

DATE IN 1/17/13	SUSPENSE	ENGINEER WJS	LOGGED IN	TYPE SWD	APP NO. 130365353
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

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

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

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

- ☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

- ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

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

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

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

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

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

BRIAN COLLINS
 Print or Type Name

Signature

SENIOR OPERATIONS ENGINEER
 Title

Date

bcollins@concho.com
 e-mail Address

11 Jan 2013

COG OPERATIONS, LLC

Need Lusk 32 State SWD #1
 K/32/185/32E/LEA

(ESTIMATES)
 13970 = DEV TOP
 14460 = DEV BOT.



1/17/13

January 9, 2013

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

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
Lea County, New Mexico

Dear Mr. Jones:

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.

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

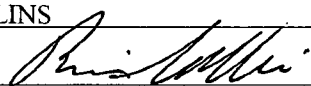
Sincerely,

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

Brian Collins
Senior Operations Engineer

BC/bg
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: _____ 11 Jan 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: _____

C-108 Application for Authorization to Inject
NORTH LUSK 32 STATE SWD #1
1550' FSL, 1800' FWL
Unit K, Sec 32 T18S R32E
Lea County, NM

COG Operating, LLC, proposes to drill the captioned well to 15250' for salt water disposal service into the Devonian-Silurian-Ordovician from 13800' to 15250'. An APD will be submitted upon approval of this C-108.

- 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 = 7500 BWPD
Proposed maximum daily injection rate = 25000 BWPD
 - 2. Closed system
 - 3. Proposed maximum injection pressure = 2760 psi
(0.2 psi/ft. x 13800' ft.)
 - 4. Source of injected water will be Bone Spring produced water. No compatibility problems are expected. Analyses of Bone Spring waters from analogous source wells are attached. No water analyses are available for the Devonian-Silurian-Ordovician receiving formation in this area.
- VIII. The injection zone is the Devonian-Silurian-Ordovician dolomite from 13800' to 15250'. Any underground water sources will be shallower than 1100' (surface casing setting depth).
- IX. The Devonian-Silurian-Ordovician injection interval will be acidized with approximately 40,000 gals 20% HCl acid.
- X. Well logs, if run, will be filed with the Division. There are no nearby Devonian-Silurian-Ordovician well logs available. A mud log will be run across the injection interval when the well is drilled.
- XI. There are three permitted, but not drilled, fresh water wells shown on the State Engineer website within a mile of the proposed SWD well. Chevron applied to drill three 200' deep wells in the SE/4 NW/4 SW/4 of Section 29-18s-32e to be used to fill a future frac pond. No drillers logs have been filed yet, so it appears the wells haven't been drilled.
- 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, LLCWELL NAME & NUMBER: North Lusk 32 State SWD No. 1WELL LOCATION: 1550' FSL, 1800' FWL K 32 18s 32e
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATIC

See Attached Wellbore Schematic

WELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2" Casing Size: 13 3/8" e ± 1100'
Cemented with: _____ sx. or 1550 ft³
Top of Cement: Surface Method Determined: DesignIntermediate CasingHole Size: 12 1/4" Casing Size: 9 7/8" e ± 2950'
Cemented with: _____ sx. or 1850 ft³
Top of Cement: Surface Method Determined: DesignProduction CasingHole Size: 8 3/4" Casing Size: 7" e ± 13800'
Cemented with: _____ sx. or 2600 ft³
Top of Cement: 2450' Method Determined: Design
Total Depth: 15250'Injection Interval13800' feet to 15250'(Perforated or Open Hole indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 4 1/2" Lining Material: Duoline 20/ Glassbore
Type of Packer: Nickel plated double grip retrievable
Packer Setting Depth: ± 13750'
Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

1. Is this a new well drilled for injection? ☒ 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): Lusk North, Watkins

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. No

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 TR Qn $\pm 2900-3850'$, Grayburg San Andres $\pm 4250-5275'$

Delaware $\pm 7100-7125'$, Bone Spring $\pm 8200'-9700'$

Wolfcamp $\pm 10275 - 10750'$, Strawn $\pm 11150 - 11725'$

Morrow ± 12100-12975'

Jones, William V., EMNRD

From: Brian Collins <BCollins@concho.com>
Sent: Monday, January 07, 2013 3:12 PM
To: Jones, William V., EMNRD
Subject: COG Devonian Tops/Bases on C108's Soon to be Submitted

Will:

I'm still waiting on Devonian picks from geologists on Apple 5 St SWD 1, Willow 17 St SWD 1 and Reposado 2 St SWD 1. I do, however, have this information on 3 upcoming C108 applications which I'll go ahead and give you. These applications will be filed as Devonian-Silurian-Ordovician.

Corsair 2 State SWD 1 (250' fnl, 800' fel, Sec 2-19s-31e, Eddy Co): Geologist pick for Devonian top = 13,050' and Devonian bottom = 13,540'. I plan to file for interval from 12,900' to 14,350'.

Magnum Pronto 32 State SWD 1 (2300' fnl, 2200' fwl, Sec 32-19s-32e, Lea Co): Geologist pick for Devonian top = 13,610' and Devonian bottom = 14,100'. I plan to file for interval from 13,450' to 14,900'.

North Lusk 32 State SWD 1 (1550' fsl, 1800' fwl, Sec 32-18s-32e, Lea Co): Geologist pick for Devonian top = 13,970' and Devonian bottom = 14,460'. I plan to file for interval from 13,800' to 15,250'.

Thanks.

Brian Collins

Senior Operations Engineer - NM Basin
COG OPERATING LLC
2208 W Main St
Artesia, New Mexico 88210-3720
575.748.6924 W
432-254-5870 C

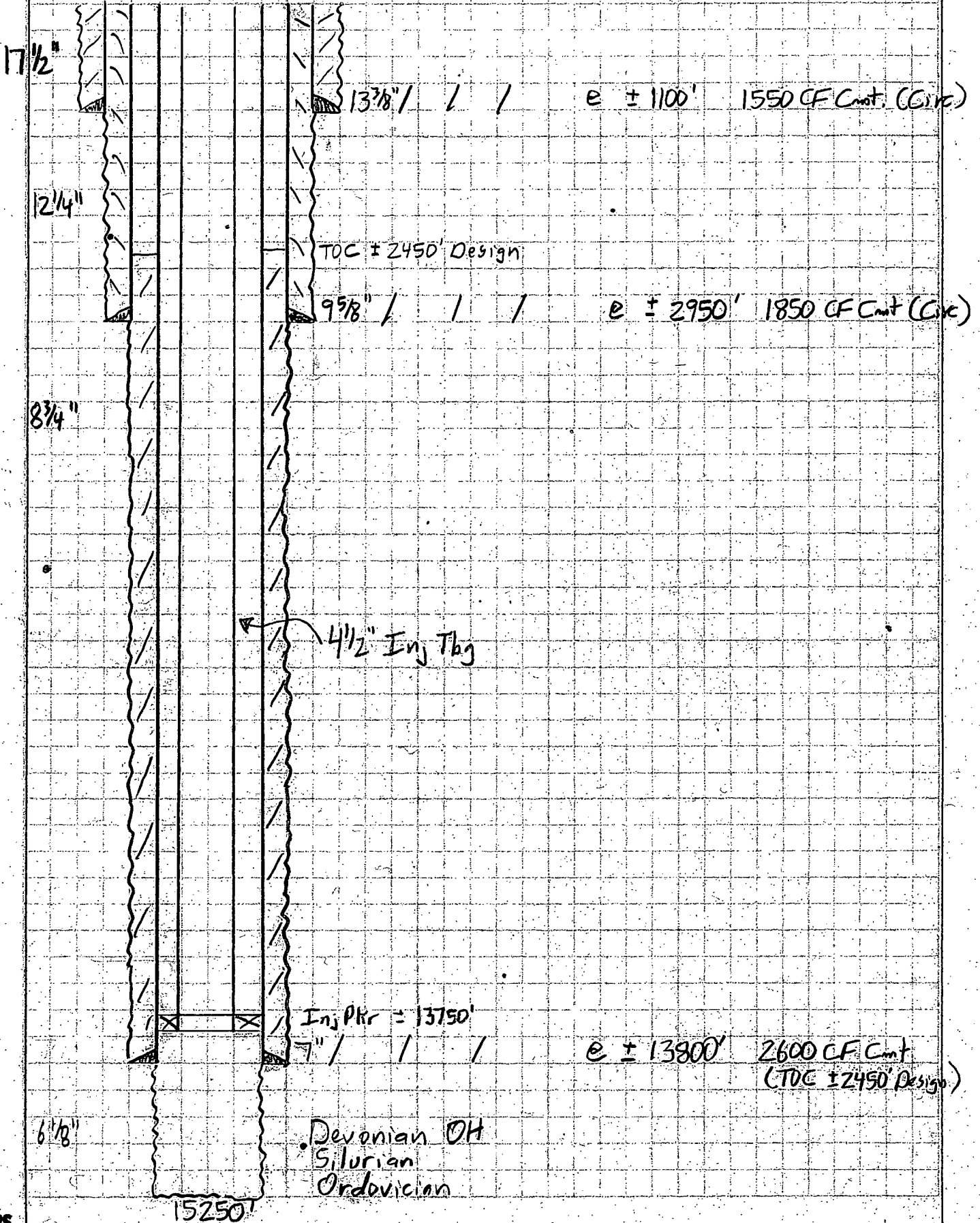


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30-025-

North Lusk 32 State SWD No. 1
1550' FSL 1800' FWL
K-32-185-32e
Lea, NM



V.

MAP

VII.

Water Analysis Produced and Receiving Formation Water

WATER SAMPLES REPRESENTATIVE OF WATER BEING INJECTED INTO THE PROPOSED SWD WELL												
Bone Spring												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2011126701	Patterson B-52 Federal	4H	William D Polk	9/16/2011	8/17/2011	1.11	2.70	166647.70	6.50		8905.26	1281.11
2011128359	Patterson B-52 Federal	4H	William D Polk	9/28/2011	9/9/2011	1.11	2.68	164369.88	6.47		9015.23	1333.29
2012103274	Magnum Pronto State	4H	William D Polk	2/9/2012	2/7/2012	1.12	2.91	176497.81	6.56		9713.70	1525.22
2012103275	Magnum Pronto State	5H	William D Polk	2/9/2012	2/7/2012	1.11	2.84	173005.58	6.45		9326.68	1460.36

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)	
27853.36	50627.64	1179.02	64.08	28.77	7.78	268.77	1.28		134.00	0.00		1150.00	103000.00	160.00	0.00	
28374.86	52144.86	1145.90	38.44	31.74	0.00	301.43	0.00		159.00	0.00		1100.00	99100.00	130.00	0.00	
30925.66	60247.32	1260.33	67.49	46.13	1.47	312.65	1.50		122.00	0.00		1100.00	102100.00	150.00	0.00	
29675.05	57191.80	1202.45	68.62	44.32	0.00	299.70	1.65		110.00	0.00		1300.00	102000.00	180.00	0.00	

XI.

Fresh Water Sample Analyses

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

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)

(quarters are smallest to largest) (NAD83 UTM in meters)

(acre ft per annum)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code Grant	Source	q q q					X	Y
									6416	4	Sec	Tws	Rng		
CP 01106		PRO		CHEVRON INC.	LE	CP 01106 POD1		4	1	3	29	18S	32E	613081	3620496
CP 01107		PRO		CHEVRON INC.	LE	CP 01107 POD1		4	1	3	29	18S	32E	613102	3620505
CP 01108		PRO		CHEVRON INC.	LE	CP 01108 POD1		4	1	3	29	18S	32E	613084	3620514

- SE-NW-SW

Record Count: 3

PLSS Search:

Section(s): 28-33

Township: 18S

Range: 32E

Sorted by: File Number

Chevron applied to drill 3 waterwells above for filling a Future Free pond. Proposed TD=200'. Permits approved 8-23-2012, logs due by 8-31-2013. There are no well logs on State Engineer website yet, so it doesn't appear these wells have been drilled yet. They will be on the edge of the 1 mile radius area of review for FW wells.



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

No PODs found.

PLSS Search:

Section(s): 4-6

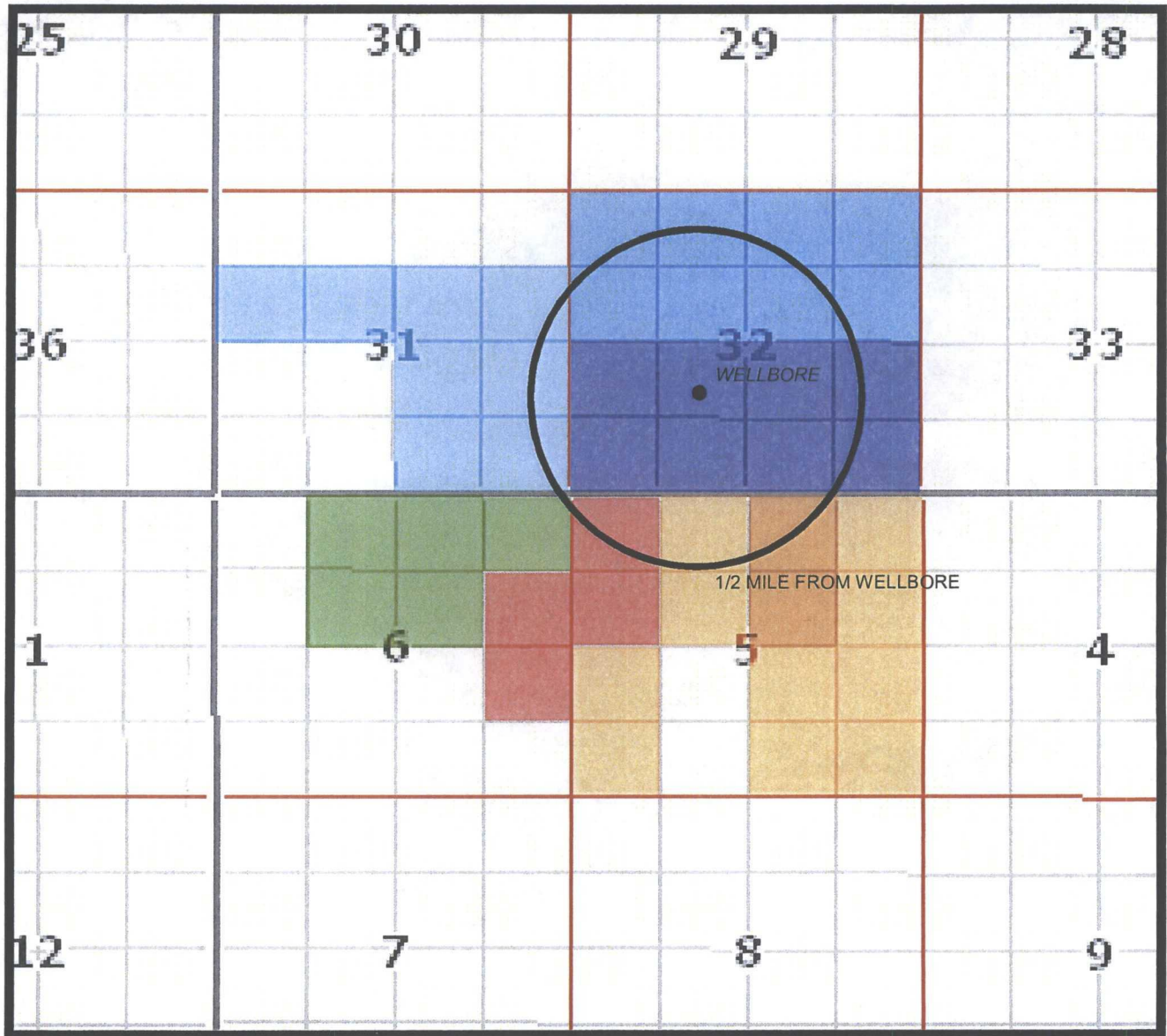
Township: 19S

Range: 32E

North Lusk 32 State SWD No. 1

K - Sec. 32 - T18s - 32e

Lea County, New Mexico





January 9, 2013

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

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
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.

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
Senior Operations Engineer

BC/bg
Enclosures



January 11, 2013

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
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.

Sincerely,

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

Brian Collins
Senior Operations Engineer

BC/sw
Enclosures



January 11, 2013

Echo Production Inc.
Attn: Ronda Wellman
P O Box 1210
Graham, RX 76450

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
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Brian Collins
Senior Operations Engineer

BC/sw
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January 11, 2013

Devon Energy Production Co
P O Box 1678
Oklahoma City, OK 73101-1678

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
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Senior Operations Engineer

BC/sw
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January 11, 2013

BLM
620 E. Greene St
Carlsbad, NM 88220

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
Lea County, New Mexico

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Brian Collins
Senior Operations Engineer

BC/sw
Enclosures



January 11, 2013

Mary Ard
801 Cherry Street
Fort Worth, TX 76102-4780

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
Lea County, New Mexico

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Brian Collins
Senior Operations Engineer

BC/sw
Enclosures



January 11, 2013

Edward R Hudson, Jr
616 Texas Street
Fort Worth, TX 76102

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
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Senior Operations Engineer

BC/sw
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January 11, 2013

William A Hudson II
616 Texas Street
Fort Worth, TX 76102

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
Lea County, New Mexico

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Brian Collins
Senior Operations Engineer

BC/sw
Enclosures



January 11, 2013

Apache Corporation
2000 Post Oak Blvd, Ste 100
Houston, TX 77056-4400

RE: Application For Authorization To Inject
North Lusk 32 State SWD #1
Township 18 South, Range 32 East, N.M.P.M.
Section 32: 1550' FSL & 1800' FWL
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Brian Collins
Senior Operations Engineer

BC/sw
Enclosures



January 9, 2013

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

Re: Legal Notice
Salt Water Disposal Well
North Lusk 32 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, appearing to read "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 North Lusk 32 State SWD No. 1 is located 1550' FSL & 1800' FWL, Section 32, Township 18 South, Range 32 East, Lea 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 Devonian-Silurian-Ordovician formation at a depth of 13800' to 15250' at a maximum surface pressure of 2760 psi and a maximum rate of 25,000 BWPD. The proposed SWD well is located approximately 33 miles northeast of Carlsbad. 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
_____, 2013.

Affidavit of Publication

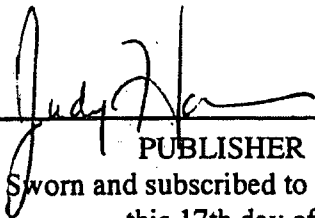
State of New Mexico,
County of Lea.

I, JUDY HANNA
PUBLISHER

of the Hobbs News-Sun, a
newspaper published at Hobbs, New
Mexico, do 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
January 17, 2013
and ending with the issue dated
January 17, 2013

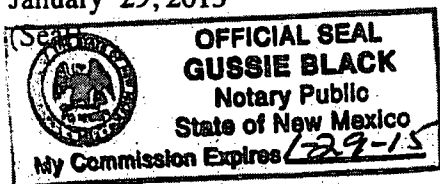

PUBLISHER

Sworn and subscribed before me
this 17th day of
January, 2013



Notary Public

My commission expires
January 29, 2015



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
publication has been made.

LEGAL

LEGAL

Legal Notice
January 17, 2013

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#27844

02107967

00107512

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:

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

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 4025

PS Form 3811, February 2004

Domestic Return Receipt

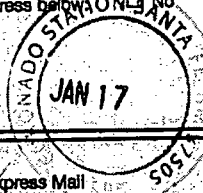
102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature *Stephanie Herrera* ☐ Agent
X *Stephanie Herrera* ☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ YesIf 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

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.
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1. Article Addressed to:

BUREAU OF LAND MANAGEMENT
620 E GREENE ST
CARLSBAD NM 88220

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 4018

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature *SVMM* ☐ Agent
X *SVMM* ☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

1-16-13

D. Is delivery address different from item 1? ☐ YesIf 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

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

1. Article Addressed to:

NM State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

COMPLETE THIS SECTION ON DELIVERY

A. Signature *[Signature]* ☐ Agent
X *[Signature]* ☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

1-17-13

D. Is delivery address different from item 1? ☐ YesIf 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

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ 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. 	<p>A. Signature <input checked="" type="checkbox"/> <i>Taylor Doyle</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery <i>Taylor Doyle</i> 1/23/13</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>1. Article Addressed to:</p> <p style="text-align: center;">Echo Production Inc. Attn: Ronda Wellman P O Box 1210 Graham, TX 76450</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number 7011 1570 0000 7781 4940 (Transfer from service label)</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ 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. 	<p>A. Signature <input checked="" type="checkbox"/> <i>June Day</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery 1-22-13</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>1. Article Addressed to:</p> <p style="text-align: center;">Apache Corporation 2000 Post Oak Blvd., Ste 100 Houston, TX 77056</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number 7011 1570 0000 7781 4001 (Transfer from service label)</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ 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. 	<p>A. Signature <input checked="" type="checkbox"/> <i>Edward R. Hudson, Jr.</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery <i>Edward R. Hudson, Jr.</i> 1/18/13</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>1. Article Addressed to:</p> <p style="text-align: center;">Edward R. Hudson, Jr. 616 Texas Street Fort Worth, TX 76102</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

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:

Mary Ann
C/O Ard Energy
222 W. 4th St. PH 5
Ft Worth, TX
76102

2. Article Number

(Transfer from service label)

7012 2210 0001 7108 8626

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

Jo Graf

C. Date of Delivery

1/21/2013

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

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:

Devon Energy Prod. Co.
P O Box 1678
Oklahoma City, OK 73101

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 4957

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

T. RAN (as above)

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

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:

William A. Hudson, II
616 Texas Street
Fort Worth, TX 76102

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 4988

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

William

C. Date of Delivery

1/18/13

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

Injection Permit Checklist: Received 1/17/13 First Email Date: — Final Reply Date: 2/5/13 Final Notice Date: 1/23/13 receipt

Issued Permit: Type: WFX/PMX/SWD Number: 1394 Permit Date: 2/5/13 (Legacy Permit: —)

Wells 1 Well Name(s): NORTH LUSK 32 STATE SWD#1

API Num: 30-0 25- Spud Date: New New/Old: N (UIC CI II Primacy March 7, 1982)

Footages 1550 FSL/1800 FWL Unit K Sec 32 Tsp 185 Rge 32E County LEA

General Location or Pool Area:

Operator: COG OPERATING LLC Contact: BRIAN COLLINS

OGRID: 229137 RULE 5.9 Compliance (Wells) 8755 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed ✓ Current Status: NOT Permitted yet

Planned Work to Well:

Diagrams: Before Conversion ✓ After Conversion ✓ Are Elogs in Imaging?: —

Well Details:	Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <u>✓</u> or Existing <u>—</u> Surface	<u>17 1/2 - 13 7/8</u>	<u>1100</u>	<u>—</u>	<u>1550 CF</u>	<u>TOP</u>
Planned <u>✓</u> or Existing <u>—</u> Interm	<u>12 1/4 - 9 7/8</u>	<u>2950</u>	<u>—</u>	<u>1850 CF</u>	<u>TOP</u>
Planned <u>✓</u> or Existing <u>—</u> LongSt	<u>8 3/4 - 7</u>	<u>13800</u>		<u>2600 CF</u>	<u>2450' Design</u>
Planned <u>—</u> or Existing <u>—</u> Liner					
Planned <u>✓</u> or Existing <u>—</u> OpenHole	<u>6 1/8"</u>	<u>13800 - 15250</u>			

Depths/Formations:

	Depths, Ft.	Formation	Tops?
Above			
Above	<u>13970</u>	<u>DEV</u>	<u>✓</u>
Proposed Interval TOP:	<u>13800</u>	<u>DEV-SIL</u>	
Proposed Interval BOTTOM:	<u>15250</u>	<u>OKD</u>	
Below	<u>14460</u>	<u>SILURIAN</u>	<u>✓</u>
Below			

Max. PSI <u>2760</u>	OpenHole <u>✓</u> Perfs
Tubing Size <u>4 1/2</u>	Packer Depth <u>13750</u>

Capitan Reef? (in — thru —) Potash? Noticed? WIPP? Noticed? Galada Top Bot OK? Flouse?

Fresh Water: MaxDepth: 1100' FW Formation — Wells? NO Analysis? — Affirmative Statement ✓

Disposal Fluid: Formation Source(s) B.S. On Lease — Only from Operator — or Commercial —

Disposal Interval: Protectable Waters? NO H/C Potential: Log WILL /Mudlog — /DST — /Tested — /Depleted — Other —

Notice: Newspaper Date 1/17/13 Mineral Owner — Surface Owner SLO N. Date 1/17

RULE 26.7(A) Identified Tracts? ✓ Affected Persons: ECHO / APACHE / DEVON / Mary E. HODSON N. Date 1/23

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Formerly Produced in Interval? NO

Penetrating.....No. Active Wells 0 Num Repairs? — on which well(s)? —

Penetrating.....No. P&Aed Wells 0 Num Repairs? — on which well(s)? —

Diagrams? —

Permit Conditions:

Issues:

Issues:

Issues: