

- IX** The proposed injection interval will acidized with 5000 gallons 7.5% NeFe.
- 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: Todd 13B Federal #2		Field: Ingle Wells (Delaware)	
Location: Sec 13-T23S-R31E; 990' FNL & 1930' FEL		County: Eddy	State: NM
Elevation: 3498' GL		Spud Date: 3/12/97	Compl Date: 5/15/97
API#: 30-015-28904	Prepared by: Ronnie Slack	Date: 5/27/04	Rev:

■ CURRENT

**WELL T&A--10/25/2000**  
Hole loaded w/ packer fluid and casing tested to 500 PSI for 30 minutes. Witnessed by BLM.

17-1/2" hole  
13-3/8", 48#, H40, @ 894'  
Cmt'd w/ 775 sxs to surface

TOC @ 3338' (CBL)

11" Hole  
8-5/8", 32#, J55, @ 4364'  
Cmt'd w/ 1120 sxs to surface

**DELAWARE** (perfed 5/10/97)  
8,134' - 8,144' LBC "E"  
8,176' - 8,216' LBC "D"  
8,305' - 8,329' LBC "B"  
acidized & frac'd  
5/26/97: 36 BO, 28 Mcf, 284 BW, on pump

**DELAWARE** (perfed 4/18/97)  
8,510' - 8,521'  
acidize & frac'd

CIBP @ 8078' (set 6/8/2000)

CIBP @ 8460' (set 5/10/97)

PBD @ 8,651'

7-7/8" Hole  
5-1/2", 15.5# & 17#, J55, @ 8740'  
Cmt'd w/ 970 sxs. TOC @ 3338' (CBL)

TD @ 8,741'

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: Todd 13B Federal #2		Field: Ingle Wells (Delaware)	
Location: Sec 13-T23S-R31E; 990' FNL & 1930' FEL		County: Eddy	State: NM
Elevation: 3498' GL		Spud Date: 3/12/97	Compl Date: 5/15/97
API#: 30-015-28904	Prepared by: Ronnie Slack	Date: 5/27/04	Rev:

■ **PROPOSED**

17-1/2" hole  
13-3/8", 48#, H40, @ 894'  
 Cmt'd w/ 775 sxs to surface

TOC @ 3338' (CBL)

11" Hole  
8-5/8", 32#, J55, @ 4364'  
 Cmt'd w/ 1120 sxs to surface

**PROPOSED SWD PERFS**  
DELAWARE  
 5,760' - 5,862'

**DELAWARE** (perf'd 5/10/97)  
 8,134' - 8,144' LBC "E"  
 8,176' - 8,216' LBC "D"  
 8,305' - 8,329' LBC "B"  
 acidized & frac'd  
 5/26/97: 36 BO, 28 Mcf, 284 BW, on pump

**DELAWARE** (perf'd 4/18/97)  
 8,510' - 8,521'  
 acidize & frac'd

7-7/8" Hole  
5-1/2", 15.5# & 17#, J55, @ 8740'  
 Cmt'd w/ 970 sxs. TOC @ 3338' (CBL)

**PROPOSED**  
 2-7/8", 6.5#, IPC Tubing

**PROPOSED**  
 5-1/2" LOK SET PACKER @ 5710'

**PROPOSED**  
 Dump bail 35' cement on top of CIBP  
 CIBP @ 8078' (set 6/8/2000)

CIBP @ 8460' (set 5/10/97)

PBD @ 8,651'

TD @ 8,741'

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DownHole SAT(tm)  
SURFACE WATER CHEMISTRY INPUT

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Devon Energy  
Todd Federal

Injection Pump

Report Date: 02-27-97  
Sample ID#: 1

Sampled: 02-03-97  
at 0000

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CATIONS

Calcium(as Ca)	25280
Magnesium(as Mg)	3806.4
Barium(as Ba)	0.00
Strontium(as Sr)	0.00
Sodium(as Na)	75965
Potassium(as K)	0.00
Lithium(as Li)	0.00
Iron(as Fe)	42.60
Ammonia(as NH3)	0.00
Aluminum(as Al)	0.00
Boron(as B)	0.00

ANIONS

Chloride(as Cl)	173190
Sulfate(as SO4)	0.00
"M" Alkalinity(as CaCO3)	152.50
"P" Alkalinity(as CaCO3)	0.00
Silica(as SiO2)	0.00
Phosphate(as PO4)	0.00
H2S (as H2S)	0.00
Fluoride(as F)	0.00
Nitrate(as NO3)	0.00

PARAMETERS

pH	5.85
Temperature(Deg F)	62.00
Calculated T.D.S.	278551
Molar conductivity	0.00

Pressure(Atm.)	0.00
P-CO2(Atm)	0.00
Density(g/ml)	1.18

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BAKER PERFORMANCE CHEMICALS INC.  
3920 ESSEX LANE HOUSTON, TEXAS 77027

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