DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
3/14/2016		MAM	3/18/2016	SWD	pMAM1607847110

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]

-SWD
-Devon Energy Production Company, LP
615

[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 _____

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2016 MAR 16 A 11:18

well
-Cotton Draw Unit-SWD 484
30-015-29728
Pool
-SWD; Devonian
96101

[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.

Linda Good	Linda Good	Regulatory Compliance Specialist	3/15/2016
Print or Type Name	Signature	Title	Date

Linda.good@dvn.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery ___Pressure Maintenance ___X___Disposal _____Storage
Application qualifies for administrative approval? ___X___Yes _____No

II. OPERATOR: ____Devon Energy Production Company, LP_____

ADDRESS: _____333 West Sheridan Avenue, Oklahoma City, Oklahoma 73102-5010_____

CONTACT PARTY: __Linda Good_____ PHONE: 405-552-6558

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 ___X___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: ___Linda Good_____ TITLE: ___Regulatory Compliance Specialist___
SIGNATURE: Linda Good DATE: 3/15/2016

E-MAIL ADDRESS: _____linda.good@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: ____9/5/2013_____

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.

Proposed Injection Well: Cotton Draw Unit SWD #84
API: 30-015-29728
APPLICATION FOR INJECTION
Form C-108 Section III

III. Well Data--On Injection Well

A. Injection Well Information

(1)	**Lease**	Cotton Draw Unit
	Well No	#84
	Location	2615' FSL & 1160' FEL
	Sec,Twn,Rnge	Sec 2-T25S-R31E
	Cnty, State	Eddy County, NM
(2)	**Casing**	18-5/8", 87.5#, K-5, BTC, @ 700' Cmt w/1350 sx, circ cmt to surf 13-3/8", 68#, N-80, BTC, @ 4350' Cmt'd w/3250 sx, circ cmt to surf 9-5/8", 47/53.5#, P-110-55 LTC, @ 12200' Cmt'd w/6056, cbl 4090 7 5/8", 39#, P110 liner, @ 14657' Cmt w/650 sx, tol @ 11858' 7", 35#, TCA-80, LTC, @ 11687' 5-1/2" x 7" X/O @ 11687' Cmt w/400 sx, etoc @ 11256' 5 1/2", 20#, P110 SLX, @ 16295' Cmt w/650 sx, tol @ 14289'
(3)	**Injection Tubing**	3-1/2" 9.3# P-110 8rd EUE IPC tubing
(4)	**Packer**	5-1/2" Baker DB Packer @ +/- 16195'

B. Other Well Information

(1)	**Injection Formation:**	Paduca; Devonian, NW
	Field Name:	(To Be Assigned)
(2)	**Injection Interval:**	16,295 - 16,585'

(3) **Original Purpose of Wellbore:**

Oil & Gas Producer, SWD Injector

(4) **Other perforated intervals:**

Devonian: Open Hole – 16,295-16,585'

(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.**

Rustler 666'; Salado 1034' (Barren); Lamar 4356 (Oil)'; Ramsey 4375 (Oil); Cherry Canyon 5350' (Oil); Brushy Canyon 7051 (Oil)'; Bone Spring 8273' (Oil); Wolfcamp 12132 (Gas)'; Strawn 13626' (Gas); Atoka 13757' (Gas); Morrow 14408' (Gas); Mississippian 15896' (Barren); Woodford 16202' (Barren); Devonian/Silurian 16349' (Barren)

Proposed Injection Well: Cotton Draw Unit SWD #84
API: 30-015-29728
APPLICATION FOR INJECTION
Form C-108 Section VII to XIII

VII Attach data on the proposed operation, including:

(1) Proposed average injection rate: 5000 BWPD
Proposed maximum injection rate: 10000 BWPD

(2) The system will be a closed system.

(3) Proposed average injection pressure: 1629 psi
Proposed max injection pressure: 3259 psi

(4) The injection fluid will be produced water from area wells producing from the Bone Spring and/or Delaware formations that will be injected into the Devonian/Silurian formation.

(5) A representative water analysis is submitted for Bone Spring and Delaware formation.

VIII Geologic Injection Zone Data

The injection zone is the Devonian/Silurian formation from 16295 - 16585'. The gross injection interval is 290' thick. The Devonian formation is a Devonian aged dolomite. The average depth to fresh water is less than 800' in this area.

IX Proposed Stimulation

Based on injectivity results this interval could be stimulated with ~30,000 gals HCL.

X Log Data

Logs have been provided with previous completion report filed.

XI Fresh Water Analysis

A Fresh Water Analysis Report for the Paduca Delaware Water Well, in Sec 2-T25S-R31E located @ Lat 32.09' 56.7" Long -103.44' 51.3" has been provided.

XII Geologic / Engineering Statement

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.

Engineering: Devon respectfully requests permission to convert the Cotton Draw Unit #84 to a salt water disposal well. This wells average production is 120 mcf/d in gas, and 486 bbl water, currently this well has been shut in since June 6, 2013 due to the production of formation solids. It is currently completed to the Devonian and produces below a 5-1/2" liner set at 16,295' thru 4-1/2" open hole with a TD of 16,585'. The conversion would consist of removing the existing 3-1/2" production string and installing a 3-1/2" internally plastic coated injection string, with a packer set at +/-16,535'. The formation will be treated with 30,000 gals of 15% HCl acid. Current and proposed well bore diagrams attached.

Reservoir: At current production rates and high water hauling cost of $2.80/bbl this well produces uneconomically. Devon has been told by Enterprise that due to the H2S content of the Devonian gas, our market for this and other Devonian producers will disappear within 6 months. There are 2 wells within a ½ mile radius, the CDU 65 and the CDU 76. The CDU 65 is an active SWD well that injects into the Delaware, and the CDU 76 which is another Devonian producer which also produces uneconomically and will lose its market at the same time, this well will is planned to be TA'd to evaluate it for up hole or conversion potential.

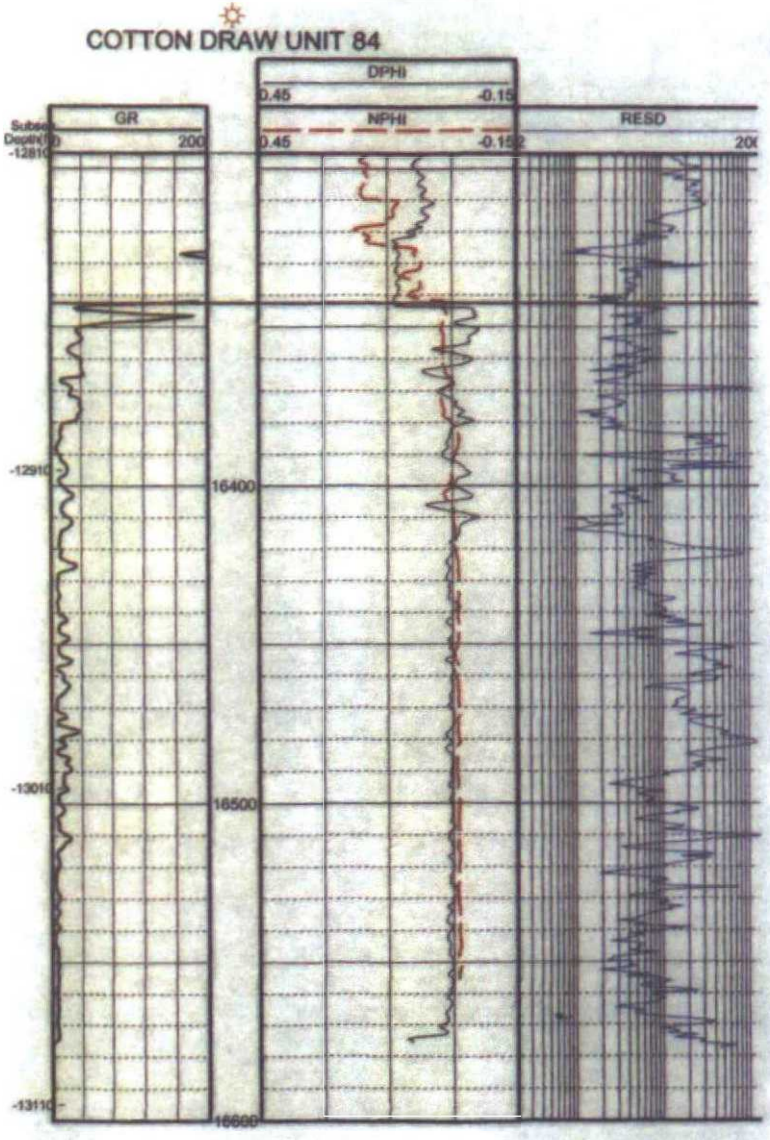
Geology: The Devonian is highly fractured and believed to act like an infinite reservoir in the vertical direction, therefore making it an ideal SWD candidate. This closest Devonian SWD well is the CDU 89 which is 1.2 miles from the CDU 84 and due to the vertically fractured nature of the Devonian and the distance between the two it is believed that these wells will not communicate. Beyond the CDU 76 there is one more Devonian producer in the area the, CDU 86, which is 1.4 miles from the CDU 84. But, due to the vertically fractured nature of the Devonian and the distance between the two it is not believed the two will communicate.

Derek Ohl, Geologist

3/3/16
Date:

XIII Proof of Notice

Proof of notice to surface owner, and public legal notification are attached.


COTTON DRAW UNIT 84
DPHI
0.45
-0.15
GR
200
NPHI
0.45
RESD
16400
16500
16600

Side 1

INJECTION WELL DATA SHEET

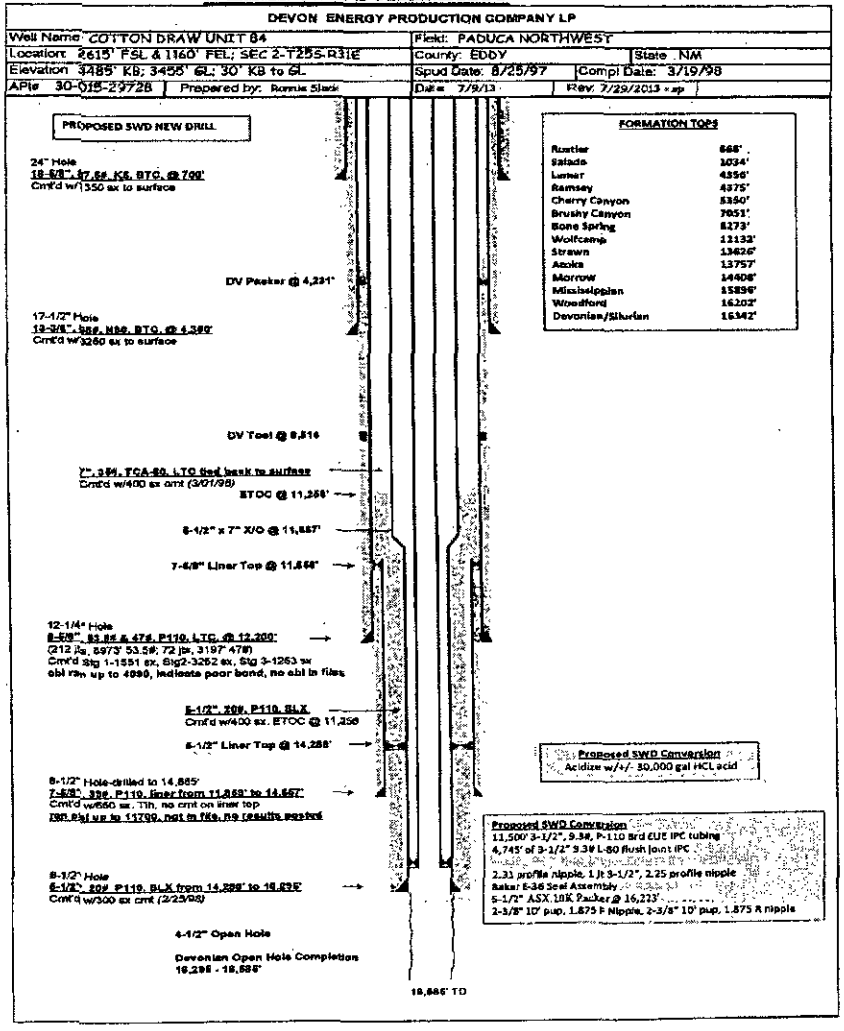
OPERATOR: Devon Energy Production Company, LP

WELL NAME & NUMBER: COTTON DRAW UNIT #84

WELL LOCATION: 2615' FSL & 1160' FEL I Sec 2 T25S R31E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24" Casing Size: 18-5/8,87.5# @ 700'

Cemented with: 1350 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circ. cement

Intermediate Casing

Hole Size: 17-1/2" Casing Size: 13-3/8", 68#, @ 4350'

Cemented with: 3250 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circ. cement

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8", 47/53.5#, @ 12200'

Cemented with: 6056 sx. *or* _____ ft³

Top of Cement: 4090 Method Determined: Circ. CBL

Production Casing

Hole Size: 8-1/2" Casing Size: 7-5/8", 39#, @ 14657'

Cemented with: 650 sx. *or* _____ ft³

Top of Cement: TOL @ 11858' Method Determined: Calc TOC

Total Depth: 5-1/2" 20# 16295 TD @16585'

Injection Interval (Open Hole)

16295' to 16585'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

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

Type of Packer: 5-1/2" ASX 10K Packer

Packer Setting Depth: +/- 16,223'

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

Additional Data

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

   If no, for what purpose was the well originally drilled? Oil & Gas Producer, SWD Injector

   _____

2. Name of the Injection Formation: Paduca; Devonian, NW

3. Name of Field or Pool (if applicable): To be Assigned by NMOCD

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.

   Devonian: Open Hole – 16,295-16,585'

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

   Rustler 666'; Salado 1034' (Barren); Lamar 4356 (Oil)'; Ramsey 4375 (Oil); Cherry Canyon 5350' (Oil); Brushy Canyon 7051 (Oil)'; Bone Spring 8273' (Oil); Wolfcamp 12132 (Gas)'; Strawn 13626' (Gas); Atoka 13757' (Gas); Morrow 14408' (Gas); Mississippian 15896' (Barren); Woodford 16202' (Barren); Devonian/Silurian 16349' (Barren)

Proposed Injection Well: Cotton Draw Unit SWD #84
API: 30-015-29728
APPLICATION FOR INJECTION
Form C-108 Section III

III. Well Data--On Injection Well

A. Injection Well Information

(1)	Lease	Cotton Draw Unit
	Well No	#84
	Location	*2615' FSL & 1160' FEL*
	Sec,Twn,Rnge	Sec 2-T25S-R31E
	Cnty, State	Eddy County, NM
(2)	Casing	18-5/8", 87.5#, K-5, BTC, @ 700' Cmt w/1350 sx, circ cmt to surf 13-3/8", 68#, N-80, BTC, @ 4350' Cmt'd w/3250 sx, circ cmt to surf 9-5/8", 47/53.5#, P-110-55 LTC, @ 12200' *Cmt'd w/6056, cbl 4090* 7 5/8", 39#, P110 liner, @ 14657' Cmt w/650 sx, toi @ 11858' 7", 35#, TCA-80, LTC, @ 11687' 5-1/2" x 7" X/O @ 11687' Cmt w/400 sx, etoc @ 11256' 5 1/2", 20#, P110 SLX, @ 16295' Cmt w/650 sx, toi @ 14289'
(3)	Injection Tubing	3-1/2" 9.3# P-110 8rd EUE IPC tubing
(4)	Packer	5-1/2" **ASX 10K Packer @ +/- 16,223'**

B. Other Well Information

(1)	*Injection Formation:* Field Name:	*Paduca; Devonian, NW* (To Be Assigned)
(2)	Injection Interval:	16,295 - 16,585'

(3) **Original Purpose of Wellbore:**

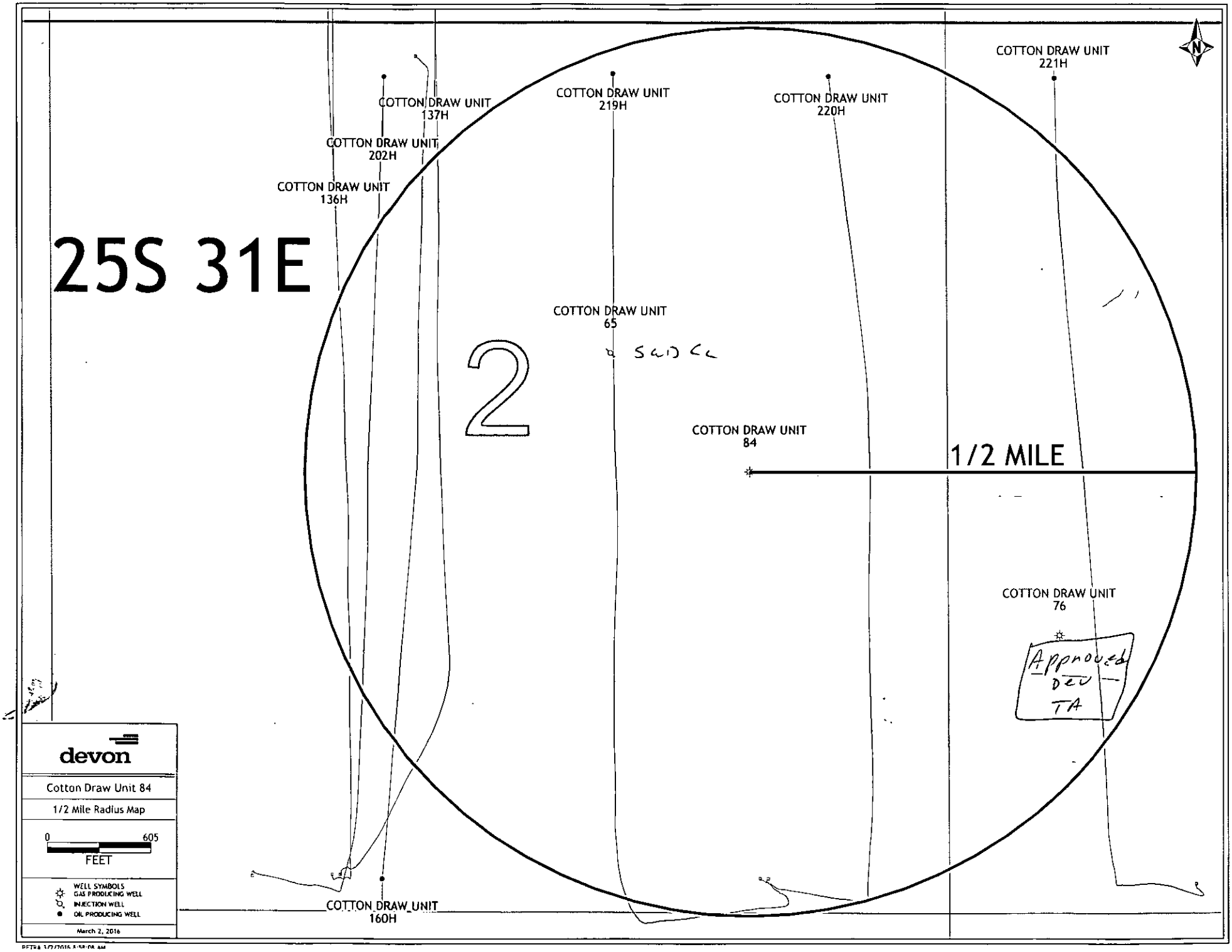
Oil & Gas Producer, SWD Injector

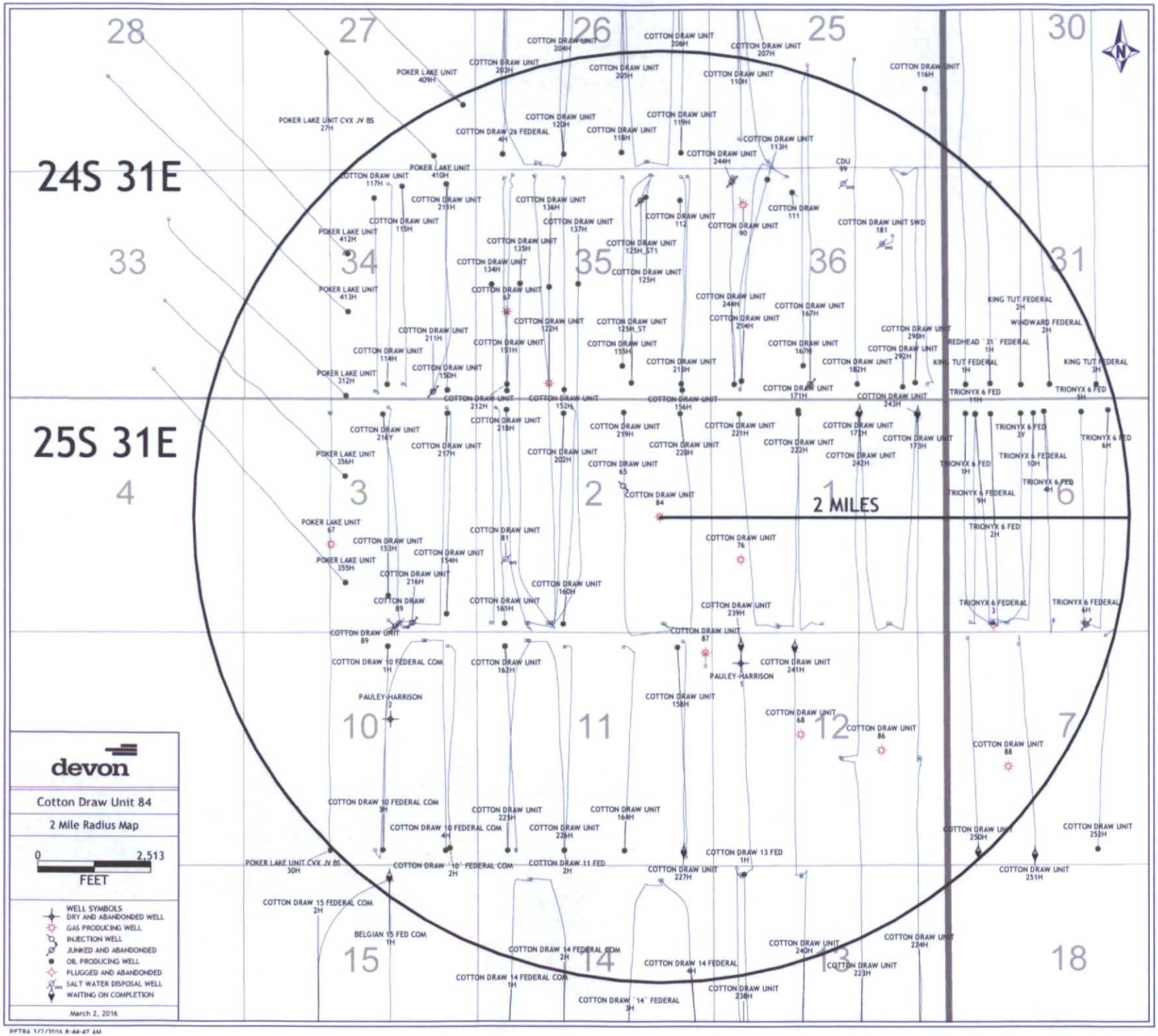
(4) ***Other perforated intervals:***

Devonian: Open Hole – 16,295-16,585'

(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.**

Rustler 666'; Salado 1034' (Barren); Lamar 4356 (Oil)'; Ramsey 4375 (Oil); Cherry Canyon 5350' (Oil); Brushy Canyon 7051 (Oil)'; Bone Spring 8273' (Oil); Wolfcamp 12132 (Gas)'; Strawn 13626' (Gas); Atoka 13757' (Gas); Morrow 14408' (Gas); Mississippian 15896' (Barren); Woodford 16202' (Barren); Devonian/Silurian 16349' (Barren)


25S 31E
2
COTTON DRAW UNIT 137H
COTTON DRAW UNIT 202H
COTTON DRAW UNIT 136H
COTTON DRAW UNIT 219H
COTTON DRAW UNIT 220H
COTTON DRAW UNIT 221H
COTTON DRAW UNIT 65
COTTON DRAW UNIT 84
1/2 MILE
COTTON DRAW UNIT 76
COTTON DRAW UNIT 160H
Approved
DEV
TA
devon
Cotton Draw Unit 84
1/2 Mile Radius Map
0
605
FEET
WELL SYMBOLS
GAS PRODUCING WELL
INJECTION WELL
OIL PRODUCING WELL
March 2, 2016


24S 31E
25S 31E
2 MILES
devon
Cotton Draw Unit 84
2 Mile Radius Map
0
2,513
FEET
WELL SYMBOLS
DRY AND ABANDONDED WELL
GAS PRODUCING WELL
INJECTION WELL
JUNKED AND ABANDONDED
OIL PRODUCING WELL
PLUGGED AND ABANDONDED
SALT WATER DISPOSAL WELL
WAITING ON COMPLETION
March 2, 2016

C108 ITEM VI--Well Tabulation in 1/2 Mile Review Area
Devon Energy Production Company, LP
Proposed Inj Well: COTTON DRAW UNIT SWD #84
Proposed Formation: DEVONIAN
Proposed Interval: 16295' - 16585'

Operator	Well Name	API NO	County	Surf Location	Sec	Twn	Rnge	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval-Ft	Casing Program	Cement / TOC
Devon Energy Prod Co LP	Cotton Draw 65	30-015-10843	Eddy	1980' FNL 1980' FEL	2	25S	31E	Inj	Active	7/8/1966	6/3/1967	19546	8180	Delaware Wolfcamp Morrow Devonian	5326-5714' (swd inj int) 12785-12851' (squeezed off) 14606-14625' CIBP @ 146444' 14787-14835' CIBP @ 15050' 16250-19546' (Open Hole) (See wellbore schematics)	20", 94# @ 600' 13-3/8", 54.5#, @ 4365' 10-3/4", 60.7#, @ 12570' 8-5/8" liner, 48, @ 16250'	1300 sx / surface 4300 sx / surface 4450 sx / 3555 ts 2350 sx / 11553 tol
Devon Energy Prod Co LP	Cotton Draw Unit 76	30-015-29252	Eddy	1680' FSL 1660' FWL	1	25S	31E	Gas	T/A Active	10/27/1996	5/1/1997	16623	16623	Devonian	16400-16623'	18-5/8", 87.5#, @ 700' 13-3/8", 68#, @ 4578' 9-5/8", 53.5#, @ 12033' 7", 35#, @ 11552' 7-5/8" liner, 39#, @ 14698 5-1/2", 20# @ 16400	1350 sx / surface 3300 sx / surface 4250 sx / surface 700 sx / 11656 tol 240 sx / 11091 toc
Devon Energy Prod Co LP	Cotton Draw Unit 84	30-015-29728	Eddy	2615' FSL 1160' FEL	2	25S	31E	Gas	Active	8/25/1997	3/19/1998	16585	16585	Devonian	16295-16585'	18-5/8", 87.5#, @ 700' 13-3/8", 68#, @ 4350' 9-5/8", 53.5/47#, @ 12200' 7", 35#, @ 11687' 7-5/8", 39#, @ 14657' 5-1/2", 20# @ 16295'	1350 sx / surface 3250 sx / surface 6056 sx / 4090 cbl 400 sx / etoc 11256 650 sx / 11858 tol 300 sx / 14289 tol
Devon Energy Prod Co LP	Cotton Draw Unit 219H	30-015-41363	Eddy	200' FSL 1110' FEL	2	25S	31E	Oil	Active	9/4/2013	1/23/2014	15280	15238	Bone Spring	10685-15212'	13-3/8", 48#, @ 880' 5/8", 40#, @ 4200' 1/2", 17#, @ 15280'	9- 940 sx / surface 5- 1235 sx / surface 3640 sx / TOC @ 4476
Devon Energy Prod Co LP	Cotton Draw Unit 220H	30-015-41364	Eddy	200' FSL 1060' FEL	2	25S	31E	Oil	Active	10/23/2013	1/24/2014	14975	14924	Bone Spring	10555-14912'	13-3/8", 48#, @ 903' 5/8", 40#, @ 4225' 1/2", 17#, @ 14975'	9- 945 sx / surface 5- 1503 sx / TOC @ 662' 3045 sx / TOC @ 3920

Cotton Draw Unit 84
C108 Application for Injection
Injection Water Analysis
Delaware Formation
Devon Energy Production Co LP

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	633542
Lease/Platform:	NEW MEXICO COM UNIT	Analysis ID #:	125781
Entity (or well #):	3	Analysis Cost:	$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	10/19/12
Analysis Date:	10/31/12
Analyst:	SANDRA GOMEZ
TDS (mg/l or g/m3):	232774.2
Density (g/cm3, tonne/m3):	1.16
Anion/Cation Ratio:	1
Carbon Dioxide:	240 PPM
Oxygen:	
Comments:	

Analysis of Sample 633542 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**143232.0**	**4040.05**	**Sodium:**	**67508.7**	**2936.46**
Bicarbonate:	**73.2**	**1.2**	**Magnesium:**	**3523.0**	**289.82**
Carbonate:	**0.0**	**0.**	**Calcium:**	**15857.0**	**791.27**
Sulfate:	**887.0**	**18.47**	**Strontium:**	**440.0**	**10.04**
Phosphate:			**Barium:**	**0.1**	**0.**
Borate:			**Iron:**	**8.0**	**0.29**
Silicate:			Potassium:	1245.0	31.84
			Aluminum:		
Hydrogen Sulfide:		0 PPM	Chromium:		
pH at time of sampling:		7.07	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**7.07**	Manganese:	0.200	0.01
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										CO_2 Press
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 * 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.83	4.20	0.00	3.08	0.04	33.62	0.05	21.57	-0.49	0.00	0.04
100	0	0.83	4.76	-0.07	0.00	0.03	27.18	0.03	12.89	-0.69	0.00	0.05
120	0	0.83	5.32	-0.13	0.00	0.05	41.47	0.02	9.53	-0.86	0.00	0.07
140	0	0.84	5.88	-0.18	0.00	0.09	71.16	0.03	10.65	-1.01	0.00	0.09

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

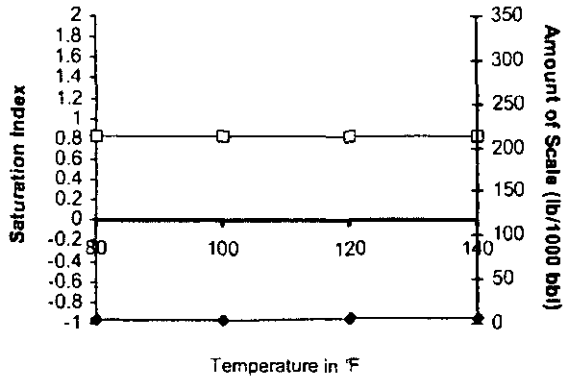
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

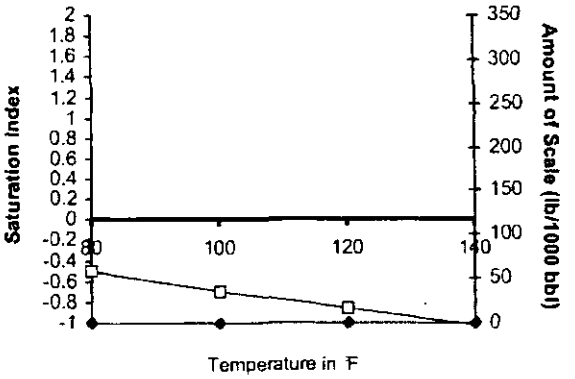
Scale Predictions from Baker Petrolite

Analysis of Sample 633542 @ 75 °F for DEVON ENERGY CORPORATION, 10/31/12

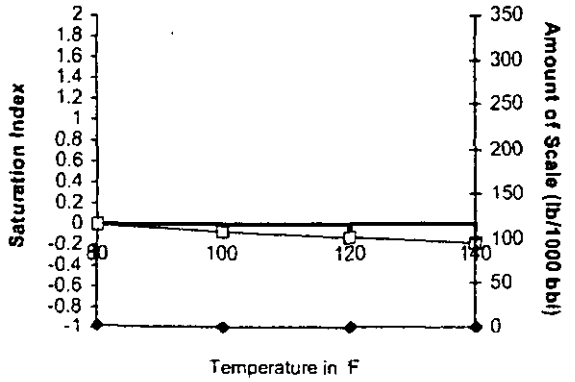
Calcite - CaCO3



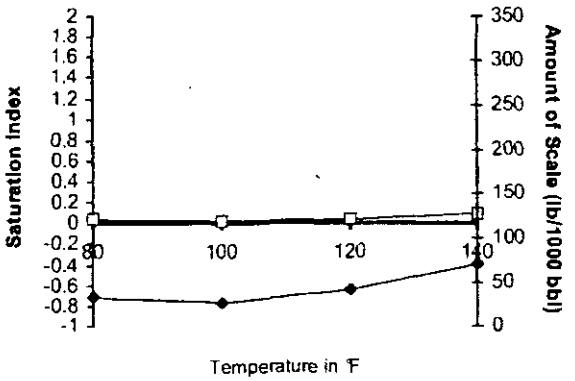
Barite - BaSO4



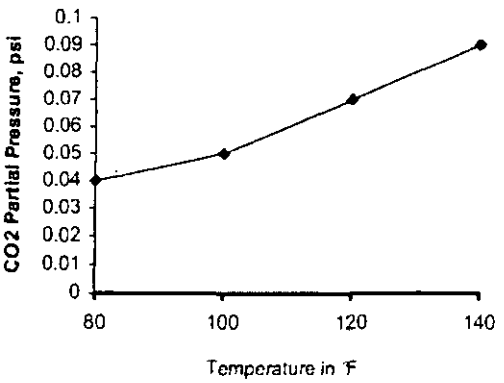
Gypsum - CaSO4*2H20



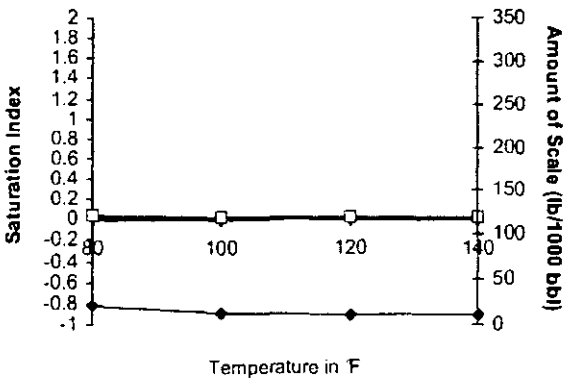
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Cotton Draw Unit 84
C108 Application for Injection
Injection Water Analysis
Bone Spring Formation
Devon Energy Production Co LP

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	633540
Lease/Platform:	CAPELLA UNIT	Analysis ID #:	125780
Entity (or well #):	1	Analysis Cost:	$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	10/19/12
Analysis Date:	10/31/12
Analyst:	SANDRA GOMEZ
TDS (mg/l or g/m3):	199313.2
Density (g/cm3, tonne/m3):	1.142
Anion/Cation Ratio:	1
Carbon Dioxide:	250 PPM
Oxygen:	
Comments:	

Analysis of Sample 633540 @ 75 °F

Anions	mg/l	meq/l
Chloride:	**120450.0**	**3397.46**
Bicarbonate:	**61.0**	**1.**
Carbonate:	**0.0**	**0.**
Sulfate:	**1966.0**	**40.93**
Phosphate:		
Borate:		
Silicate:		
Hydrogen Sulfide:		0 PPM
pH at time of sampling:		6.69
pH at time of analysis:		
pH used in Calculation:		**6.69**

Cations	mg/l	meq/l
Sodium:	**62153.2**	**2703.51**
Magnesium:	**1705.0**	**140.26**
Calcium:	**10875.0**	**542.66**
Strontium:	**431.0**	**9.84**
Barium:	**0.5**	**0.01**
Iron:	**33.0**	**1.19**
Potassium:	1637.0	41.86
Aluminum:		
Chromium:		
Copper:		
Leac:		
Manganese:	1.500	0.05
Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.21	1.16	0.21	402.17	0.23	344.60	0.47	167.23	0.63	0.29	0.08
100	0	0.27	1.74	0.14	287.31	0.23	339.39	0.44	161.74	0.44	0.29	0.1
120	0	0.33	2.03	0.08	177.94	0.25	363.40	0.43	159.42	0.27	0.00	0.12
140	0	0.38	2.60	0.03	77.54	0.29	409.12	0.43	159.42	0.12	0.00	0.15

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

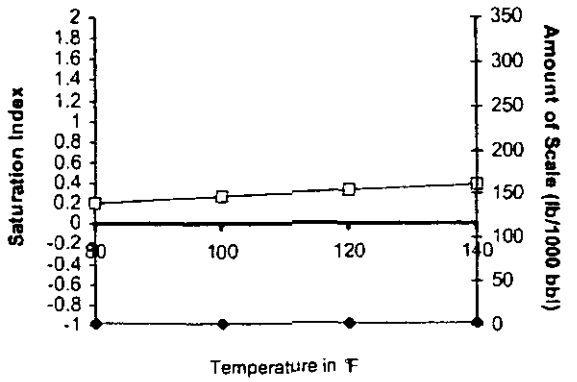
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

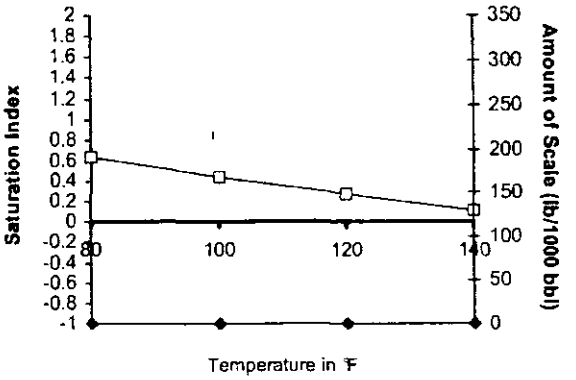
Scale Predictions from Baker Petrolite

Analysis of Sample 633540 @ 75 °F for DEVON ENERGY CORPORATION, 10/31/12

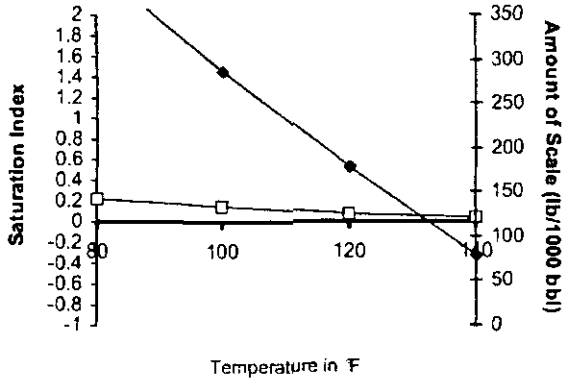
Calcite - CaCO3



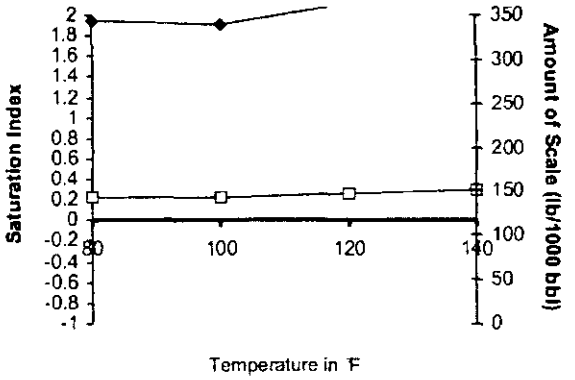
Barite - BaSO4



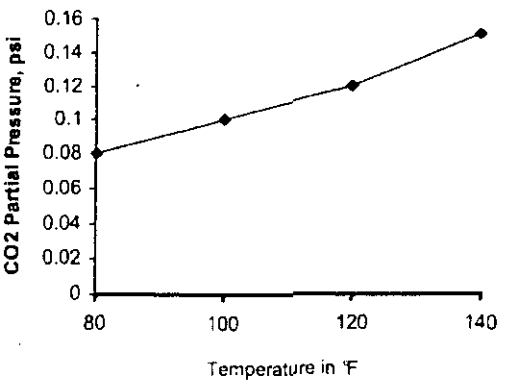
Gypsum - CaSO4*2H20



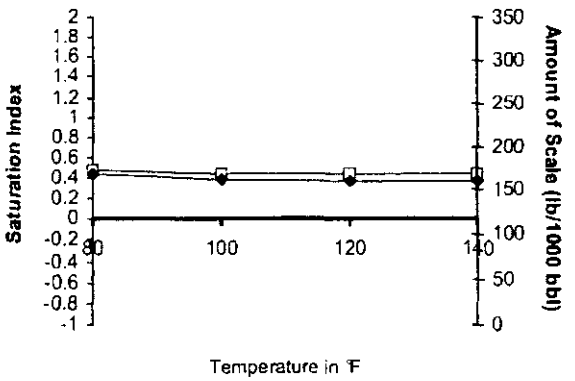
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Cotton Draw Unit 84
C108 Application for Injection
Injection Water Analysis
Delaware Formation
Devon Energy Production Co LP

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	633541
Lease/Platform:	BROWN BEAR	Analysis ID #:	125782
Entity (or well #):	1	Analysis Cost:	$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	10/19/12
Analysis Date:	10/31/12
Analyst:	SANDRA GOMEZ
TDS (mg/l or g/m3):	85195.9
Density (g/cm3, tonne/m3):	1.061
Anion/Cation Ratio:	1
Carbon Dioxide:	130 PPM
Oxygen:	
Comments:	

Analysis of Sample 633541 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**52707.0**	**1486.67**	**Sodium:**	**23678.3**	**1029.95**
Bicarbonate:	**109.8**	**1.8**	**Magnesium:**	**1474.0**	**121.26**
Carbonate:	**0.0**	**0.**	**Calcium:**	**6421.0**	**320.41**
Sulfate:	**77.0**	**1.6**	**Strontium:**	**161.0**	**3.67**
Phosphate:			**Barium:**	**0.3**	**0.**
Borate:			**Iron:**	**23.0**	**0.83**
Silicate:			Potassium:	542.0	13.86
			Aluminum:		
Hydrogen Sulfide:		0 PPM	Chromium:		
pH at time of sampling:		6.73	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**6.73**	Manganese:	2.500	0.09
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.21	2.90	-1.27	0.00	-1.30	0.00	-1.08	0.00	-0.71	0.00	0.15
100	0	0.29	4.19	-1.31	0.00	-1.28	0.00	-1.09	0.00	-0.88	0.00	0.19
120	0	0.38	5.80	-1.34	0.00	-1.22	0.00	-1.08	0.00	-1.03	0.00	0.24
140	0	0.47	7.41	-1.35	0.00	-1.15	0.00	-1.07	0.00	-1.16	0.00	0.29

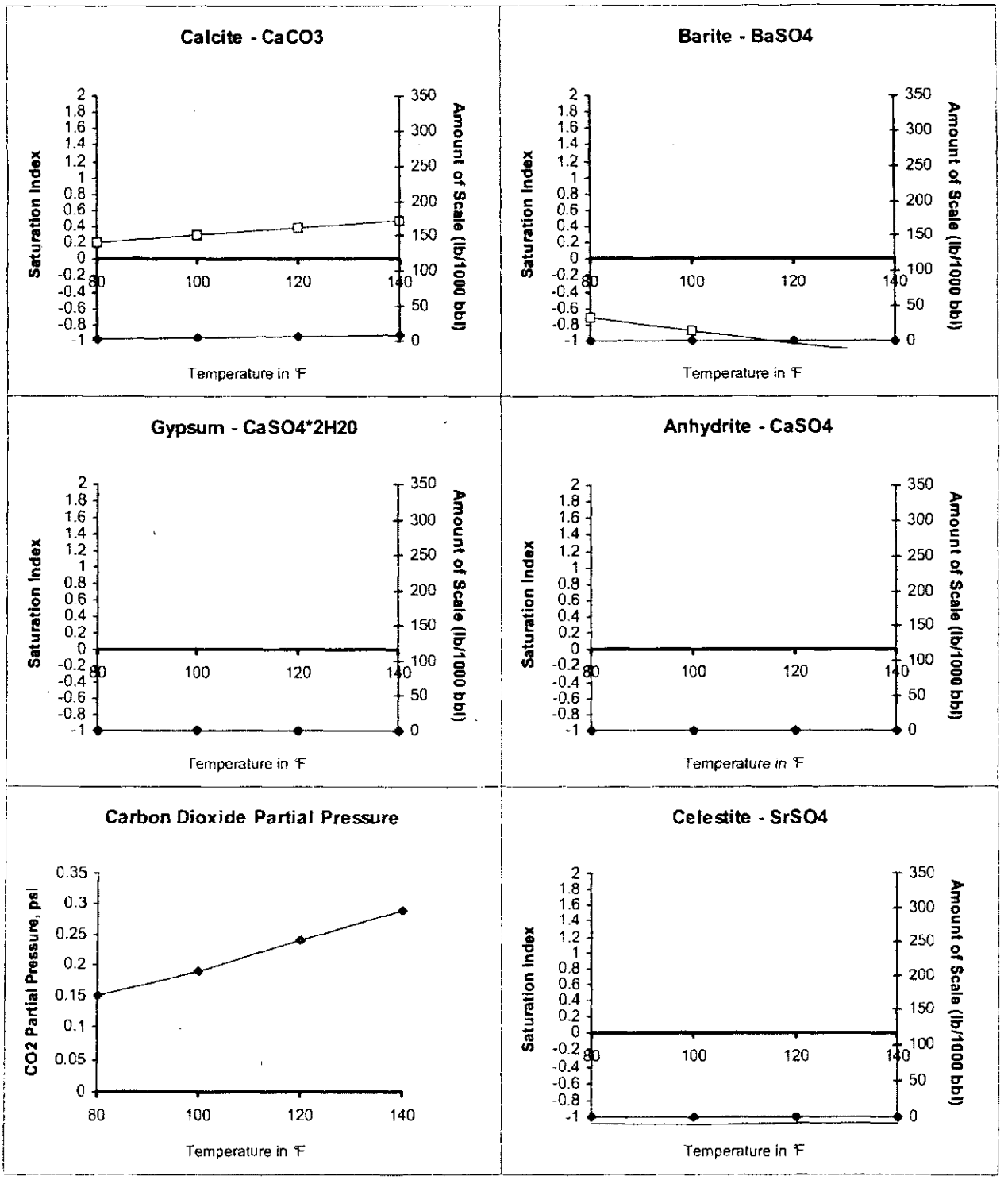
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Scale Predictions from Baker Petrolite

Analysis of Sample 633541 @ 75 °F for DEVON ENERGY CORPORATION, 10/31/12



Fresh Water Analysis Report
Paduca Delaware Water Well
SEC 2-T25S-R31E
Lat 32.09' 56.7" Long -103.44' 51.3"

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	575022
Lease/Platform:	PADUCA LEASE	Analysis ID #:	113161
Entity (or well #):	FRESH WATER	Analysis Cost:	$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	10/06/11
Analysis Date:	10/10/11
Analyst:	SANDRA GOMEZ
TDS (mg/l or g/m3):	3720.6
Density (g/cm3, tonne/m3):	1.004
Anion/Cation Ratio:	1.0000004
Carbon Dioxide:	20 PPM
Oxygen:	
Comments:	

Analysis of Sample 575022 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**328.0**	**9.25**	**Sodium:**	**452.1**	**19.66**
Bicarbonate:	**24.4**	**0.4**	**Magnesium:**	**120.0**	**9.87**
Carbonate:	**0.0**	**0.**	**Calcium:**	**531.0**	**26.5**
Sulfate:	**2248.0**	**46.8**	**Strontium:**	**7.0**	**0.16**
Phosphate:			**Barium:**	**0.1**	**0.**
Borate:			**Iron:**	**0.5**	**0.02**
Silicate:			Potassium:	9.5	0.24
			Aluminum:		
Hydrogen Sulfide:		0	Chromium:		
pH at time of sampling:		7	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		7	Manganese:	0.025	0.
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.84	0.00	-0.03	0.00	-0.10	0.00	-0.26	0.00	1.06	0.00	0.03
100	0	-0.72	0.00	-0.04	0.00	-0.04	0.00	-0.26	0.00	0.90	0.00	0.04
120	0	-0.59	0.00	-0.03	0.00	0.04	55.87	-0.24	0.00	0.78	0.00	0.05
140	0	-0.45	0.00	-0.01	0.00	0.15	173.21	-0.21	0.00	0.68	0.00	0.06

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Injection Water Analysis Report
Mad Dog 15 #1
SEC 15-T23S-R34E
(Devonian Formation Water)

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	FRANK GARDNER (575) 390-5194
Area:	JAL, NM	Sample #:	481511
Lease/Platform:	MAD DOG '15' LEASE	Analysis ID #:	102920
Entity (or well #):	1	Analysis Cost:	$90.00
Formation:	DEVONIAN		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	09/24/10
Analysis Date:	09/13/10
Analyst:	LEAH DURAN
TDS (mg/l or g/m3):	69356
Density (g/cm3, tonne/m3):	1.051
Anion/Cation Ratio:	1
Carbon Dioxide:	20 PPM
Oxygen:	N/A
Comments:	

Analysis of Sample 481511 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**40711.0**	**1148.31**	**Sodium:**	**24262.3**	**1055.35**
Bicarbonate:	**366.0**	**6.**	**Magnesium:**	**298.0**	**24.51**
Carbonate:	**0.0**	**0.**	**Calcium:**	**1833.0**	**91.47**
Sulfate:	**1404.0**	**29.23**	**Strontium:**	**55.0**	**1.26**
Phosphate:			**Barium:**	**1.0**	**0.01**
Borate:			**Iron:**	**4.5**	**0.16**
Silicate:			Potassium:	421.0	10.77
			Aluminum:		
Hydrogen Sulfide:		153 PPM	Chromium:		
pH at time of sampling:		8.4	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**8.4**	Manganese:	0.200	0.01
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.80	51.07	-0.42	0.00	-0.46	0.00	-0.15	0.00	1.22	0.65	0.01
100	0	1.70	54.67	-0.46	0.00	-0.43	0.00	-0.16	0.00	1.04	0.65	0.02
120	0	1.62	58.60	-0.49	0.00	-0.38	0.00	-0.16	0.00	0.89	0.65	0.05
140	0	1.56	62.86	-0.51	0.00	-0.31	0.00	-0.15	0.00	0.76	0.33	0.08

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

WATER ANALYSIS
Bone Spring Formation
Chimayo 16 ST #1

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	492168
Lease/Platform:	CHIMAYO UNIT	Analysis ID #:	100662
Entity (or well #):	16-1	Analysis Cost:	$90.00
Formation:	Bone Spring		
Sample Point:	HEATER DUMP		

Summary	
Sampling Date:	05/12/10
Analysis Date:	05/18/10
Analyst:	STACEY SMITH
TDS (mg/l or g/m3):	235300.4
Density (g/cm3, tonne/m3):	1.157
Anion/Cation Ratio:	1
Carbon Dioxide:	1400 PPM
Oxygen:	
Comments:	

Analysis of Sample 492168 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	142827.0	4028.63	**Sodium:**	76546.4	3329.58
Bicarbonate:	73.0	1.2	**Magnesium:**	1589.0	130.72
Carbonate:	0.0	0.	**Calcium:**	10332.0	515.57
Sulfate:	1021.0	21.26	**Strontium:**	1192.0	27.21
Phosphate:			**Barium:**	2.5	0.04
Borate:			**Iron:**	379.0	13.7
Silicate:			Potassium:	1334.0	34.12
			Aluminum:		
Hydrogen Sulfide:		17 PPM	Chromium:		
pH at time of sampling:		6.5	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**6.5**	Manganese:	4.500	0.16
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.18	1.40	-0.08	0.00	-0.03	0.00	0.58	321.11	1.00	1.12	0.14
100	0	0.24	1.95	-0.16	0.00	-0.05	0.00	0.55	310.50	0.80	1.12	0.18
120	0	0.30	2.51	-0.23	0.00	-0.04	0.00	0.54	304.91	0.62	1.12	0.21
140	0	0.35	3.35	-0.29	0.00	-0.01	0.00	0.53	303.52	0.47	0.84	0.25

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.
Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

WATER ANALYSIS
Delaware Formation
Apache 25 Fed 6

Laboratory Services, Inc.
4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Devon Energy

SAMPLE Apache 25-6
SAMPLED BY

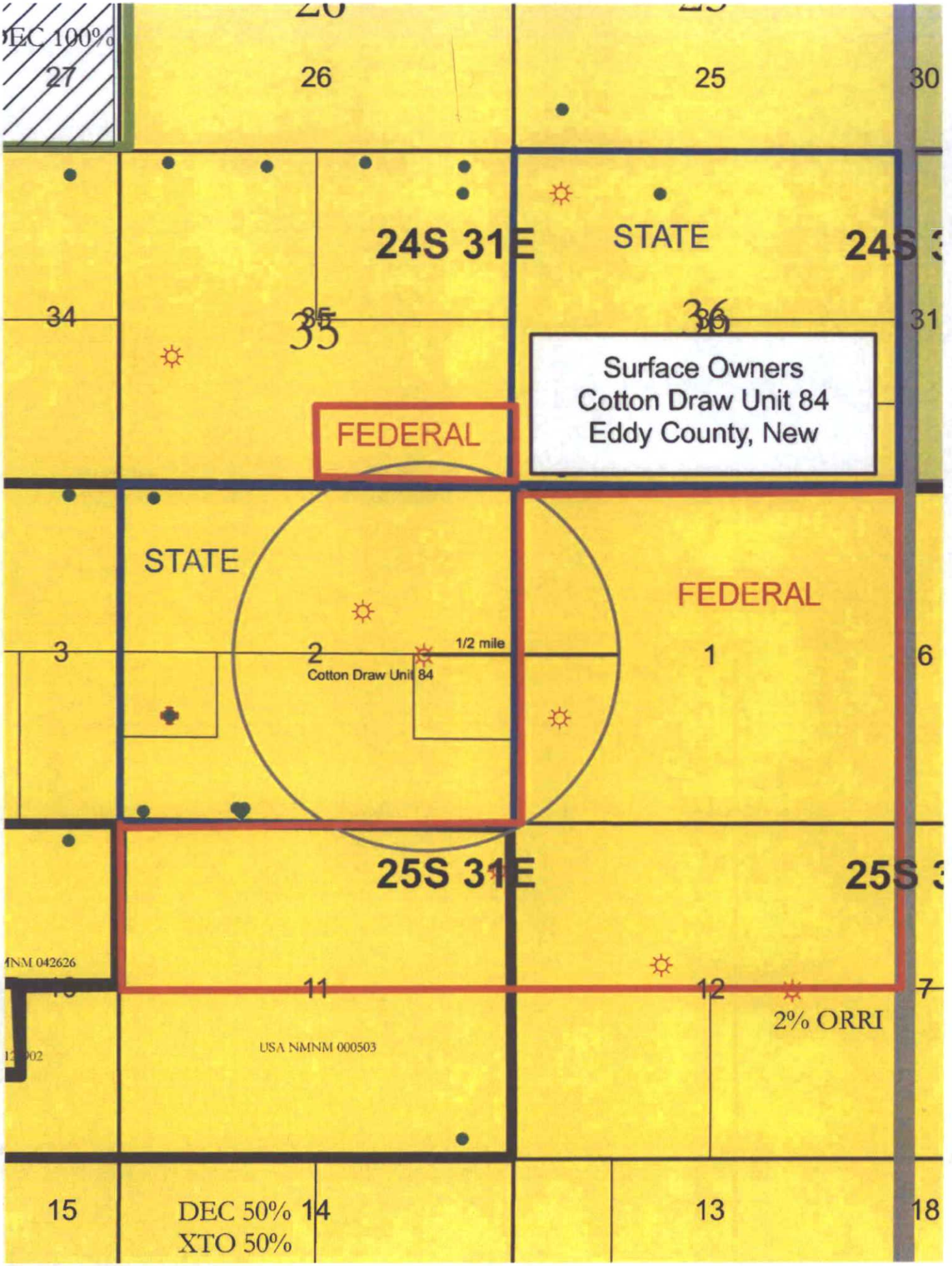
DATE TAKEN
REMARKS

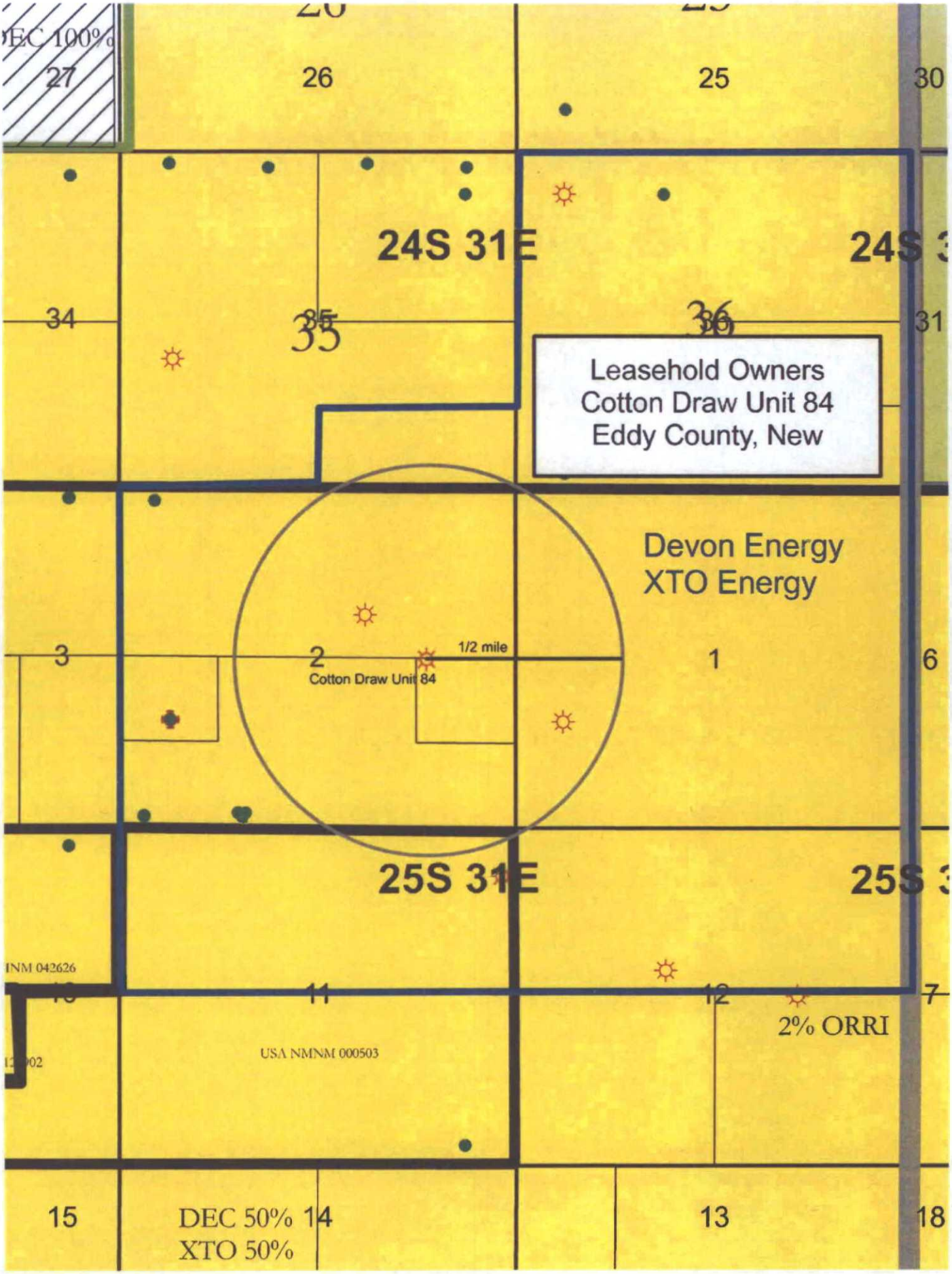
Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	80	
pH at Lab	6.05	
Specific Gravity @ 60°F	1.195	
Magnesium as Mg	59,566	
Total Hardness as CaCO3	103,700	
Chlorides as Cl	192,032	
Sulfate as SO4	200	
Iron as Fe	33	
Potassium	85	
Hydrogen Sulfide	0	
Rw	0.046	@ 23° C
Total Dissolved Solids	295,500	
Calcium as Ca	43,134	
Nitrate	35	

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.65

Analysis by: Vickie Biggs
Date: 3/5/04


EC 100%
27
26
25
30
24S 31E
STATE
24S 3
34
35
36
31
Surface Owners
Cotton Draw Unit 84
Eddy County, New
FEDERAL
STATE
FEDERAL
3
2
1/2 mile
Cotton Draw Unit 84
1
6
25S 31E
25S 3
NM 042626
11
12
7
2% ORRI
USA NMNM 000503
15
DEC 50%
XTO 50%
14
13
18


DEC 100%
27
26
25
30
24S 31E
24S 3
34
35
36
31
Leasehold Owners
Cotton Draw Unit 84
Eddy County, New
Devon Energy
XTO Energy
1/2 mile
3
2
Cotton Draw Unit 84
1
6
25S 31E
25S 3
NM 042626
11
12
7
2% ORRI
USA NMNM 000503
15
DEC 50%
XTO 50%
14
13
18

Leasehold Ownership
½ mile Cotton Draw Unit 84

24S-31E Section 35: S/2 SE/4

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc. 810 Houston Street Fort Worth, Texas 76102-6298	.500000
	Total: 1.000000

24S-31E Section 36: All

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc.	.500000
	Total: 1.000000

25S-31E Section 1: All

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc.	.500000
	Total: 1.000000

25S-31E Section 2: All

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc.	.500000
	Total: 1.000000

25S-31E Section 11: N/2

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc.	.500000
	Total: 1.000000

25S-31E Section 12: N/2

Devon Energy Production Company, L.P.	.500000
XTO Energy, Inc.	.500000

Total: 1.000000

Section XIV--Proof of Notice to Surface Land Owner
Devon Energy Prod Co LP
C108 Application For Injection
Proposed Well: Cotton Draw Unit SWD #84

Proof of Notice to Surface Land Owner of well location site.

Certified receipt No. 9214 8901 5271 8100 1166 39

New Mexico State Land Office
Attn: Donald Martinez – Surface Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

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 Cotton Draw Unit 84.

Date Mailed: 3/15/2016

Signature: Linda Good Date: 3/15/2016

Linda Good, Regulatory Compliance Specialist
Devon Energy Production Co., L.P.
333 West Sheridan Avenue
Oklahoma City, OK 73102

Section XIV--Proof of Notice to Leasehold Operators
Devon Energy Prod Co LP
C108 Application For Injection
Proposed Well: Cotton Draw Unit 84

Proof of Notice to Leasehold Operators within 1/2 mile of Cotton Draw Unit 76

Certified receipt No. 9214 8901 5271 8100 1166 22

XTO Energy, Inc
810 Houston Street
Fort Worth, Texas 76102-6298

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 Cotton Draw Unit SWD #84.

Date Mailed: 3/15/2016

Signature: Linda Good Date: 3/15/2016

Linda Good, Regulatory Compliance Specialist
Devon Energy Production Co., L.P.
333 West Sheridan Avenue
Oklahoma City, OK 73102

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Rynni Henderson, being first duly sworn, on oath says:

That she is the Publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

March 3 2016

That the cost of publication is **$73.49** and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this 4 day of March, 2016

My commission Expires 2/13/17

Notary Public

OFFICIAL SEAL
Cynthia Arredondo
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 2/13/17

March 3, 2016

Legal Notice

Devon Energy Production Company, LP, 333 West Sheridan Avenue, 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 existing well, the Cotton Draw Unit 84 is located at 2615' FSL & 1160' FEL, Section 2, Township 25 South, Range 31 East, in Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Bone Spring and/or Delaware formations. The disposal water will be injected into the Devonian formation at a depth of 16,295' to 16,585', open hole, at a maximum surface pressure of 3259 psi and a maximum rate of 10,000 BWPD. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within (15) days of this notice. Any interested party with questions or comments may contact Josh Bruening at Devon Energy Corporation, 333 West Sheridan Avenue, Oklahoma City, OK 73102-8260, or call (405) 552-7882.

Devon Energy Corporation
333 W. Sheridan Avenue
Oklahoma City, OK 73102

405-552-6558
Linda.good@dvn.com

devon

March 15, 2016

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

RE: Form C-108, Application for Authorization to Inject
Cotton Draw Unit SWD #84; API 30-015-29728
Eddy County, NM
Section 2, T25S, R31E

Dear Santa Fe Oil Conservation Division:

Please find attached Devon Energy Production Company, L.P.'s Form C-108 Application for Authorization to Inject. Devon's application proposes to convert the Cotton Draw Unit SWD #84 to salt water disposal in the Devonian formation.

The surface land owner and operators with leasehold ownership have been notified with Devon's application to inject via certified mail. A copy of this application has been filed with the OCD-Artesia office.

If you have any questions or concerns, please contact Josh Bruening at (405) 552-7882 or myself at (405) 552-6558.

Sincerely,

Linda Good

Linda Good
Regulatory Compliance Specialist

Enclosure

Devon Energy Corporation
333 W. Sheridan Avenue
Oklahoma City, OK 73102

405-552-6558
linda.good@dvn.com

devon

March 15, 2016

New Mexico State Land Office
Surface Division
Attn: Donald Martinez
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: Form C-108, Application for Authorization to Inject
Cotton Draw Unit SWD #84; API 30-015-29728
Eddy County, NM
Section 2, T25S, R31E

Dear New Mexico State Land Office:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject. Devon's application proposes to convert the Cotton Draw Unit #84 to salt water disposal in the Devonian formation.

The surface land owner and operators with leasehold ownership have been notified with Devon's application to inject via certified mail. A copy of this application has been filed with the OCD-Artesia office.

If you have any questions or concerns, please contact Josh Bruening at (405) 552-7882 or myself at (405) 552-6558.

Sincerely,

Linda Good

Linda Good
Regulatory Compliance Specialist

Enclosure

Devon Energy Corporation
333 W. Sheridan Avenue
Oklahoma City, OK 73102

405-552-6558
linda.good@dvn.com

devon

March 15, 2016

Oil Conservation Division
811 S. First Street
Artesia, New Mexico 88210

RE: Form C-108, Application for Authorization to Inject
Cotton Draw Unit SWD #84; API 30-015-29728
Eddy County, NM
Section 2, T25S, R31E

Dear Conservation Division – Artesia District Office:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject. The original application has been filed with the Oil Conservation Division-Santa Fe Office.

Devon's application proposes to convert the Cotton Draw Unit SWD #84 to salt water disposal in the Devonian formation.

The surface land owner and operators with leasehold ownership have been notified with Devon's application to inject via certified mail.

If you have any questions or concerns, please contact Josh Bruening at (405) 552-7882 or myself at (405) 552-6558.

Sincerely,

Linda Good

Linda Good
Regulatory Compliance Specialist

Enclosure

Devon Energy Corporation
333 W. Sheridan Avenue
Oklahoma City, OK 73102

405-552-6558
Linda.good@dvn.com

devon

March 15, 2016

XTO Energy, Inc.
810 Houston Street
Ft. Worth, Texas 76102-6298

RE: Form C-108, Application for Authorization to Inject
Cotton Draw Unit SWD #84; API 30-015-29728
Eddy County, NM
Section 2, T25S, R31E

Dear XTO Energy, Inc.:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject.

Devon's application proposes to convert the Cotton Draw Unit #84 to salt water disposal in the Devonian formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Cotton Draw Unit #84 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions or concerns, please contact Josh Bruening at (405) 552-7882 or myself at (405) 552-6558.

Sincerely,

Linda Good

Linda Good
Regulatory Compliance Specialist

Enclosure

SLO / Devon states depletion - SLO & Devon negotiated settlement Oct 8th

C-108 Review Checklist: Received 08/08/13 Add. Request: 09/16/13 Reply Date: — Suspended: — [Ver 10]

PERMIT TYPE: WFX / PMX / SWD Number: 1447 Permit Date: 10/25/13 Legacy Permits/Orders: NA

Well No. 84 Well Name(s): Cotton Draw Unit (CDU)

API: 30-0 15-29728 Spud Date: 08/25/97 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 2615 FSL / 1160 FEL Lot — Unit I Sec 2 Tsp 25S Rge 31E County Eddy

General Location: Cotton Draw / south of Rapp / near TX border Pool: Padua, NW; Devonian Pool No.: 96615

Operator: Devon Energy Production Company, LP OGRID: 6137 Contact: Stephanie Porter

COMPLIANCE RULE 5.9: Inactive Wells: 5 Total Wells: 1819 Fincl Assur: Yes Compl. Order? No **IS 5.9 OK?** Yes

Well File Reviewed ✓ Current Status: Former producer in Devonian 11/04/97

Well Diagrams: NEW: Proposed ○ RE-ENTER: Before Conv. ✓ After Conv. ✓ Are Elogs in Imaging?: Multiple / only for open hole portion / CBL 4090' to 12,139'

Planned Rehab Work to Well: No changes to well construction / acidize / add tubing / packer system

Well Construction Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __ **Conductor**	—	—		—	—
Planned __or Existing ✓ **Surface**	24 / 18 5/8	0 to 700		1350	Cir. to surface
Planned __or Existing ✓ **Interm/Prod**	17 1/2 / 13 3/8	0 to 4350	DV Tool 4291	3250	Cir. to surface
Planned __or Existing ✓ **Prod/Interm**	12 1/4 / 9 5/8	0 to 12200	DV tool 8514	1050 / 3350	CBL - 4090'
Planned __or Existing ✓ **Liner/Prod**	8 1/2 / 7 3/8	11858 - 14037	—	420	TOL - calculated
	6 1/2 / 5 1/2	14289 - 16295		300	11,826'
Planned __or Existing ✓ **OH / PERF**	4 3/4 - 5 1/8	16295 - 16585	Inj Length 290'		

Injection Stratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops?
Adjacent Unit: Litho. Struc. Por.		Morrow	14408
Confining Unit: Litho. Struc. Por.		Mississippian	15896
Proposed Inj Interval TOP:	16295	Woodford fm	16202
Proposed Inj Interval BOTTOM:	16585	Devonian fm	16342
Confining Unit: Litho. Struc. Por.	NA	Silurian / Fusselman (included)	
Adjacent Unit: Litho. Struc. Por.	—	Montoya	—

Completion/Operation Details:

Drilled TD 16585 PBTD NA

NEW TD NA NEW PBTD NA

NEW Open Hole NA or NEW Perfs NA

Tubing Size 3 1/2 in. Inter Coated? Yes

Proposed Packer Depth 16180 ft

Min. Packer Depth 16195 (100-ft limit)

Proposed Max. Surface Press. 3259 psi

Admin. Inj. Press. 3259 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ○ Noticed? NA **BLM Sec Ord** ✓ NA **WIPP** ✓ NA Noticed? NA **SALADO:** T: 1037 B: 4356 **CLIFF HOUSE** NA

FRESH WATER: Formation Pecos Basin (Alluvial) Max Depth 300 to 600' ft Wells? ✓ FW Analysis ✓ from 2022 well on lease **HYDROLOGIC AFFIRM By Qualified Person** ✓

Disposal Fluid: Formation Source(s) Delaware fm / CDU (Bone Spring fm) Analysis? Yes On Lease ○ Operator Only ✓ or Commercial ○

Disposal Interval: Injection Rate (Avg/Max BWPD): 5000/10000 Protectable Waters: NO **CAPITAN REEF:** thru ○ adj ○ NA ✓

H/C Potential: Producing Interval? Yes - see note Formerly Producing? Yes Method: E Log / Mudlog / DST / Depleted / Other See e-mails

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 2 Horizontals? 0

Penetrating Wells: No. Active Wells 2 Num Repairs? 0 on which well(s)? [one well injection / SWD 1460 Delaware GP] Diagrams? Yes - on file

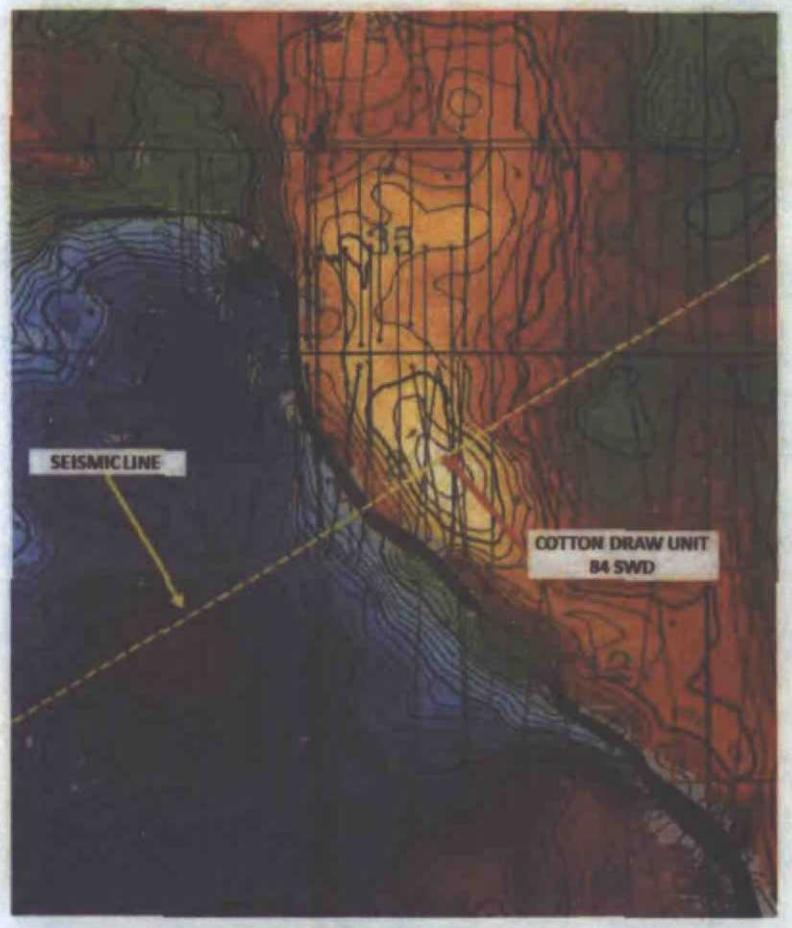
Penetrating Wells: No. P&A Wells 0 Num Repairs? 0 on which well(s)? — Diagrams? NA

NOTICE: Newspaper Date 07/18/13 Mineral Owner SLO Surface Owner SLO N. Date 8/13/13

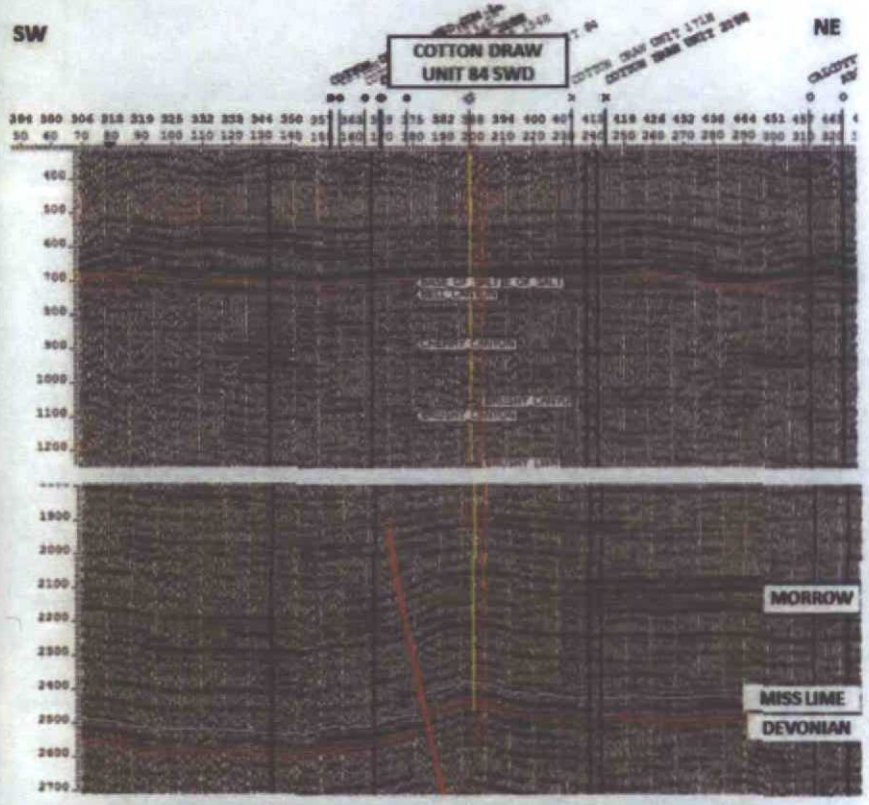
RULE 26.7(A): Identified Tracts? Yes Affected Persons: XTO Energy [Unit with Devon] N. Date 8/13/13

Permit Conditions: Issues: CBL not available on file,

Add Permit Cond: None identified - except restate 100-ft packer (max depth of 16195') size.



MISS LIME TIME STRUCTURE MAP
C.I.= 4 MSEC= 25 FT.



SOUTHWEST-NORTHEAST TRENDING 3D SEISMIC LINE
OVER THE COTTON DRAW UNIT 84 SWD

Good, Linda

From: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Sent: Thursday, March 03, 2016 8:41 AM
To: Good, Linda
Cc: Jones, William V, EMNRD
Subject: FW: Cotton Draw Unit SWD #84 - C-108 Expiration (30-015-29728)

Linda:

FYI regarding your re-application for this well. This will be attached to your application as part of the record. PRG

Phillip R. Goetze, PG
Engineering and Geological Services 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

From: Holm, Anchor [mailto:aholm@slo.state.nm.us]
Sent: Thursday, March 03, 2016 7:32 AM
To: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Cc: Martin, Ed <emartin@slo.state.nm.us>; Khalsa, Niranjan K. <nkhalsa@slo.state.nm.us>
Subject: RE: Cotton Draw Unit SWD #84 - C-108 Expiration (30-015-29728)

Phil,

The SLO has received the compensatory royalty payment on September 14, 2014, and has agreed to withdraw our objection to this SWD conversion of the Cotton Draw Unit #84 gas well. This reapplication will likely not be further contested by the SLO assuming that no significant changes are made in the new proposed conversion and injection interval.

Anchor E. Holm
Geoscientist/Petroleum Engineering Specialist
Oil Gas & Minerals Division
505.827.5759
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
aholm@slo.state.nm.us

nmstatelands.org

From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Tuesday, March 01, 2016 1:17 PM
To: Holm, Anchor <aholm@slo.state.nm.us>
Subject: FW: Cotton Draw Unit SWD #84 - C-108 Expiration (30-015-29728)

Anchor:

A notice of coming application. The SLO protested this well, but resolved its protest with Devon. Devon let this lapse without providing an extension letter. There would be no changes to the application, only the application to renew the order. PRG

Phillip R. Goetze, PG
Engineering and Geological Services 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

From: Goetze, Phillip, EMNRD
Sent: Tuesday, March 01, 2016 12:28 PM
To: 'Good, Linda' <Linda.Good@dvn.com>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>; Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: RE: Cotton Draw Unit SWD #84 - C-108 Expiration (30-015-29728)

Linda:

Yes, SWD-1447 has expired or terminated. Any petition to extend this order had to be submitted prior to the two-year anniversary date, 10/25/2015. A new C-108 would be required to have a new SWD order issue for this well. PRG

Phillip R. Goetze, PG
Engineering and Geological Services 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

From: Good, Linda [mailto:Linda.Good@dvn.com]
Sent: Tuesday, March 01, 2016 5:56 AM
To: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Subject: Cotton Draw Unit SWD #84 - C-108 Expiration (30-015-29728)

Hi Phillip,

The Cotton Draw Unit SWD #84 C-108 expired on 10/25/2015. Is it too late to file an extension or do I need to re-submit the C-108 application? Administrative Order SWD-1447.

Thank you,

Linda Good
Regulatory Compliance Specialist
Devon Energy Corporation
Devon Energy Center-Tower - OKDEC 18.532
333 West Sheridan Avenue Oklahoma City OK 73102-5015
405-552-6558
linda.good@dvn.com

devon

This email has been scanned by the Symantec Email Security.cloud service.

30-015-10843

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: COTTON DRAW UNIT 65		Field: PADUCA	
Location: 1980' FNL & 1980' FEL; SEC 2-T25S-R31E		County: EDDY	State: NM
Elevation: 3476' KB; 3455' GL; 21' KB to GL		Spud Date: 7/8/66	Compl Date:
API#: 30-015-10843	Prepared by: Ronnie Slack	Date: 3/21/14	Rev:

PLUGGED & ABANDONED
3/21/14

Converted to SWD 3/98
Administrative Order SWD-699

36" Hole
20", H40, 94#, @ 600'
Cmt'd w/ 1300 sx surface

10-3/4" TOC-3555' T/S

dv @ 4308

17-1/2" hole
13-3/8", J55, 54.5#, @ 4365'
Cmt'd w/ 4300 sx. Cmt did not circ.

Cherry Canyon SWD 5326-5714 (3/98)

dv @ 7478

8-5/8", P110, 40#, liner from 11553' to surface'
Cmt'd w/1230 sx. TOC @ 65', T/S (3/67)

8-5/8" Liner hanger @ 11,553

12-1/4" hole
10-3/4", 60.7#, P110, @ 12,570'
Cmt w/4450 sx cmt total. TOC @ 3555' temp survey

Wolfcamp 12785-12851 (6/67) sqzd w/150 sx (7/72)

Morrow 14606-14625 (3/92)

Morrow 14787-14835 (6/67)

9-1/2" hole
8-5/8", P110, 48#, liner from 11553' to 16250'
Cmt'd w/1350 sx, sqzd liner top w/1000 sx
Tied back liner from 11553' to surface

9.5# mud

9.5# mud

9.5# mud

9.5# mud

9.5# mud

9.5# mud

10# Brine

19,546' TD

1. Spot 30 sx cmt from 129' to surf. Top off w/5 sx. *(3/17/14)*
2. Cut wellhead off, set dry hole marker. *(3/21/14)*

Spot 50 sx cmt @ 490' - 650'. *(3/14/14)*

Spot 50 sx cmt @ 790' - 950'. *(3/14/14)*
(Top of Salt @ 950')

Spot 70 sx cmt @ 3,910' - 4,165' *(3/14/14) (Base of Salt @ 4,115')*

Spot 45 sx cmt @ 4,256' - 4,438'. Tagged. *(3/13/14) (Top of Delaware @ 4,370')*

Set CIBP @ 5,300'. Spot 30 sx cmt @ 5,192'-5,300'

Spot 30 sx @ 7,395' - 7,516' *(3/12/14)*

20 sx cmt. 8180' pbd (3/98)
CIBP @ 8250 (3/98)

15 sx on top of retainer. 11439' pbd (1/95)
Cement retainer 11491.
985 sx below retainer

CIBP @ 14644' (3/92)

Model D 14700 (6/67)

CIBP 15050 (6/67)

Cement 16070 - 16780 (6/67)

Cement 17070 - 17220 (6/67)

Cement 18630 - 18800 (6/67)

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

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.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.*

1. Type of Well ☐ Oil Well ☑ Gas Well ☐ Other	5. Lease Serial No. NMNM0503
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No. 891005247E
	8. Well Name and No. COTTON DRAW UNIT 76
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP	9. API Well No. 30-015-29252
3a. Address 333 West Sheridan Avenue, Oklahoma City, OK 73102-5015 3b. Phone No. *(include area code)* 405-552-4615	10. Field and Pool or Exploratory Area PADUCA
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* Sec 1 T25S R31E 1650 FSL 660 FWL	11. Country or Parish, State EDDY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Cancel P&A ops, request TA status for SWD evaluation.
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

1. 9/30/15-Prep location for P&A ops.
2. 10/1-10/8/15: Conduct flow down kill ops. Lost 16,340' of EL tools in hole with intent to set a W/L plug in Model D packer @ 16,310'.
3. 10/9-10/20/15: MIRU P&A rig. Fished out all EL wire, tools, and 2-7/8" production tubing with seal assembly from packer @ 16,310'.
4. 10/23/15: Set plastic coated RBP @ 16,305'. Set 2nd plastic coated RBP @ 16,257'.
5. 10/24/15: Load hole. Test casing to 514 psi for 30 min. Lost 14 psi. Did not chart. Prepare to test casing again & chart.
6. 10/26/15: RU chart recorder. Test casing to 525 psi for 30 minutes. Lost 5 psi. Original MIT chart delivered to Jim Amos.
7. 10/27/15: Run casing inspection logs.

Wellbore is temporarily abandoned.

Request that well be approved for a 12 month TA Status to remove from the inactive list. Devon will evaluate well for swd, file C-108 application for swd disposal, and convert well to swd.

Current wellbore schemat and MIT chart attached.

12/21/15
Accepted for record
NM OIL CONSERVATION

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 18 2015

APPROVED FOR 12 MONTH PERIOD
ENDING 10-26-16

RECEIVED

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Ronnie Slack	Title Production Technologist
Signature Ronnie Slack	Date 10-28-15

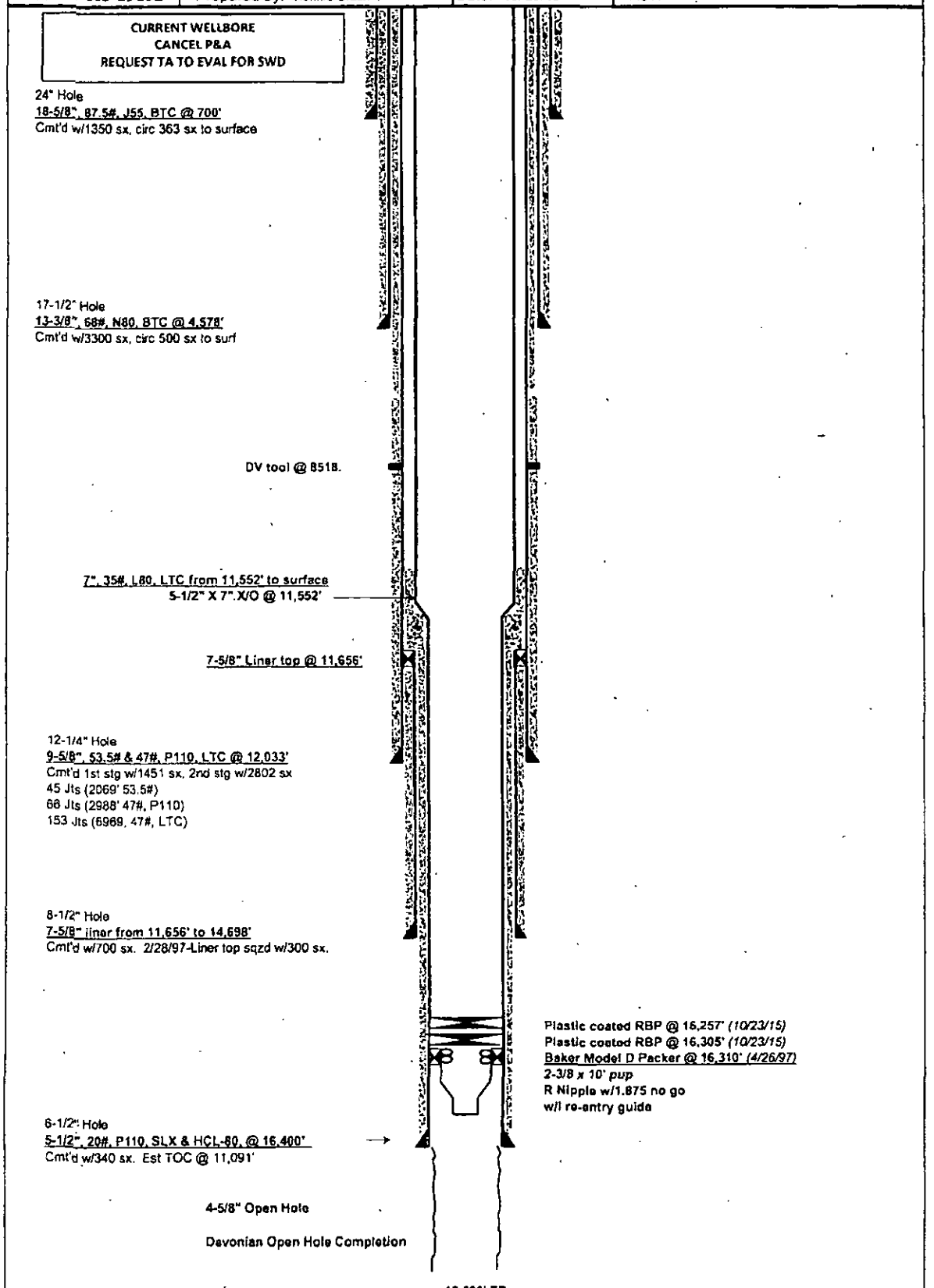
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by James A. Amos	Title SPET	Date 12-10-15
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 CFO	

Title 18 U.S.C. Section 1001 and Title 43 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.

(Instructions on page 2)

DEVON ENERGY PRODUCTION COMPANY LP			
Well Name: COTTON DRAW UNIT 76		Field: PADUCA NORTHWEST	
Location: 1650' FSL & 660' FWL; SEC 1-T25S-R31E		County: EDDY	State: NM
Elevation: KB: 3457' GL; ' KB to GL		Spud Date: 10/27/96	Compl Date: 5/1/97
API#: 30-015-29252	Prepared by: Ronnie Slack	Date: 10/26/15	Rev:



McMillan, Michael, EMNRD

From: Good, Linda <Linda.Good@dvn.com>
Sent: Monday, March 21, 2016 6:12 AM
To: McMillan, Michael, EMNRD
Subject: RE: Cotton Draw SWD Well No. 84

Good morning Michael,

Yes the Order expired in October 2015, so we submitted a new application. The wellbore schematic is current and proposed. Please let me know if you need anything else.

Thank you,

Linda Good
Regulatory Compliance Specialist
Devon Energy Corporation
Devon Energy Center-Tower - OKDEC 18.532
333 West Sheridan Avenue Oklahoma City OK 73102-5015
405-552-6558
linda.good@dvn.com

devon

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Friday, March 18, 2016 1:51 PM
To: Good, Linda <Linda.Good@dvn.com>
Subject: Cotton Draw SWD Well No. 84

Linda:
I am looking at the Cotton Draw SWD Well No. 84, and I have some questions.
The Cotton Draw SWD Well No. 84 was an approved SWD by Administrative Order SWD 1447.
Did Devon do a work over on the well, but did not start injecting within 2 years? So, is the wellbore diagram in the application, the current well status? If not you will need a current wellbore diagram.

Thank You

Michael A. McMillan
Engineering and Geological Services Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe NM 87505
O: 505.476.3448 F. 505.476.3462
Michael.mcmillan@state.nm.us

SLO / Devon states depletion - SLO & Devon negotiated settlement Oct 8th

C-108 Review Checklist: Received 08/08/13 Add. Request: 09/16/13 Reply Date: — Suspended: — [Ver 10]

PERMIT TYPE: WFX / PMX / (SWD) Number: 1447 Permit Date: 10/25/13 Legacy Permits/Orders: NA

Well No. 84 Well Name(s): Cotton Draw Unit (CDU)

API : 30-0 15-29728 Spud Date: 08/25/97 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 2615 FSL / 1160 FEL Lot ___ Unit I Sec 2 Tsp 25S Rge 31E County Eddy

General Location: Cotton Draw / south of WIPP / near TX border Pool: Paduca, NW; Devonian Pool No.: 96615

Operator: Devon Energy Production Company LP OGRID: 6137 Contact: Stephanie Porter

COMPLIANCE RULE 5.9: Inactive Wells: 5 Total Wells: 1819 Fincl Assur: Yes Compl. Order? No IS 5.9 OK? Yes

Well File Reviewed ✓ Current Status: Former producer in Devonian

Well Diagrams: NEW: Proposed ○ RE-ENTER: Before Conv. ✓ After Conv. ✓ Are Elogs in Imaging?: Multiple / only for ~~open hole portion~~ / 11/04/97 CBL 4090' to 12,137'

Planned Rehab Work to Well: No changes to well construction / acidize / add tubing / packer system

Well Construction Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement (Sx) or Cf	Cement Top and Determination Method
Planned __ or Existing __ Conductor	—	—		—	—
Planned __ or Existing ✓ Surface	24 / 18 5/8	0 to 700		1350	Cir. to surface
Planned __ or Existing ✓ (Interm)/Prod	17 1/2 / 13 3/8	0 to 4350	~~DV Packer 4231~~	3250	Cir. to surface
Planned __ or Existing ✓ Prod/(Interm)	12 1/4 / 9 5/8	0 to 12200	DV tool 8514	6056 / 3500	CBL - 4090'
Planned __ or Existing ✓ (Liner)/Prod	8 1/2 / 7 3/8 ~~6 1/2 / 5 1/2~~	11858 - 14657 ~~14289 - 16295~~	—	630 300	TOL - calculated ~~see above~~
Planned __ or Existing ✓ (OH) / PERF	4 ~~1/2~~ 5/8	16295 - 16585	Inj Length 290'		

Injection Stratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops?
Adjacent Unit: (Litho) Struc. Por.		Morrow	14408
Confining Unit: (Litho) (Struc) (Por.)		Mississippian	15896
Proposed Inj Interval TOP:	16295	Woodford Fm	16202
Proposed Inj Interval BOTTOM:	16585	Devonian Fm	16342
Confining Unit: Litho. Struc. Por.	NA	Silurian / Fusselman (included)	
Adjacent Unit: Litho. Struc. Por.	—	Montoya	—

Completion/Operation Details:

Drilled TD 16585 PBTD NA

NEW TD NA NEW PBTD NA

NEW Open Hole NA or NEW Perfs NA

Tubing Size 3 1/2 in. Inter Coated? Yes

Proposed Packer Depth 16180 ft

Min. Packer Depth 16195 (100-ft limit)

Proposed Max. Surface Press. 3259 psi

Admin. Inj. Press. 3259 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ○ *Noticed?* NA **BLM Sec Ord** NA **WIPP** NA *Noticed?* NA **SALADO:** T: 1034 B: 4356 **CLIFF HOUSE** NA

FRESH WATER: Formation Pecos Basin Alluvial Max Depth Est. 300' to 400 ft Wells? ∅ FW Analysis ✓ **HYDROLOGIC AFFIRM By Qualified Person** ✓

Disposal Fluid: Formation Source(s) Delaware Fm / Bone Spring Fm / CDU (all Lease) Analysis? Yes from Sec 2 well on lease On Lease ○ Operator Only ✓ or Commercial ○

Disposal Interval: Injection Rate (Avg/Max BWPD): 5000/10000 Protectable Waters: NO OXY USA - deep wells / No SDR in Sec 2 **CAPITAN REEF:** thru ○ adj ○ NA ✓

H/C Potential: Producing Interval? Yes - see note Formerly Producing? Yes Method: E Log /Mudlog/DST/Depleted/(Other) see e-mails

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 2 Horizontals? ∅

Penetrating Wells: **No. Active Wells** 2 Num Repairs? ∅ on which well(s)? [one well injection / SWD into Delaware Gp] Diagrams? ~~Yes~~ - Not needed

Penetrating Wells: **No. P&A Wells** ∅ Num Repairs? ∅ on which well(s)? ___ Diagrams? NA

NOTICE: Newspaper Date 07/18/13 Mineral Owner SLO Surface Owner SLO N. Date 8/13/13

RULE 26.7(A): Identified Tracts? Yes Affected Persons: XTO Energy [Unit with Devon] N. Date 8/13/13

Permit Conditions: Issues: CBL not available on file.

Add Permit Cond: None identified - except restate 100-ft packer (max. depth of 16195') disc.

SLO negotiated payment for remaining HC [illegible]

State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order SWD-1447
October 25, 2013

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B. NMAC, Devon Energy Production Company, LP (the "operator") seeks an administrative order for its Cotton Draw Unit SWD Well No. 84 with a location of 2615 feet from the South line and 1160 feet from the East line, Unit letter I of Section 2, Township 25 South, Range 31 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified. One objection from the New Mexico State Land Office was received within the prescribed waiting period, but the applicant, Devon Energy Production Company, LP, satisfied this protest through a negotiated settlement with the State Land Office. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

Devon Energy Production Company, LP (OGRID 6137), is hereby authorized to utilize its Cotton Draw Unit SWD Well No. 84 (API 30-015-29728) with a location of 2615 feet from the South line and 1160 feet from the East line, Unit letter I of Section 2, Township 25 South, Range 31 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) into Devonian formations and the upper Fusselman formation through open hole from approximately 16295 feet to 16585 feet. Injection will occur through internally-coated tubing and a packer set within 100 feet of the permitted interval **at a depth no shallower than 16195 feet.**

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine

leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 3259 psig**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district II office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

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

JAMI BAILEY
Director

JB/prg

cc: Oil Conservation Division – Artesia District Office
State Land Office – Oil, Gas, and Minerals Division

C-108 Review Checklist: Received 3/16 Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: SWD 1447 Issued October 25, 2013

Well No. 84 Well Name(s): Cotton Draw Unit

API: 30-0 15-29728 Spud Date: 8/27/1997 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 2615 FSL 1160 FEL Lot ___ or Unit I Sec 2 Tsp 25S Rge 31E County Eddy

General Location: 2 mile SW Wipp Pool: SWD; Devonian Pool No.: 96101

BLM 100K Map: JAL Operator: Devon Energy Production Co LP OGRID: 6137 Contact: Linda Good

COMPLIANCE RULE 5.9: Total Wells: 1547 Inactive: 10 Fincl Assur: 6 Compl. Order? N/A IS 5.9 OK? Y Date: 4-01-2016 (April Fools day)

WELL FILE REVIEWED ✓ Current Status: Proposed injection - see comment

WELL DIAGRAMS: NEW: Proposed ○ or **RE-ENTER:** Before Conv. ○ After Conv. ✓ Logs in Imaging: Y

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __Surface	24 / 18 5/8	700		1350	Surface
Planned __or Existing __Interm/Prod	17 1/2 / 13 3/8	4360		3250	Surface
Planned __or Existing __Interm/Prod	12 1/4 / 9 5/8	12240		6056	4090' CBL
Planned __or Existing __Prod/Liner	8 1/2 / 7 5/8	14651		650	11848' Calculated
Planned __or Existing __Liner					
Planned __or Existing __OH / PERF	16295 / 16585		Inj Length 290'		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.	[redacted]	wd	16354
Confining Unit: Litho. Struc. Por.		ms	15846
Proposed Inj Interval TOP:	16295		
Proposed Inj Interval BOTTOM:	16585		
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.	[redacted]		

Completion/Operation Details:

Drilled TD 16585 PBTD _____
NEW TD _____ NEW PBTD _____
NEW Open Hole ✓ or NEW Perfs ○
Tubing Size 5 1/2 in. Inter Coated? Y
Proposed Packer Depth 16480 ft
Min. Packer Depth 16440 (100-ft limit) 16195
Proposed Max. Surface Press. 3259 psi
Admin. Inj. Press. 3259 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P MA Noticed? ___ BLM Sec Ord ○ WIPP ○ Noticed? ___ Salt/Salado T: 1W B: 4356 **NW:** Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth 450 **HYDRO AFFIRM STATEMENT** By Qualified Person ✓

NMOSE Basin: CARLSBAD CAPITAN REEF: thru adj (NA) No. Wells within 1-Mile Radius? ___ FW Analysis

Disposal Fluid: Formation Source(s) Delaware, Bone Spring Analysis? Y On Lease ○ Operator Only ✓ or Commercial ✓

Disposal Int: Inject Rate (Avg/Max BWPD): 10K → MAX Protectable Waters? NO Source: ___ System: Closed or Open

HC Potential: Producing Interval? Y Formerly Producing? ___ Method: Logs/DST/P&A/Other ___ 2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Y Well List? Y Total No. Wells Penetrating Interval: 2 Horizontals? ___

Penetrating Wells: No. Active Wells 2 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

Penetrating Wells: No. P&A Wells 0 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

NOTICE: Newspaper Date March 3rd Mineral Owner NMSLO Surface Owner NMSLO N. Date 3/15/2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: XTO, N. Date 3/15/2016

Order Conditions: Issues: _____

Add Order Cond: Operator had Approval for SWD, drilled, equipped well but did not begin injection within 2 years. This is a new application. Perfs not w/i [redacted]' 16195' As Stated in Admin Order SWD-1447 ~~16195 As Stated in Order~~ = 100'/perf, ~~[redacted]~~ wdc (10 perfs) → 16195' As Stated in Admin Order SWD-1447 * Made deal w/ NMSLO, and NMSLO consented.