





August 7, 2015

RECEIVED OGD

2015 08 17 P 3:18

New Mexico Oil Conservation Division  
Attn: Phillip Goetze  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

Dear Mr. Goetze:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the referenced well. Attached, for your review, is a copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

Our geologic prognosis has the top of the Devonian at 14622' and Fusselman at 15022'. I'm permitting the injection interval a couple of hundred feet shallower and deeper than the prognosis just in case the formation tops are different than expected due to the lack of deep well control in this area. We will likely call TD about 1250' to 1500' below the actual top of the Devonian when we drill the well.

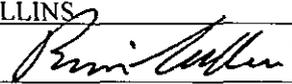
Please do not hesitate to contact me at (575) 748-6940 should you have any questions.

Sincerely,

Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance  X  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  X  Yes \_\_\_\_\_ No
- II. OPERATOR:  COG Operating, LLC   
ADDRESS:  2208 West Main St, 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  X  No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME:  BRIAN COLLINS  TITLE:  Operations Engineering Advisor   
SIGNATURE:    DATE:  10 August 2015   
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: \_\_\_\_\_

C-108 Application for Authorization to Inject  
TAR HEEL 16 STATE SWD 1  
1150' FSL, 1150' FEL  
Unit P, Sec 16, T20S, R33E  
Lea County, NM

COG Operating, LLC, proposes to drill the captioned well and make it into an open hole Devonian-Silurian-Ordovician SWD well from approximately 14,400' to 16,400'.

- V. Map is attached.
- VI. No wells within the ½ mile radius area of review penetrate the proposed injection zone.
- VII.
  - 1. Proposed average daily injection rate = 17,300 BWPD  
Proposed maximum daily injection rate = 25,000 BWPD
  - 2. Closed system
  - 3. Proposed maximum injection pressure = 2880 psi  
(0.2 psi/ft. x 14400' ft.)
  - 4. Source of injected water will be Delaware Sand, Bone Spring and Wolfcamp produced water. No compatibility problems are expected (we've seen no compatibility issues in other Devonian SWDs that take the same produced water as the proposed SWD well). Analyses of Delaware, Bone Spring and Wolfcamp waters are attached. There are no Devonian-Silurian-Ordovician receiving formation water analyses available in this area.
- VIII. The injection zone is the Devonian-Silurian-~~Ordovician~~ from 14400' to 16400' which is composed of porous limestone and dolomite. Any underground fresh water sources will be shallower than 1336' based on the top of the Rustler Anhydrite at approximately 1336'.
- IX. The Devonian-Silurian-Ordovician injection interval will be acidized with approximately 40,000 gals of 20% HCl acid.
- X. Well logs, if run, will be filed with the Division. There are no nearby well logs available for the Devonian-Silurian-Ordovician section.
- XI. There are no fresh water wells within a mile of the proposed SWD well.
- XII. After examining the available geologic and engineering data, no evidence was found 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: Tar Heel 16 State SWD #1

WELL LOCATION: 1150' FSL 1150' FEL P 16 20s 33e  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26" Casing Size: 20" e ± 1350'  
Cemented with: - sx. or ± 4000 ft<sup>3</sup>  
Top of Cement: Surface Method Determined: Design

See Attached Schematic

Intermediate Casing

Hole Size: 17 1/2" Casing Size: 13 3/8" e ± 5500'  
12 1/4" ± 7500  
Cemented with: = sx. or ± 2900 ft<sup>3</sup>  
Top of Cement: Surface ± 5000' Method Determined: Design  
Design

Production Casing

Hole Size: 8 1/2" Casing Size: 7" liner ± 10900-14400'  
Cemented with: - sx. or ± 650 ft<sup>3</sup>  
Top of Cement: Top of Liner Method Determined: Design  
Total Depth: 16400'

Injection Interval

14400' feet to 16400'

(Perforated or Open Hole, indicate which)

INJECTION WELL DATA SHEET

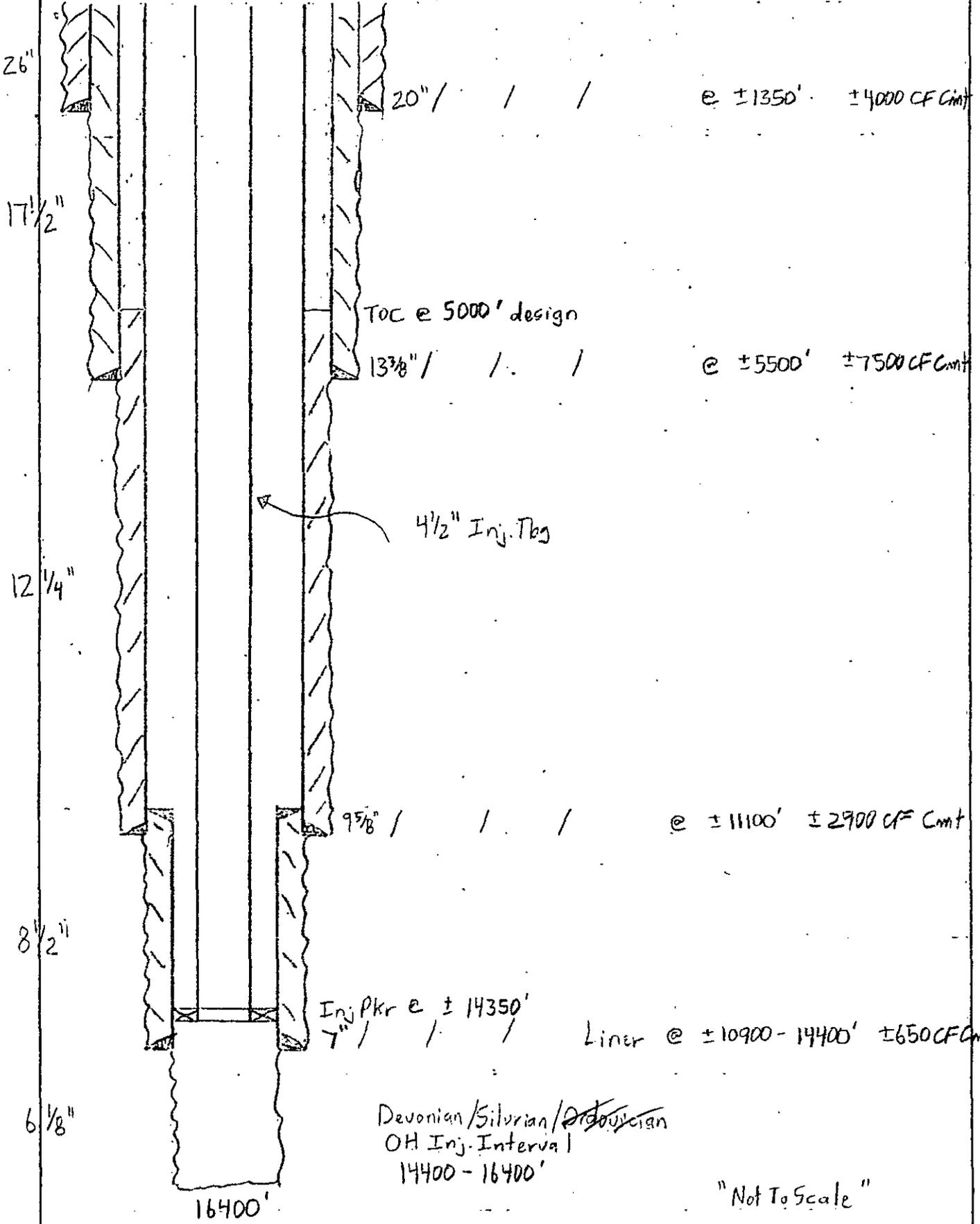
Tubing Size: 4 1/2" Lining Material: Glassbore  
Type of Packer: 10K CRA Permanent or 10K nickel plated double grip retrievable  
Packer Setting Depth: ± 14350'  
Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

1. Is this a new well drilled for injection? X Yes        No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_  
\_\_\_\_\_
2. Name of the Injection Formation: Devonian - Silurian - Ordovician
3. Name of Field or Pool (if applicable): \_\_\_\_\_
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. N/A
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_  
Underlying: None  
Overlying: Yates Seven Rivers ± 2900-3475', Delaware ± 5550-6600'  
Bone Spring ± 8400-11000', Wolfcamp ± 11600  
Atoka ± 13300-13350', Morrow ± 13300-13800'

30-025-

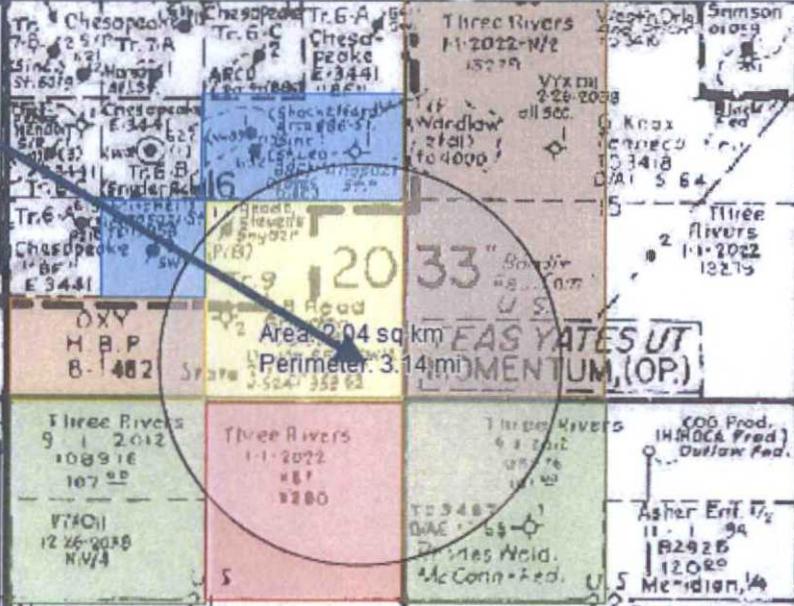
Tar Heel 16 State SWD #1  
1150' FSL, 1150' FEL  
P-16-205-33e  
Lea, NM



**V.**

**MAP**

Tar Heel 16 State SWD #1  
 1150' FSL, 1150' FEL  
 SEC. 16, T20S, R33E  
 Lea County, NM



● Desert Rainbow, LLC  
 P.O. Box 1837  
 Roswell, NM 88202

● State of New Mexico  
 310 Old Santa Fe Trail  
 Santa Fe, New Mexico 87504

● Chevron USA Inc.  
 1400 Smith Street  
 Houston, TX 77002

● Chevron USA Inc.  
 3310 W Wall St  
 Midland, TX 7970

● Cross Border Resources, Inc.  
 McKinney Ave Suite 900  
 Dallas, TX 75201

● Larry Squires  
 11 Regency Square  
 Hobbs, NM 88242

● J.W. Neal  
 P.O. Box 278  
 Hobbs, NM 88241

● Oxy USA WTP, LP  
 P.O. Box 27570  
 Houston, TX 77227

● Apache Corporation  
 2000 Post Oak Blvd. Suite 100  
 Houston, TX 77056

● COG Acreage, LP  
 550 W Texas Suite 100  
 Midland, TX 79701

● Conoco Phillips Company  
 P.O. Box 7500  
 Bartlesville, Oklahoma 74005

● Sun Exploration &  
 Production Company  
 P.O. Box 1330  
 Houston, TX 77251

● Chisos Ltd.  
 670 Dona Ana Rd. SW  
 Deming, NM 88030

# VI.

**No Wells Penetrate  
Proposed Disposal  
Interval Within Half  
Mile Area of Review**

# **VII.**

**Water Analyses  
Produced Formation  
Water**

**No Water Analysis  
Receiving Formation  
Water Is Available**

# Injection Fluid Analyses

WATER SAMPLES REPRESENTATIVE OF WATER BEING INJECTED INTO THE PROPOSED SWD WELL												
<b>Delaware</b>												
2012103128	Gehrig	Fed #2	William D Polk	2/15/2012	1/10/2012	1.16	4.00	251245.24	6.47		25915.00	3525.76
2011128362	Sly Hawk State	1	William D Polk	9/28/2011	9/13/2011	1.17	4.06	256802.26	6.50		26180.00	4101.14
<b>Bone Spring</b>												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2012104723	Phantom 18 State	2H	William D Polk	2/29/2012	1/6/2012	1.09	2.23	136209.81	6.52		6156.63	1132.53
<b>Wolfcamp</b>												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2012105892	Augustus 10	1H		3/15/2012	3/8/2012	1.06	1.46	89771.55	6.60		3963.30	639.83
2011128833	Trail Boss 4	4H	William D Polk	9/30/2011	9/21/2011	1.05	1.31	78745.89	7.10		3143.00	406.00

81017.80	66969.32	1342.77	64.22	35.40	4.51	1492.00	24.27		122.00	0.00		450.00	151300.00	250.00	0.00	
83379.63	62970.16	1133.12	38.78	20.06	1.64	905.03	9.33		73.00	0.00		70.00	161300.00	360.00	0.00	
TH (CaCO3)	Na (mg/L)	K (mg/L)	Zn (mg/L)	Fe (mg/L)	Ba (mg/L)	Sr (mg/L)	Mn (mg/L)	Resistivity	HCO3 (mg/L)	CO3 (mg/L)	OH (mg/L)	SO4 (mg/L)	Cl (mg/L)	CO2 (mg/L)	H2S (mg/L)	
20530.54	43509.27	957.44	0.00	28.72	0.00	414.86	1.36		159.00	0.00		850.00	83000.00	140.00	0.00	
TH (CaCO3)	Na (mg/L)	K (mg/L)	Zn (mg/L)	Fe (mg/L)	Ba (mg/L)	Sr (mg/L)	Mn (mg/L)	Resistivity	HCO3 (mg/L)	CO3 (mg/L)	OH (mg/L)	SO4 (mg/L)	Cl (mg/L)	CO2 (mg/L)	H2S (mg/L)	
13352.51	28320.32	350.70	0.00	17.85	1.77	707.79	0.00		220.00	0.00		950.00	54600.00	60.00	0.00	
10421.23	27950.00	433.00		15.00	2.48	780.00	0.41		366.00	0.00		150.00	45500.00	140.00	0.00	

**X.**

**No Nearby Logs Available For  
Proposed Devonian Injection  
Interval**

**XI.**

**No Fresh Water Wells  
Within 1 Mile Radius**



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*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

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No PODs found.

**PLSS Search:**

**Section(s):** 8, 9, 10, 15, 16, **Township:** 20S **Range:** 33E  
17, 20, 21, 22



August 6, 2015

Hobbs News-Sun  
P.O. Box 850  
Hobbs, NM 88240

Re: Legal Notice  
Salt Water Disposal Well  
Tar Heel 16 State 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 for 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 cursive script that reads "Brian Collins".

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

**HOBBS NEWS SUN**  
**LEGAL NOTICES**

COG Operating LLC, 2208 W. Main Street, Artesia, NM 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 Tar Heel 16 State SWD No. 1, is located 1150' FSL & 1150' FEL, Section 16, Township 20 South, Range 33 East, Lea County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware, Bone Spring and Wolfcamp formations. The disposal water will be injected into the Devonian/Silurian/Ordovician formation at a depth of 14,400' to 16,400' at a maximum surface pressure of 2880 psi and a maximum rate of 25,000 BWPD. The proposed SWD well is located approximately 31 miles west/northwest of Eunice. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 S. St. Francis Drive, 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, NM 88210, or call 575-748-6940.

Published in the Hobbs News Sun, Hobbs, New Mexico  
\_\_\_\_\_, 2015.



August 7, 2015

New Mexico Oil Conservation Division  
Attn: Phillip Goetze  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

Dear Mr. Goetze:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the referenced well. Attached, for your review, is a copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

Our geologic prognosis has the top of the Devonian at 14622' and Fusselman at 15022'. I'm permitting the injection interval a couple of hundred feet shallower and deeper than the prognosis just in case the formation tops are different than expected due to the lack of deep well control in this area. We will likely call TD about 1250' to 1500' below the actual top of the Devonian when we drill the well.

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

Sincerely,

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

Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Oil Conservation Division  
Attn: Paul Kautz  
1625 North French Dr.  
Hobbs, NM 88240

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

Dear Mr. Kautz:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the referenced well. Attached, for your review, is a copy of the C-108 application. Once we receive the newspaper publication and all certified return receipts, I will send you a copy.

Our geologic prognosis has the top of the Devonian at 14622' and Fusselman at 15022'. I'm permitting the injection interval a couple of hundred feet shallower and deeper than the prognosis just in case the formation tops are different than expected due to the lack of deep well control in this area. We will likely call TD about 1250' to 1500' below the actual top of the Devonian when we drill the well.

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Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

State of New Mexico  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87504

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to drill this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as the surface owner or an operator within a half mile radius area of review. 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.

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Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Desert Rainbow, LLC  
P.O. Box 1837  
Roswell, NM 88202

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
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Brian Collins  
Operations Engineering Advisor

BC/sw  
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August 7, 2015

Chevron USA Inc.  
1400 Smith Street  
Houston, TX 77002

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Township 20 South; Range 33 East, N.M.P.M.  
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Operations Engineering Advisor

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August 7, 2015

Chevron USA Inc.  
3310 W Wall St  
Midland, TX 7970

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Operations Engineering Advisor

BC/sw  
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August 7, 2015

Cross Border Resources, Inc.  
Mckinney Ave Suite 900  
Dallas, TX 75201

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Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Larry Squires  
11 Regency Square  
Hobbs, NM 88242

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Brian Collins  
Operations Engineering Advisor

BC/sw.  
Enclosures



August 7, 2015

J.W. Neal  
P.O. Box 278  
Hobbs, NM 88241

RE: Application For Authorization To Inject  
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Township 20 South, Range 33 East, N.M.P.M.  
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August 7, 2015

Oxy USA WTP, LP  
P.O. Box 27570  
Houston, TX 77227

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August 7, 2015

Apache Corporation  
2000 Post Oak Blvd. Suite 100  
Houston, TX 77056

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Lea County, New Mexico**

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Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to drill this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as the surface owner or an operator within a half mile radius area of review. 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  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Conoco Phillips Company  
P.O. Box 7500  
Bartlesville, Oklahoma 74005

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

To Whom It May Concern:

Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to drill this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as the surface owner or an operator within a half mile radius area of review. 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,

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

Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Sun Exploration & Production Company  
P.O. Box 1330  
Houston, TX 77251

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea 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  
Operations Engineering Advisor

BC/sw  
Enclosures



August 7, 2015

Chisos Ltd.  
670 Dona Ana Rd. SW  
Deming, NM 88030

RE: Application For Authorization To Inject  
Tar Heel 16 State SWD #1  
Township 20 South, Range 33 East, N.M.P.M.  
Section 16: 1150' FSL & 1150' FEL  
Lea County, New Mexico

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Sincerely,

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

Brian Collins  
Operations Engineering Advisor

BC/sw  
Enclosures

**Jones, William V, EMNRD**

---

**From:** Marissa Villa <MVilla@concho.com>  
**Sent:** Monday, December 07, 2015 10:47 AM  
**To:** Jones, William V, EMNRD  
**Subject:** Tar Heel 16 State SWD #1  
**Attachments:** Scanned from PRT01-ARW; Scanned from PRT01-ARW; Scanned from PRT01-ARW;  
Scanned from PRT01-ARW; Scanned from PRT01-ARW; Scanned from PRT01-ARW;  
Scanned from PRT01-ARW; Scanned from PRT01-ARW  
  
**Importance:** High

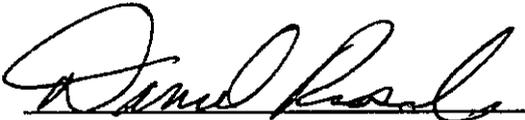
CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

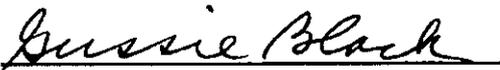
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated  
August 11, 2015  
and ending with the issue dated  
August 11, 2015.



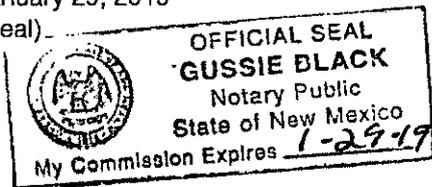
Publisher

Sworn and subscribed to before me this  
11th day of August 2015.



Business Manager

My commission expires  
January 29, 2019  
(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

**LEGAL NOTICE**  
August 11, 2015

COG Operating LLC, 2208 W. Main Street, Artesia, NM 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 Tar Heel 18 State SWD (No. 1) is located 1150' FSL & 1150' FEL, Section 16, Township 20 South, Range 33 East, Lea County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware, Bone Spring and Wolfcamp formations. The disposal water will be injected into the Devonian/Silurian/Ordovician formation at a depth of 14,400' to 16,400' at a maximum surface pressure of 2880 psi and a maximum rate of 25,000 BWPD. The proposed SWD well is located approximately 31 miles west/northwest of Eunice. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 S. St. Francis Drive, 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, NM 88210, or call 575-748-8940. #30254

67112034

00161106

BRIAN COLLINS  
COG OPERATING LLC  
2208 W. MAIN ST.  
ARTESIA, NM 88210

**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:

*Oxy USA WTP, LP*  
*P.O. Box 27570*  
*Houston, TX 77227*  
*Tar Steel 16 State SWD #1*

2. Article Number (Transfer from service label) 7013 3020 0000 8748 8911

PS Form 3811, July 2013 Domestic Return Receipt

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Address  
*[Signature]*

B. Received by (Printed Name) *[Signature]* C. Date of Delivery *8-17-15*

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

**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:

*Apache Corporation*  
*2000 Post Oak Blvd. Suite 100*  
*Houston, TX 77056*  
*Tar Steel 16 State SWD #1*

2. Article Number (Transfer from service label) 7013 3020 0000 8748 8928

PS Form 3811, July 2013 Domestic Return Receipt

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Address  
*[Signature]*

B. Received by (Printed Name) *[Signature]* C. Date of Delivery *8-17-15*

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

**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:

*Desert Rainbow, LLC*  
*P.O. Box 1837*  
*Roswell, NM 88202*  
*Tar Steel 16 State SWD #1*

2. Article Number (Transfer from service label) 7013 3020 0000 8748 8843

PS Form 3811, July 2013 Domestic Return Receipt

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Address  
*[Signature]*

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

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes



SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature <i>R. Smith</i> <input type="checkbox"/> Agent <input type="checkbox"/> Address	
1. Article Addressed to:		B. Received by (Printed Name)	C. Date of Delivery
<p style="text-align: center;"><i>Chisos Ltd.</i> 670 Dona Ana Rd. SW Deming, NM 88030 <i>Tar Heel 16 State SVD #1</i></p>		<i>R. Smith</i>	<i>8-14-11</i>
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label)		3. Service Type	
117023 3020 0000 8748 8959		<input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
PS Form 3811, July 2013		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature <i>Chris...</i> <input type="checkbox"/> Agent <input type="checkbox"/> Address	
1. Article Addressed to:		B. Received by (Printed Name)	C. Date of Delivery
<p style="text-align: center;"><i>Chevron USA Inc.</i> 1400 Smith Street Houston, TX 77002 <i>Tar Heel 16 State SVD #1</i></p>			
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label)		3. Service Type	
7013 3020 0000 8748 8867		<input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
PS Form 3811, July 2013		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Signature <i>Michael C. Lucas</i> <input type="checkbox"/> Agent <input type="checkbox"/> Address	
1. Article Addressed to:		B. Received by (Printed Name)	C. Date of Delivery
<p style="text-align: center;"><i>State of New Mexico</i> 310 Old Santa Fe Trail Santa Fe, New Mexico 87504 <i>Tar Heel 16 State SVD #1</i></p>		<i>Michael C. Lucas</i>	<i>8/14/11</i>
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label)		3. Service Type	
7013 3020 0000 8748 8850		<input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery	
PS Form 3811, July 2013		Domestic Return Receipt	

**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:

*NEW MEXICO Oil Conservation Division*  
*Attn: Phillip Goetze*  
*1220 South St. Francis Drive*  
*Santa Fe, NM 87505*  
*Tar Steel 16 State SWD #1*

2. Article Number  
*(Transfer from service label)* 111 17013 3020 0000 8748 8829 111

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
*[Signature]*  Agent  
 Address

B. Received by (Printed Name)  
*NIKKI B. SANTA*

C. Date of Delivery  
*AUG 17 2015*

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

PS Form 3811, July 2013 Domestic Return Receipt

**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:

*Oil Conservation Division*  
*Attn: Paul Kautz*  
*1625 North French Dr.*  
*Hobbs, NM 88240*  
*Tar Steel 16 State SWD #1*

2. Article Number  
*(Transfer from service label)* 111 17013 3020 0000 8748 8836 111

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
*[Signature]*  Agent  
 Address

B. Received by (Printed Name)  
*Platman*

C. Date of Delivery  
*8-14-15*

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

PS Form 3811, July 2013 Domestic Return Receipt

**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:

*Conoco Phillips Company*  
*P.O. Box 7500*  
*Bartlesville, Oklahoma 74005*  
*Tar Steel 16 State SWD #1*

2. Article Number  
*(Transfer from service label)* 7013 3020 0000 8748 8935

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
*[Signature]*  Agent  
 Address

B. Received by (Printed Name)  
*ConocoPhillips*

C. Date of Delivery  
*AUG 17 2015*

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No  
*Mail Services*  
*Bartlesville, OK*

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

PS Form 3811, July 2013 Domestic Return Receipt

Service <sup>TM</sup>  
**CERTIFIED MAIL RECEIPT**  
 Domestic Mail Only; No Insurance Coverage Provided

For delivery information visit our website at [www.usps.com](http://www.usps.com).

**OFFICIAL USE**

Postage \$ \_\_\_\_\_

Certified Fee \_\_\_\_\_

Cross Border Resources, Inc.  
 McKinney Ave Suite 900  
 Dallas, TX 75201  
 Tar Heel 16 State SWD #1

(Endc  
 Resti  
 (Endo)

Total \_\_\_\_\_

Sent To \_\_\_\_\_

Street, Apt. No.,  
 or PO Box No. \_\_\_\_\_

City, State, ZIP+4 \_\_\_\_\_

PS Form 3800, August 2006 See Reverse for Instructions

7013 3020 0000 8748 8881

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul> <p>1. Article Addressed to:</p> <div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px 0;"> <p><i>Cross Border Resources, Inc.</i>  <i>McKinney Ave Suite 900</i>  <i>Dallas, TX 75201</i>  <i>Tar Heel 16 State SWD #1</i></p> </div>	<p>A. Signature <span style="float: right;"><input type="checkbox"/> Agent <input checked="" type="checkbox"/> Address</span></p> <p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes        If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) <span style="float: right; border: 1px solid black; padding: 2px;">7013 3020 0000 8748 8881</span></p>	
<p>PS Form 3811, July 2013 <span style="float: right;">Domestic Return Receipt</span></p>	

**CONCHO**

2208 West Main Street  
 Artesia, New Mexico 88210

NIXIE 752011055-1N 08/2

RETURN TO SENDER  
 INSUFFICIENT ADDRESS  
 UNABLE TO FORWARD  
 RETURN TO SENDER



8 8874



2208 West Main Street  
 Artesia, New Mexico 88210

*Chevron USA Inc.  
 3310 W Wall St  
 Midland, TX 7970*

*OFS*

*Chevron USA Inc.  
 310 W Wall St  
 Midland, TX 7970  
 Tar Heel 16 State SWD #1*

See Reverse for Instructions

**NIXIE 797012007-1N 08/24/15**

**RETURN TO SENDER  
 UNABLE TO FORWARD  
 UNABLE TO FORWARD  
 RETURN TO SENDER**

**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:

*Chevron USA Inc.  
 3310 W Wall St  
 Midland, TX 7970  
 Tar Heel 16 State SWD #1*

2. Article Number  
 (Transfer from service label)

7013 3020 0000 8748 8874

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Address

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

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

3. Service Type  
 Certified Mail®  Priority Mail Express™  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

**PS Form 3800, August 2008 (Reverse) PSN 7530-02-000-9007**

**IMPORTANT: Save this receipt and present it when making an inquiry.**

- If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. A duplicate Endorsement (Return Receipt Requested) may be requested. To receive a fee waiver for endorsement, Restricted Delivery, a USPS postmark on your Certified Mail receipt is required.
- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt Requested or Registered Mail, Certified Mail, or Registered Mail, please complete and attach a Return Receipt Requested form (PS Form 3811) to the article and add applicable postage to cover the value of the article.
- NO INSURANCE COVERAGE IS PROVIDED for any class of international mail.
- Certified Mail is not available for any class of international mail.
- A unique identifier for your mailpiece is required for delivery by First-Class Mail® or Priority Mail®.
- A mailing receipt is required for your mailpiece.
- A record of delivery kept by the Postal Service for two years.

**Certified Mail Provides:**

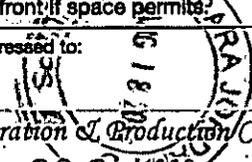
- A unique identifier for your mailpiece
- A record of delivery kept by the Postal Service for two years
- Certified Mail is not available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED for any class of international mail.
- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt Requested or Registered Mail, Certified Mail, or Registered Mail, please complete and attach a Return Receipt Requested form (PS Form 3811) to the article and add applicable postage to cover the value of the article.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. A duplicate Endorsement (Return Receipt Requested) may be requested. To receive a fee waiver for endorsement, Restricted Delivery, a USPS postmark on your Certified Mail receipt is required.
- If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

**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:

  
**Sun Exploration & Production Company**  
 P.O. Box 1930  
 Houston, TX 77251  
 Tar Heel 16 State SWD #1

2. Article Number (Transfer from service label):

PS Form 3811, July 2013

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature *James Felder*  Agent  Address

B. Received by (Print Name) **JAMES FELDER** 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®  Priority Mail Express™

Registered  Return Receipt for Merchandise

Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes

7013 3020 0000 8748 8942

Domestic Return Receipt

**Jones, William V, EMNRD**

---

**From:** Jones, William V, EMNRD  
**Sent:** Thursday, September 03, 2015 2:35 PM  
**To:** 'Brian Collins'; 'Marissa Villa'  
**Cc:** Goetze, Phillip, EMNRD; McMillan, Michael, EMNRD; Dade, Randy, EMNRD; Holm, Anchor E.  
**Subject:** Proposed SWD from COG Operating LLC: Tar Heel 16 State SWD #1 30-025-Pending 1150FSL/FEL P-16-20S-33E-Lea Open Hole Devonian 14400 to 16400

Hello Brian and Marissa,  
I have this one evaluated and it looks cookie cutter good.

Have you gotten any protests?  
Is there any Devonian/Silurian/Ordovician structure or expected productivity  
.... or faults in the Paleozoic in this area?

Now I just need the mailers (with dates they went out) to all affected parties and a copy of the posting in the newspaper.  
And, since it is in the middle of the Potash – we ask that you send proof of notice to the nearest Potash lessee.

Happy Labor Day!



**William V. Jones, P.E., Engineer and District IV Supervisor**  
Oil Conservation Division <http://www.emnrd.state.nm.us/ocd/>  
1220 South St. Francis Drive, Santa Fe, NM 87505  
P: 505.476.3477 C: 505.419.1995

*Reminded again  
12/3/15  
Received 12/7/15*

*Note  
Not logged in  
as of 12/27/15  
Need status update  
Will*

## Jones, William V, EMNRD

---

**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Wednesday, December 16, 2015 3:32 PM  
**To:** Jones, William V, EMNRD  
**Cc:** Goetze, Phillip, EMNRD; McMillan, Michael, EMNRD; Dade, Randy, EMNRD; Holm, Anchor E.  
**Subject:** RE: Proposed SWD from COG Operating LLC: Tar Heel 16 State SWD #1 30-025-Pending 1150FSL/FEL P-16-20S-33E-Lea Open Hole Devonian 14400 to 16400  
**Attachments:** Tar Heel State SWD #1 Structure Map.pdf

Will:

I've attached a Devonian structure map prepared by our geology group. We're not on a structural closure, our geologist says faulting is not a concern here and there's no reason to believe the Devonian will be productive. Hope this is what you needed. Let me know if you need anything else. Thank you.

### Brian Collins

Operations Engineering Advisor  
NM Basin Team

COG OPERATING LLC  
2208 W. Main Street  
Artesia, New Mexico 88210-3720  
Phone # 575.748.6924  
Email: [bcollins@concho.com](mailto:bcollins@concho.com)



---

**From:** Jones, William V, EMNRD [mailto:WilliamV.Jones@state.nm.us]  
**Sent:** Thursday, December 03, 2015 1:28 PM  
**To:** Brian Collins; Marissa Villa  
**Cc:** Goetze, Phillip, EMNRD; McMillan, Michael, EMNRD; Dade, Randy, EMNRD; Holm, Anchor E.  
**Subject:** [External] RE: Proposed SWD from COG Operating LLC: Tar Heel 16 State SWD #1 30-025-Pending 1150FSL/FEL P-16-20S-33E-Lea Open Hole Devonian 14400 to 16400

\*\*\*\* External email. Use caution. \*\*\*\*

Hi Brian/Marissa,  
Here is the Tar Heel questions.  
I don't remember getting any reply back.

Take Care,  
Will

---

**From:** Jones, William V, EMNRD  
**Sent:** Thursday, September 03, 2015 2:35 PM  
**To:** 'Brian Collins'; 'Marissa Villa'  
**Cc:** Goetze, Phillip, EMNRD; McMillan, Michael, EMNRD; Dade, Randy, EMNRD; Holm, Anchor E.  
**Subject:** Proposed SWD from COG Operating LLC: Tar Heel 16 State SWD #1 30-025-Pending 1150FSL/FEL P-16-20S-33E-Lea Open Hole Devonian 14400 to 16400

Hello Brian and Marissa,  
I have this one evaluated and it looks cookie cutter good.

Have you gotten any protests?  
Is there any Devonian/Silurian/Ordovician structure or expected productivity  
.... or faults in the Paleozoic in this area?

Now I just need the mailers (with dates they went out) to all affected parties and a copy of the posting in the newspaper.  
And, since it is in the middle of the Potash – we ask that you send proof of notice to the nearest Potash lessee.

Happy Labor Day!



**William V. Jones, P.E., Engineer and District IV Supervisor**  
Oil Conservation Division <http://www.emnrd.state.nm.us/ocd/>  
1220 South St. Francis Drive, Santa Fe, NM 87505  
P: 505.476.3477 C: 505.419.1995

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**Jones, William V, EMNRD**

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**From:** Jones, William V, EMNRD  
**Sent:** Monday, December 07, 2015 11:59 AM  
**To:** 'Marissa Villa'  
**Subject:** RE: Tar Heel 16 State SWD #1

Marissa,  
I didn't see a notice to any Potash company.  
Let me know?

Thank You,  
Will

---

**From:** Marissa Villa [mailto:MVilla@concho.com]  
**Sent:** Monday, December 07, 2015 10:47 AM  
**To:** Jones, William V, EMNRD  
**Subject:** Tar Heel 16 State SWD #1  
**Importance:** High

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**Jones, William V, EMNRD**

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**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Thursday, April 21, 2016 4:35 PM  
**To:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Cc:** McMillan, Michael, EMNRD; Marissa Villa  
**Subject:** RE: COG C108 Application for Tar Heel 16 State SWD 1 (Sec 16-20s-33e)

Will, Phillip:

Thanks for your quick response and your patience. I'll check and see if we sent the proof of notice for the potash. If not, we'll get it done and get it to you.

Brian

---

**From:** Jones, William V, EMNRD [mailto:WilliamV.Jones@state.nm.us]  
**Sent:** Thursday, April 21, 2016 4:26 PM  
**To:** Goetze, Phillip, EMNRD; Brian Collins  
**Cc:** McMillan, Michael, EMNRD  
**Subject:** [External] RE: COG C108 Application for Tar Heel 16 State SWD 1 (Sec 16-20s-33e)

\*\*\*\* External email. Use caution. \*\*\*\*

Brian  
I think that one was pending notice to a potash lessee...I have emailed asking for that notice proof several times. For notice deficiency we don't log in. (I could be wrong can let you know next week.)

Will

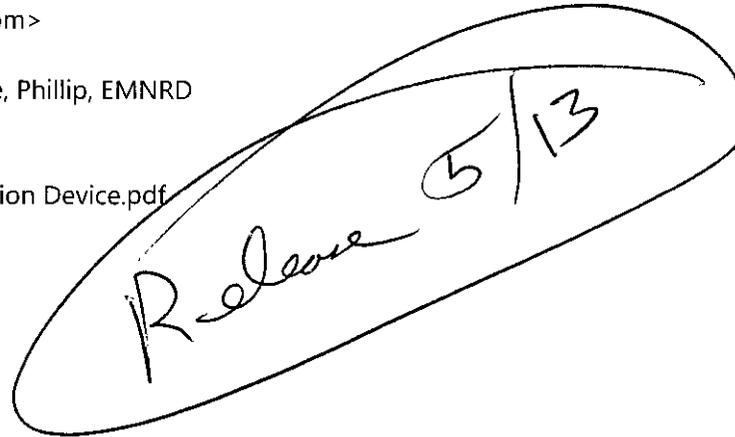
Sent via the Samsung GALAXY S® 5, an AT&T 4G LTE smartphone

----- Original message -----  
From: "Goetze, Phillip, EMNRD" <Phillip.Goetze@state.nm.us>  
Date: 04/21/2016 4:17 PM (GMT-07:00)  
To: Brian Collins <BCollins@concho.com>

**Jones, William V, EMNRD**

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**From:** Marissa Villa <MVilla@concho.com>  
**Sent:** Tuesday, May 03, 2016 10:21 AM  
**To:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Cc:** Brian Collins  
**Subject:** Tar Heel 16 State SWD  
**Attachments:** Scanned from a Xerox Multifunction Device.pdf



Release 5/13

-----Original Message-----

From: prt02-aw@concho.com [mailto:prt02-aw@concho.com]  
Sent: Tuesday, May 03, 2016 11:10 AM  
To: Marissa Villa  
Subject: Scanned from a Xerox Multifunction Device

Please open the attached document. It was scanned and sent to you using a Xerox Multifunction Device.

Attachment File Type: pdf, Multi-Page

Multifunction Device Location:

Device Name: prt02-aw

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**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:

**Mosaic Potash**  
**1361 Potash Mines RD**  
**Carlsbad, NM 88210**  
 Tar Heel 16 State SWD #1

2. Article Number  
(Transfer from service label)

7013 3020 0000 8749 5001

PS Form 3811, July 2013

Domestic Return Receipt

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  
x *J. M. de S. Beljean*  Agent  Addressee

B. Received by (Printed Name)  
*LINDAS. Battzell* C. Date of Delivery  
*4-28-10*

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



3. Service Type  
 Certified Mail®  Priority Mail Express®  
 Registered  Return Receipt for Merchandise  
 Insured Mail  Collect on Delivery

4. Restricted Delivery? (Extra Fee)  Yes



C-108 Review Checklist: Received 8/17/15 Add. Request: \_\_\_\_\_ Reply Date: 4/28/15 Suspended: \_\_\_\_\_ [Ver 14]

PERMIT TYPE: WFX / PMX (SWD) Number: 1626 Permit Date: 5/13/16 Legacy Permits/Orders: \_\_\_\_\_

Well No: \_\_\_\_\_ Well Name(s): TAR HEEL 16 State SWD #1

API: 30-0 25-Pending Spud Date: (NOT SPUD) New or Old: \_\_\_\_\_ (UIC Class II Primacy 03/07/1982)

Footages 1150 FSL/FEL Lot \_\_\_\_\_ or Unit P Sec 16 Tsp 20S Rge 33E County LEA

General Location: 31 mi WNW of Eunice Pool: \_\_\_\_\_ Pool No.: \_\_\_\_\_

BLM 100K Map: \_\_\_\_\_ Operator: COG Operating LLC OGRID: 229137 Contact: Brian Collins

COMPLIANCE RULE 5.9: Total Wells: 3898 Inactive: 4 Fincl Assur: OK Compl. Order? \_\_\_\_\_ IS 5.9 OK?  Date: 9/3/15

WELL FILE REVIEWED  Current Status: NOT Permitted

WELL DIAGRAMS: NEW: Proposed  or RE-ENTER: Before Conv.  After Conv.  Logs in Imaging: will be filed

Planned Rehab Work to Well: \_\_\_\_\_

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing _____ Surface	<u>26-20</u>	<u>1350</u>	<u>4000 fcs</u>	<u>CIRC</u>
Planned <input checked="" type="checkbox"/> or Existing _____ Interm/Prod	<u>17 1/2-13 7/8</u>	<u>5500</u>	<u>7500 CF</u>	<u>CIRC (R-#)</u>
Planned <input checked="" type="checkbox"/> or Existing _____ Interm/Prod	<u>12 1/4-9 5/8</u>	<u>11,100</u>	<u>2900 CF</u>	<u>5000</u>
Planned <input checked="" type="checkbox"/> or Existing _____ Prod/Liner	<u>8 1/2-7"</u>	<u>10,900-14,400</u>	<u>6500 CF</u>	<u>TO/L</u>
Planned _____ or Existing _____ Liner				
Planned <input checked="" type="checkbox"/> or Existing <u>(OH) PERF</u>		<u>14,000-16,400 TD</u>	<u>Inj Length 2000</u>	

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.		<u>Dev @ 14522 (Fuss @ 15922)</u>		Drilled TD _____ PBTB _____
Confining Unit: Litho. Struc. Por.				NEW TD <u>16400</u> NEW PBTB _____
Proposed Inj Interval TOP:	<u>14,400</u>	<u>DEV FUS</u>		NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>
Proposed Inj Interval BOTTOM:	<u>16,400</u>	<u>16,400</u>		Tubing Size <u>4 1/2</u> in. Inter Coated: <u>Slonbor</u>
Confining Unit: Litho. Struc. Por.				Proposed Packer Depth _____ ft
Adjacent Unit: Litho. Struc. Por.				Min. Packer Depth _____ (100-ft limit)
AOR: Hydrologic and Geologic Information				Proposed Max. Surface Press. _____ psi
POTASH: R-111-P <input checked="" type="checkbox"/> Noticed? <input type="checkbox"/> BLM Sec Ord <input type="checkbox"/> WIPP <input type="checkbox"/> Noticed? _____ SALT/SALADO T: _____ B: _____ <u>SLIT HOUSE</u>				Admin. Inj. Press. <u>2880</u> (0.2 psi per ft)

FRESH WATER: Aquifer \_\_\_\_\_ Max Depth 1336 HYDRO AFFIRM STATEMENT By Qualified Person

NMOSE Basin: CAPAN REEF thru  adj  NA  No. Wells within 1-Mile Radius?  FW Analysis

Disposal Fluid: Formation Source(s) D. el / BS / WC Analysis? \_\_\_\_\_ On Lease  Operator Only  or Commercial

Disposal Int: Inject Rate (Avg/Max BWPD): \_\_\_\_\_ Protectable Waters? \_\_\_\_\_ Source: \_\_\_\_\_ System: Closed  or Open

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

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

Penetrating Wells: No. Active Wells 0 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

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

NOTICE: Newspaper Date 8/9 Mineral Owner SLO Surface Owner SLO N. Date 8/7

RULE 26.7(A): Identified Tracts?  Affected Persons: See LIST MAP N. Date 8/7

Permit Conditions: Issues: \_\_\_\_\_