

ABOVE THIS LINE FOR DIVISION USE ONLY

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



229137 COG Operating LLC  
30-015-27056  
Lusk 9209 SU-P #1 Old #  
Lusk 12 SWD #1 New  
ULF 12 19S 3/E

**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,  
(to follow by email)  
 [F]  Waivers are Attached

2012 JUL 23 P 1:05  
 RECEIVED OGD

[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.**

<u>BRIAN COLLINS</u>		<u>SENIOR OPERATIONS ENGINEER</u>	<u>06/15/12</u>
Print or Type Name	Signature	Title	Date
		<u>bcollins@concho.com</u>	
		e-mail Address	



July 19, 2012

New Mexico Oil Conservation Division  
Attn: William V. Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Application For Authorization To Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

RECEIVED OGD  
2012 JUL 23 PM 1:53

Dear Mr. Jones:

COG Operating LLC respectfully requests administrative approval for authorization to inject the Lusk 12 SWD #1 well as referenced above. Enclosed, for your review, please find one complete copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

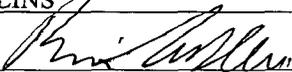
Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_  Yes \_\_\_\_\_ No
- II. OPERATOR: \_\_\_\_\_ COG Operating LLC \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ 2208 W. Main Street, Artesia, NM 88210 \_\_\_\_\_  
CONTACT PARTY: \_\_\_\_\_ BRIAN COLLINS \_\_\_\_\_ PHONE: \_\_\_\_\_ 575-748-6940 \_\_\_\_\_
- 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: \_\_\_\_\_ BRIAN COLLINS \_\_\_\_\_ TITLE: \_\_\_\_\_ Senior Operations Engineer \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_  \_\_\_\_\_ DATE: \_\_\_\_\_ 6/19/2012 \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_ bcollins@concho.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: \_\_\_\_\_

Application for Authorization to Inject  
Lusk 12 SWD No. 1  
Unit F, Section 12-T19S-R31E

Objective: COG Operating, LLC proposes to reenter the Lusk 9209 JV-P No. 1, drill out plugs, clean out to approximately 11250', squeeze cement Delaware perforations, squeeze cement Bone Spring perforations, squeeze cement Wolfcamp perforations, test squeezed perforations to 1000 psi, perforate and acidize the Strawn Lime 11015-11205' and convert well to SWD service.

- V. Map is attached.
- VI. Four wells within the 1/2 mile radius area of review penetrate the proposed injection zone. A wellbore diagram of each one is attached.
- VII.
  - 1. Proposed average daily rate = 2500 BWPD  
Proposed maximum daily rate = 10000 BWPD
  - 2. Proposed maximum injection pressure = 2203psi (0.2 psi/ft)
  - 3. System is closed
  - 4. Majority of injected water will be Bone Spring produced water. Analysis of produced water is attached.
  - 5. The Strawn is depleted and is not productive within a mile of the Lusk 12 SWD No. 1. Strawn water has very high chlorides like the Bone Spring produced water. We have two Strawn SWD's in the Lusk area and have encountered no compatibility issues.
- VIII. The injection zone is the Strawn limestone from 11015' to 11205'. Underground sources of drinking water will be shallower than 632 feet deep.
- IX. The proposed injection zone will be acidized with 30,000 gallons 15% HCL acid if necessary.
- X. Logs are filed with the Division. A section of the porosity log is attached.
- XI. There are no fresh water wells within one mile of the Lusk 12 SWD No. 1.
- XII. After examining available geologic and engineering data, there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Proof of Notice is attached.

# **III.**

## **WELL DATA**

INJECTION WELL DATA SHEET

OPERATOR: \_\_\_\_\_ COG Operating LLC

WELL NAME & NUMBER: Lusk 12 SWD No. 1 (Formerly Lusk 9209 JV-P No. 1)

WELL LOCATION: 1980' FNL 1820' FWL F 12 19s 31e  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8" @ 632'

Cemented with: 700 sx. or - ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 9 5/8" @ 4000'

Cemented with: 1400 sx. or - ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2" @ 11290'

Cemented with: 1800 sx. or - ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circulated

Total Depth: 11290'

Injection Interval

11015' feet to 11205'

(Perforated) or Open Hole; indicate which)

See Attached  
Before & After  
Schematics

**INJECTION WELL DATA SHEET**

Tubing Size: 2 7/8" Lining Material: Dualine ZO or IPC  
Type of Packer: 10K nickel plated double grip retrievable  
Packer Setting Depth: ± 10965'  
Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

1. Is this a new well drilled for injection?        Yes X No  
If no, for what purpose was the well originally drilled? Oil & Gas  
\_\_\_\_\_
  
2. Name of the Injection Formation: Strawn
  
3. Name of Field or Pool (if applicable): Lvsk
  
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. \_\_\_\_\_  
See attached "before" schematic
  
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_  
Underlying: Strawn (wells in area depleted), Morrow 12200-12500'  
Overlying: Wolfcamp 10200-10425' (very limited reservoir volumes in area)  
Bone Spring 7000-9000', Delaware 4500-6800'

30-015-27056

Lusk 9209 JV-P No.1

Zero: 14' AGL

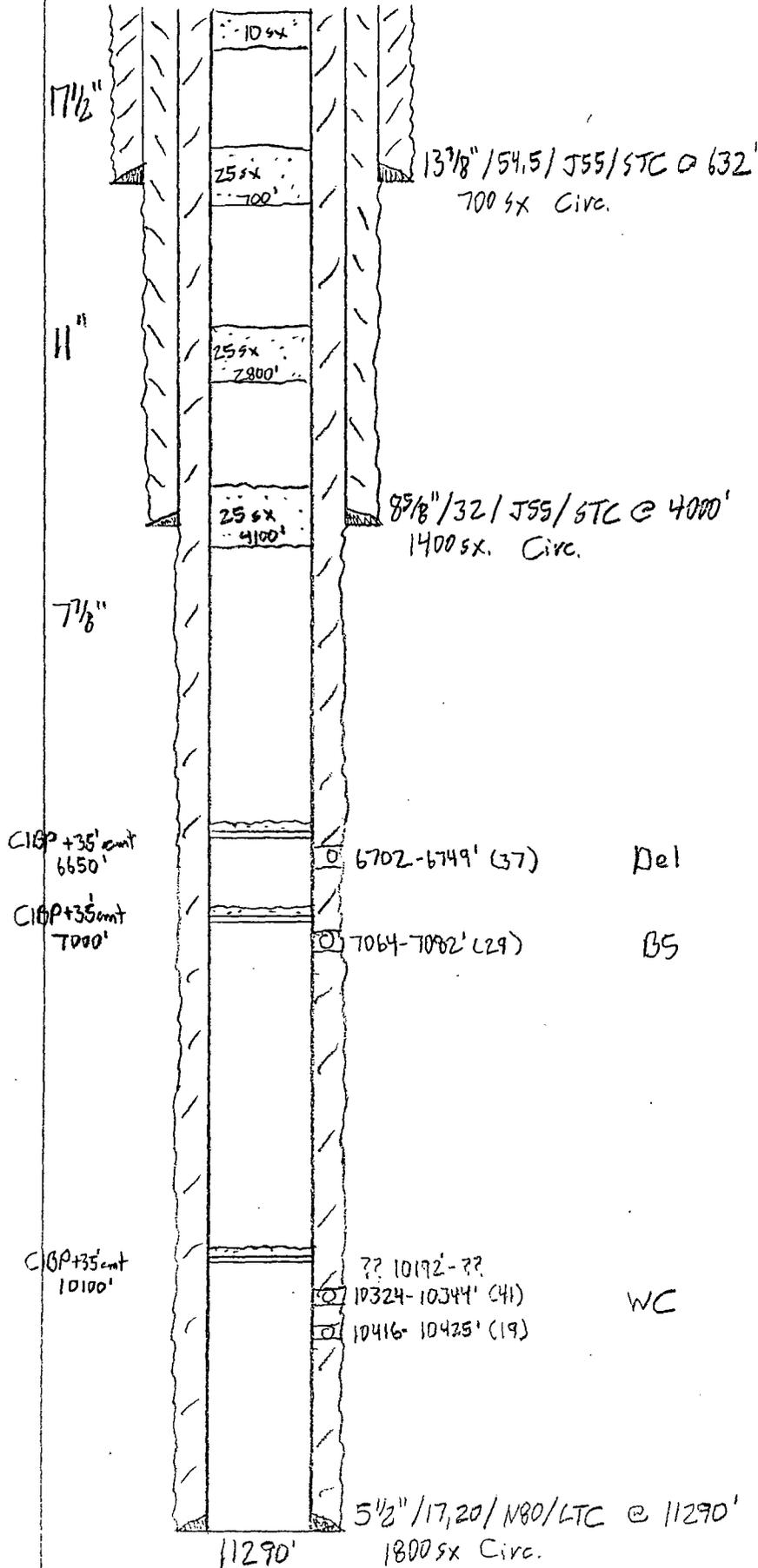
1980' FNL, 1000' FNL

F-12-196-31e

Eddy NM

KB: 3624'

GL: 3610'



Before SWD Conversion

C10P+35' cont  
6650'

C10P+35' cont  
7000'

C10P+35' cont  
10100'

6702-6749' (37)

Del

7064-7082' (29)

B5

?? 10192'-??

10324-10344' (41)

WC

10416-10425' (19)

5 1/2" / 17.20 / N80 / LTC @ 11290'

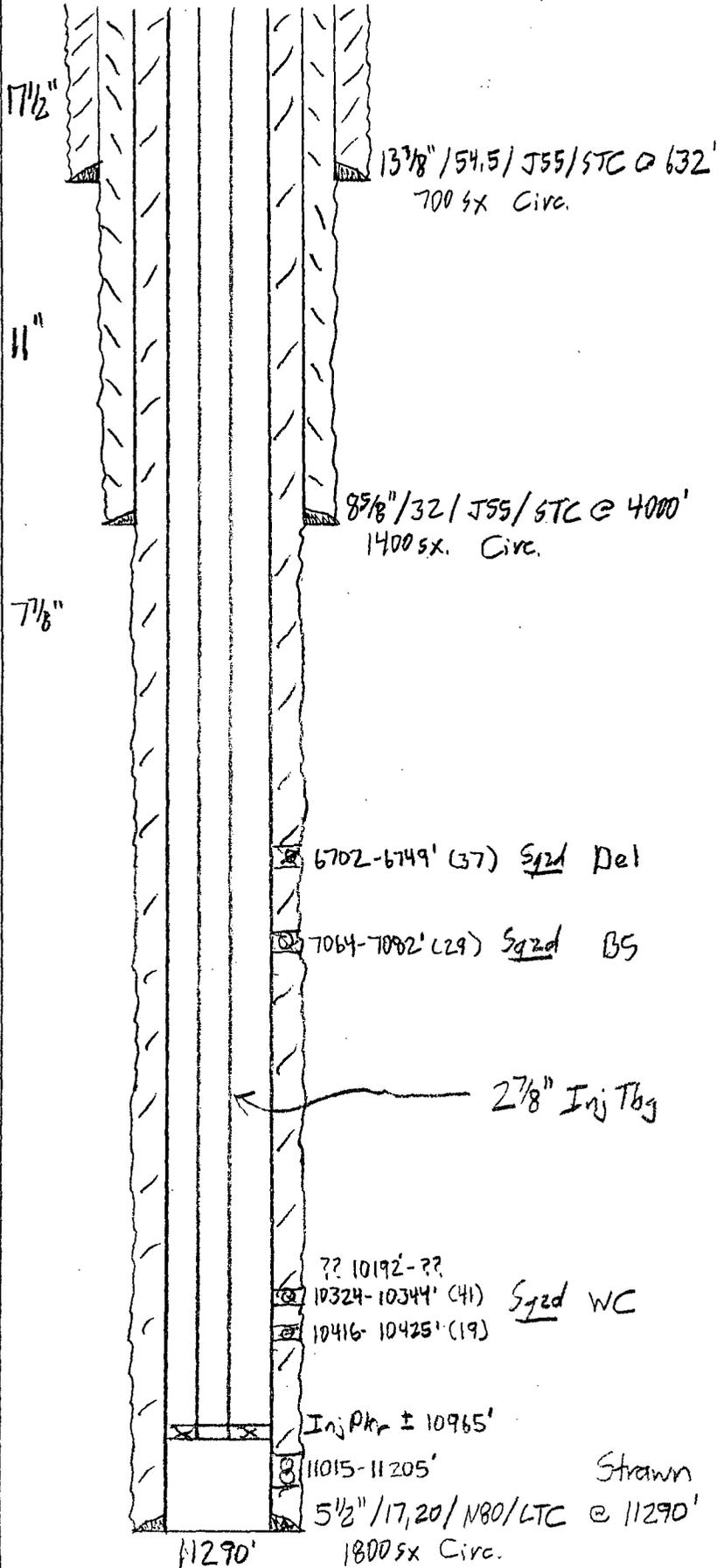
1800 sx Circ.

11290'

30-015-27056

Lusk 12 SWD No. 1  
(Lusk 9209 JV-P No. 1)

1780' FNL, 1820' FNL  
F-12-196-31c  
Eddy NM



After SWD Conversion

**V.**

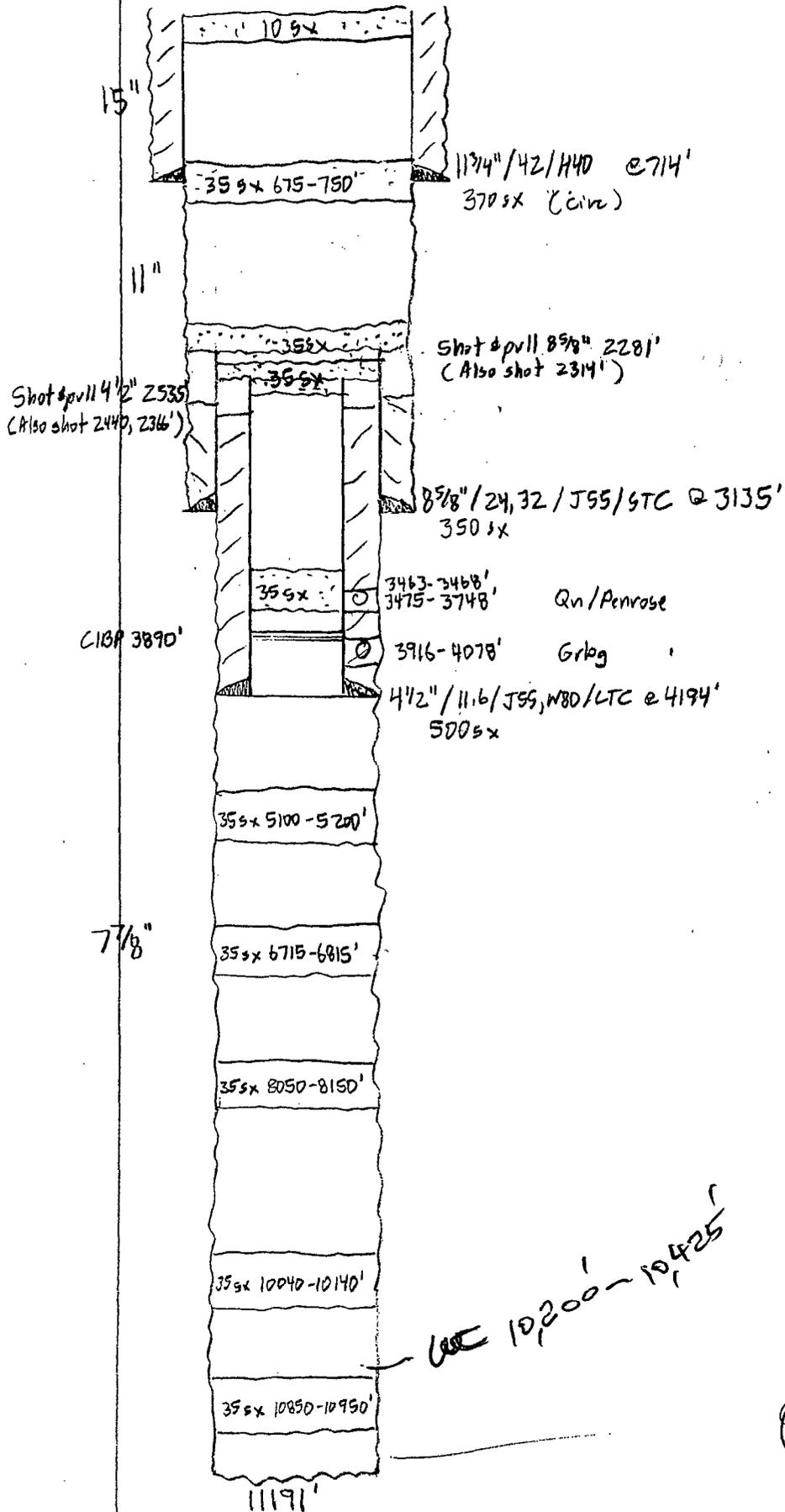
**MAP**

**Wells within 1/2  
Mile Radius**

# **VI.**

## **Well Data on Wells Penetrating Strawn within 1/2 Mile Radius Area of Review**

Joyce Conn. 1  
 660' FNL, 660' FWL  
 D-12-19s-31e  
 Eddy NM



Within Area of Review

Use 10,200' - 10,425'

OK

Well: Airbus Fzd. 1

Zero: 17' AGL

Location: 1980' FSL, 660' FWL

KB: 3621'

L -12- 19s- 3le

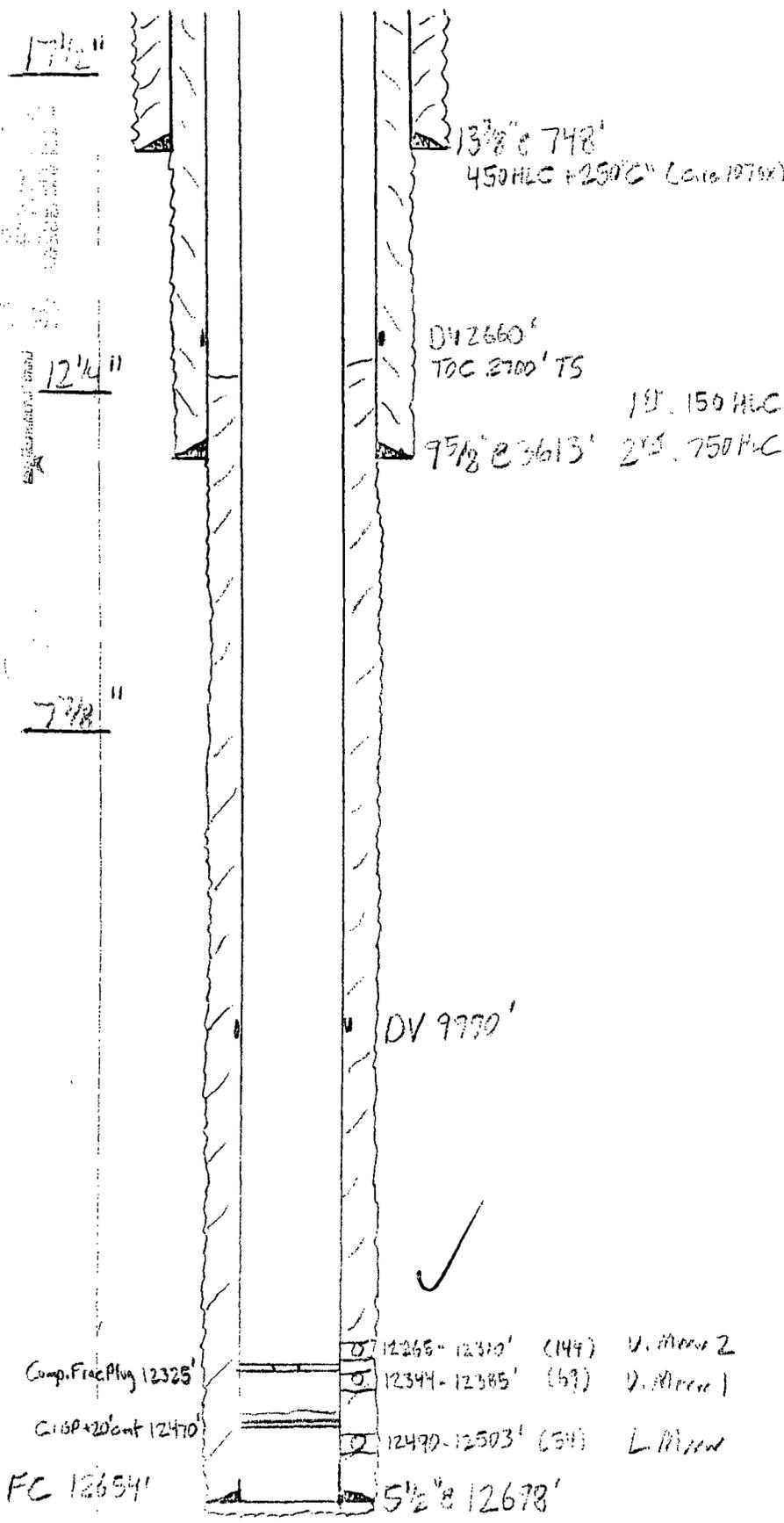
GL: 3604'

Eddy NM

30-015-35887

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 7/8"	54.5	J55	BTC	748'
9 5/8"	36.40	J55	BTC	3613'
5 1/2"	17	M95-110	LTC	12678'
2 3/8"	4.7	L80	LEUE	



Within Area of Review

12265 - 12310' (144) U. Missed 2  
 12344 - 12385' (69) U. Missed 1  
 12470 - 12503' (51) L. Missed  
 FC 12654'  
 12700'

1st. 550 Super H (Circ 686X)  
 2nd. 1200 HLC + 100 C"

30-015-39712

Pop Tart 12 Fed. 4H  
Surf: 660' FNL, 710' FWL, Unit D  
EOL: 2087' FSL, 621' FNL, Unit E  
12-19s-31e  
Eddy, NM

17 1/2"

12 1/4"

13 3/8" / 545 / JSS / STC @ 825'

350 ex "C" 4 3/8 gel + 250 "C" (circ) 965x

9 7/8" / 36 / JSS / BTCC 2700'

550 ex "C" 4 3/8 gel + 250 "C" (circ) 1128x

8 3/4" to  
10667' MD  
(76" incl.)  
6 1/8" to

Well  
T.A'd

Within Area of Review

TOC 6460' TS

7" / 29 / P110 / LTC @ 10500' (60" incl.)  
1300 ex HLC + 300 ex H

400 ex H

9200 - 10569'

10680 - 10827' ±

Reamer + XD + 5. to DP + BS + Bit

12915' MD

10624' TVD

KOP 9900'

First KOP 9950'  
Loft Fish in Curve  
10277' - 10623'  
Spot 22.5 ex H  
9900 - 10194'

22.5 ex "H" 9900'

10318'

250 ex "H" 11084'

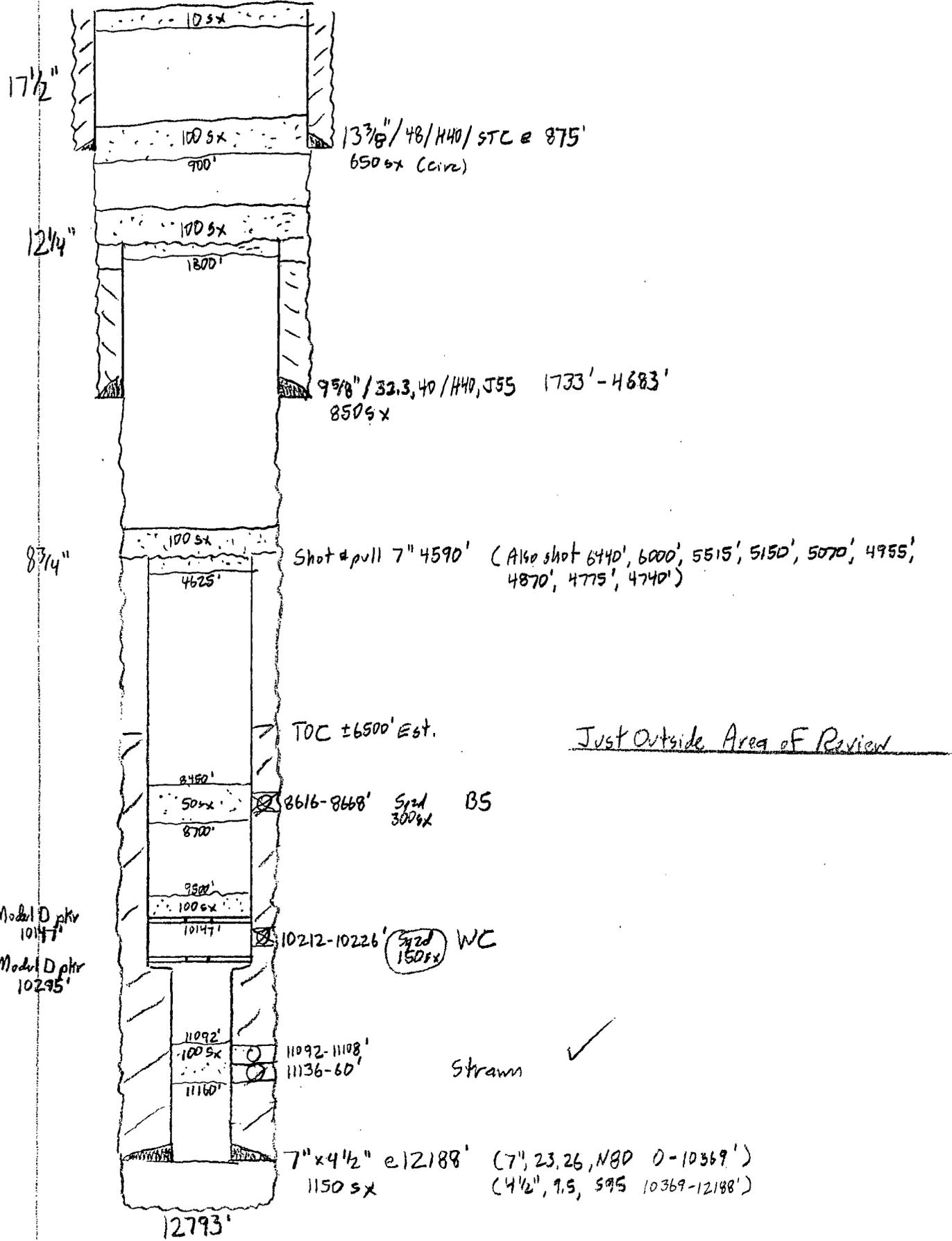
11093'

Not to Scale

30-015-05762

Greenwood Unit 7  
1980' FNL, 660' FEL  
H-12-19s-31c  
Eddy NM

Zerol  
K0'  
GL'



Modul D ptr  
10147'  
Modul D ptr  
10295'

7" x 4 1/2" e 12188' (7", 23.26, N80 0-10369')  
1150 SX (4 1/2", 9.5, 595 10369-12188')

# **VII.**

## **WATER ANALYSIS**

### **Injection Water**





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*New Mexico Office of the State Engineer*  
**Point of Diversion by Location**  
(with Owner Information)

---

No PODs found.

PLSS Search:

Sections: 1, 2, 11, 12, 13, Township: 19S Range: 31E  
14



---

*New Mexico Office of the State Engineer*  
**Point of Diversion by Location**  
(with Owner Information)

---

No PODs found.

PLSS Search:

Section: 6, 7, 18

Township: 19S

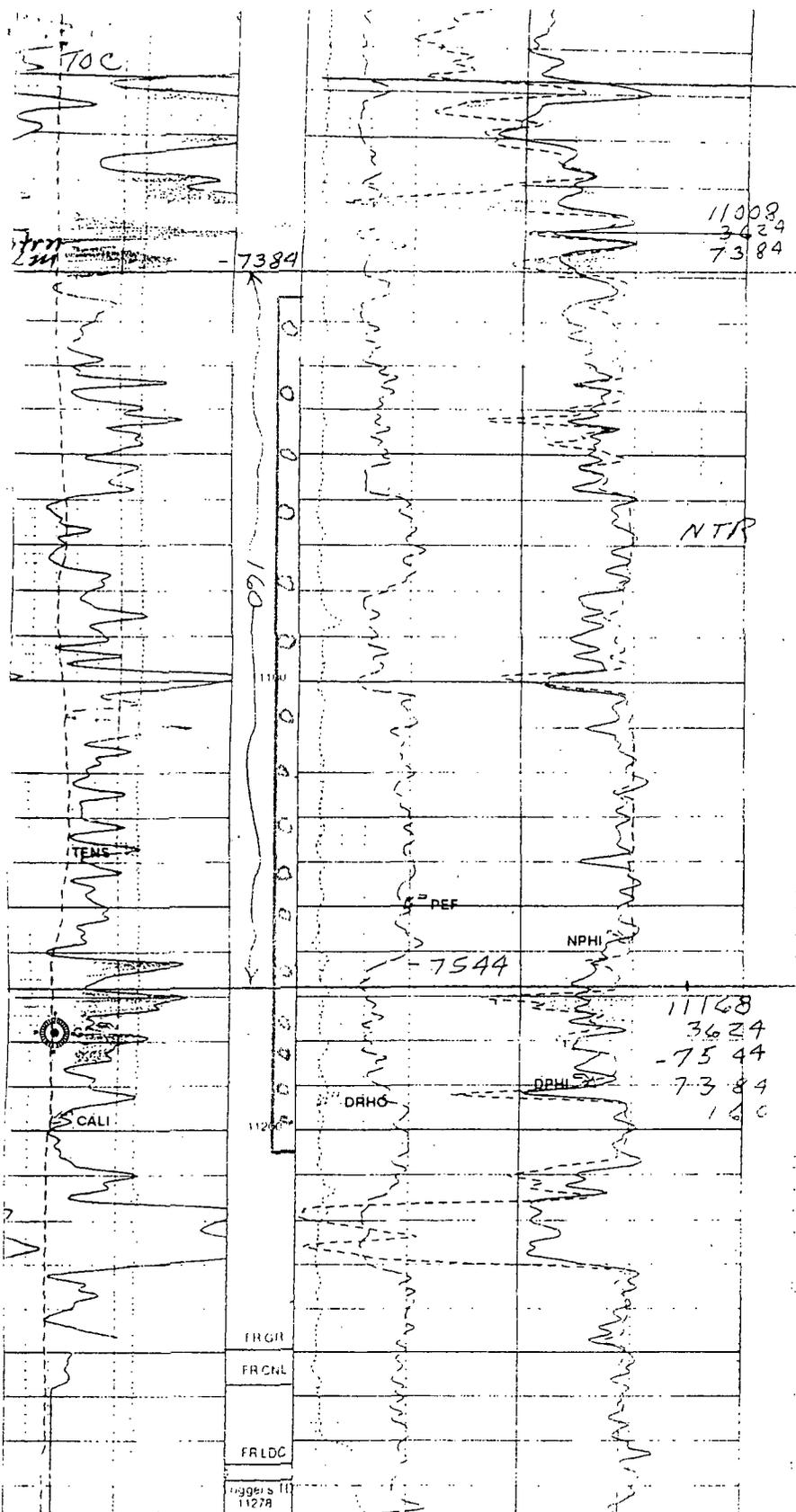
Range: 32E

**X.**

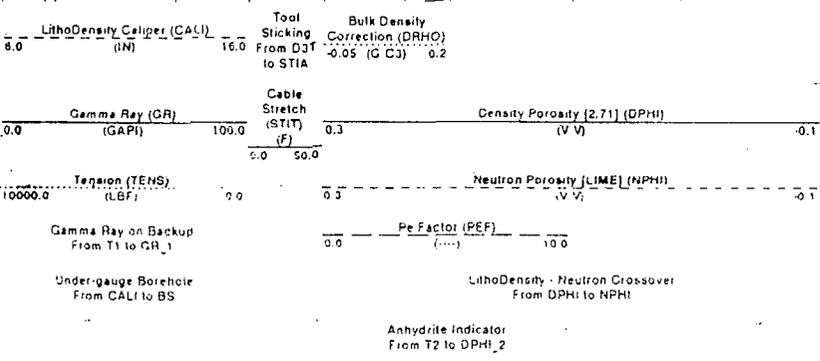
# **LOG SECTION**

**Strawn Disposal Zone**





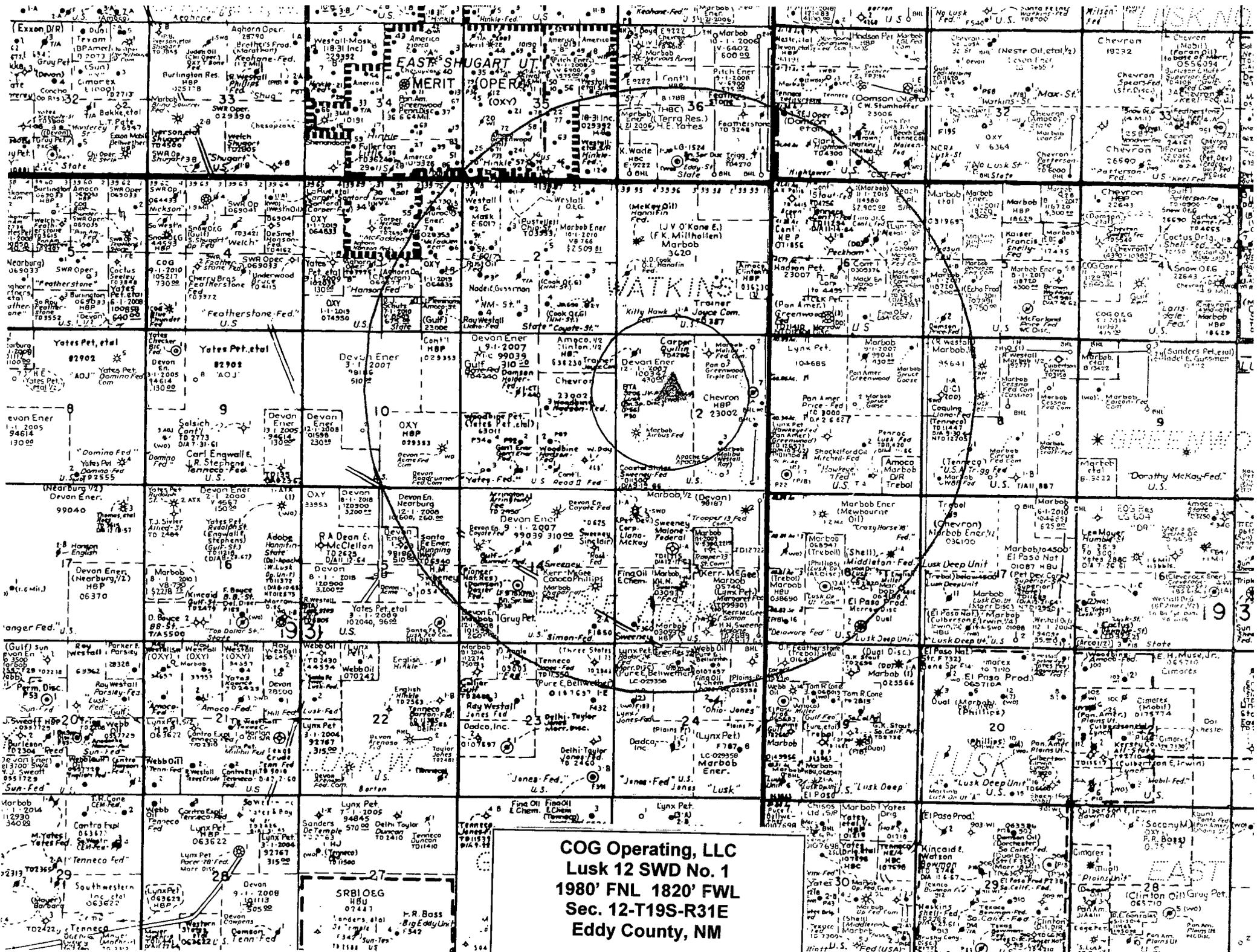
Strawn Lime  
SWD Interval  
11015-11205'  
Gross



PIP SUMMARY

Integrated Borehole Volume Every 10.0 F3

Integrated Borehole Volume Every 100.0 F3



**COG Operating, LLC**  
**Lusk 12 SWD No. 1**  
**1980' FNL 1820' FWL**  
**Sec. 12-T19S-R31E**  
**Eddy County, NM**

**EAST**

**CLINTON OIL GRUPT**

**065710**



July 19, 2012

Bureau of Land Management  
620 East Greene Street  
Carlsbad, NM 88220-6292

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's application to convert the referenced well to salt water disposal. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.**

5. Lease Serial No.  
NMNM100342

6. If Indian, Allottee or Tribe Name

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

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well  
 Oil Well     Gas Well     Other SWD

8. Well Name and No.  
Lusk 12 SWD 1

2. Name of Operator  
COG Operating, LLC

9. API Well No.  
30-015-27056

3a. Address  
2208 W. Main Street, Artesia, NM 88210

3b. Phone No. (include area code)  
575-748-6940

10. Field and Pool or Exploratory Area  
Lusk Strawn

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec. 12-T19S-R31E, Unit f  
1980 FNL 1820 FWL

11. Country or Parish, State  
Eddy County, NM

**12. CHECK THE 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 checked="" type="checkbox"/> Other <u>Convert to SWD</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.)

Submitted Form C-108 - Copy Attached

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)  
Brian Collins

Title Senior Operations Engineer

Signature 

Date 06/30/2012

**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 operations thereon.

Office \_\_\_\_\_

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.



July 19, 2012

ConocoPhillips Company  
P.O. Box 7500  
Bartlesville, OK 74005

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

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Sincerely,

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



July 19, 2012

Devon Energy Production LP  
333 W. Sheridan Ave.  
Oklahoma City, OK 73102-5010

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
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Eddy County, New Mexico

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



July 19, 2012

Fidelity Exploration & Production Company  
1625 Broadway #1800  
Denver, CO 80202

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



July 19, 2012

Lynx Petroleum Consultants Inc.  
P.O. Box 1708  
Hobbs, NM 88241

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



July 19, 2012

Shackelford Oil Company  
P.O. Box 10665  
Midland, TX 79702

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's application to convert the referenced well to salt water disposal. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



July 19, 2012

Vanguard Permian, LLC  
5847 San Felipe, Suite 3000  
Houston, TX 77057

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's application to convert the referenced well to salt water disposal. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

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Sincerely,

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

7011 1570 0000 7781 1987

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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Bureau of Land Management**  
 620 East Greene Street  
 Street, Apt. No.; or PO Box No. **Carlsbad, NM 88220-6292**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**  
 PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 1994

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Total Postage & Fees	\$	

Sent To **ConocoPhillips Company**  
 P.O. Box 7500  
 Street, Apt. No.; or PO Box No. **Bartlesville, OK 74005**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**  
 PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 2007

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Total Postage & Fees	\$	

Sent To **Devon Energy Production LP**  
 333 W. Sheridan Ave.  
 Street, Apt. No.; or PO Box No. **Oklahoma City, OK 73102-5010**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**  
 PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 2014

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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Fidelity Exploration & Production Co.**  
 1625 Broadway #1800  
 Street, Apt. No.; or PO Box No. **Denver, CO 80202**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**  
 PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 2021

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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To Lynx-Petroleum-Consultants-Inc.  
P.O. Box 1708  
 Street, Apt. No.; or PO Box No. Hobbs, NM 88241  
 City, State, ZIP+4 Lusk 12 SWD #1/Notification

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 2038

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Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To Shackelford-Oil-Company  
P.O. Box 10665  
 Street, Apt. No.; or PO Box No. Midland, TX 79702  
 City, State, ZIP+4 Lusk 12 SWD #1/Notification

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7781 2045

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**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To Vanguard Permian, LLC  
5847 San Felipe, Suite 3000  
 Street, Apt. No.; or PO Box No. Houston, TX 77057  
 City, State, ZIP+4 Lusk 12 SWD #1/Notification

PS Form 3800, August 2006 See Reverse for Instructions



July 19, 2012

Artesia Daily Press  
P. O. Box 190  
Artesia, NM 88211-0190

Re: **Legal Notice**  
**Salt Water Disposal Well**  
**Lusk 12 SWD #1**

To Whom It May Concern:

Enclosed is a legal notice regarding New Mexico Oil Conservation Division C-108 Application for Authorization to Inject a salt water disposal well.

Please run this notice and return the proof of notice to the undersigned at:

**COG Operating LLC, 2208 W. Main St., Artesia, NM 88210**

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

**ARTESIA DAILY PRESS**  
**LEGAL NOTICES**

COG Operating, LLC, 2208 W. Main Street, Artesia, New Mexico, 88210, has filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Lusk 12 SWD No. 1 is located 1980' FNL and 1820' FWL, Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Bone Spring formation. The disposal water will be injected into the Strawn formation at a depth of 11015' - 11205' at a maximum surface pressure of 2203 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 Street, Santa Fe, New Mexico, 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at COG Operating, LLC, 2208 W. Main Street, Artesia, New Mexico, 88210, or call 575-748-6940.

Published in the Artesia Daily Press, Artesia, New Mexico, on \_\_\_\_\_, 2012.

DRILLING PROGRAM

BTA OIL PRODUCERS  
Lusk, 9206 JV-P, Well No. 1  
1980' FNL and 1980' FEL  
Sec. 12, T-19-S, R-31-E  
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, BTA Oil Producers submits the following 10 items for pertinent information in accordance with BLM requirements:

1. The geologic surface formation is Quaternary.
2. The estimated top of geologic marker is as follows:

Bone Spring	6,800'	U. Reef	11,040'
Strawn	10,978'	L. Reef	11,100'

3. The estimated depth at which anticipated water, oil or gas formations are expected to be encountered:

Strawn                      10,978'

All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and furnished to the BLM, Division of Minerals. All oil and gas shows will be adequately tested for commercial possibilities reported and protected.

4. Proposed Casing and Cementing program:

<u>Casing Size</u>	<u>Setting From</u>	<u>Depth to</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
13-3/8"	0	600'	54.5#	J55	STC
8-5/8"	0	4,000'	32.0#	J55	STC
5-1/2"	0	2,000'	20.0#	N80	LTC
5-1/2"	2,000'	9,000'	17.0#	N80	LTC
5-1/2"	9,000'	11,500'	20.0#	N80	LTC

~~Depending upon availability at the time that the casing is run, equivalent or adequate weights and grades may be substituted.~~

13-3/8" casing will be cemented with 600 sx Class "C" cement containing 2% CaCl to circulate to the surface.

8-5/8" casing will be cemented with sufficient light cement, tailed-in with 400 sx Class "C", to circulate to the surface.

5-1/2" casing will be cemented back up above the bottom of the 8-5/8" casing.

Note: All casing strings will be pressure tested to 0.22 psi/ft. of setting depth or 1500 psi (whichever is greater) after cementing and prior to drillout.



August 30, 2012

Jessica Wilma Cook  
805 N. Richardson  
Roswell, NM 88201

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

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Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



August 30, 2012

Jan Maxwell  
901 Olde Towne Dr.  
Irving, TX 75061

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

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Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



August 30, 2012

Perry C. Maxwell Jr.  
1712 Hillcrest Dr.  
Irving, TX 75602

Re: Application to Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

To Whom It May Concern:

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Please do not hesitate to contact us at 575-748-6940 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

7011 1570 0000 7761 2274

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Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Perry C. Maxwell Jr.**  
**1712 Hillcrest Dr.**  
 Street, Apt. No., or PO Box No. **Irving, TX 75602**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7761 2267

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Jan Maxwell**  
**901 Olde Towne Dr.**  
 Street, Apt. No., or PO Box No. **Irving, TX 75061**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0000 7761 2250

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Jessica Wilma Cook**  
**805 N. Richardson**  
 Street, Apt. No., or PO Box No. **Roswell, NM 88201**  
 City, State, ZIP+4 **Lusk 12 SWD #1/Notification**

PS Form 3800, August 2006 See Reverse for Instructions



RECEIVED OCD  
2012 AUG 13 P 12:41

August 10, 2012

New Mexico Oil Conservation Division  
Attn: William V. Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Affidavit of Publication/Certified Return Receipts  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

Dear Mr. Jones:

COG Operating LLC submitted an application for authorization to inject the Lusk 12 SWD #1 on July 19, 2012. Enclosed, for your review, please find one copy of the affidavit of publication and one copy of the certified return receipts from each party that was notified.

Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

# Affidavit of Publication

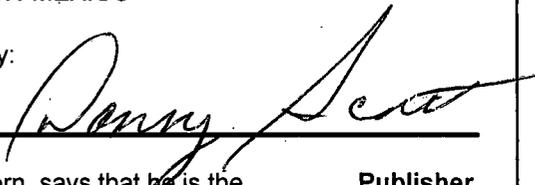
NO. 22234

# Copy of Publication:

STATE OF NEW MEXICO

County of Eddy:

Danny Scott



being duly sworn, says that he is the Publisher

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

### Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 Consecutive weeks/days on the same

day as follows:

First Publication	<u>July 24, 2012</u>
Second Publication	_____
Third Publication	_____
Fourth Publication	_____
Fifth Publication	_____

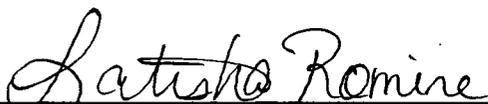
Subscribed and sworn to before me this

24th day of July 2012



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2015



Latisha Romine  
Notary Public, Eddy County, New Mexico

**LEGAL NOTICE**

COG Operating, LLC, 2208 W. Main Street, Artesia, New Mexico, 88210, has filed Form G-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Lusk 12 SWD No. 1 is located 1980' FNL and 1820' FWL, Section 12, Township 19 South, Range 31 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Bone Spring formation. The disposal water will be injected into the Strawn formation at a depth of 11015' - 1205' at a maximum surface pressure of 2203 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 Street, Santa Fe, New Mexico, 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at COG Operating, LLC, 2208 W. Main Street, Artesia, New Mexico, 88210, or call 575-748-6940. Published in the Artesia Daily Press, Artesia, N.M., July 24, 2012, Legal No. 22234.

**SENDER: COMPLETE THIS SECTION**

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- Print your name and address on the reverse so that we can return the card to you.
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1. Article Addressed to:

**Bureau of Land Management**  
**620 East Greene Street**  
**Carlsbad, NM 88220-6292**  
**Lusk 12 SWD #1/Notification**

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X *HLS*  Agent  Addressee

B. Received by (Printed Name) *Heather Shatz* C. Date of Delivery *7/23*

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 (Transfer from service label) 7011 1570 0000 7781 1987

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

**SENDER: COMPLETE THIS SECTION**

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**ConocoPhillips Company**  
**P.O. Box 7500**  
**Bartlesville, OK 74005**  
**Lusk 12 SWD #1/Notification**

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X *[Signature]*  Agent  Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 (Transfer from service label) 7011 1570 0000 7781 1994

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Devon Energy Production LP**  
**333 W. Sheridan Ave.**  
**Oklahoma City, OK 73102-5010**  
**Lusk 12 SWD #1/Notification**

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X *RW*  Agent  Addressee

B. Received by (Printed Name) C. Date of Delivery *7-23*

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 (Transfer from service label) 7011 1570 0000 7781 2007

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

**SENDER: COMPLETE THIS SECTION**

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Lynx Petroleum Consultants Inc.**  
**P.O. Box 1708**  
**Hobbs, NM 88241**  
**Lusk 12 SWD #1/Notification**

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
 X *Anita Daugherty*  Agent  Addressee

B. Received by (Printed Name) *Anita Daugherty* C. Date of Delivery *7-23-12*

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 (Transfer from service label) 7011 1570 0000 7781 2021

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7011 1570 0000 7781 2014

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Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Return to sender  
unable to forward

Sent To Fidelity Exploration & Production Co.  
1625 Broadway #1800  
Street, Apt. No., or PO Box No. Denver, CO 80202  
City, State, ZIP+4 Lusk 12-SWD #1/Notification  
PS Form 3800, August 2005 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

COMPLETE THIS SECTION ON DELIVERY

A. Signature  
X *R Kelly*  Agent  Addressee

B. Received by (Printed Name) *R KELLY* C. Date of Delivery *8/6/12*

D. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below:

1. Article Addressed to:

Fidelity Exploration & Production Co.  
1700 Lincoln Street, Suite 2800  
Denver, CO 80203  
**Lusk 12 SWD #1/Notification**

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number

(Transfer from service label) 7011 1570 0000 7781 2090

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Shackelford Oil Company  
P.O. Box 10665  
Midland, TX 79702  
**Lusk 12 SWD #1/Notification**

COMPLETE THIS SECTION ON DELIVERY

A. Signature  
*Doregan O'Hearn*  Agent  Addressee

B. Received by (Printed Name) *MEGAN O'HEARN* C. Date of Delivery *7-27-12*

D. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
(Transfer from service label)

7011 1570 0000 7781 2038

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Vanguard Permian, LLC  
5847 San Felipe, Suite 3000  
Houston, TX 77057  
**Lusk 12 SWD #1/Notification**

COMPLETE THIS SECTION ON DELIVERY

A. Signature  
X *[Signature]*  Agent  Addressee

B. Received by (Printed Name) C. Date of Delivery *7-27-12*

D. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
(Transfer from service label)

7011 1570 0000 7781 2045

## Jones, William V., EMNRD

---

**From:** Jones, William V., EMNRD  
**Sent:** Thursday, August 09, 2012 2:29 PM  
**To:** 'bcollins@concho.com'  
**Cc:** Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD  
**Subject:** Disposal application from Concho: Lusk 12 SWD #1 30-015-27056 Strawn from 11015 to 11205 feet  
**Attachments:** EddyNM\_NASH\_53\_SWD.pdf

Hello Brian,

I talked with someone from your office yesterday and passed at least the first item on, but just sending an email for the records,

Looks like 7 parties were noticed. Would you let me know where the separately owned tracts of land exist within the ½ mile AOR and the owner(s) of each tract? Attaching an example...

Please send a copy of the newspaper notice after you see it in the paper.

The fresh water sands may exist down to 632 feet – what does the Geologists call this interval? Is it alluvium or what.

This well was permitted before as SWD-1240 into the same interval – probably expired? The new permit will be called SWD-1240-A.

Hope all is well,

William V. Jones, P.E.

505-476-3448W 505-476-3462F  
Engineering Bureau, Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## Jones, William V., EMNRD

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**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Friday, August 10, 2012 8:08 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Dean Chumbley; Jan Spradlin; Riley Edwards; Savannah Wilkinson  
**Subject:** RE: Disposal application from Concho: Lusk 12 SWD #1 30-015-27056 Strawn from 11015 to 11205 feet

Will:

We're working on plotting leasehold operators' (within ½ mile AOR) leases on a map and will get it to you ASAP.

Our geologists call everything from the surface to the Rustler "Permian" formation. Searching the State Engineer website, I found no record of any water wells within a 2 mile radius of the captioned well which tells me there is no fresh water present here. The stock tanks in this area use water piped in from Ogallala wells to the east (Carlsbad's Double Eagle water line). I used 632' as the deepest "possible" fresh water because that's where the surface casing was set.

The return receipts and public notice are in the mail to you and should arrive soon. Hopefully I've answered your questions. Take care.

Brian Collins

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**From:** Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]  
**Sent:** Thursday, August 09, 2012 3:29 PM  
**To:** Brian Collins  
**Cc:** Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD  
**Subject:** Disposal application from Concho: Lusk 12 SWD #1 30-015-27056 Strawn from 11015 to 11205 feet

Hello Brian,

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William V. Jones, P.E.  
505-476-3448W 505-476-3462F  
Engineering Bureau, Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



RECEIVED OCD  
2012 SEP -4 P 12: 57

August 30, 2012

New Mexico Oil Conservation Division  
Attn: William V. Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Application For Authorization To Inject  
Lusk 12 SWD #1  
Township 19 South, Range 31 East, N.M.P.M.  
Section 12: 1980' FNL & 1820' FWL  
Eddy County, New Mexico

Dear Mr. Jones:

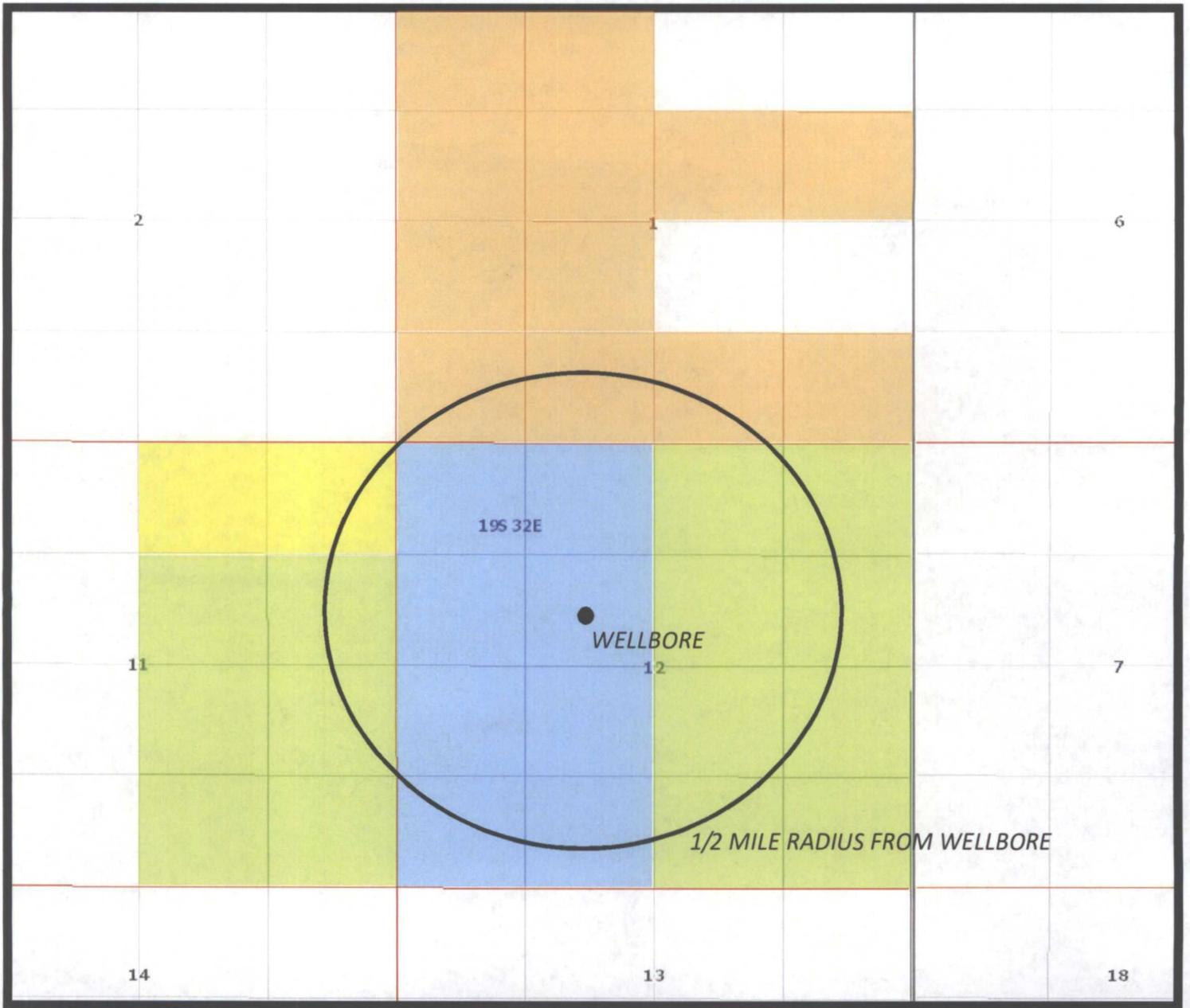
COG Operating LLC recently submitted to you a C-108 application for the Lusk 12 SWD #1 well referenced above. Per your request, please find the enclosed lease map identifying all of the separately owned tracts of land along with the owners of each tract. Also enclosed are copies of notification letters that were sent to three additional affected parties that were left off of the initial request.

Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



- J Cook, J Maxwell, P Maxwell Jr.
- Bureau of Land Management
- Chevron USA Inc.
- COG Operating LLC

Lusk 12 SWD No. 1  
 1980' FNL & 1820' FWL  
 Sec. 12; T19s - R31e  
 Eddy County, New Mexico

**Injection Permit Checklist** (11/15/2010)

WFX \_\_\_\_\_ PMX \_\_\_\_\_ SWD 1240-A Permit Date 9/6/12 UIC Qtr JAS

# Wells 1 Well Name(s): LUSK 12 SWD #1 (Formerly LUSK 9209 JV-P#1)

API Num: 30-015-27056 Spud Date: 8/29/12 New/Old: N (UIC primacy March 7, 1982)

Footages 1980 FWL/1820 FWL Unit F Sec 12 Tsp 19S Rge 31E County EDDY

General Location: ≈ 30 mi NE of Corbush, JUST on N edge of Reef area

Operator: COG OPERATING LLC Contact BRYAN COLLINS

OGRID: 221137 RULE 5.9 Compliance (Wells) 05705 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed \_\_\_\_\_ Current Status: \_\_\_\_\_

Planned Work to Well: RE-ENTER TO 11250', SEE DELAYING BS/WC Perf Strain

Diagrams: Before Conversion  After Conversion  Elogs in Imaging File:

Well Details:	Sizes		Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
	Hole.....	Pipe				
New ___ Existing ___ Surface	<u>17 1/2</u>	<u>13 3/8</u>	<u>632'</u>	<u>—</u>	<u>700SX</u>	<u>CIRC</u>
New ___ Existing ___ Interm	<u>11</u>	<u>8 5/8</u>	<u>4000'</u>	<u>?</u>	<u>1400SX</u>	<u>CIRC</u>
New ___ Existing ___ LongSt	<u>7 7/8</u>	<u>5 1/2</u>	<u>11,290'</u>		<u>1800SX</u>	<u>CIRC</u>
New ___ Existing ___ Liner						
New ___ Existing ___ OpenHole						

Depths/Formations: Depths, Ft. Formation Tops? (LUSK area)

Formation(s) Above	<u>10164</u>	<u>WC</u>	<input checked="" type="checkbox"/>
	<u>10996</u>	<u>Strain</u>	<input checked="" type="checkbox"/>
Injection TOP:	<u>11,015</u>	<u>STRAIN</u>	<u>4 in</u>
Injection BOTTOM:	<u>11,205</u>	<u>"</u>	
Formation(s) Below			

Max. PSI 2203 OpenHole Perf   
Tubing Size 2 7/8 Packer Depth 10,85

Capitan Reef? yes (Potash? Noticed?) [WIP? Noticed?] Salado Top/Bot \_\_\_\_\_ Cliff House? \_\_\_\_\_

Fresh Water: Depths: 632' Formation \_\_\_\_\_ Wells? NO Analysis? \_\_\_\_\_ Affirmative Statement

Disposal Fluid Analysis?  Sources: BS

Disposal Interval: Analysis?  Production Potential/Testing: depleted / (OTHER STRAIN SWDS) Not Prod. within a mile

Notice: Newspaper Date \_\_\_\_\_ Surface Owner BLM 7/19/12 Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Persons: BLM/CONOCO/Paron/Fidelity/LYNX/Fidelity/Vegard

AOR: Maps?  Well List?  Producing in Interval? NO Wellbore Diagrams?

.....Active Wells 2 Repairs? 0 Which Wells? \_\_\_\_\_

.....P&A Wells 2 Repairs? 0 Which Wells? \_\_\_\_\_

Issues: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_