

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



2004 JUL 19 PM 1 10

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

July 14, 2004

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

RE: Form 3160-5, Convert to injection/Dispose water
Notification to BLM, Roswell, NM
Barclay 11 H Federal #1
Eddy County, NM
Section 11, T23S, R31E

Gentlemen:

Please find attached a copy of Devon Energy Production Company, LP's Form 3160-5 that has been filed with the BLM office in Roswell, NM. A copy of the Form C108, Application for Authorization to Inject accompanied the sundry. Devon's C108 application was previously submitted to the Oil Conservation Division in a cover letter dated May 19, 2004.

If you have any questions, please contact me at (405)-552-4615. Thank you for your cooperation in this matter.

Sincerely,

Ronnie Slack
Engineering Technician

RS/rs

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 11, T23S, R31E, Unit H, 2180' FNL & 660' FEL

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.
Barclay 11 H Federal #1

9. API Well No.
30-015-25419

10. Field and Pool, or Exploratory Area
Livingston Ridge South, 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	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input checked="" type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> Dispose Water

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

5. 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.)*

EPCO is submitting a request to convert this well to SWD. Please find copy of C108 application attached.

I hereby certify that the foregoing is true and correct

Signed Ronnie Slack Title Engineering Technician Date 7/7/04

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

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 or to furnish any matter within its jurisdiction.



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

May 19, 2004

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

RE: Form C-108, Application for Authorization to Inject
Barclay 11 H Federal #1
Eddy County, NM
Section 11, T23S, R31E

RECEIVED
MAY 21 2004
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

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 Barclay 11 H Federal #1. A copy of this application has been filed with the OCD-Atesia office.

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: _____ 5/19/04 _____
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.

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: _____ Barclay 11 H Federal #1 _____

WELL LOCATION: _____ 2180' FNL & 660' FEL _____ H _____ Sec 11 _____ 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: _____ 700 _____ sx. _____ *or* _____ ft³ _____

Top of Cement: _____ Surface _____ Method Determined: Circ. cement

Intermediate Casing

Hole Size: _____ 12-1/4" _____ Casing Size: _____ 10-3/4" _____
Cemented with: _____ 1500 _____ sx. _____ *or* _____ ft³ _____

Top of Cement: _____ Surface _____ Method Determined: Circ cement

Production Casing

Hole Size: _____ 9-1/2" _____ Casing Size: _____ 7-5/8" _____
Cemented with: _____ 2450 _____ sx. _____ *or* _____ ft³ _____

Top of Cement: _____ 2808' _____ Method Determined: CBL 8/7/03

Total Depth: _____ 15,400' _____

Injection Interval

_____ 5,210' _____ feet to _____ 5,800' _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2", 9.2# Lining Material: IPC

Type of Packer: 7-5/8" Lok Set

Packer Setting Depth: 5,160'

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): Livingston Ridge South; 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.

The Barclay 11 H Federal #1 is currently perforated in the Delaware from 6588' to 8268'. It is proposed, to abandon these Delaware perfs with a CIBP at 6550' and cap with 35' cement, prior to initializing salt water disposal in the Delaware at 5210' to 5800'. Prior to the Delaware, this well was perforated and abandoned in the following zones. Morrow from 14,654' to 15,121'. The Morrow was abandoned with a packer plug and a cement plug from 14513' to 14569'. Strawn from 13356' to 13506'. The Strawn was abandoned with a packer plug and a cement plug from 12926' to 13253'. Wolfcamp from 12760' to 12770'. The Wolfcamp was abandoned with a CIBP @ 12318" and capped w/ 9 sxs cement. Wolfcamp from 11978' to 12024'. The Wolfcamp was abandoned with CIBP at 11955' and capped with 9 sxs cement. Bone Spring from 9182' to 10270'. The Bone Spring was abandoned with a CIBP at 9150' and capped with a cement plug from 9115' to 9150'.

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

The Delaware (6147') underlies the proposed Delaware injection interval at 5210' – 5800'. There are no productive oil or gas zones above the proposed injection zone in this wellbore.

Barclay 11 H Federal #1
APPLICATION FOR INJECTION
Form C-108 Section III

III. Well Data--On Injection Well

A. Injection Well Information

- (1) **Lease** Barclay 11 H Federal
Well No #1
Location 2180' FNL & 660' FEL
Sec.Twn,Rnge Sec 11, T23S-R31E, Unit H
Cnty, State Eddy County, New Mexico
- (2) **Casing** 13-3/8", 54.5#, @ 750' in 17-1/2" hole. Cmt'd w/ 700 sxs.
TOC @ surface. Cement circulated.
- 10-3/4", 45.5 & 40.5#, @ 4480' in 12-1/4" hole. Cmt'd w/ 1500 sxs.
TOC @ surface. Cement circulated.
- 7-5/8", 11.7# & 29.7#, @ 12600'. Cmt'd w/ 2450 sxs.
TOC @ 2808', determined by CBL (87/03)
- 4-1/2" Liner set at from 12446' to 15400'. Cmt'd w/ 600 sxs.
TOC @ liner top, determined by calculation.
- (3) **Injection Tubing** 3-1/2" ID, Internally Plastic Coated tubing run to 5,160'
- (4) **Packer** 7-5/8" Lok Set @ 5,160'

B. Other Well Information

- (1) **Injection Formation:** Delaware
Field Name: Livingston Ridge South; Delaware
- (2) **Injection Interval:** 5210' to 5800' (cased hole, perforated)
- (3) **Original Purpose of Wellbore:**

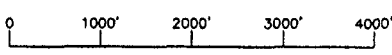
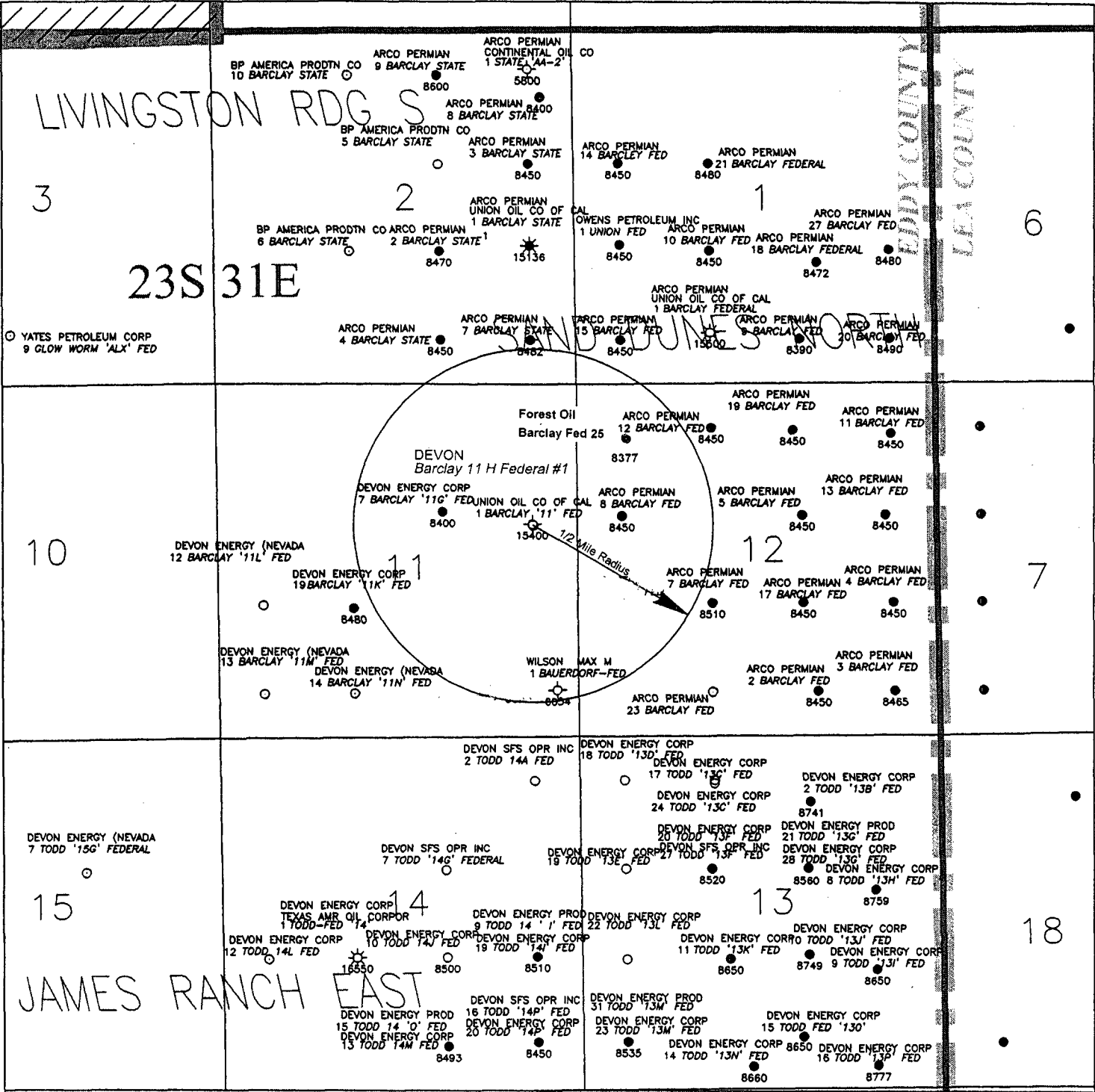
The Barclay 11 H Federal #1 was spud on 10/3/85 and drilled as an oil & gas well to a TD of 15,400'. This well tested the Morrow, Strawn, Wolfcamp, and Bone Spring zones without success. The well was plugged in 1986. In June, 2003 the well was re-entered and completed in the Delaware from 6588' to 8268'. The well tested 36 BO, 15 MCF, on pump, on 9/10/03. The Barclay 11 H Federal #1 last tested 1 BO, 0 MCF, 76 BW on 4/25/04.

(4) Other perforated intervals:

Delaware: 6588' - 8268' (Open)
Bone Spring: 9,182' - 10,270' (abandoned)
Wolfcamp: 11,978' - 12,024' (abandoned)
Wolfcamp: 12,760' - 12,770' (abandoned)
Strawn: 13,356' - 13,506' (abandoned)
Morrow: 14,654' - 14,708' (abandoned)
Morrow: 15,115' - 15,121' (abandoned)

(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/gas zone below the Delaware is the Bone Spring at +/- 9182'. This zone was unproductive in the Barclay 11 H Federal #1. There are no productive oil/gas zones above the proposed injection zone in the area of review.



devon

Sand Dunes, North Field
Eddy County, New Mexico

Barclay '11' H Federal #1
Sec 11, T23S R31E
2180' FNL & 660' FEL

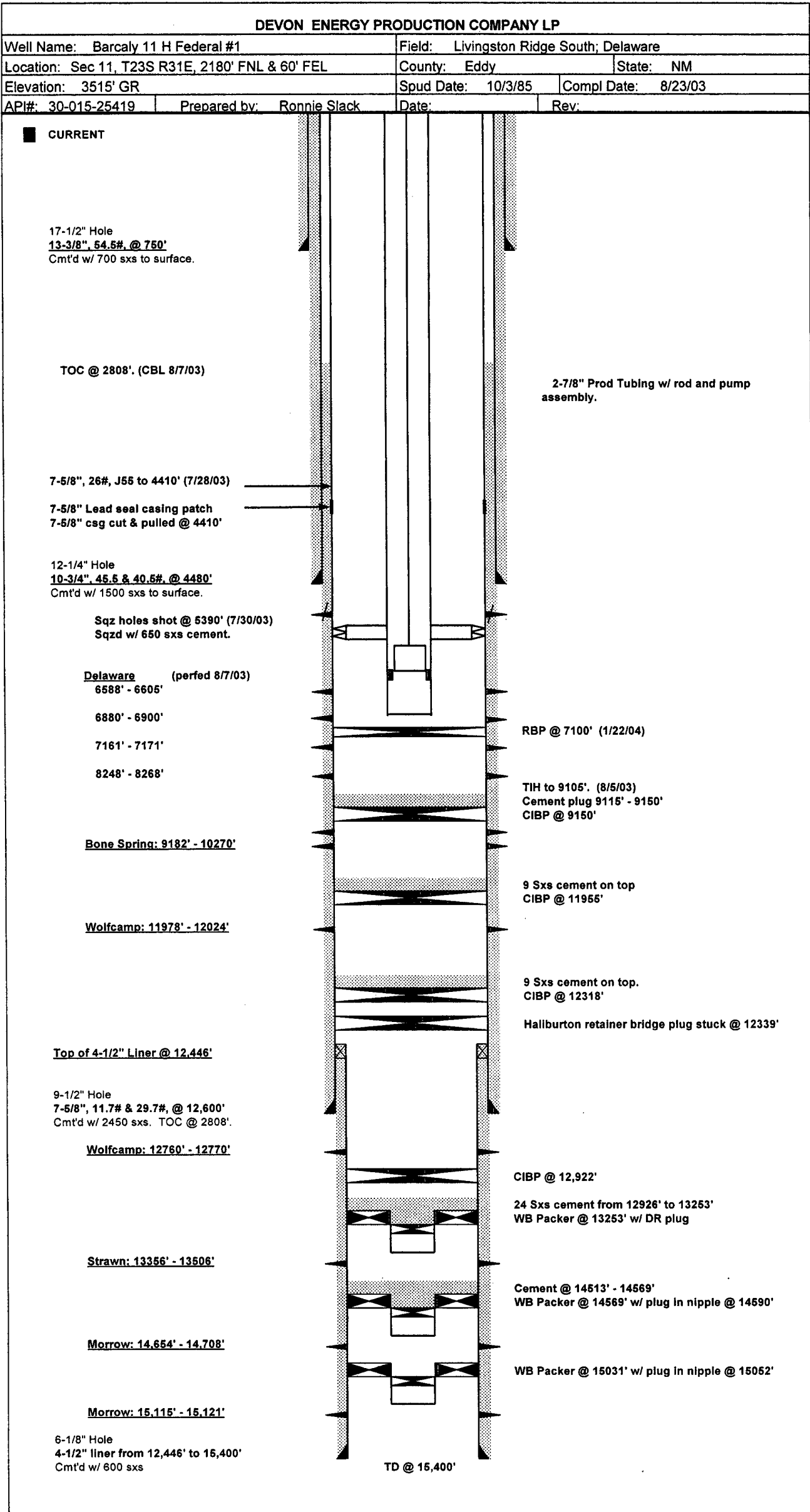
Scale: 1" = 2000'
BARCLAY-11-FED-No-1.dwg

Date: 4.28-04

	DEVON ENERGY PRODUCTION COMPANY, LP																			
	C108 ITEM VI--Well Tabulation in Review Area																			
	Barclay 11 H Federal #1 - 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					
1	Forest Oil Corp	Barclay State #7	30-015-30809	Eddy	2 T23S R31E	Oil	Act	04/06/00	05/04/00	8482	8437	Delaware	6146 - 8271	13-3/8", 48#, @ 895', w/700 sxs 8-5/8", 32#, @ 4473', w/1800 sxs 5-1/2", 17#, @ 8482', w/860 sxs	Circ circ 1929' (calc.)					
2	Devon Energy Prod Co LP	Barclay 11G Federal #7	30-015-27622	Eddy	11 T23S R31E	Oil	Act	09/14/93	10/24/93	8400	8356	Delaware	7460 - 7510 8056 - 8252	13-3/8", 48#, @ 855', w/700 sxs 8-5/8", 32#, @ 4400', w/1700 sxs 5-1/2", 15.5-17#, @ 8400', w/1150 sxs	Circ Circ 1530' (CBL)					
3	Devon Energy Prod Co LP	Barclay 11 H Federal #1 (Proposed for salt water injection)	30-015-25419	Eddy	11 T23S R31E	Oil	Act	06/28/03	08/23/03	15400	9104	Morrow Strawn Wolfcamp Bone Spring Delaware	14654 - 15121 13356 - 13506 11978 - 12770 9182 - 10270 6588 - 8268	13-3/8", 54.5#, @ 750, w/ 700 sxs 10-3/4", 40.5-45.5#, @ 4480, w/1500 sxs 7-5/8", 11.7-29.7#, @ 12600', w/2450 sxs 4-1/2", 12446 - 15400, w/600 sxs	Circ Circ 2808' (CBL) liner top (calc.)					
4	Max Wilson	Bauerdorf-Federal #1	30-015-10036	Eddy	11 T23S R31E	dryhole	P&A'd	02/05/63	2/23/63	6054	P&A'd	Dry Hole Not completed		Plugged & Abandoned 10 sxs in top 8-5/8" casing 32 sxs 800' to 900' 32 sxs 3030' to 3150' 32 sxs 4400' to 4500' 32 sxs 5550' to 5650' 8-5/8", @ 326'	Circ Circ Circ Circ Circ Circ					
5	Forest Oil Corp	Barclay Federal #8	30-015-29786	Eddy	12 T23S R31E	Oil	Act	07/20/98	08/17/98	8450	8357	Delaware	6585 - 7533	13-3/8", 48#, @ 885', w/700 sxs 8-5/8", 32#, @ 4446', w/1400 sxs 5-1/2", 15.5-17#, @ 8448', w/875 sxs	Circ Circ Circ					
6	Forest Oil Corp	Barclay Federal #25	30-015-30597	Eddy	12 T23S R31E	Oil	Act	09/24/99	10/25/99	8377	8324	Delaware	6553 - 8156	13-3/8", 48#, @ 854', w/700 sxs 8-5/8", 32#, @ 4421', w/1400 sxs 5-1/2", 17#, @ 8377', w/900 sxs	Circ Circ 1900' (TS)					

Well Name: Barcaly 11 H Federal #1		Field: Livingston Ridge South; Delaware	
Location: Sec 11, T23S R31E, 2180' FNL & 60' FEL		County: Eddy	State: NM
Elevation: 3515' GR		Spud Date: 10/3/85	Compl Date: 8/23/03
API#: 30-015-25419	Prepared by: Ronnie Slack	Date: 5/17/04	Rev:

TD @ 15,400'



MAX WILSON COMPANY			
Well Name: Bauerdorf Federal #1		Field: Wildcat	
Location: Sec 11-T23S-R21E. 660 FSL, 330' FEL		County: Eddy	State: NM
Elevation:		Spud Date: 2/5/63	Dry hole: P&A'd 2/23/63
API#: 30-015-10036	Prepared by: Ronnie Slack	Date: 5/6/04	Rev:

☐ PROPOSED

☒ CURRENT

DRY HOLE

PLUGGED & ABANDONED - 2/23/63

8-5/8" casing @ 326'

Open Hole from 326' to 6054'

Drilling Mud

Drilling Mud

Drilling Mud

Drilling Mud

TD @ 6054'

10 Sx Cement plug at surface

32 Sx Cement plug @ 800' - 900'

32 Sx Cement plug @ 3030' - 3150'

32 Sx Cement plug @ 4400' - 4500'

32 Sx Cement plug @ 5550' - 5650'

Barclay 11 H Federal #1
APPLICATION FOR INJECTION
Form C-108 Section VII to XII

VII Attach data on the proposed operation, including:

- (1) Proposed average injection rate: 1000 BWPD
Proposed maximum injection rate: 2000 BWPD
- (2) The system will be a closed system.
- (3) Proposed average injection pressure: 800 psi
Proposed max injection pressure: 1050 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 surface waters from the Todd Federal lease. Similar Delaware waters will be injected into the Barclay 11 H Federal #1.

VIII The proposed injection interval is located in the Delaware formation. This Permian age reservoir is approximately 610 feet thick in this area. The injection interval is from 5,210' to 5,800'.

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.

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☒ All

Well / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

WELL / SURFACE DATA REPORT 05/17/2004

(acre ft per annum)		(quarters are 1=NW 2=NE 3=SW 4=SE)		UTM are in Mete	
DB File Nbr	Use	Diversion	Owner	Well Number	
No Records found, try again		(quarters are biggest to smallest)		X Y are in Feet	Y
		Source	Twrs	Rng	Sec
		q	q	q	q
		Zone		X	
		Zone			Eastf

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☒ All

Well / Surface Data Report

Clear Form

Avg Depth to Water Report

Water Column Report

WATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 05/17/2004

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg

No Records found, try again

DownHole SAT(tm)
SURFACE WATER CHEMISTRY INPUT

Devon Energy
Todd Federal

Injection Pump

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

Sampled: 02-03-97
at 0000

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

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

Application For Injection
Devon Energy Prod Co LP
Barclay 11 H Federal #1
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 Barclay 11 H Federal #1

Date Mailed: 5/19/04

Signature: Ronnie Slack

Date: 5/19/04

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
- Barclay 11 H Federal #1
Form C-108 Section XIV

Proof of Notice to Leasehold Operators within 1/2 mile of Barclay 11 H Federal #1

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

A copy of this application has been mailed to the above leasehold operator by certified mail, pertaining to Devon Energy's application for salt water disposal in the Barclay 11 H Federal #1

Date Mailed: 5/19/04

Signature: Ronnie Slack

Date: 5/19/04

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

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:

April 21 _____ 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

21 day of April, 2004
Stephanie Brown

My commission expires 12-13-05

Notary Public

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 the Barclay 11 H Federal #1, located 2180' FNL & 660 FEL, Section 11, 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 5210' to 5800' with a maximum pressure of 1000 psi and a maximum rate of 2000 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.

April 21, 2004

Legal Notice

Devon Energy Production Company, LP, 20 North