

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 \_\_\_\_\_

*COG Operating, LLC  
 Santa Fe, NM  
 C/4/19/31E/EDDY  
 30-05-23938*

[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

*Brian Collins*  
 Signature

SENIOR OPERATIONS ENGINEER  
 Title

10/24/12  
 Date

bcollins@concho.com  
 e-mail Address



November 15, 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  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FWL  
Eddy County, New Mexico

Dear Mr. Jones:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the South Shugart Deep 1 SWD well as referenced above. 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.

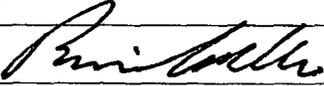
Sincerely,

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

Brian Collins  
Senior Operations Engineer

BC/bg  
Enclosures

**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: \_\_\_\_\_ 24 Oct 12 \_\_\_\_\_  
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  
SOUTH SHUGART DEEP 1 SWD  
Unit C, Sec 4 T19S R31E  
Eddy County, NM

COG Operating, LLC, proposes to squeeze the depleted Morrow 11823-11969', clean out to 13500' and convert well to salt water disposal service into the Devonian from 13242' to 13500'.

- 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 = 3000 BWPD  
Proposed maximum daily injection rate = 25,000 BWPD
  - 2. Closed system
  - 3. Proposed maximum injection pressure = 2648 psi  
(0.2 psi/ft. x 13242' ft.)
  - 4. Source of injected water will be Bone Spring produced water. No compatibility problems are expected. Analysis of Bone Spring water is attached. There are no Devonian receiving formation water analyses available in this area.
- VIII. The injection zone is the Devonian Dolomite from 13242' to 13500' which recovered 6000' of sulfur water on a DST when drilled. Any underground water sources will be shallower than 497' based on surface casing setting depth. There are no fresh water wells in the area.
- IX. The Devonian injection interval might be acidized with approximately 30,000 gals of 20% HCl acid.
- X. Well logs are filed with the Division. A section of the neutron-density porosity log showing the injection interval is attached.
- 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: South Shugart Deep 1 SWD

WELL LOCATION: 760' FNL 1980' FNL C 4 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" e 497'  
Cemented with: 500 sx. or - ft<sup>3</sup>  
Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 9 5/8" e 4150'  
Cemented with: 1500 sx. or - ft<sup>3</sup>  
Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 8 1/2" Casing Size: 5 1/2" e 13510'  
Cemented with: 900 sx. or - ft<sup>3</sup>  
Top of Cement: 9850' Method Determined: Temp Survey  
Total Depth: 13510'

Injection Interval

13242' feet to 13500'

(Perforated) or Open Hole; indicate which)

See Attached Before & After Schematics

**INJECTION WELL DATA SHEET**

Tubing Size: 2 7/8" or 3 1/2" Lining Material: IPC or Ovaline 20  
Type of Packer: Nickel plated double grip retrievable  
Packer Setting Depth: 13200' ±  
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? Oil & Gas

2. Name of the Injection Formation: Devonian

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

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. Yes.

Morrow 11823-30', 11964-69'

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: Seven Rivers ± 2600-2700', Queen/Grayburg ± 3350-4150'

Delaware ± 6600-6800', Bone Spring ± 7950-9400'

Morrow ± 11400-12000'

Well: South Shugart Deep 1 SWD

Zero: 19' AGL

Location: 760' FNL 1780' FNL

KB: 3605'

C-4-19s-31c

GL: 3586'

Eddy NM

30-015-23938

Casing Program:

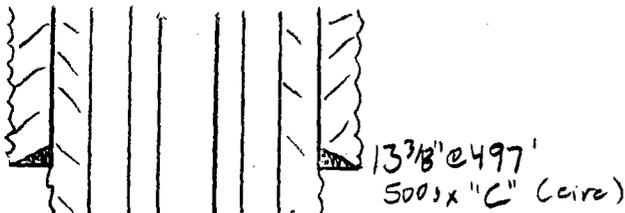
Size	Wt.	Grade	Conn.	Depth
13 7/8"	48	H40	STC	497'
9 5/8"	40	N80/595	LTC	4150'
5 1/2"	17	N80/595	LTC	13510'
(59' ts 17/595 on bottom)				
(262' + 1 cut jt. 17/N80 on top)				

17 1/2"

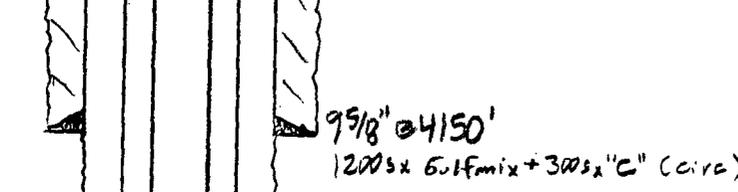
100% RECYCLED WHITE SQUARE  
42-389 200 RECYCLED WHITE SQUARE  
MADE IN U.S.A.

12 1/4"

8 1/2"



13 7/8" @ 497'  
500s x "C" (circ)



9 5/8" @ 4150'  
1200s x 60ft mix + 300s x "C" (circ)

2 7/8" or 3 1/2" Inj Tbg

AFTER SWD Conversion

TOC 9850' TS

11823-30' Spud Mrrw  
11964-69'

Inj Pkr ± 13200'  
13242-13500' Devonian

5 1/2" @ 13510' 900s x "C"  
13510'

Well: South Shugart Deep 1

Zen: 19' AGL

KB: 3605'

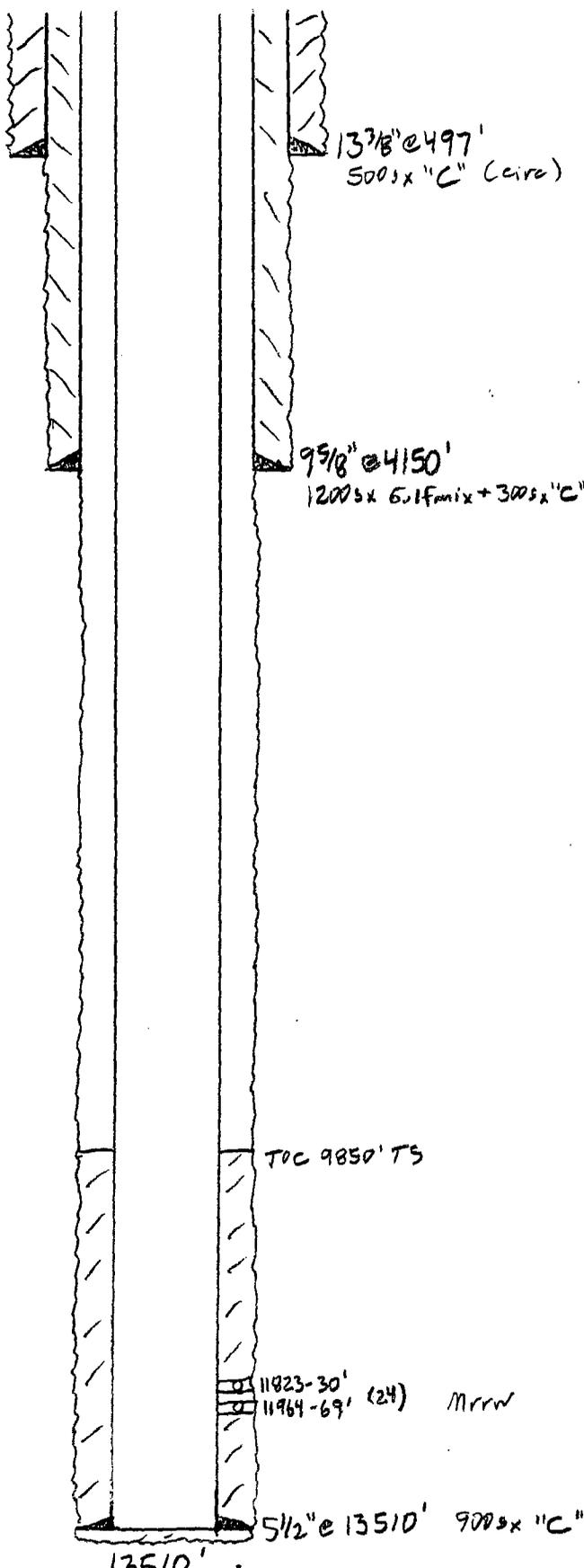
GL: 3586'

Location: 760' FWL 1980' FWL  
C-4-19s-31c

Eddy NM  
30-DIS-23938

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 7/8"	48	H4D	STE	497'
9 5/8"	40	N80/595	LTC	4150'
5 1/2"	17	N80/595	LTC	13510'
(59-jt 17/595 on bottom)				
(262-jt 17/N80 on top)				
2 3/8"	4.7	N80	EVE	11769'
387-jt Baker Latch EL D/O 1.61" profik				



Before SWD Conversion

40 SHEETS EYE-EASE® 25 DATE  
 42-389 100 SHEETS EYE-EASE® 50 DATE  
 44-389 100 SHEETS EYE-EASE® 50 DATE  
 46-389 100 RECYCLED WHITE 5 SQUARE  
 48-389 200 RECYCLED WHITE 5 SQUARE  
 Made in U.S.A.

National Brand

8 1/2"

Well: South Shugart Deep 1

Elev: 19' AGL

Location: 760' FWL 1780' FWL

KB: 3605'

C-4-175-31e

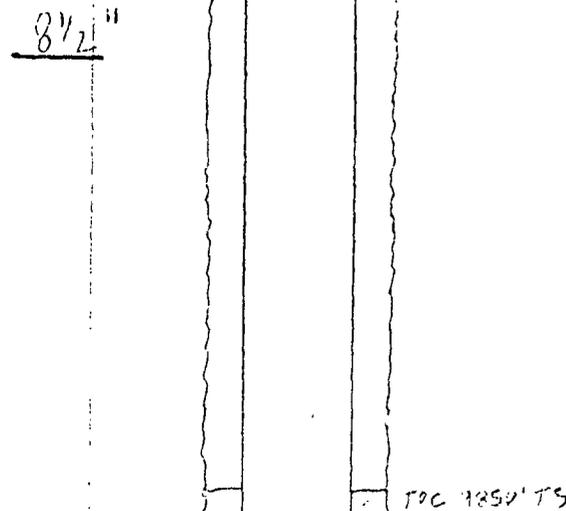
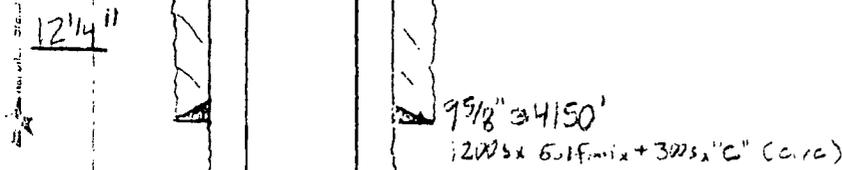
GL: 3586'

Eddy NM

30-015-23938

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 7/8"	48	H40	STC	497'
9 5/8"	40	N80/S95	LTC	4150'
5 1/2"	17	N80/S95	LTC	13510'
(59 ft. 17/S95 on bottom)				
(262 x 1 bit ft. 17/N80 on top)				
2 3/8"	4.7	N80	EVE	11767'
387 ft. Butter Lockset w/ EL offset 1.81" per ft.				



- 11823-00 (14)
- 11581-1112 (12)
- 11701-11 (10)
- 112012-16 (15)

Proposed BUT  
not done?

(MORROW)

**V.**

**MAP**



# **VII.**

## **Water Analysis Produced and Receiving Formation Water**

WATER SAMPLES REPRESENTATIVE OF WATER BEING INJECTED INTO THE PROPOSED SWD WELL												
<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)
2012104123	Lusk Deep Unit	A #23H		2/24/2012	2/10/2012	1.11	2.89	175864.37	6.40		9307.00	1462.00
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
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

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)
29671.91	58163.00	1280.00		56.00	0.29	334.00	2.28		109.80	0.00		1050.00	104100.00	240.00	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
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

**X.**

**Log Across Proposed  
Delaware Sand  
Injection Interval**

South Shugart Deep Federal Unit #1

DST Information

#1	Delaware	6,440'-6,520'	IHP 2856, FHP 2856, 6 min IFP 61, 55 min ISIP 1885, 1 hr FF 71-71, 2 hr FSIP 1887, rec 3' of oil & 20' of brine
#3	Wolfcamp	9,910-10,020	IHP 5410, FHP 5366, 5 min IFP 137-174, 1 hr ISIP 1063, 1 hr FFP 165, 2 hr FSIP 3742, rec 440' gas cut drlg mud
#4	Morrow	11,786-11,851	IHP 6441, FHP 6441, 12 min IFP 759-782, 1 hr ISIP 5084, 150 min FFP 621-759, 300 min FSIP 5216, 1566' GCWB & 189' GCDF
#5	Morrow	11,883-11,956	IHP 6544, FHP 6500, 9 min IF 619-607, 1 hr ISIP 3037, 99 min FF 607-575, 270 min 4790, rec 760' DF & 1200' WB
#6	Morrow	12,430-12,500	IHP 6623, FHP 6623, 6 min IFP 885-774, 1 hr ISIP 3773, 75 min FFP 802, 123 min FSIP 2680, 332' DF rec
#7	Mississippian	12,720-12,822	IHP 6894, FHP 6894, 8 min IFP 867-781, 69 min ISIP 5754, 63 min FFP 759-802, 115 min ISIP 5030, 2200 cc gas in sampler est 85 MCFGPD
#8	Devonian	13,165-13,261	IHP 7174, FHP 7152, 5 min IFP 1304-1431, 60 min ISIP 5452, 120 min FFP 1545-3907, 240 min FSIP 5452, 5940' of salt water & 2600' WB
#9	Devonian	13,410-13,510	IHP 7326, FHP 7262, 5 min IFP 1324-1355, 60 min ISIP 5952, 60 min FFP 1387, 116 min FSIP 5506, rec 2913' WP & 632' sulfer water

Schlumberger

# COMPENSATED NEUTRON FORMATION DENSITY

FED. UNIT #1  
COMPANY GULF OIL EXP. & PROD.

COMPANY GULF OIL <sup>Corp.</sup> EXPLORATION AND PRODUCTION COMPANY

WELL SOUTH SHUGART DEEP FEDERAL UNIT #1

FIELD WILDCAT <sup>Dev.</sup>

COUNTY EDDY STATE NEW MEXICO

LOCATION 760' FNL & 1980' FWL,

API SERIAL NO 73938 SEC. 4 TWP 19-S RANGE 31-E

Other Services:  
DLL/MSFL  
BHC  
MONITOR

Datum: G.L. Elev.: 3586

Measured From: K.B. 19 Ft. Above Perm. Datum

Measured From: K.B. Elev.: K.B. 3605  
D.F. \_\_\_\_\_  
G.L. 3586

DATE	3-10-82				
DEPTH	ONE				
LOG NO.	13510				
LOG NO.	13513				
LOG NO.	13512				
LOG NO.	4030				
LOG NO.	9 5/8 @ 150	@	@	@	
LOG NO.	4149				
LOG NO.	8.5				
LOG NO.	SALT GEL				
LOG NO.	10.3 35				
LOG NO.	10 6.8 ml		ml		ml
LOG NO.	MUD PIT				
LOG NO.	.042 @ 76 °F	@	°F		°F
LOG NO.	.028 @ 76 °F	@	°F		°F
LOG NO.	@ °F	@	°F		°F
LOG NO.	C				
LOG NO.	.018 @ 183 °F	@	°F		°F
LOG NO.	0500				
LOG NO.	1350				
LOG NO.	183 °F		°F		°F

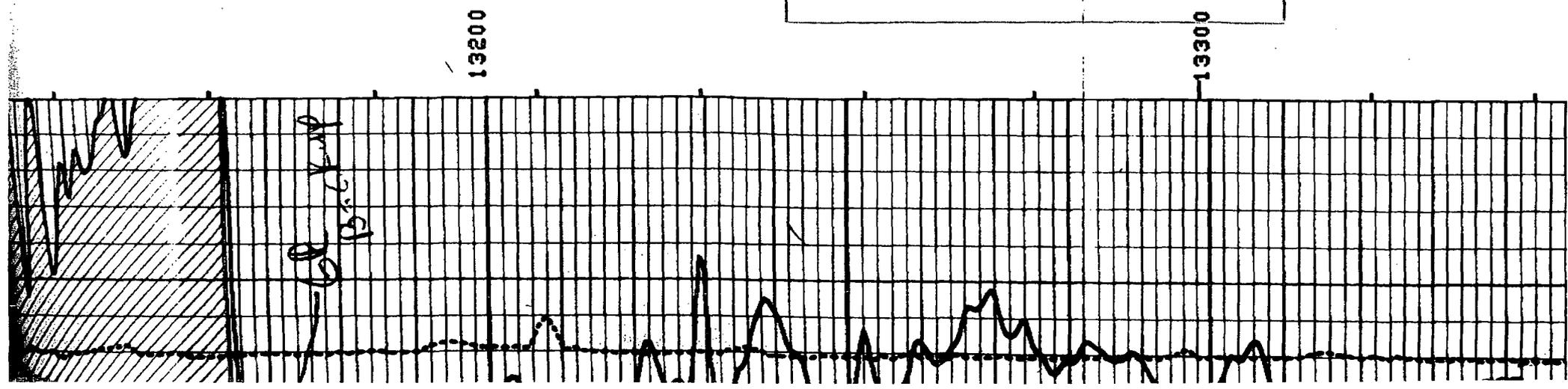
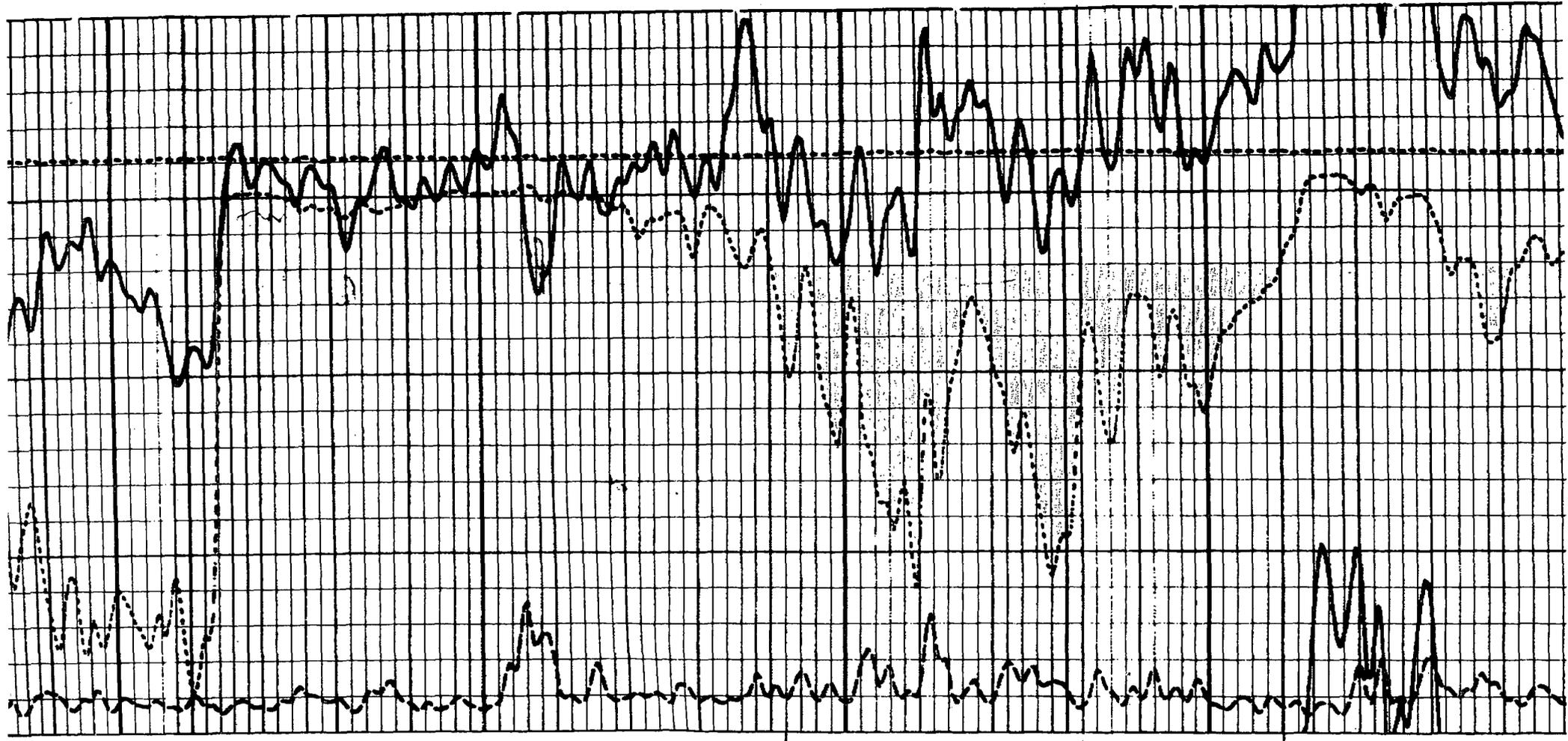
BEST COPY AVAILABLE

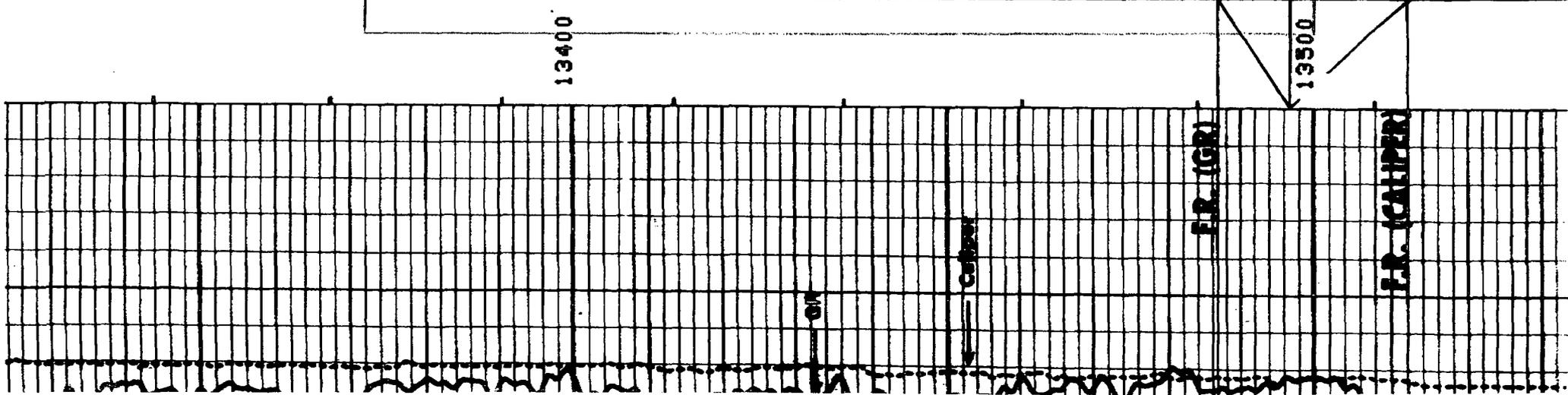
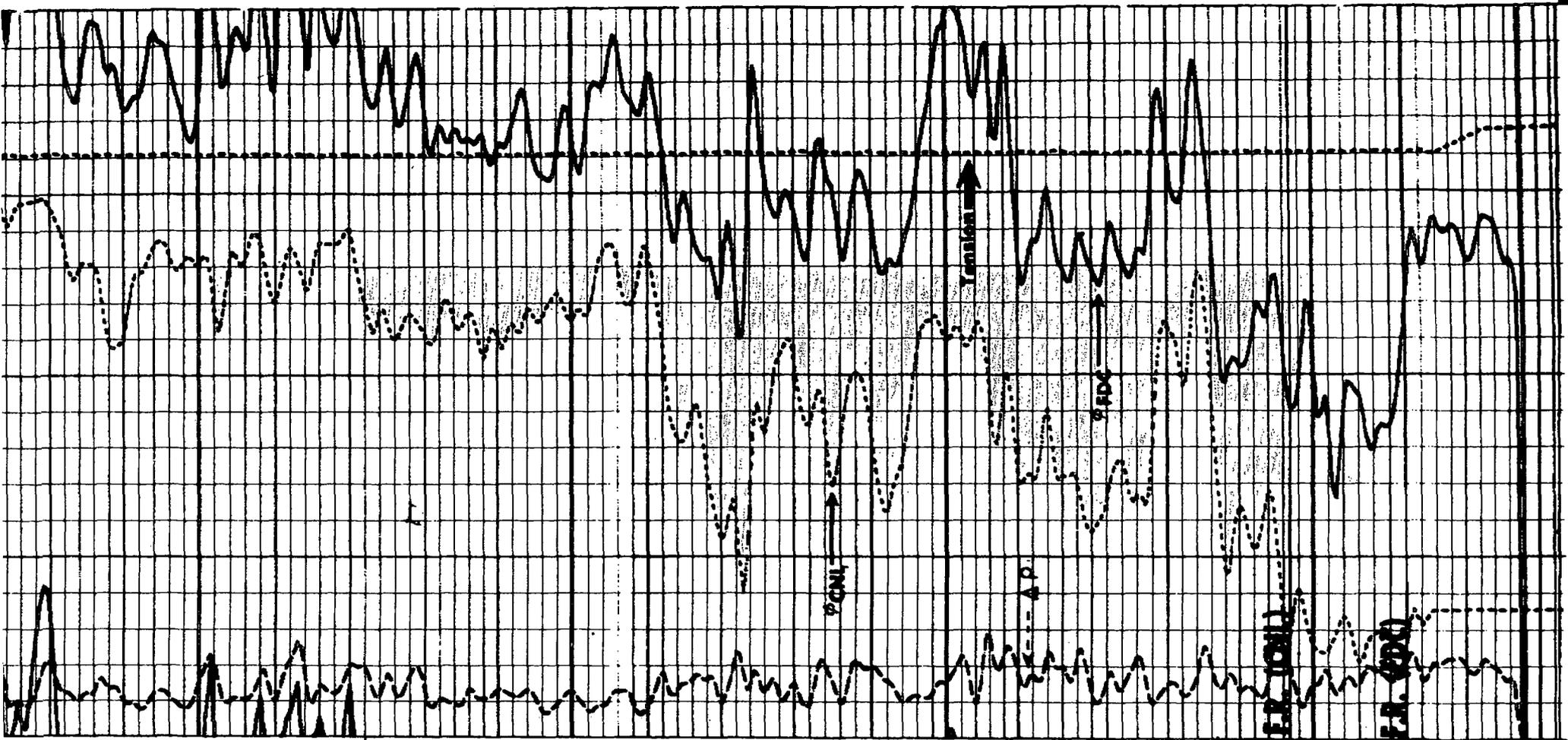
The well name, location and borehole reference data were furnished by the customer.

NO.	Order No.	TYPE LOG	Depth	REMARKS
ONE	267590			
FULL				
160000				
30				
600				
8194				
92				
583				
3925				
327				
608				
1467				
8174				
1161				
8194				
1114				
2878				
DS1				
ROHSPRING				
1				
24				
176				
163				
DCB1				
2756				

INFORMATION DATA

BKG. CPS  
Source CPS  
Sens. - Cal  
T. C. - Cal  
Spacing - Before Log  
Spacing - Before Log





# **XI.**

## **Fresh Water Sample Analyses**



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

No PODs found.

**PLSS Search:**

**Section(s):** 32, 33, 34

**Township:** 18S

**Range:** 31E



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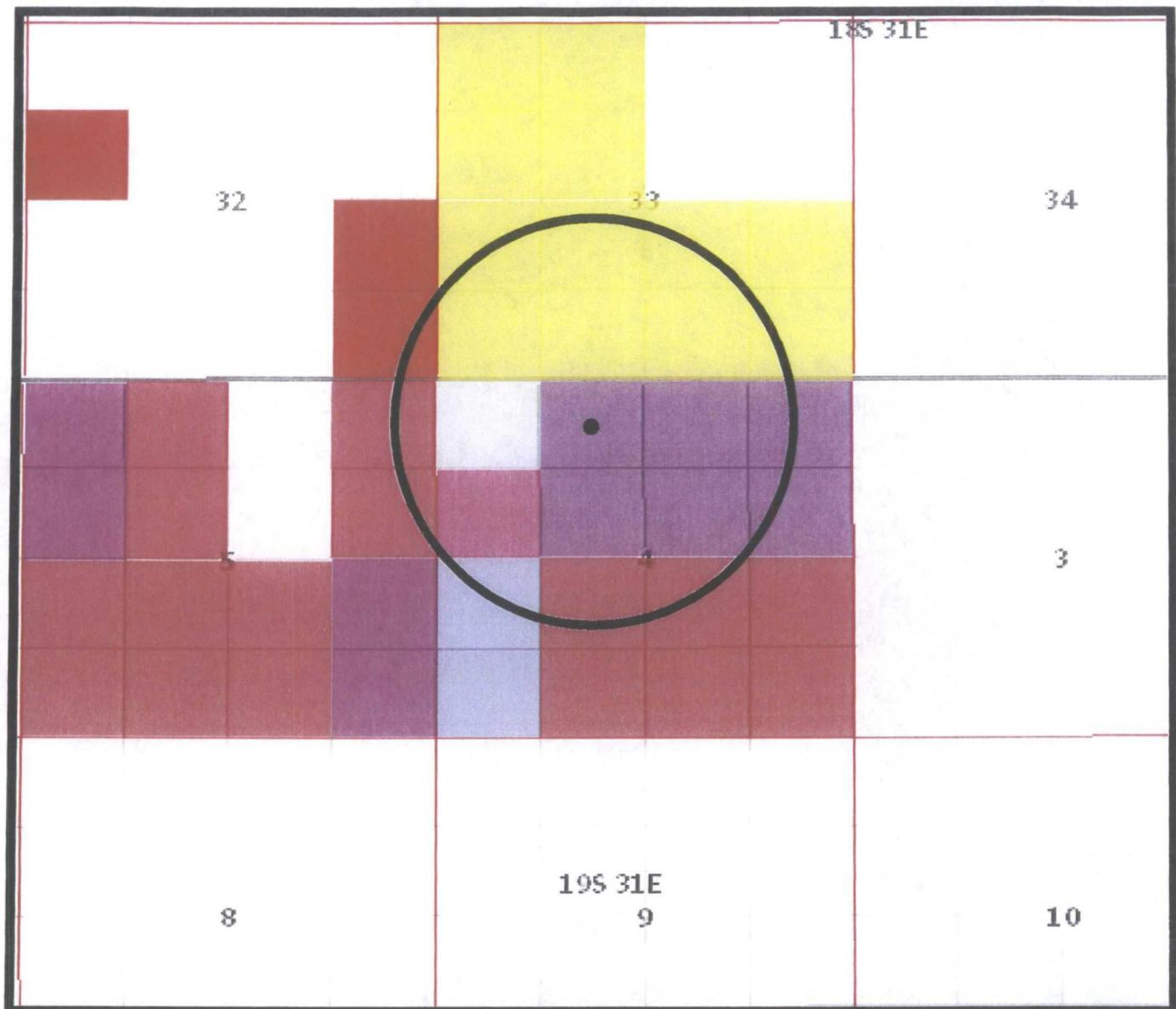
*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

**PLSS Search:**

**Section(s):** 3, 4, 5, 8, 9, 10    **Township:** 19S    **Range:** 31E



- Paul Slayton  
Kathryn Alexander; Walter Granbury;  
Marie Wade; Leland & Virginia Wittkopp
- Atofina Petrochemicals/Exxon Corp.
- Yates, etal; Oxy Y-1 Company; ~
- Devon Energy Prod Co LP
- Yates, etal; Oxy Y-1 Company; ~
- Devon Energy Prod.; Paul Slayton ~
- Snow Oil and Gas Inc.
- COG Operating LLC
- 18-31 Inc.

**South Shugart Deep 1 SWD**  
**760' FNL & 1980' FWL**  
**Sec. 4; Township 19s - Range 31e**  
**Eddy County, New Mexico**



November 15, 2012

Oil Conservation Division  
Attn: Richard Inge  
811 South 1<sup>st</sup> St.  
Artesia, NM 88210

RE: Application For Authorization To Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FEL  
Eddy County, New Mexico

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

Sincerely,

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Brian Collins  
Senior Operations Engineer

BC/bg  
Enclosures



November 15, 2012

Chi Operating  
P O Box 1799  
Midland, TX 79702

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FEL  
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



November 15, 2012

Legacy Reserves Operating  
P O Box 10848  
Midland, TX 79702

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South Shugart Deep 1 SWD  
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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



November 15, 2012

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

**RE: Legal Notice  
Salt Water Disposal Well  
South Shugart Deep 1 SWD**

Gentlemen:

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/bg

enclosure

**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 South Shugart Deep 1 SWD is located 760' FNL and 1980' FWL, Sec. 4, 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 Devonian formation at a depth of 13242-13500' at a maximum surface pressure of 2648 psi and a maximum rate of 25,000 BWPD. This well is located approximately 27 miles northeast of Carlsbad. 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  
\_\_\_\_\_, 2012.

# Affidavit of Publication

NO. 22377

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 November 21, 2012

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

23rd day of November, 2012



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/21/2012

*Latisha Romine*

Latisha Romine  
Notary Public, Eddy County, New Mexico

# Copy of Publication:

## LEGAL NOTICE

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 South Shugart Deep 1 SWD is located 760' FNL and 1980' FWL, Sec 4, 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 Devonian formation at a depth of 13242-13500' at a maximum surface pressure of 2648 psi and a maximum rate of 25,000 BWPD. This well is located approximately 27 miles northeast of Carlsbad. 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., Nov. 21, 2012. Legal No. 22377.

11. F. Archeological, Historical and Cultural Sites: None observed in the area.

G. Land Use: ~~Grazing and hunting, in season.~~

H. Surface Ownership: Surface is Federal

12. Operator's Representative:

The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

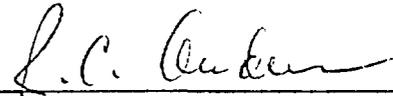
Gulf Oil Exploration & Production Co.  
A Division of Gulf Oil Corporation  
P. O. Box 670  
Hobbs, New Mexico 88240  
Telephone: (505) 393-4121  
Area Production Manager: R. C. Anderson

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Gulf Oil Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

September 9, 1981

Date



R. C. Anderson  
Area Production Manager

KRP/jr

**Jones, William V., EMNRD**

---

**From:** Bobbie Goodloe <BGoodloe@concho.com>  
**Sent:** Wednesday, January 02, 2013 11:17 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Brian Collins  
**Subject:** RE: South Shugart Deep 1 SWD  
**Attachments:** BLM Proof of Delivery-S. Shugart Deep 1 SWD.pdf

Will,  
Attached is the Proof of Delivery of notification to the Carlsbad BLM field office for the S. Shugart Deep #1 SWD as requested.

Thank you,  
Bobbie Goodloe

---

**From:** Bobbie Goodloe  
**Sent:** Thursday, December 27, 2012 1:24 PM  
**To:** 'William.V.Jones@state.nm.us'  
**Subject:** South Shugart Deep 1 SWD

Mr. Jones,  
I have attached a copy of the 3160 that was sent out today to the Carlsbad BLM field office as well as the entire packet as you requested on the well named above. I will email proof of delivery when I receive it back.

Please let me know if there is anything else that you need.

Thank you,

*Bobbie Goodloe*

**Administrative Assistant/Completions - NM Basin**  
**COG OPERATING LLC**  
2208 W Main St  
Artesia, New Mexico 88210-3720  
575.748.6954



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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:

Carlsbad Field Office  
B.L.M.  
670 E. Greene St.  
Carlsbad, NM 88210

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
*[Signature]*  Addressee

B. Received by (Printed Name) *[Signature]* C. Date of Delivery *12/28/12*

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 4049



RECEIVED OCD

December 7, 2012

2012 DEC 13 P 1: 35

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

Re: Affidavit of Publication/Certified Return Receipts  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FWL  
Eddy County, New Mexico

Dear Mr. Jones:

Enclosed, per your request, please find one copy of the affidavit of publication and one copy of the certified return receipts from each party that was notified. Please note the Certified Mailers were sent out on November 15, 2012.

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/bg  
Enclosures

**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:

**NMOED**  
**Attn: William Jones**  
**1220 S. St Francis Dr**  
**Santa Fe, NM 87505**

2. Article Number  
(Transfer from service label)

7011 1570 0000 7781 3271

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]*
 Agent  
 Addressee

B. Received by (Printed Name)

*Cerey Vign*

C. Date of Delivery

11-20-12

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

1. Article Addressed to:

**CHI OPERATING**  
**P O BOX 1799**  
**MIDLAND TX 79702**

2. Article Number  
(Transfer from service label)

7011 1570 0000 7781 3295

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *Dianna Bell*
 Agent  
 Addressee

B. Received by (Printed Name)

*Dianna Bell*

C. Date of Delivery

11/27/12

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

1. Article Addressed to:

**LEGACY RESERVES OPERATING**  
**P O BOX 10848**  
**MIDLAND TX 79702**

2. Article Number  
(Transfer from service label)

7011 1570 0000 7781 3288

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *April Barlow*
 Agent  
 Addressee

B. Received by (Printed Name)

*April Barlow*

C. Date of Delivery

11/28/12

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

**Jones, William V., EMNRD**

---

**From:** Bobbie Goodloe <BGoodloe@concho.com>  
**Sent:** Tuesday, January 22, 2013 11:33 AM  
**To:** Jones, William V., EMNRD  
**Subject:** South Shugart #1 SWD  
**Attachments:** South Shugart 1 SWD.PDF; BLM Proof of Delivery-S. Shugart Deep 1 SWD.PDF

Will,  
Please review the attachment containing the affidavit of publication along with the Proof of Delivery receipts for the South Shugart #1 SWD well. This was on your list showing that it was never received so let me know if this is not what you are missing since I show them emailed out previously.

Thanks!

*Bobbie Goodloe*  
**Administrative Assistant/Completions - NM Basin**  
**COG OPERATING LLC**  
**2208 W Main St**  
**Artesia, New Mexico 88210-3720**  
**575.748.6954**



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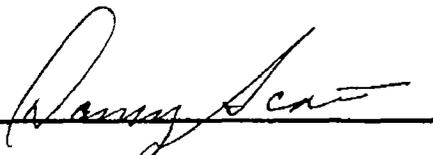
# Affidavit of Publication

NO. 22377

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:

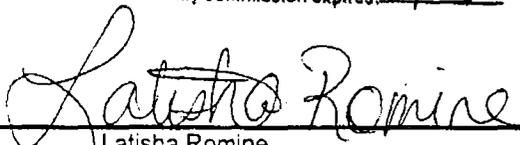
First Publication	<u>November 21, 2012</u>
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	

Subscribed and sworn to before me this 23rd day of November, 2012



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/21/2012



Latisha Romine  
Notary Public, Eddy County, New Mexico

# Copy of Publication:

## LEGAL NOTICE

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 South Shugart Deep 1 SWD is located 760'FNL and 1980'FWL, Sec.4, 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 Devonian formation at a depth of 13242-13500' at a maximum surface pressure of 2648 psi and a maximum rate of 25,000 BWPD. This well is located approximately 27 miles northeast of Carlsbad. 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., Nov. 21, 2012. Legal No 22377.

**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:

Carlsbad Field Office  
B.L.M.  
670 E. Greene St.  
Carlsbad, NM 88220

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]*  Agent  Addressee

B. Received by (Printed Name)

*[Signature]* C. Date of Delivery

12/28/12  
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 4049

**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:

NINCOID  
 Attn: William Jones  
 1220 S. St Francis Dr  
 Santa Fe, NM 87505

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 3271

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]* Agent Addressee

B. Received by (Printed Name)

*[Signature]*

C. Date of Delivery

11-20-12

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

1. Article Addressed to:

CHI OPERATING  
 P O BOX 1799  
 MIDLAND TX 79702

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 3295

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]* Agent Addressee

B. Received by (Printed Name)

*[Signature]*

C. Date of Delivery

11-27-12

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

1. Article Addressed to:

LEGACY RESERVES OPERATING  
 P O BOX 10848  
 MIDLAND TX 79702

2. Article Number

(Transfer from service label)

7011 1570 0000 7781 3288

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X *[Signature]* Agent Addressee

B. Received by (Printed Name)

*[Signature]*

C. Date of Delivery

11/28/12

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

## Jones, William V., EMNRD

---

**From:** Bobbie Goodloe <BGoodloe@concho.com>  
**Sent:** Thursday, December 27, 2012 1:23 PM  
**To:** Jones, William V., EMNRD  
**Subject:** South Shugart Deep 1 SWD  
**Attachments:** South Shugart Deep3160.pdf

Mr. Jones,

I have attached a copy of the 3160 that was sent out today to the Carlsbad BLM field office as well as the entire packet as you requested on the well named above. I will email proof of delivery when I receive it back.

Please let me know if there is anything else that you need.

Thank you,

*Bobbie Goodloe*

**Administrative Assistant/Completions - NM Basin**  
**COG OPERATING LLC**  
**2208 W Main St**  
**Artesia, New Mexico 88210-3720**  
**575.748.6954**



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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. \_\_\_\_\_  
6. If Indian, Allottee or Tribe Name \_\_\_\_\_

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

Type of Well  
 Oil Well     Gas Well     Other SWD

Name of Operator  
COG OPERATING LLC

a. Address  
2208 W. MAIN STREET, ARTESIA, NM 88210

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

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

8. Well Name and No.  
SOUTH SHUGART DEEP 1 SWD

9. API Well No.  
30-015-23938

10. Field and Pool or Exploratory Area  
SHUGART MORROW

11. Country or Parish, State  
EDDY COUNTY, NM

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

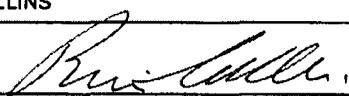
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> 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 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	

3. 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 recompleat 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 recompleat 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 FOR C-108 COPY ATTACHED

4. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
BRIAN COLLINS

Title SENIOR OPERATIONS ENGINEER

Signature  Date 12/27/2012

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Office \_\_\_\_\_

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.

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.



January 29, 2013

Abo Petroleum Corp.  
105 S. 4th Street  
Artesia, NM 88210

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FEL  
Eddy 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 convert this well to 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 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



January 29, 2013

Lynx Petroleum Inc.  
Attn: Mr. Larry Scott  
3325 N. Enterprise Dr.  
Hobbs, NM 88240

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FEL  
Eddy 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 convert this well to 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 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



January 29, 2013

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

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
Section 4: 760' FNL & 1980' FEL  
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



January 29, 2013

Myco Industries, Inc.  
105 S. 4th Street  
Artesia, NM 88210

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
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BC/sw  
Enclosures



January 29, 2013

Oxy Y-1 Company  
P O Box 27570  
Houston, TX 77227-7570

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Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Paul Slayton  
P O Box 2035  
Roswell, NM  
88202-2035

Re: Application to Inject  
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BC/sw  
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January 29, 2013

Yates Petroleum Corp.  
105 S. 4th Street  
Artesia, NM 88210

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BC/sw  
Enclosures



January 29, 2013

18-31 Inc.  
P O Box 1120  
Roswell, NM 88202-1120

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Kathryn Alexander  
P O Box 1248  
Fredricksburg, TX 78624-1248

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Walter Granberry  
1923 33rd Street  
Lubbock, TX 79411

Re: Application to Inject  
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Township 19 South, Range 31 East, N.M.P.M.  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Marie Wade  
P O Box 1248  
Fredricksburg, TX 78624-1248

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South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Leland Wittkopp  
803 Runyan  
Artesia, NM 88210

Re: Application to Inject  
South Shugart Deep 1 SWD  
Township 19 South, Range 31 East, N.M.P.M.  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Virginia Wittkopp  
803 Runyan  
Artesia, NM 88210

Re: Application to Inject  
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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures



January 29, 2013

Snow Oil & Gas Inc.  
P O BOX 1277  
Andrews, TX 79714

Re: Application to Inject  
South Shugart Deep 1 SWD  
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BC/sw  
Enclosures



January 29, 2013

ExxonMobil Corporation  
800 Bell Street  
Houston, TX 77002

Re: Application to Inject  
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Enclosures

**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Wednesday, December 26, 2012 5:37 PM  
**To:** 'Brian Collins'  
**Cc:** Dean Chumbley; Ezeanyim, Richard, EMNRD  
**Subject:** Disposal application from COG Operating LLC: South-Shugart Deep #1 30-015-23938 C/4/19S/31E/Eddy County Devonian disposal from 13242 to 13500 feet

Hey Brian,

The only thing I see to question on this application for SWD in Eddy County is the notices:

- a. Surface Owner: Our well file shows the surface at this well location to be Federal – at least in the original APD for this well. If you agree, would you send Carlsbad Field Office a copy of the C-108 and let me know when it was mailed? I didn't see proof of notice to any surface owner.
- b. AOR "affected persons" – the list/map indicates several parties to notify, but the green cards are only for Legacy and Chi and those two were not on the list. So maybe a mix-up or I got the applications shuffled. Would you guys check it out?

Otherwise, all looks swell, the well was drilled for some reason to Devonian depths, but the DST's were wet. I didn't look for the nearest production, but it clearly is not within ½ mile.

Thanks Again,

Will

## Jones, William V., EMNRD

---

**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Thursday, December 27, 2012 8:11 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: Disposal application from COG Operating LLC: South Shugart Deep #1  
30-015-23938 C/4/19S/31E/Eddy County Devonian disposal from 13242 to 13500 feet

Will: I'm embarrassed at the poor job we've done on notifying the surface owner recently. I thought we'd notified the BLM, but we didn't. Notification will be mailed to CFO BLM today. I promise to pay closer attention when proofing our notification letters. Dean Chumbley will check on b. below (he's out of the office). I think he determined that Legacy and Chi and ourselves were the only "lease operators" within the ½ mile radius. We'll let you know. Thanks. --Brian

---

**From:** Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]  
**Sent:** Wednesday, December 26, 2012 6:37 PM  
**To:** Brian Collins  
**Cc:** Dean Chumbley; Ezeanyim, Richard, EMNRD  
**Subject:** Disposal application from COG Operating LLC: South Shugart Deep #1 30-015-23938 C/4/19S/31E/Eddy County Devonian disposal from 13242 to 13500 feet

Hey Brian,

The only thing I see to question on this application for SWD in Eddy County is the notices:

12/28/12 ✓  
Surface Owner: Our well file shows the surface at this well location to be Federal – at least in the original APD for this well. If you agree, would you send Carlsbad Field Office a copy of the C-108 and let me know when it was mailed? I didn't see proof of notice to any surface owner.

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Thanks Again,

Will

**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.

## Jones, William V., EMNRD

---

**From:** Jones, William V., EMNRD  
**Sent:** Thursday, January 03, 2013 10:15 AM  
**To:** 'Bobbie Goodloe'  
**Subject:** RE: South Shugart Deep 1 SWD

I think the Landman is looking at this one – or the listing of “affected persons” in the application was incorrect...??

For the “affected persons” we are mainly interested in the owners of the formation depths being proposed for SWD. Normally those are Lessees as there should not be any “Division designated Operators” in the interval being proposed for SWD.

That being said, sometimes if there are shallower or deeper producing wells, and those operators like to be noticed also – sometimes they are concerned about effects on their uncemented wellbores.

Also notice should go to the surface owner of the well site and the nearest Potash Lessee if the ½ or so mile AOR extends into the R-111-P defined Potash Area.

---

**From:** Jones, William V., EMNRD  
**Sent:** Thursday, December 27, 2012 2:51 PM  
**To:** 'Bobbie Goodloe'  
**Subject:** RE: South Shugart Deep 1 SWD

Thank You!

Only now waiting on a question of notice to Affected Persons.

The parties shown on the colored plat with the AOR circle on it were not shown as being noticed.

---

**From:** Bobbie Goodloe [<mailto:BGoodloe@concho.com>]  
**Sent:** Thursday, December 27, 2012 1:23 PM  
**To:** Jones, William V., EMNRD  
**Subject:** South Shugart Deep 1 SWD

Mr. Jones,

I have attached a copy of the 3160 that was sent out today to the Carlsbad BLM field office as well as the entire packet as you requested on the well named above. I will email proof of delivery when I receive it back.

Please let me know if there is anything else that you need.

Thank you,

*Bobbie Goodloe*

Administrative Assistant/Completions - NM Basin  
COG OPERATING LLC  
2208 W Main St

NOTICE 12/13 in 11/15/12  
 Injection Permit Checklist (11/15/2010)

WFX \_\_\_\_\_ PMX \_\_\_\_\_ SWD 1397 Permit Date 12/14/12 UIC Q# (60N/D)  
 # Wells 1 Well Name(s): SOUTH SUGART DEEP #1  
 API Num: 30-0 15-23938 Spud Date: 11/8/12 New/Old: 0 (UIC primacy March 7, 1982) EDDY  
 Footages 760FNL/1980FWL Unit C Sec 4 Tsp 19S Rge 31E County DEAR

General Location: \_\_\_\_\_  
 Operator: COG OPERATING, LLC Contact BRIAN COLLINS  
 OGRID: 229137 RULE 5.9 Compliance (Wells) 0/3755 (Finan Assur) OK IS 5.9 OK? OK  
 Well File Reviewed ✓ Current Status: monow 11,23'-11,967' since 8/2, Now Barely Producing  
 Planned Work to Well: SQE Monow Paper

Diagrams: Before Conversion ✓ After Conversion ✓ Elogs in Imaging File: Yes

Well Details:	Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
New <u>✓</u> Existing <u>✓</u> Surface	17 1/2 - 13 3/8	497'		500SX	CRC
New <u>✓</u> Existing <u>✓</u> Interm	12 1/4 - 9 5/8	4,150'		1500SX	CRC
New <u>✓</u> Existing <u>✓</u> LongSt	8 1/2 - 5 1/2	13,910 TD		900SX C	9850' T.S.
New <u>✓</u> Existing <u>✓</u> Liner					
New <u>✓</u> Existing <u>✓</u> OpenHole					

Depths/Formations: SHUGART UNIT

Depths, Ft.	Formation	Top?
13067	DEW	✓
13164	DEW	✓
Formation(s) Above		
Injection TOP: <u>13242</u>	DEW	Max. PSI <u>2648</u> Open Hole <u>Perfs</u> ✓
Injection BOTTOM: <u>13500</u>	DEW	Tubing Size <u>2 7/8 or 3 1/4</u> Packer Depth <u>13200'</u>
Formation(s) Below		

13242  
2648.4

Capitan Reef? None (Potash? Noticed?) [WIPP? Noticed?] Salado Top/Bot 810 - ~2400' Cliff House? Noticed?  
 Fresh Water: Depths: <497' Formation \_\_\_\_\_ Wells? None Analysis? \_\_\_\_\_ Affirmative Statement ✓

Disposal Fluid Analysis? ✓ Sources: B, S.

Disposal Interval: Analysis? NA Production Potential/Testing: DST = wet 12/28/12

Notice: Newspaper Date 11/21/12 Surface Owner BLM Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Persons: See LIST 11/21/12 CHEP/Logg

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

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

Issues: not drilled first day? Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_