

## Goetze, Phillip, EMNRD

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**From:** Goetze, Phillip, EMNRD  
**Sent:** Friday, September 1, 2017 4:09 PM  
**To:** Mike Pippin (mike@pippinllc.com)  
**Cc:** Jones, William V, EMNRD; Chavez, Carl J, EMNRD; Sanchez, Daniel J., EMNRD; Inge, Richard, EMNRD; Dade, Lewis (Randy); Griswold, Jim, EMNRD; McMillan, Michael, EMNRD  
**Subject:** IPI Request for the Federal T SWD No. 1  
**Attachments:** Federal T SWD # 1 WD.PDF; Federal T SWD #1 BLM completion.pdf; SWD-1135.pdf

RE: Federal T SWD No. 1 (API 30-015-26404); SWD-1135

Mr. Pippin:

The Division has considered Limerock's alternative proposal for a limited pressure increase following consideration of the report prepared by HollyFrontier for the IPI application. The Division will not approve any partial increase in the maximum surface injection pressure without hearing due to the requirements of the UIC Program for the operation of Class I (Non-haz) wells. Additionally, the well file and associated administrative orders were reviewed for this decision and to satisfy the requirements of the Division's Primacy Agreement. This review identified issues that also supported the denial and possible noncompliance of the well's operation under its injection authority.

The review of the well file finds evidence that the perforations in the Wolfcamp from 6868 feet to 7360 feet are not within the improved injection interval (7400 feet to 8200 feet) and were not squeezed off prior to the commencement of injection [see attached well diagram]. The current well file information available to OCD shows the completion of this interval in 1993, followed by a TA status with the CIBP placed at 6800 feet. The re-entry effort by Devon for the conversion to a disposal well in 2008 makes no mention of these perforations except that they are open as described in the submittal of the 3160-4 Well Completion Form (dated September 29, 2008) to the BLM [see attached copy]. Additionally, there is no exception in the order record for the packer setting depth currently at 6789 feet. Therefore, the Division is requesting that Limerock review their sources that may show these perforations to be sealed off. If Limerock cannot provide sufficient evidence that these perforations are not accepting injection fluids, then this well will be in noncompliance of the order and will be recommended for an enforcement action.

Please contact me with any questions regarding this matter. PRG

**Phillip Goetze, PG**  
Engineering Bureau, Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive, Santa Fe, NM 87505  
Direct: 505.476.3466  
E-mail: [phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



# DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

## Current Schematic L. Wolfcamp and Cisco SWD

17-1/2" Hole  
13-3/8", 68#, LTC, @ 472'  
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole  
8-5/8", J65, 32#, STC, @ 2,589'  
Cmt'd w/900 Sx. Circ to surface

SWD-1135 approved an injection zone from 7400 feet to 8200 feet with a packer located within 100 feet of the top of the injection interval

WOLFCAMP (8/21/93)  
6,868' - 7,038'

WOLFCAMP (8/18/93)  
7,092' - 7,097'; 7,120' - 7,146'

WOLFCAMP (8/16/93)  
7,330' - 7,340'; 7,350' - 7,360'

SWD Perforations:  
CISCO (8/1/93)  
7,685' - 7,695'

CISCO (7/30/93)  
7,760' - 7,768'

CISCO (7/28/93)  
7,780' - 7,798'

CISCO (7/25/93)  
7,932' - 7,940'

CISCO (7/22/93)  
8,034' - 8,042'  
8,055' - 8,060'

4" Liner top @ 9,055'

7-7/8" Hole  
5-1/2", N80, 17#, LTC, @ 9,473'  
Cmt'd w/430 Sx

MORROW (9/14/90)  
10,008' - 10,014'  
10,038' - 10,054'

4-3/4" Hole  
10" 10.46#, L80 Liner @ 9,055' - 10,141'  
Cmt'd w/80 Sx

## Formation Tops

Morrow 9,800'-10,250'  
Atoka 9,230' - 9,700'  
Upper Wolfcamp 6,400' - 7,200'  
Abo 5,600' - 6,200'  
Yeso 3,300' - 3,900'  
San Andres 2,000' - 2,800'  
Queen 1,450' - 1,650'

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

Following their addition in 1993 when the well was assessed for production; there is no record of these perforations being squeezed off.

Frac 7768'-7840' with 4500 gals 15% Spearhead acid and 118,255 gals Spectra Star 2500 + 108,750 # 100% 20/40 White sand.

Frac 7893'-8060' with 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 187,552 # 100% 20/40 White sand.

35' cement. 9,005' PBD  
CIBP @ 9,040' (7/21/93)

CIBP @ 9,950' (7/19/93)

10,100' PBD

10,141' TD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTOCT 06 2008  
OCD-ARTESIAFORM APPROVED  
OMB NO. 1004-0137  
EXPIRES, March 31, 2007

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Other SWD- Order 1135		5. Lease Serial No NM-42410							
b. Type of Completion <input type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input checked="" type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resrv., <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name							
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP		7. Unit or CA Agreement Name and No							
3. Address 20 North Broadway Oklahoma City, OK 73102-8260		8. Lease Name and Well No Federal T 1							
3a. Phone No (include area code) 405-552-8198		9. API Well No. 30-015-26404 0052							
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At Surface 660 FNL 990 FEL At top prod. Interval reported below At total Depth		10. Field and Pool, or Exploratory L. Wolfcamp and Cisco 96136 11. Sec, T, R, M, on Block and Survey or Area 12 18S 27E 12. County or Parish Eddy 13. State NM							
14. Date Spudded 6/28/1990	15. Date T D Reached 8/25/1990	16. Date Completed 9/15/08 - SWD 9/13/90 orig cmpl <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.							
17. Elevations (DR, RKB, RT, GL)* 3634' KB; 3618' GL									
18. Total Depth: MD 7600' TVD		19. Plug Back T D. MD 6142' TVI							
20. Depth Bridge Plug Set: MD 6177' TVI									
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)		22. Was well cored? Was DST run? Directional Survey?							
DLL-MGRD, SDL_DSN (original logs)		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy)							
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8" ILT&C	68		472'		450 Sx		Surf	
12 1/4"	8-5/8" J55	32		2589'		900 Sx		Surf	
7-7/8"	5-1/2" ILT&C	17		9473'		430 Sx		Surf	
4 3/4"	4" L80	10.46		10,141'		80 Sx		9055'	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
3 1/2" IPC	6789'	6789'						

25 Producing Intervals	Top	Bottom	26 Perforation Record	Size	No. Holes	Perf Status
Formation			Perforated Interval			
Wolfcamp	6868'	7360'	6868'-7360'		140	Open for SWD
Cisco	7893'	7840'	7893'-7840'		228	Open for SWD
Morrow	10,008'	10,054'	10,008'-10,054'			Abandoned
D.						

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7893-8060'	Frac - 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% White 20/40 sand.
7758-7840'	Frac - 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% White 20/40 sand.

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
NA		24	→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→				#DIV/0!		

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

DAVID R. GLASS  
PETROLEUM ENGINEER

Choke Size	Ibg. Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status
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(See instructions and spaces for additional data on reverse side)

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Ibg. Press. Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Ibg. Press. Flwg SI	Csg Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

(See instructions and spaces for additional data on reverse side)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

30 Summary of Porous Zones (Include Aquifers).

Show all important zones of porosity and contents thereof, Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31 Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc	Name	Top Meas Depth
				Yates	476'
				Queen	1218'
				Grayburg	1572'
				San Andres	2072'
				Tubb	4824'
				Abo	6016'
				Wolfcamp	7682'
				Cisco	8912'
				Strawn	9513'
				Atoka	9628'
				Morrow	9828'
				Morrow Clastics	9965'
				Lower Morrow	10104'

32. Additional remarks (include plugging procedure).

33 Indicate which items have been attached by placing a check in the appropriate box

- ☐ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☐ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other Wellbore Schematic

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (Please print) Norvella Adams Title Sr. Staff Engineering Technician

Signature [Signature] Date 9/17/2008

Title 18 U.S.C. Section 1001 and Title 49 U.S.C. Section 1212; make 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 as to any matter within its jurisdiction.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

FORM APPROVED  
OMB NO. 1004-0137  
EXPIRES: March 31, 2007

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other SWD conversion. Admin Order SWD-1135	
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP	
3a. Address 20 North Broadway, Oklahoma City, OK 73102	3b. Phone No. (include area code) 405-552-8198
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) 660 FNL 990 FEL A 12 18S 27E	

5 Lease Serial No NM-42410
6. If Indian, Allottee or Tribe Name
7. Unit or CA Agreement Name and No.
8 Well Name and No Federal T 1
9 API Well No 30-015-26404
10. Field and Pool, or Exploratory Area L.Wolfcamp and Cisco
11. County or Parish, State Eddy NM

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Addize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Redamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input checked="" type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Converted to SWD. Administrative Order SWD-1135

8/04/08 RU unit. ND wellhead and NU BOP. TIH with bit and drill collars.

8/05/08 Drill CIBP at 6800' and 7078'.

8/06/08 Drilled through cement at 7525', CIBP at 7300' and cement at 7560' and CIBP at 7595'.

8/07/08 Ran step rate test; pumped 50 bbls at 1/2 bbl/min - 0# psi, pumped 50 bbls at 1 bbl/min - 20# psi, pumped 50 bbls at 2 bbls/min - 75# psi, pumped 50 bbls at 3 bbls/min - 170# psi, pumped 50 bbls at 4 bbls/min - 250 psi.

8/08/08 Trucked in and established injection in the Wolfcamp at 150 BWPD at 170 psi.

8/11/08 Drilled cement retainers at 7745', and 7780'.

8/12/08 Drilled cement retainer at 7820' and 8000'. Circulate hole and TOH with tubing and bit.

8/13/08 Perforate Cisco from 7893' - 8060', total 140 holes. TIH and set packer at 7688'. Frac with 5,040 gals 15% HCl + 120,372 gals Spectra Star 2500 + 167,552 # 20/40 White sand.

8/14/08 TIH with retrievable tool and latch onto packer. Release packer and TOOH with packer and tubing. RU wireline and perforate Cisco from 7758'-7840'; 228 total holes

8/15/08 TIH with packer and set at 7582'. NU frac valve.

8/16/08 Frac 7758'-8060' with 4500 gals 15% Spearhead acid + 119,255 gals Spectra 2500 + 106,750 # 20/40 100% White sand. RD.

8/18/08 Release packer. TOOH with packer and tubing

8/20/08 TIH with bailer and bailed sand. Bailed sand to 8460'. TOOH with tubing. ND BOP and NU flange. Waiting on tubing.

9/15/08 TIH with packer and tubing. Set packer at 6789'. ND BOP and NU tree Ran MIT test to 500 # for 30 minutes - ok, notified Mike Bratcher with OCD

TOOH with tubing. RIH with 3 1/2" IPC tubing and set at 6789'. Injection line installation in progress.

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

Name: Norvella Adams

Title: Sr. Staff Engineering Technician

Signature: 

Date: 9/17/2008

ACCEPTED FOR RECORDS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by:

/S/ DAVID R. GLASS

Title:

Date:

SEP 29 2008

Accepted for record  
NMOCD

Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office:

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

**Current Schematic  
L. Wolfcamp and Cisco SWD**

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13-3/8", 68#, LTC, @ 472'  
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole  
8-5/8", J66, 32#, STC, @ 2,589'  
Cmt'd w/900 Sx. Circ to surface

WOLFCAMP (8/21/93)  
6,868' - 7,038'

WOLFCAMP (8/18/93)  
7,092' - 7,097'; 7,120' - 7,146'

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CISCO (7/22/93)  
8,034' - 8,042'  
8,055' - 8,060'

4" Liner top @ 9,055'

7-7/8" Hole  
5-1/2", N80, 17#, LTC, @ 9,473'  
Cmt'd w/430 Sx

MORROW (9/14/90)  
10,008' - 10,014'  
10,038' - 10,054'

4-3/4" Hole  
4" 10.46#, L80 Liner @ 9,055' - 10,141'  
Cmt'd w/80 Sx

**Formation Tops**

Morrow 9,600'-10,250'  
Atoka 9,230' - 9,700'  
Upper Wolfcamp 6,400' - 7,200'  
Abo 5,600' - 6,200'  
Yeso 3,300' - 3,900'  
San Andres 2,000' - 2,800'  
Queen 1,450' - 1,650'

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

Frac 7756'-7840' with 4500 gals 15% Spearhead acid and 118,253 gals Spectra Star 2500 + 108,750 # 100% 20/40 White sand.

Frac 7893'-8060' with 6040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% 20/40 White sand.

35' cement 9,005' PBD  
CIBP @ 9,040' (7/21/93)

CIBP @ 9,950' (7/19/93)

10,100' PBD

10,141' TD

