

DATE IN 9/12/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 9/16/08	TYPE SWD	APP NO. PKVRO826034031
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

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

**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☒ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

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

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

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

Ronnie Slack  
 Print or Type Name

Ronnie Slack  
 Signature

Engineering Tech  
 Title

9-10-08  
 Date

Ronnie.Slack@dvni.com  
 e-mail Address

2008 SEP 12 PM 1:12  
 RECEIVED



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

405 235 3611 Phone  
www.devonenergy.com

September 10, 2008

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

RE: Re-submittal Form C-108, Application for Authorization to Inject  
Tomcat 15 Federal #2; API# 30-025-33909  
Lea County, NM  
Section 15, T23S, R32E

Gentlemen:

Please find attached Devon's re-submittal of Form C-108, Application for Authorization to Inject. Devon has revised its application to encompass the Delaware interval from 5126' to 7042' for salt water disposal. Devon proposes to take produced waters from the Delaware formation and re-inject back into the Delaware (Bell Canyon) formation for salt water disposal purposes through existing perforations from 5207' to 5530'. Perforations from 5207' to 5530' tested wet in May 2008.

A copy of this revised application has been filed with the OCD-Hobbs office, surface land owner, and leasehold operators. A public notice of the revised Delaware interval has been published in the Hobbs News-Sun.

If you have any questions, please contact Jim Cromer at (405)-228-4464 or myself at (405)-552-4615. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink that reads "Ronnie Slack". The signature is written in a cursive, flowing style.

Ronnie Slack  
Engineering Technician

RS/rs  
Enclosure

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance ☒ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? ☒ Yes \_\_\_\_\_ No
- II. OPERATOR: \_\_\_\_\_ Devon Energy Production Company, LP \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ 20 North Broadway, Suite 1500, Oklahoma City, Oklahoma 73102 \_\_\_\_\_  
CONTACT PARTY: \_\_\_\_\_ Ronnie Slack \_\_\_\_\_ PHONE: \_\_\_\_\_ 405-552-4615
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes ☒ No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: \_\_\_\_\_ Ronnie Slack \_\_\_\_\_ TITLE: \_\_\_\_\_ Engineering Technician
- SIGNATURE: \_\_\_\_\_ *Ronnie Slack* \_\_\_\_\_ DATE: \_\_\_\_\_ 9-9-08 \_\_\_\_\_
- E-MAIL ADDRESS: \_\_\_\_\_ Ronnie.Slack@DVN.com \_\_\_\_\_
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.
- Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.
- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
- (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

## INJECTION WELL DATA SHEET

OPERATOR: \_\_\_\_\_ Devon Energy Production Company, LP \_\_\_\_\_

WELL NAME &amp; NUMBER: \_\_\_\_\_ Tomcat 15 Federal #2 \_\_\_\_\_

WELL LOCATION: \_\_\_\_\_ 1980' FSL & 1980' FEL, \_\_\_\_\_ J \_\_\_\_\_ Sec 15 \_\_\_\_\_ T23S \_\_\_\_\_ R32E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17-1/2" \_\_\_\_\_ Casing Size: 13-3/8", 48#, @ 667'  
 Cemented with: 400 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface \_\_\_\_\_ Method Determined: Circ. cement

Intermediate Casing

Hole Size: 11" \_\_\_\_\_ Casing Size: 8-5/8", 32# @ 4941'  
 Cemented with: 1125 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface \_\_\_\_\_ Method Determined: Circ. cement

Production Casing

Hole Size: 7-7/8" \_\_\_\_\_ Casing Size: 5-1/2", 17#, @ 9003'  
 Cemented with: 935 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: 5130 \_\_\_\_\_ Method Determined: CBL  
 Total Depth: 9003' \_\_\_\_\_

Injection Interval (Perforated)

\_\_\_\_\_ 5207' \_\_\_\_\_ feet to \_\_\_\_\_ 5530' \_\_\_\_\_

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2-3/8", 4.6# Lining Material: IPCType of Packer: 5-1/2" IPCPacker Setting Depth: +/- 5,150'

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

Additional Data

1. Is this a new well drilled for injection? Yes X No  
 If no, for what purpose was the well originally drilled? Producing Oil Well

2. Name of the Injection Formation: Delaware from 5126 to 7042: Perfed Interval in Delaware Bell Canyon from 5207 to 5530

3. Name of Field or Pool (if applicable): Diamond Tail

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.

Delaware Bell Canyon from 5,207' to 5,530. (RBP @ 5,166')  
Delaware Brushy Canyon from 7,264' to 8,615' (CIBP @ 7200', + 35' cement. PBD @ 7,165')

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

The next lowest productive oil zone below the proposed injection interval is the Delaware Brushy Canyon interval from 7264' to 8615'. It was productive in the Tomcat 15 Fed #2 (28 MBO, 31 MMCF, 116 MBW). The next lower productive gas zone is in the Morrow from 14,996' to 15,009'. It is currently productive in the Tomcat 15 Fed #1 (1 MBO, 1711 MMCF, 9 MBW). There are no productive oil or gas bearing zones above the proposed injection interval.

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: TOMCAT 15 FEDERAL #2		Field: DIAMONDTAIL	
Location: 1980' FSL & 1980' FEL; SEC 15-T23S-R32E		County: LEA	State: NM
Elevation: 3735' KB		Spud Date: 2/26/00	Compl Date: 3/27/00
API#: 30-025-33909	Prepared by: Ronnie Slack	Date: 9/9/08	Rev:

**PROPOSED FOR SWD**

17-1/2" hole  
13-3/8", 48#, H40, STC, @ 667'  
 Cmt'd w/ 400 sx to surface

11" Hole  
8-5/8", 32#, S80, STC, @ 4,941'  
 Cmt'd w/1125 sx to surface

TOC @ 5130' (CBL) (3/17/00)

Permitted Delaware Interval from 5126 to 7042 for SWD.

**PROPOSED PERFORATIONS FOR SWD**

**DELAWARE BELL CANYON (5/1/08)**

5,207' - 5,210' → (swab all water, no oil-5/7/08)

5,365' - 5,369' → (swab all water, no oil-5/6/08)

5,520' - 5,530' → (swab all water, no oil-5/3/08)

5/1/08: acidized w/2000 gals 7.5% pentol

**DELAWARE BRUSHY CANYON (6/13/00)**

7,264' - 7,266'

6/22/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON (4/29/08)**

7,363' - 7,368' (swabbed 27 bbls water-wet-4/29/08)

**DELAWARE BRUSHY CANYON (6/13/00)**

7,674' - 7,678'

6/15/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON (6/13/00)**

8,220' - 8,227'

6/14/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON**

8,595' - 8,615' (3/17/00)

3/21/00: fraced w/73240# 16/30, acidized w/2K gals

7-7/8" Hole

5-1/2", 17#, N80, LTC, @ 9,003'

Cmt'd w/935 sx. TOC @ 5,130'

**Formation Tops**

Rustler	1207'
Delaware/Lamar	4940'
Bell Canyon	5000'
Cherry Canyon	5832'
Brushy Canyon	7059'
Bone Spring	8818'

**Proposed:**

2-3/8", 4.6#, IPC, tubing

**Proposed:**

5-1/2" IPC Packer @ +/- 5,150'

**Proposed:**

35' cement. PBD @ 5,730

CIBP @ 5,765'

35' cement. 7,165' PBD (5/10/08)

CIBP @ 7,200' (5/10/08)

30 Sx cement from 8673' to 8944' (4/25/08)

9,003' TD

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: TOMCAT 15 FEDERAL #2		Field: DIAMONDTAIL	
Location: 1980' FSL & 1980' FEL; SEC 15-T23S-R32E		County: LEA	State: NM
Elevation: 3735' KB		Spud Date: 2/26/00	Compl Date: 3/27/00
API#: 30-025-33909	Prepared by: Ronnie Slack	Date: 5/20/08	Rev:

**CURRENT WELLBORE SCHEMATIC**

17-1/2" hole  
13-3/8", 48#, H40, STC, @ 667'  
 Cmt'd w/ 400 sx to surface

11" Hole  
8-5/8", 32#, S80, STC, @ 4,941'  
 Cmt'd w/1125 sx to surface

TOC @ 5130' (CBL) (3/17/00)

**DELAWARE BELL CANYON** (5/1/08)

5,207' - 5,210' → (swab all water, no oil-5/7/08)  
 5,365' - 5,369' → (swab all water, no oil-5/6/08)  
 5,520' - 5,530' → (swab all water, no oil-5/3/08)

5/1/08: acidized w/2000 gals 7.5% pentol

**DELAWARE BRUSHY CANYON** (6/13/00)

7,264' - 7,266'  
 6/22/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON** (4/29/08)

7,363' - 7,368' (swabbed 27 bbls water-wet-4/29/08)

**DELAWARE BRUSHY CANYON** (6/13/00)

7,674' - 7,678'  
 6/15/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON** (6/13/00)

8,220' - 8,227'  
 6/14/00-acidized w/1000 gals 7.5% NeFe

**DELAWARE BRUSHY CANYON**

8,595' - 8,615' (3/17/00)  
 3/21/00: fraced w/73240# 16/30, acidized w/2K gals

7-7/8" Hole  
5-1/2", 17#, N80, LTC, @ 9,003'  
 Cmt'd w/935 sx. TOC @ 5,130'

**Formation Tops**

Rustler	1207'
Delaware/Larma	4940'
Bell Canyon	5000'
Cherry Canyon	5832'
Brushy Canyon	7059'
Bone Spring	8818'

2-7/8", 6.4#, N80 production tubing

SN @ 5,142'

RBP @ 5,166' (5/14/08)

35' cement. 7,165' PBD (5/10/08)  
 CIBP @ 7,200' (5/10/08)

30 Sx cement from 8673' to 8944' (4/25/08)

9,003' TD



**STRATA PRODUCTION COMPANY**  
**Record of plug & abandonment per BLM records**

Well Name: CODORNIZ FEDERAL #2		Field: DIAMOND TAIL	
Location: 1850' FNL & 330' FEL; SEC 15-T23S-R32E		County: LEA	State: NM
Elevation: 3720' GL		Spud Date: 5/30/95	Compl Date: P&A 6/19/95
API#: 30-025-32972	Prepared by: Ronnie Slack	Date: 5/12/08	Rev:

**PLUGGED & ABANDONED**  
**12/31/96**

17-1/2" hole  
13-3/8", 48#, H40, @ 620'  
 Cmt'd w/700 sx to surface

20 sx cement from 60' to surface

50 sx cement from 582' to 682'

**12/31/96:** Dug out dry hole marker, TIH w/630' of one inch pipe between 13-3/8" & 8-5/8" casing, pumped 280 sx cement to approx. 20' from surface. Reset marker. Plugging Final.

11" hole  
8-5/8", 32#, HCK55 & J55, @ 5,076'  
 Cmt'd w/350 sx. TOC @ 4,000'

50 sx cement from 5026' to 5126'

**OPEN HOLE FROM 5076' TO 9039'** →

50 sx cement from 7042' to 7142'

50 sx cement from 8736' to 8836'

9,039' TD

JOHN H. TRIGG COMPANY  
Plugged & Abandoned 6/1/62

Well Name: CONTINENTAL FED 1-15		Field: WILCAT	
Location: 1980' FNL & 1980' FEL; SEC 15-T23S-R32E		County: LEA	State: NM
Elevation: 3721 DF		Spud Date: 5/18/62	Compl Date: P&A--6/1/62
API#: 30-025-08117	Prepared by: Ronnie Slack	Date: 5/12/08	Rev:

PLUGGED & ABANDONED-- 6/1/62

Plugging records not shown on OCD website

8-5/8", J55, @ 362'  
Cmt'd w/275 sx

OPEN HOLE FROM 362' TO 5086' →

5,086' TD

**TOMCAT 15 FEDERAL #2**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section III**

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

**A. Injection Well Information**

- (1) Lease Tomcat 15 Federal  
Well No #2  
Location 1980' FSL & 1980' FEL  
Sec,Twn,Rnge Sec 15, T23S-R32E, Unit Letter J  
Cnty, State Lea County, New Mexico
- (2) Casing 13-3/8", 48#, @ 667' in 17-1/2" hole. Cmt'd w/ 400 sxs.  
TOC @ surface. Cement circulated.  
8-5/8", 32#, @ 4,941'. Cmt'd w/ 1125 sxs.  
TOC @ surface. Cement circulated.  
5-1/2", 17#, @ 9,003'. Cmt'd w/ 935 sxs.  
TOC @ 5130'. Cement bond log.
- (3) Injection Tubing 2-3/8" , 4.7#, J-55 IPC tubing run to +/- 5,150'
- (4) Packer 5-1/2" IPC Packer @ +/- 5,150'

**B. Other Well Information**

- (1) Injection Formation: Delaware from 5126' to 7042'  
Field Name: Diamond Tail
- (2) Injection Interval: Delaware Bell Canyon perms 5207'-5210; 5365'-5369'; 5520'-5530'
- (3) Original Purpose of Wellbore:

The Tomcat 15 Federal #2 was spud February 26, 2000 and completed as an oil producer in the Delaware Brushy Canyon from 7,264' to 8,615'. Cumulative production for the Delaware Brushy Canyon through May 2007 is 28 MBO, 31 MMCF, and 116 MBW. This well was recompleted to the Delaware Bell Canyon from 5207' to 5530' in May 2008, but swabbed all water. Devon now would like to utilize the well bore for SWD, injecting into the Delaware Bell Canyon perms from 5207' to 5530'.

- (4) Other perforated intervals:

Only perforated zones are:  
Delaware Bell Canyon from 5,207' - 5,530'  
Delaware Brushy Canyon from 7,264' to 8,615'

- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well if any.

The next lowest productive oil zone below the proposed injection interval is the Delaware Brushy Canyon interval from 7264' to 8615'. It was productive in the Tomcat 15 Fed #2 (28 MBO, 31 MMCF, 116 MBW). The next lower productive gas zone is in the Morrow from 14,996' to 15,009'. It is currently productive in the Tomcat 15 Fed #1 (1 MBO, 1711 MMCF, 9 MBW). There are no productive oil or gas bearing zones above the proposed injection interval.



C108 ITEM VI--Well Tabulation in Review Area																
Devon Energy Production Company, LP																
Proposed Disposal Well: Tomcat 15 Federal #2																
Operator	Well Name	API NO	County	Footage	Sec	Twn	Rnge	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Interval-Ft	Casing Program	Cement / TOC
Devon Energy Prod Co LP	Tomcat 15 Fed #1	30-025-33801	Lea	1980' FSL 660' FWL	15	23S	32E	Gas	Active	02/11/97	05/27/97	16050	15036	14996-15009	20" 94# @ 618' 13-3/8" 72# @ 4755' 9-5/8" 53.5# @ 12410' 7-5/8" liner, 12034'-15063'	1425 Sx / Surf 3275 Sx / Surf 2800 Sx / 4200' (Est.) 625 Sx / liner top
Devon Energy Prod Co LP	Tomcat 15 Fed #2	30-025-33909	Lea	1980' FSL 1980' FEL	15	23S	32E	Oil	SI	02/26/00	03/27/00	9003	7165	5207 - 5530 7264 - 8615	Delaware Bell Canyon Delaware Brushy Canyon	400 Sx / Surf 1125 Sx / Surf 935 Sx / 5130' (cbl)
Strata Production Company	Codorniz Federal #2	30-025-32972	Lea	1850' FNL 330' FEL	15	23S	32E	Dry	P&A	05/30/95	P&A 6/19/95	9039	surface	NA	Dry hole wellbore P&Ad	700 Sx / Surf 350 Sx / 4000'
John H. Trigg Company	Continental Fed 1-15	30-025-08117	Lea	1980' FNL 1980' FEL	15	23S	32E	Dry	P&A	05/18/62	P&A 6/1/62	5086	NA	NA	Dry hole wellbore P&Ad	275 Sx / Surf

**TOMCAT 15 FEDERAL #2**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section VII to XII**

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

- (1) Proposed average injection rate: 2000 BWPD  
Proposed maximum injection rate: 3000 BWPD
- (2) The system will be a closed system.
- (3) Proposed average injection pressure: 700 psi  
Proposed max injection pressure: 900 psi
- (4) The proposed injection fluid is produced water from the Delaware that will be re-injected into the Delaware Bell Canyon zone. Attached is a water analysis of Delaware produced water from the Tomcat 21 SWD station. No water compatability issues are anticipated.
- (5) Disposal zone (Delaware Bell Canyon) formation water is submitted from the Tomcat 15 Federal 2 well, which was recently perforated in this zone. The Delaware Bell Canyon swabbed all water in the Tomcat 15 Fed #2.

**VIII Geologic Injection Zone Data**

The Delaware formation from 5126' to 7042' is being submitted for permit for disposal with specific disposal perforations in the Delaware Bell Canyon formation from 5,207' to 5,530'. The Delaware formation is a Permian aged sandstone. The proposed injection interval is 323' thick. The average depth of water report notes aquifers at an average depth of 400'. Surface casing is set at 667' and cemented to surface in the proposed injector, Tomcat Federal #2.

**IX Proposed Stimulation**

Depending on injection rates and pressures, the proposed injection zone could be acidize with +/- 5000 gallons 7.5% acid and fraced w/+/-120,000# proppant.

**X Log Data**

Well logs have previously been submitted to the OCD.

**XI Fresh Water Analysis**

No fresh water wells were indicated within one mile of proposed injection well per New Mexico office of the State Engineer web site.

**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.

**XIII Proof of Notice**

Proof of notice to surface owner, leasehold operator, and public legal notification is attached

**C108-Item VII #4**  
**Injection Water Analysis**  
**Tomcat 21 SWD Station**  
**Delaware Produced Water**



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**ANALYTICAL RESULTS FOR**  
**DEVON ENERGY**  
**ATTN: TRACY KIDD**  
**P.O. BOX 250**  
**ARTESIA, NM 88211**  
**FAX TO: (575) 746-9072**

Receiving Date: 03/03/08  
 Reporting Date: 03/10/08  
 Project Number: NOT GIVEN  
 Project Name: TOMCAT 21 SWD TANKS  
 Project Location: NOT GIVEN

Sampling Date: 03/03/08  
 Sample Type: WASTEWATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: ML  
 Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		03/07/08	03/07/08	03/07/08	03/07/08	03/06/08	03/06/08
H14362-1		73,700	21,800	4,030	2,110	335,000	28.0
Quality Control		NR	49.2	50.8	3.04	1,412	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.5	102	101	99.9	NR
Relative Percent Difference		NR	2.8	< 0.1	6.7	0.7	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
----------	-------------	-----------	------	-------	-------

	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	03/06/08	03/07/08	03/06/08	03/06/08	03/06/08	03/03/08
H14362-1	166,000	232	0	34.2	5.52	301,000
Quality Control	490	24.0	NR	1000	7.04	NR
True Value QC	500	25.0	NR	1000	7.00	NR
% Recovery	98.0	96.0	NR	100	100	NR
Relative Percent Difference	< 0.1	3.6	NR	< 0.1	1.3	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
----------	-------------	-------	-------	-------	-------	-------

*Tracy Kidd*  
 Chemist

03/10/08  
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for services. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Cardinal and its subsidiaries shall not be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. This report relates only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

C108-Item VII #4  
Injection Water Analysis  
Tomcat 21 SWD Station  
Delaware Produced Water



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
DEVON ENERGY  
TRACY KIDD  
P.O. BOX 250  
ARTESIA, NM 88210  
FAX TO: (575) 746-9072

Receiving Date: 03/03/08  
Reporting Date: 03/04/08  
Project Number: NOT GIVEN  
Project Name: TOMCAT 21 SWD TANKS  
Project Location: NOT GIVEN

Sampling Date: 03/03/08  
Sample Type: WASTEWATER  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AB

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		03/04/08	03/04/08	03/04/08	03/04/08
H14362-1	WASTEWATER	2.86	5.83	1.80	7.30
Quality Control		0.096	0.097	0.090	0.286
True Value QC		0.100	0.100	0.100	0.300
% Recovery		96.3	97.0	90.3	95.2
Relative Percent Difference		2.9	0.8	0.8	1.0

METHOD: EPA SW-846 8021B

Chemist

03/05/08  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analytical services. At claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the analytical service. H14362-1 DEVON is liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



**C108-Item VII #5**

**Disposal Zone Formation Water Analysis**  
**Tomcat 15 Federal #2**  
**Delaware Bell Canyon Zone**

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:	44212
Region:	PERMIAN BASIN	Account Manager:	WAYNE PETERSON (505) 910-9389
Area:	ARTESIA, NM	Sample #:	437125
Lease/Platform:	TOM CAT '15' FEDERAL	Analysis ID #:	82330
Entity (or well #):	2	Analysis Cost:	\$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 437125 @ 75 °F					
Sampling Date:	05/16/08	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	05/27/08	Chloride:	105918.0	2987.56	Sodium:	51117.9	2223.5
Analyst:	KIMBERLY POOLE	Bicarbonate:	73.0	1.2	Magnesium:	2020.0	166.17
TDS (mg/l or g/m3):	172866.9	Carbonate:	0.0	0.	Calcium:	11404.0	569.06
Density (g/cm3, tonne/m3):	1.121	Sulfate:	618.0	12.87	Strontium:	631.0	14.4
Anion/Cation Ratio:	1	Phosphate:			Barium:	11.0	0.16
		Borate:			Iron:	64.0	2.31
		Silicate:			Potassium:	993.0	25.4
Carbon Dioxide:	350 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		6	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		6	Lead:		
					Manganese:	17.000	0.62
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.42	0.00	-0.27	0.00	-0.26	0.00	0.17	70.26	1.51	5.63	0.46
100	0	-0.33	0.00	-0.33	0.00	-0.26	0.00	0.15	63.44	1.32	5.63	0.57
120	0	-0.25	0.00	-0.38	0.00	-0.23	0.00	0.15	61.37	1.16	5.34	0.67
140	0	-0.15	0.00	-0.42	0.00	-0.17	0.00	0.15	62.85	1.01	5.34	0.77

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 CO<sub>2</sub> pressure is actually the calculated CO<sub>2</sub> fugacity. It is usually nearly the same as the CO<sub>2</sub> partial pressure.

**Form C-108 Section XIV**

**Proof of Notice to Leasehold Operator**

Application For Injection in Tomcat 15 Federal #2  
Devon Energy Production Company, LP

**Leasehold Operators within 1/2 mile of Tomcat 15 Federal #2**

Roff Resources  
333 Clay Street, Suite 4300  
Houston, Texas 77002

Certified receipt No.  
7005 1160 0005 1810 4957

Strata Production Company  
1301 N. Sycamore  
Roswell, New Mexico 88201

7005 1160 0005 1810 4964

Twin Montana  
P.O. Box 1210  
Graham, Texas 76540

7005 1160 0005 1810 4971

Echo Production  
P.O. Box 1210  
Graham, Texas 76540

7005 1160 0005 1810 4988

Conoco Phillips  
600 N Dairy Ashford St  
Houston, Texas 77079

7005 1160 0005 1810 4995

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 Tomcat 15 Federal #2.

Date Mailed: 9/10/2008

Signature: *Ronnie Slack*

Date: 9/10/2008

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

**Form C-108 Section XIV**  
**Proof of Notice to Surface Land Owner**

Application For Injection in Tomcat 15 Federal #2  
Devon Energy Production Company, LP

**Surface Land Owner**

Bureau of Land Management  
Carlsbad Field Office  
620 East Greene Street  
Carlsbad, NM 88220

Certified receipt No.  
7005 1160 0005 1810 4940

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 Tomcat 15 Federal #2.

Date Mailed: 9/10/2008

Signature: Ronnie Slack

Date: 9/10/2008

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

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a news-  
paper published at Hobbs, New  
Mexico, do solemnly swear that  
the clipping attached hereto was  
published in the regular and entire  
issue of said paper, and not a sup-  
plement thereof for a period

of 1 issue(s).

Beginning with the issue dated  
August 29, 2008

and ending with the issue dated  
August 29, 2008

*Kathi Bearden*

PUBLISHER

Sworn and subscribed to before

me this 29th day of  
August, 2008

*Una*  
Notary Public.

My Commission expires  
February 07, 2009  
(Seal)



OFFICIAL SEAL  
DORA MONTZ  
NOTARY PUBLIC  
STATE OF NEW MEXICO

My Commission Expires: \_\_\_\_\_

This newspaper is duly qualified to  
publish legal notices or advertise-  
ments within the meaning of  
Section 3, Chapter 167, Laws of  
1937, and payment of fees for said  
publication has been made.

**LEGAL**

**AUGUST 29, 2008**

Devon Energy Production Company, LP, 20 North Broad-  
way, Oklahoma City, OK 73102-8260 has filed revised  
form C-108 (Application for Authorization to Inject) with the  
New Mexico Oil Conservation Division seeking administra-  
tive approval for an injection well. The proposed well, the  
Tomcat 15 Federal #2, located 1980' FSL & 1980' FEL,  
Section 15, Township 23 South, Range 32 East, in Lea  
County, New Mexico, will be used for salt water disposal.  
The Delaware interval from 5126' to 7042' is being permit-  
ted for salt water disposal with specific perforations in the  
Delaware Bell Canyon from 5207' to 5530' for disposal of  
Delaware produced water. A maximum injection rate of  
3000 BWRD and maximum injection pressure of 900 psi is  
expected.

All interested parties opposing the aforementioned must file  
objections or request for a hearing with the Oil Conserva-  
tion Division, 1220 South Saint Francis Drive, Santa Fe,  
New Mexico 87505-5472, within 15 days. Additional infor-  
mation can be obtained by contacting Jim Cromer at (405)  
228-4464.

#24347

03100039 00015937  
DEVON ENERGY CORPORATION  
RONNIE SLACK  
20 N. BROADWAY, SUITE 1500  
OKLAHOMA CITY, OK 73102-8260

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
DEVON ENERGY PRODUCTION COMPANY, LP

3a. Address  
20 North Broadway, Ste 1500, Oklahoma City, OK 73102

3b. Phone No. (include area code)  
405-552-4615

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1980 FSL 1980 FEL 15 T23S R32E

5. Lease Serial No.

NM-84728

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Well Name and No.

Tomcat 15 Federal #2

9. API Well No.

30-025-33909

10. Field and Pool, or Exploratory Area

DIAMOND TAIL

11. County or Parish, State

LEA

NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<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	

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)

Devon Energy Production Company, LP is preparing Form C108, Application for Authorization to Inject that will be filed with the Oil Conservation Division, Santa Fe, New Mexico office. Devon is proposing to convert the Tomcat 15 Federal #2 to SWD in the Delaware Bell Canyon zone from 5207' to 5530'. The BLM will be furnished a copy of C108 application when filed with the OCD.

Proposed:

1. RIH & set CIBP @ 5,765'. Dump 35' cement on top. (puts PBD within 200' of bottom proposed injection perf @ 5530'.)
2. The proposed Delaware Bell Canyon zone for injection is already perforated at 5207'-5210'; 5365'-5369'; 5520'-5530'. This interval swabbed wet.
3. Acidize current Delaware Bell Canyon perfs from 5207' to 5530' w/+/- 5000 gallons 7.5% acid and Frac w/+/- 120,000# proppant if necessary.
4. RIH w/2-3/8" IPC tubing & packer. Displace w/ packer fluid. Set packer @ +/- 5,150'. Conduct MIT.
5. Turn to SWD.

Proposed schematic attached

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

Name: Ronnie Slack

Title Engineering Technician

Signature *Ronnie Slack*

Date 5/28/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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 or operations thereon.

Office

Time Mark Every 60 S

Integrated Annulus Volume Every 100 F3

Cable Tension (TENS)  
(LBF)

10000 0

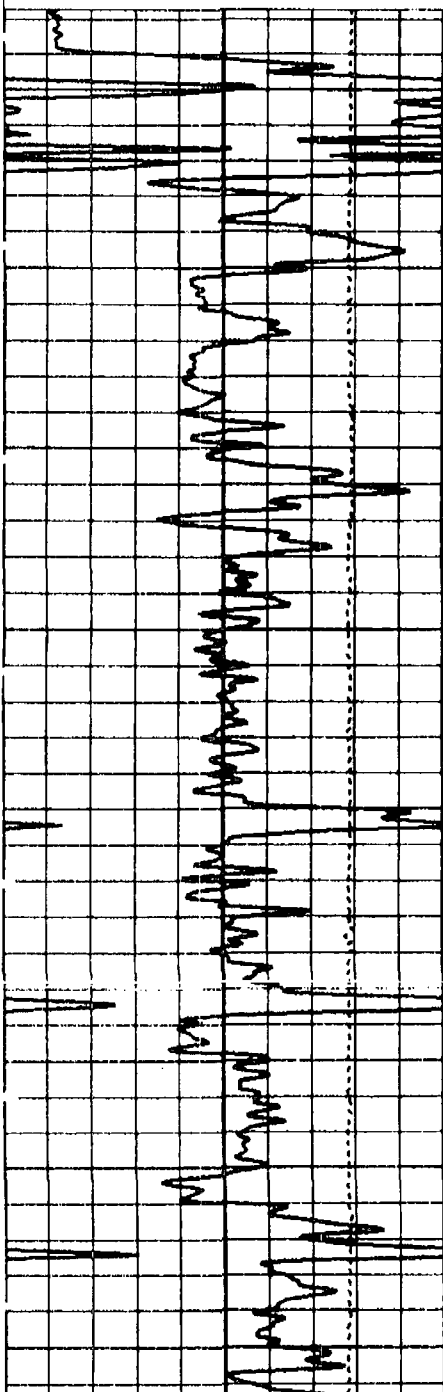
GR (GR)  
(GAPI)

0 100

AHT10 (AHT10)  
(OHMM) 2000

AHF30 (AHF30)  
(OHMM) 2000

AHF30 (AHF30)  
(OHMM) 2000



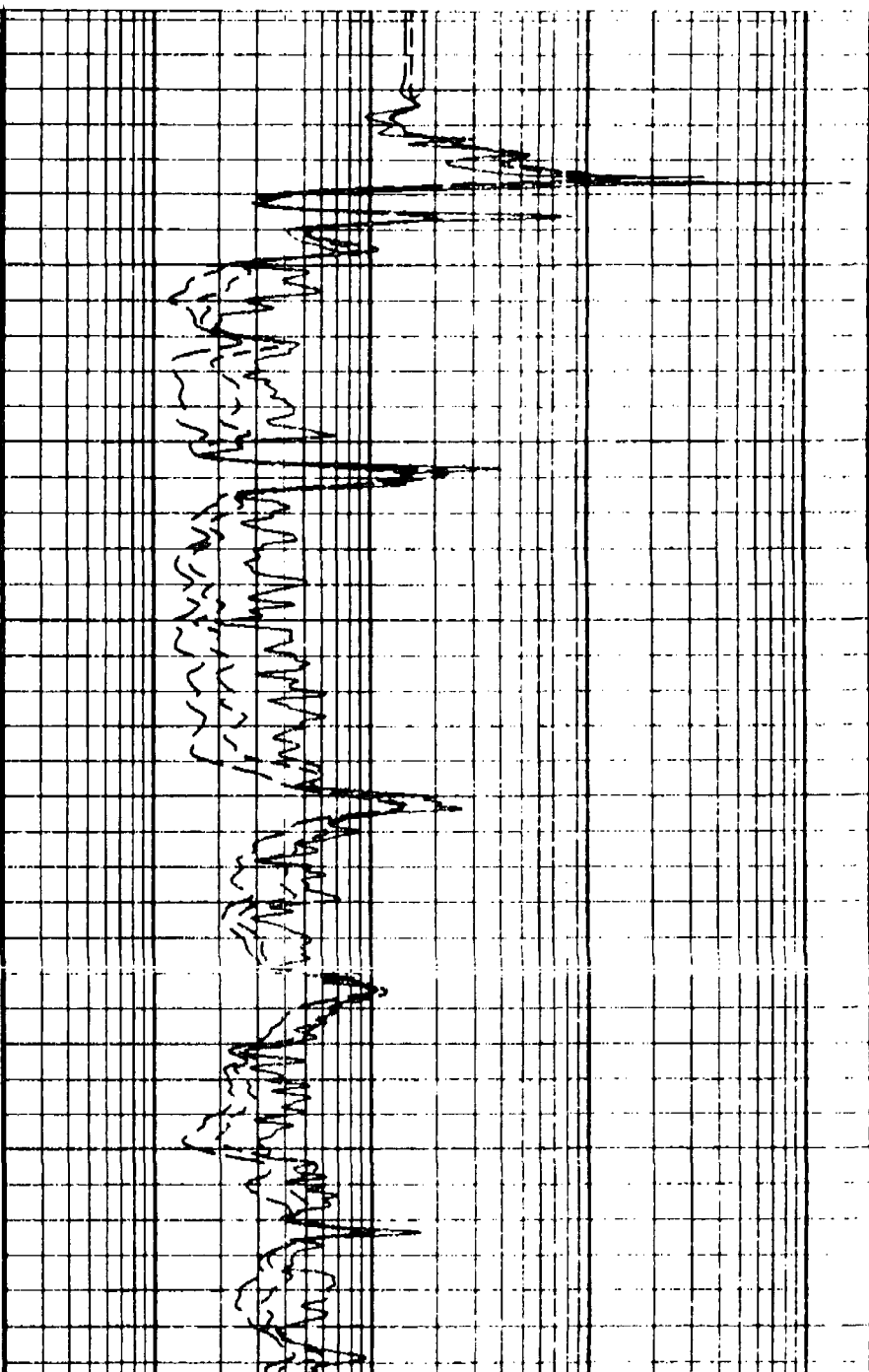
Casing

5000

5100

5200

5300



Tomcat 15 Feb #2



DEVON ENERGY PRODUCT TOMCAT '15' FEDERAL #2 (OIL)  
 DIAMONDTAIL Field, LEA Co., NM Area: INGLE WELLS/SAN  
 1980' FSL, 1980' FEL, Sec 15, 23S 32E C NW SI Elev: 3735.0' (15.0' AGL)

Last updated by:  
 Jim Cromer 04/23/2008

Surface Casing Record  
 13.375" / 48.00# / H-40 / STC @ 667'

Intermediate Casing Record  
 8 625" / 32.00# / S-80 / STC @ 4941'

Production Casing Record  
 5 50" / 17 00# / N-80 / LTC @ 9003'

Tubing Record  
 OUT

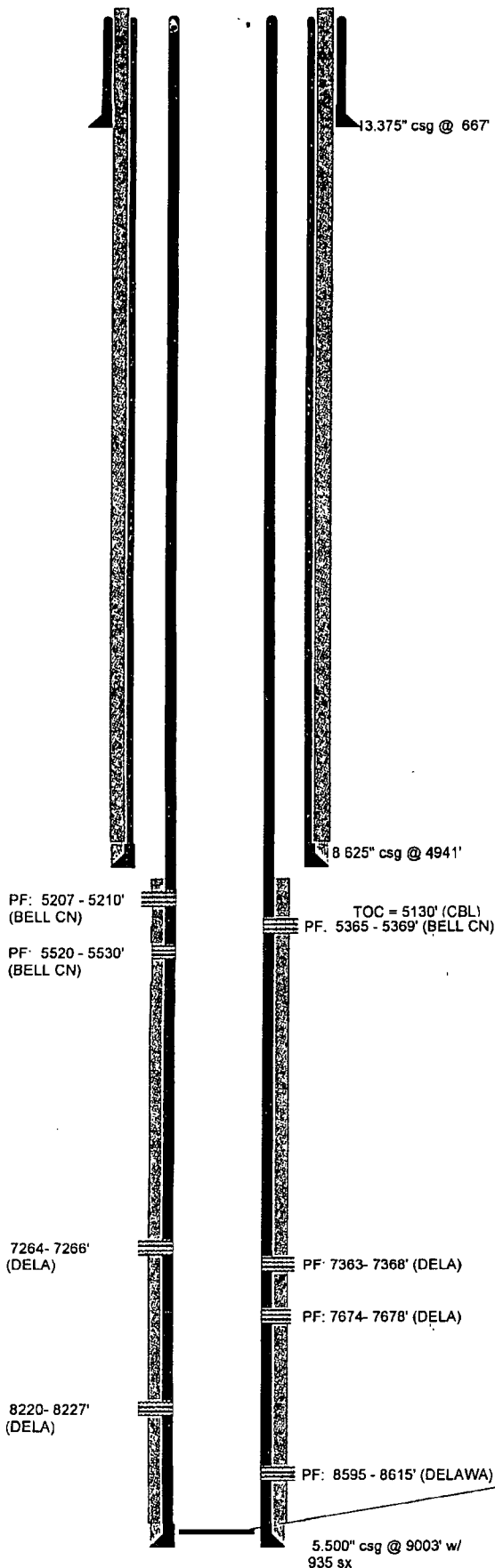
**Well History (spudded 02/26/2000):**

4/2/2000 - DC. Set 5.5" csg @ 9003' .cmt w/ 935 sx.  
 Complete DELAWARE 8595'- 8615'. FRAC w/ 73,240#  
 16/30 Ottawa sd. (IP 77 BO, 105 MCF, 128 BW).

6/00 - add pay. PF DELAWARE 8220 - 27', 7674 - 78' and  
 7264 - 66'. ACDZ ea. set w/ 1000 g 7.5%. RTP.

5/07 - SI due to battery destruction (lightning).

4/08 - add pay. PF 7363 - 7368' w/ 2 SPF. Set RBP @  
 7425', set pkr @ 7316'. swab tbg dry, no fluid entry  
 overnight. PF 5207 - 10', 5365 - 69' and 5520 - 5530' w/ 2  
 SPF 120 deg ph. Set RBP @ 5579', load hole w/ 2% KCl.  
 Set pkr @ 5140'. ACDZ w/ 2000 G 7½% Pentol acid w/ 50  
 BS. Broke @ 2552 PSI @ 1.9 BPM. good breaks and  
 bailout on last set of balls. MAX 4100#, MIN PSI 1600  
 AIP = 2000# @ 6 BPM. ISDP 860 PSI, 5M 675 PSI. 10M  
 570 PSI, 15 M 510 PSI.



TUBING DETAIL						
Descrip.	Jts	O.D.	Wt	Gr	Conn	Depth Int'vl
FILTER SUB	1	1.250	0.0	/	/	8484- 8490

**Plugs:**  
 FLTC @ 8956'

Perf Detail		
Interval	spf	Date
5207- 5210'	2	04/30/2008
5365- 5369'	2	04/30/2008
5520- 5530'	2	04/30/2008
8595- 8615'	0	/ /

Comments:

API# 30-025-33909  
 Current status: INAC

37. SUMMARY OF POROUS ZONES: (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):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
KB	3735		SALT ANHYDRITE
DELAWARE	4940		SAND, SHALE / DOLOMITE
CHERRY CANYON	5740		SAND, SHALE / DOLOMITE
MANZANITA	6030		SAND, SHALE / DOLOMITE
BRUSHY CANYON	7020		SAND, SHALE / DOLOMITE
BONE SPRINGS	8760		LIMESTONE / SHALE
TD	9006		

RECEIVED

2000

DELAWARE, NM

38. GEOLOGICAL MARKERS			38. GEOLOGICAL MARKERS		
NAME	TOP		NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH		MEAS. DEPTH	TRUE VERT. DEPTH
KB	3735				
DELAWARE	4940				
CHERRY CANYON	5740				
MANZANITA	6030				
BRUSHY CANYON	7020				
BONE SPRINGS	8760				
TD	9006				

RECEIVED  
APR 10 1960  
HARRIS



**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Tuesday, July 15, 2008 12:52 PM  
**To:** 'Slack, Ronnie'  
**Cc:** Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD  
**Subject:** Injection Application from Devon: Tomcat 15 Federal #2 30-025-33909 Unit J Sec 15 T23S R32E

Hello Ronnie:  
Application looks good, however:

- 1) It appears that one well in the AOR does not isolate the injection adequately  
Please ask your people if they would rather re-enter and re-plug the 30-025-32972 (Codorniz Federal #2 - STRATA) to isolate the proposed injection interval OR you could revise your C-108 and send new notices and newspaper notice - applying to inject from 5126 to 7042.  
(interval between plugs in the Codorniz well).
- 2) Please send a copy of the CBL or Temp Survey run on the 5-1/2 inch casing to Hobbs to be included in the imaged well logs.
- 3) Ask your Geologist what is the formation names and tops from depths of 1340 feet to 5000 feet.

Thank You,

Will Jones  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

7/15/2008

**Jones, William V., EMNRD**

**From:** Slack, Ronnie [Ronnie.Slack@dvn.com]  
**Sent:** Wednesday, July 16, 2008 9:56 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Cromer, Jim  
**Subject:** RE: Injection Application from Devon: Tomcat 15 Federal #2 30-025-33909 Unit J Sec 15 T23S R32E  
**Attachments:** Tomcat 15 Fed 2 proposed swd schemat.xls; Stratas\_Codorniz Federal #2 p&a.xls

Good morning Will,

I wanted to help if I could with your concerns stated below concerning our SWD application for Tomcat 15 Fed #2. Our engineer is not in the office this week, so I have copied him to get his input also.

Item #1 :

Our requested injection zone in the Tomcat 15 Fed #2 is the Bell Canyon from 5207' to 5530'. The Codorniz Fed #2 (operated by Strata) well that is plugged, has a cement plug from 5026 to 5126 (across the 8-5/8" casing shoe). In addition there is cement behind the 8-5/8 shoe up to 4000' w/ two more cement plugs above this. There are plugs below our proposed injection interval in the Codorniz well at 7042-7142 & 8736-8836'. It appears to me that our proposed injection interval is being capped from top & bottom by these plugs in this offset well. I have attached the schemat of the Codorniz Fed #2 plugged well & our Tomcat 15 Fed #2. I do not know if it would be in our interest/feasible to re-enter Strata's well and plug further.

Item #2:

I will send a copy of CBL (Tomcat 15 Fed #2) to Hobbs for imaging.

Item #3:

Carl Burdick (Geologist) had supplied me with these formation names & tops:

Rustler 1207'  
 Delaware/Lamar 4940'  
 Bell Canyon 5000'  
 Cherry Canyon 5832'  
 Brushy Canyon 7059'  
 Bone Spring 8818'

I hope this helps, but please advise with any more questions or concerns.

Thank you,

*Ronnie Slack*

Engineering Tech  
 Devon Energy Corporation  
 CT 3.033  
 (405) 552-4615 (office)  
 (405) 552-1415 (fax)  
 Email: Ronnie.Slack@dvn.com

---

**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Tuesday, July 15, 2008 1:52 PM  
**To:** Slack, Ronnie  
**Cc:** Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD  
**Subject:** Injection Application from Devon: Tomcat 15 Federal #2 30-025-33909 Unit J Sec 15 T23S R32E

Hello Ronnie:  
 Application looks good, however:

7/16/2008

**Jones, William V., EMNRD**

---

**From:** Wesley\_Ingram@blm.gov  
**Sent:** Friday, September 26, 2008 5:51 PM  
**To:** Shannon\_Shaw@nm.blm.gov  
**Cc:** Jones, William V., EMNRD  
**Subject:** Re: Conversion of Tomcat 15 Fed 2

Shannon J. Shaw,

A review of the proposed conversion of the Devon Energy Tomcat 15 Fed 2 to SWD has raised the following concerns:

1. The John H. Trigg well - Continental Fed 1-15 has no recorded history of plugging operations and could be a potential problem. If the formation allows fluid to travel throughout, which appears to be the assumption with regards to the change in the application due to the plugged Codorniz Fed 2 well, there is a possibility that flow will enter this wellbore.
2. Also with the expanded range to encompass more of the Delaware due to the Codorniz Fed 2, there is also the possibility that flow could work up the formation and past the TOC on this proposed injection well since the top of the Bell Canyon is 5000' and the TOC is 5130'.

The following are recommended actions - confirm that the Trigg well is adequately plugged and perform a bull head squeeze on the Tomcat to tie the production casing back to the intermediate casing.

This notification was received in the CFO on 9/15/2008.

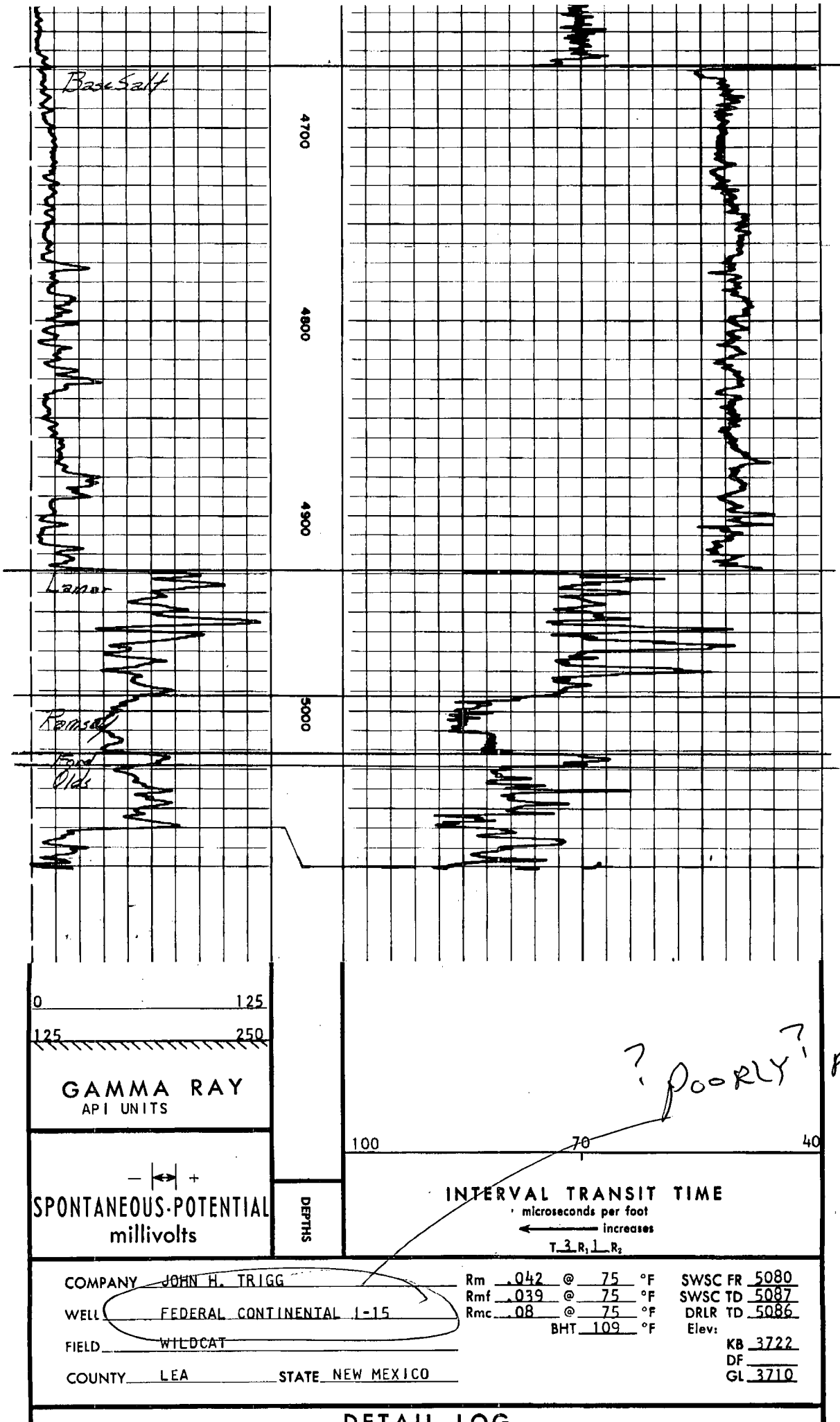
Wesley W. Ingram

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(Provisional on CMT work)

SWD Checklist.xls/List