

DATE IN <u>11.30.10</u>	SUSPENSE	ENGINEER <u>WJ.</u>	LOGGED IN <u>11.30.10</u>	TYPE <u>SWD</u>	APP NO. <u>1033436775</u>
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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



*PTG-W*  
*1196-A*  
*COB*  
*RECEIVED 11/30/10*  
*MYA-X-21 SWD #1*  
*30-015-22434*

### 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 \_\_\_\_\_

*Pr. IP*  
*308012*

#### [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.

Dean Chumbley  
Print or Type Name

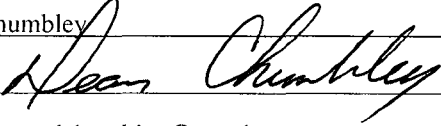
Signature

Land Advisor  
Title

11/23/10  
Date

dchumbley@conchoresources.com  
e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance X Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? X Yes \_\_\_\_\_ No
- II. OPERATOR: COG Operating LLC  
ADDRESS: 2208 W. Main Street  
CONTACT PARTY: Dean Chumbley PHONE: 575-748-6948
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes X No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Dean Chumbley TITLE: Land Advisor  
SIGNATURE:  DATE: 11/23/10  
E-MAIL ADDRESS: dchumbley@conchoresources.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: 8/27/09

C-108 Application for Authorization to Inject  
MYOX 21 SWD #1  
1980' FNL, 660' FWL  
E-21-T25S-R28E, Eddy County

Marbob Energy Corporation proposes re-enter the captioned well for salt water disposal service into the Delaware Sand from 3500' to 4850'.

- V. Map is attached.
- VI. One well within the ½ mile radius area of review penetrates the proposed injection zone. Wellbore schematic is attached.
- VII.
  - 1. Proposed average daily injection rate = 2000 BWPD  
Proposed maximum daily injection rate = 5000 BWPD
  - 2. Closed system
  - 3. Proposed maximum injection pressure = 700 psi  
(0.2 psi/ft. x 3500' ft.)
  - 4. Source of injected water will be Delaware Sand and Bone Spring Sand produced water. No compatibility problems are expected. Analyses of Delaware and Bone Spring waters from analogous source wells are attached.
- VIII. The injection zone is the Delaware Sandstone, a fine-grained sandstone from 3500' to 4850'. Any underground water sources will be shallower than 532'.
- IX. The Delaware sand injection interval will be acidized with approximately 20 gal/ft of 7 ½ % HCl acid. If necessary, the injection interval may be fraced with up to 300,000 lbs. of 20/40 mesh sand.
- X. Well logs are filed with the Division. A section of the dual laterolog resistivity log showing the injection interval is attached.
- XI. There is one fresh water well within a mile of the proposed SWD well. Water analysis from the well is attached.
- 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.

## INJECTION WELL DATA SHEET

OPERATOR: Marbob Energy CorpWELL NAME & NUMBER: MYDX 21 SWD No. 1 (Formerly Hammond 1)WELL LOCATION: 1980' FNL 660' FWLE

UNIT LETTER

21

TOWNSHIP

28e

RANGE

WELLBORE SCHEMATIC

See attached before and after  
Schematics. Marbob proposes  
to reenter this well, clean out to  
4910', run 5 1/2" casing and convert  
to SWD in the Delaware 3500-4850'.

WELL CONSTRUCTION DATASurface Casing

Hole Size: 11 Casing Size: 8 3/8" @ 532'  
 Cemented with: 190 sx. or - ft<sup>3</sup>  
 Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
 Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Production Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
 Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Total Depth: 4910'Injection Interval

3500' feet to 4850'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8" Lining Material: IPC or Duoline 20  
 Type of Packer: OK nickel plated double grip retrievable  
 Packer Setting Depth: 3450' ±  
 Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

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

2. Name of the Injection Formation: Delaware Sand  
 3. Name of Field or Pool (if applicable): San Lorenzo  
 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

See wellbore schematic

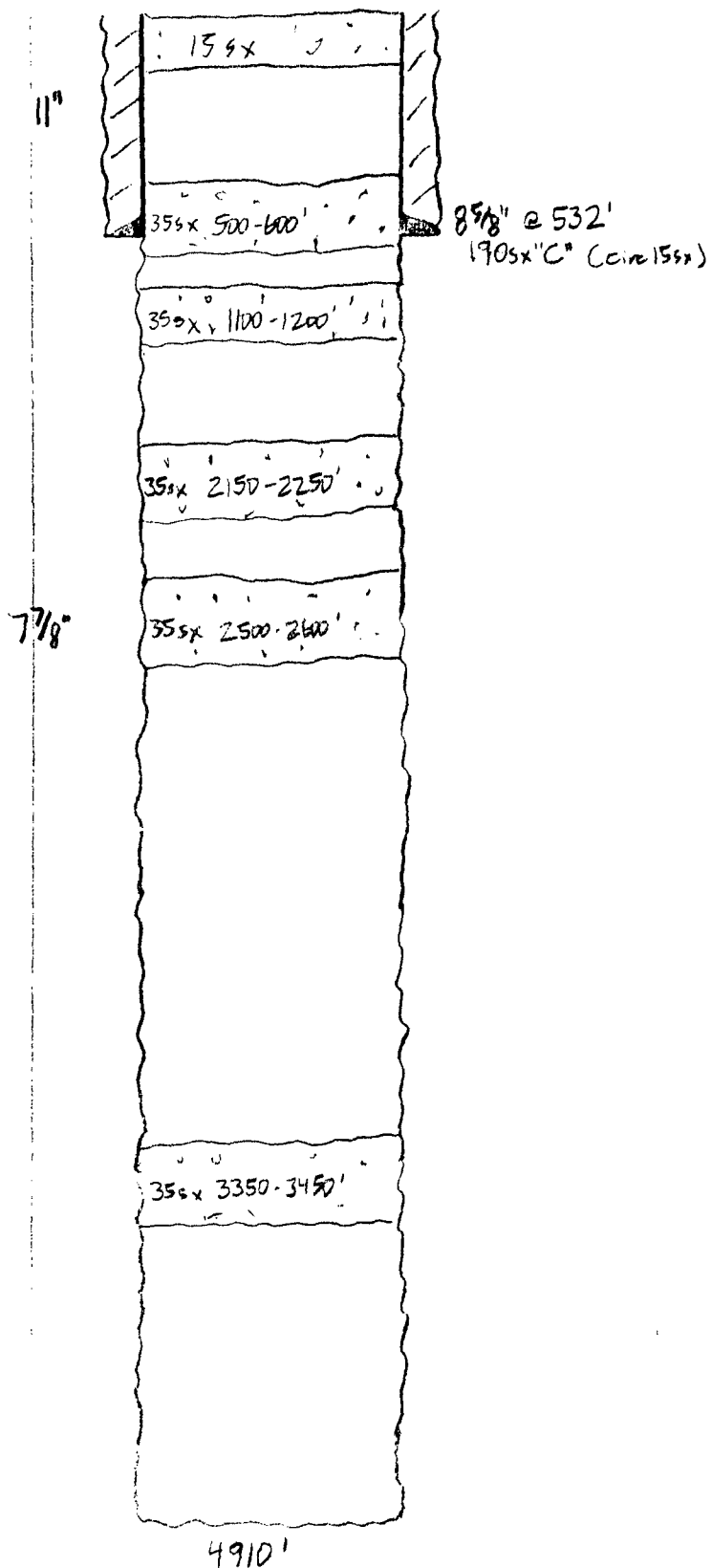
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Underlying: Possible Bone Spring 6500-8500', Possible Penn ±10500'  
Possible Strawn ±11800', Possible Atoka ±12,100'  
Possible Morrow ±12,500'

Overlying: None

30-015-22434

(Formerly Hammond 1)  
1980' FNL 660' FWL  
E-21-255-28e  
Eddy NM



Before SWD Conversion

30-015-22434

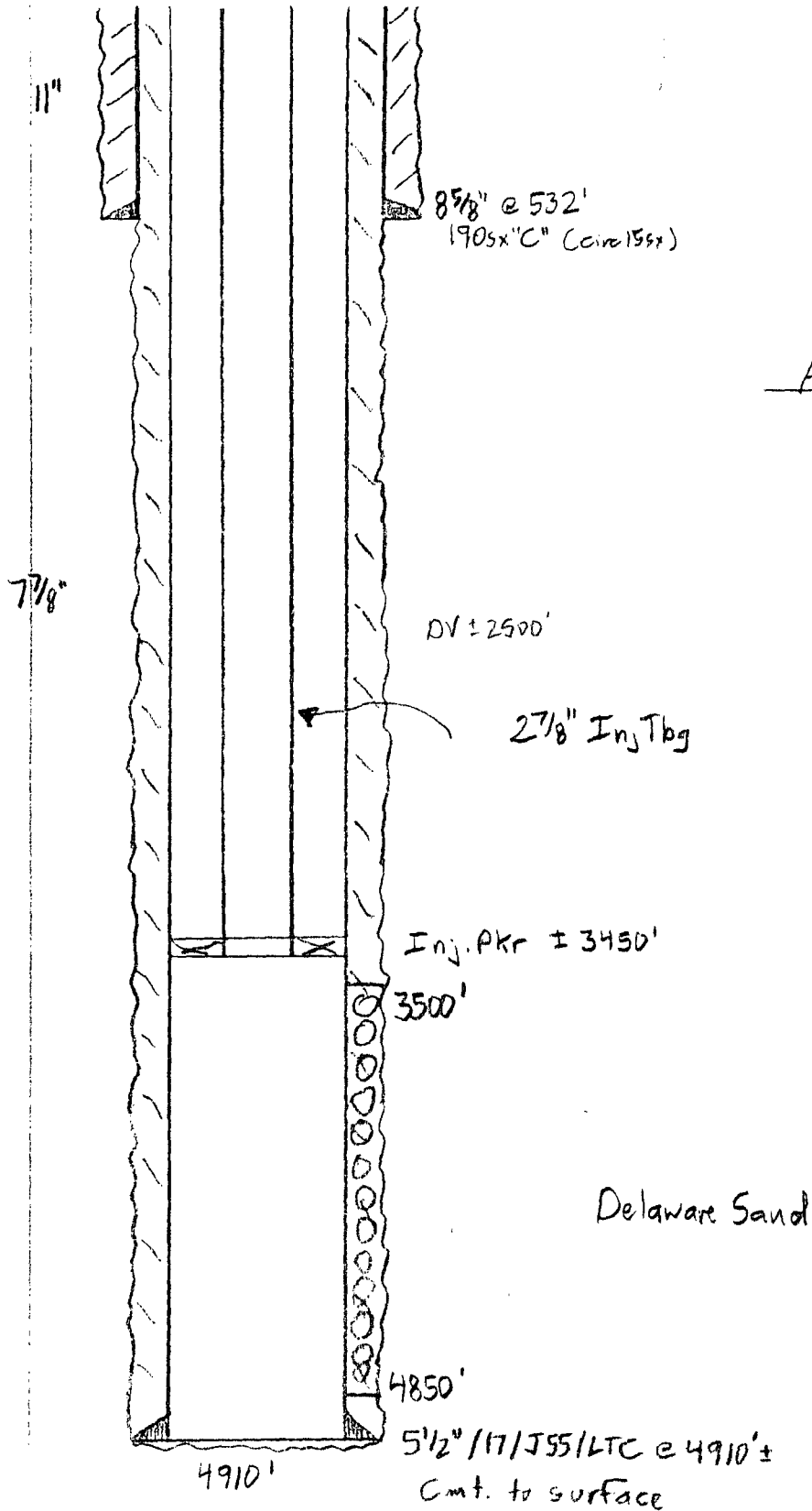
11170X 21 SWD No. 1

(Formerly Hammond 1)

1980' FNL, 660' FWL

E-21-255-28e

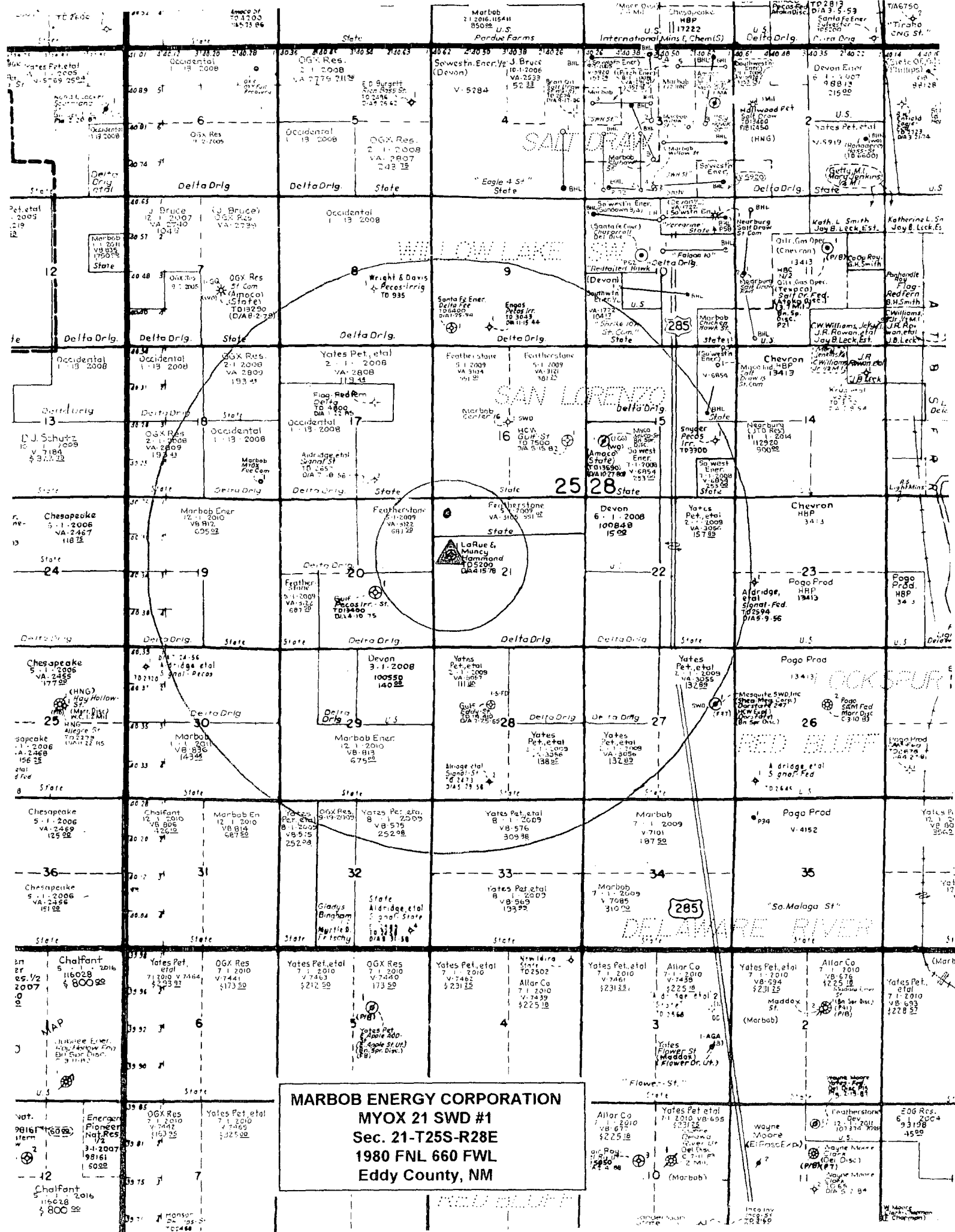
Eddy NM



**V.**

**MAP**





# **VI.**

**Wells Within ½ Mile  
Radius Area of Review  
That Penetrate  
Proposed Injection  
Zone**

Well: MYDX 21 ST 8

Location: 660' FNL, 330' FNL  
D- 21- 25s - 28e  
Eddy NM  
30-015- 37034

Zero: 17.5' AGL

KB: 3020.5'

GL: 3003'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	48	J55	STC	360'
9 5/8"	36	J55	STC	2360'
7"	23	N80	LTC	6526'
	23	P110	LTC	8699'
2 7/8"	6.5	J55	EVE	

17 1/2"

12 1/4"

8 3/4"

13 3/8" @ 360'  
400s x "C" (Circ 13s x)

TDC 1700' TS

9 5/8" @ 2360'  
525s x HLC + 250s x "C" (Circ 54s x)

Within 1/2 Mile Radius Area of Review

DV 5712'

FC 8660'

8446-57' (36) Harkay sd  
7" @ 8699'

1st 450s x Super H (Circ 133s x)  
2nd: 650s x HLC + 100s x "H"

8700'

**VII.**

**WATER ANALYSIS**

# HALLIBURTON

## PERMAIN BASIN OPERATIONS LABORATORY WATER ANALYSIS REPORT HOBBS, NEW MEXICO

COMPANY Maribob REPORT W09-055  
DATE July 12, 2009  
DISTRICT Artesia

*Delaware Produced Water*

SUBMITTED BY \_\_\_\_\_

WELL \_\_\_\_\_ DEPTH \_\_\_\_\_ FORMATION \_\_\_\_\_  
COUNTY \_\_\_\_\_ FIELD \_\_\_\_\_ SOURCE \_\_\_\_\_  
TANK \_\_\_\_\_

SAMPLE	Black River	Spanish Cedar 1	Wtr. Well C-00516	
Sample Temp.	70 °F	70 °F	70 °F	°F
RESISTIVITY	15.8	0.054	3.41	
SPECIFIC GR	1.000	1.154	1.002	
pH	7.85	5.43	7.33	
CALCIUM	750 mpl	30,000 mpl	1,000 mpl	mpl
MAGNESIUM	300 mpl	17,100 mpl	450 mpl	mpl
CHLORIDE	104 mpl	140,306 mpl	240 mpl	mpl
SULFATES	Light mpl	Light mpl	Heavy mpl	mpl
BICARBONATES	153 mpl	61 mpl	262 mpl	mpl
SOLUBLE IRON	0 mpl	25 mpl	0 mpl	mpl
<CL	N	N	N	
Sodium	mpl	mpl	mpl	mpl
TDS	mpl	mpl	mpl	mpl
OIL GRAVITY	@ °F	@ °F	@ °F	@ °F

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MPL = Milligrams per liter  
Resistivity measured in Ohm-cm

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ANALYST \_\_\_\_\_

# HALLIBURTON

PERMAIN BASIN OPERATIONS LABORATORY  
WATER ANALYSIS REPORT  
HOBBS NEW MEXICO

COMPANY Marbob

REPORT NO. 008-156  
DATE November 15 2008  
DISTRICT Hobbs

*Bone Spring Sand  
Produced Water*

SUBMITTED BY \_\_\_\_\_

WELL Save DA 21 Fed. #1 DEPTH \_\_\_\_\_ FORMATION \_\_\_\_\_  
COUNTY \_\_\_\_\_ FIELD \_\_\_\_\_ SOURCE \_\_\_\_\_

## SAMPLE

Sample Temp.	70 °F			
RESISTIVITY	0.968			
SPECIFIC GR	1.095			
pH	6.53			
CALCIUM	7500 mpl			
MAGNESIUM	6000 mpl			
CHLORIDE	83125 mpl			
SULFATES	Light mpl			
BICARBONATES	231 mpl			
SOLUBLE IRON	0 mpl			
KCL	Negative			
Sodium	0 mpl			
TDS	0 mpl			
OIL GRAVITY	0 °F			

## REMARKS

MPL = Milligrams per liter  
Rstivity measured in cm-1 at 25 °C

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ANALYST: MMB/DA

**X.**

**Dual Laterolog Across  
Across Proposed  
Delaware Sand Portion  
of Injection Interval**



# Dual Sinterology

FILE NO.

COMPANY

C.E. 12 M.  
LARUE & MUNCY

WELL

HAMMOND NO. 1

FIELD

WILDCAT

COUNTY

EDDY

STATE

NEW MEXICO

LOCATION:

1980' FNL &amp; 660' FWL

Other Services  
BHC AL/GR

SEC 21 TWP 25-S RGE 28-E

GROUND LEVEL

Elev. 2994

KB  
Elevations  
3004Permanent Datum  
Log Measured from  
Drilling Measured fromK. B. 10 Ft. Above Permanent Datum  
K. B.DF  
GL 2994

Date

3-30-78

Run No.

ONE

Depth-Driller

4910

Depth-Logger

4873

Bottom Logged Interval

4872

Top Logged Interval

2400

Sealing-Driller

8 5/8 @ 545

Sealing-Logger

545

Bit Size

7 7/8"

Type Fluid in Hole

SALT GEL

Density and Viscosity

10.1 40

pH and Fluid Loss

9.5 16.6cc

Source of Sample

PIT

Rm @ Meas. Temp.

.034 @ .72 °F

Rmf @ Meas. Temp.

.034 @ .72 °F

Rmc @ Meas. Temp.

.034 @ .72 °F

Source of Rmf and Rmc

MEAS.

Rm @ BHT

.023 @ 105°F

Time Since Circ

13 HOURS

Aux. Rec. Temp. Deg. F

105°F

Equip. No. and Location

6123 HOBBS

Recorded By

MC ATEE

LABILE-BEVERS

FOLD HERE

THIS HEADINGS AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS

SHALLOW CURVE INTERRUPTED ON REPEAT SEC.  
DEEP CURVE INTERRUPTED ON MAIN LOG.  
G/R SENS. = 649 T.C. = 1

Equipment Used

Series No	1221	3501	1306
Run No.	ONE	ONE	ONE
S.O.	95939	95939	95939
Tool No.	37959	32038	31410
Elec. No.	31396	-	-
Part No.	31427	-	-

Changes in Mud Type or Additional Samples

Rate	Sample No.			
Depth-Driller				
Type Fluid in Hole				
Dens.	Visc.			
H	Fluid Loss	cc	cc	
Source of Sample				
m @ Meas. Temp.	@	°F	@	°F
mf @ Meas. Temp.	@	°F	@	°F
mc @ Meas. Temp.	@	°F	@	°F
Source Rmf Rmc				
m @ BHT	@	°F	@	°F
mf @ BHT	@	°F	@	°F
mc @ BHT	@	°F	@	°F

Type Log

Depth

Scale Changes

Scale Up Hole

Scale Down Hole

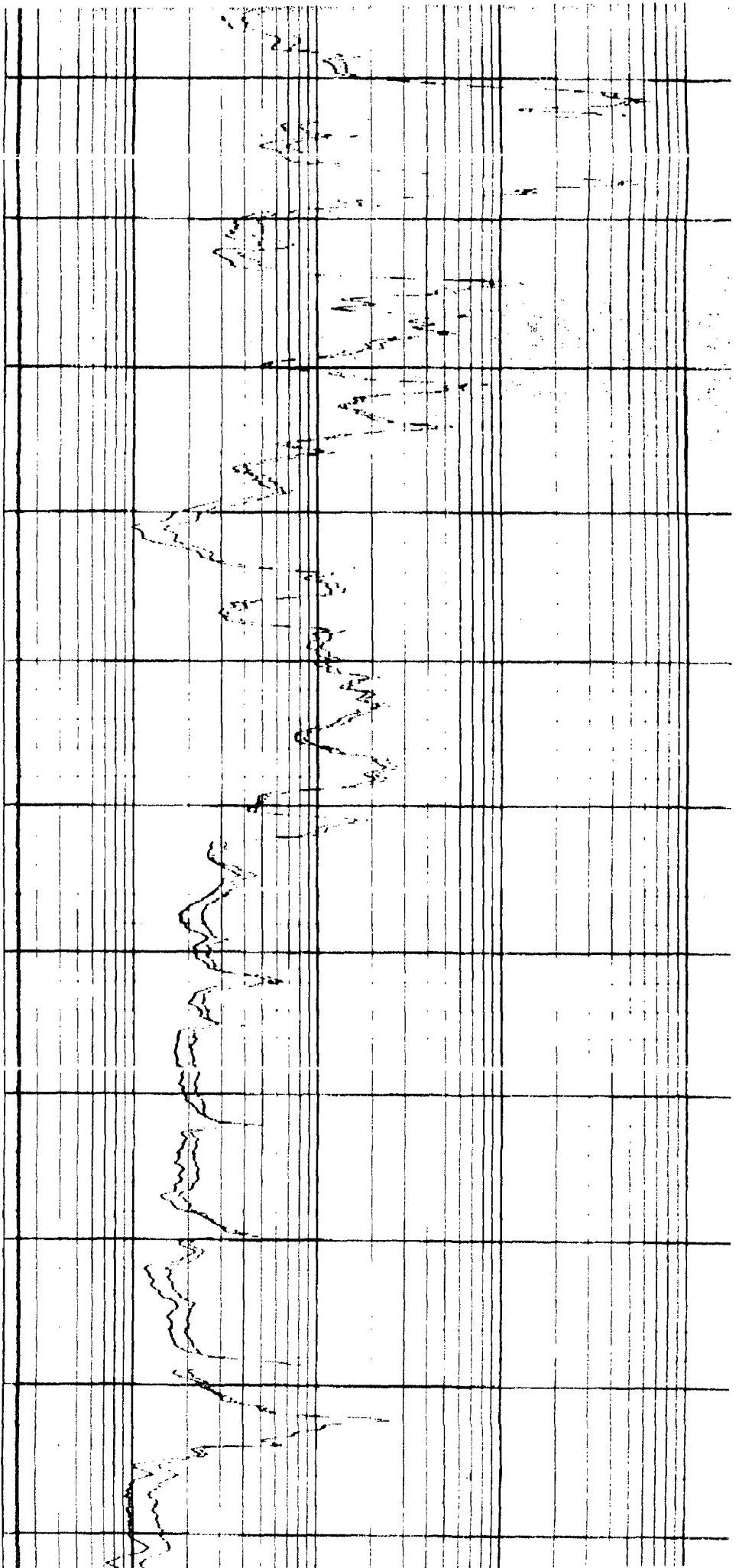
Equipment Data

Run No.	Tool Type	Pad Type	Tool Position	Other
ONE	SEE ABOVE		CENTRALIZED	

ELECTOR TYPE SCINT.  
ELECTOR LENGTH 6"

BEAM WIDTH 2 1/4"





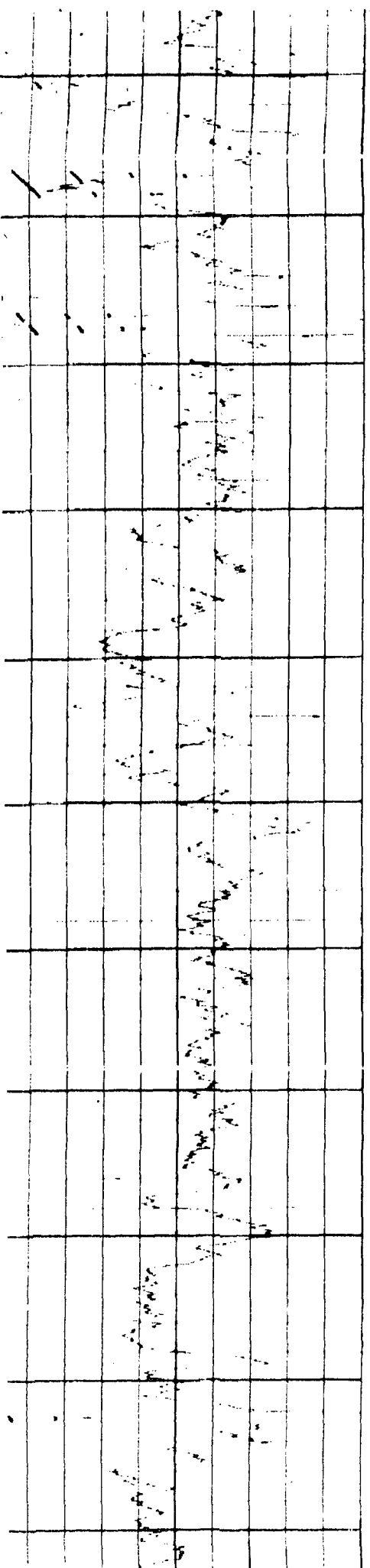
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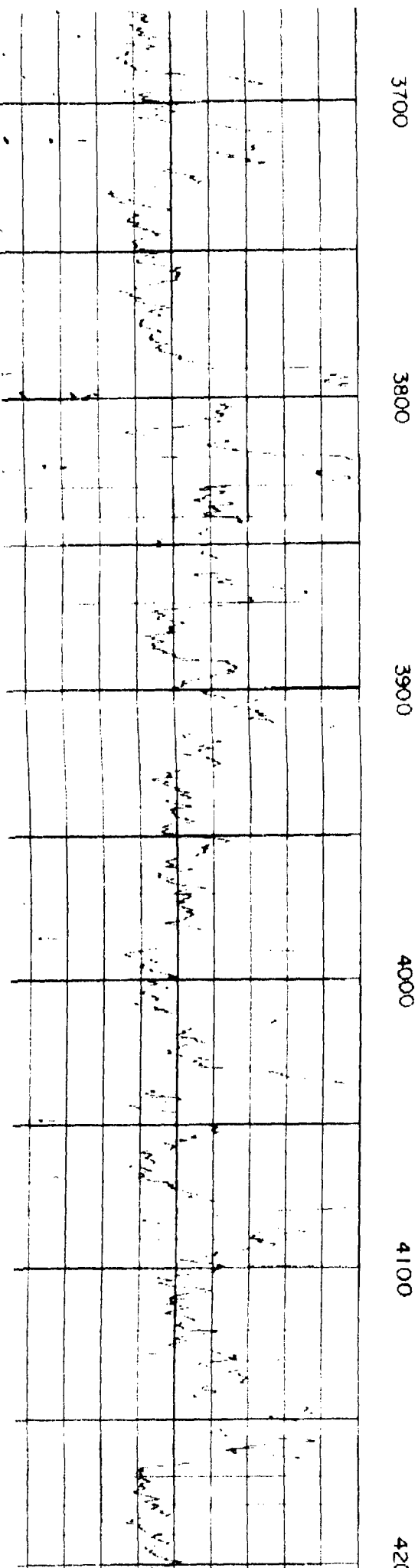
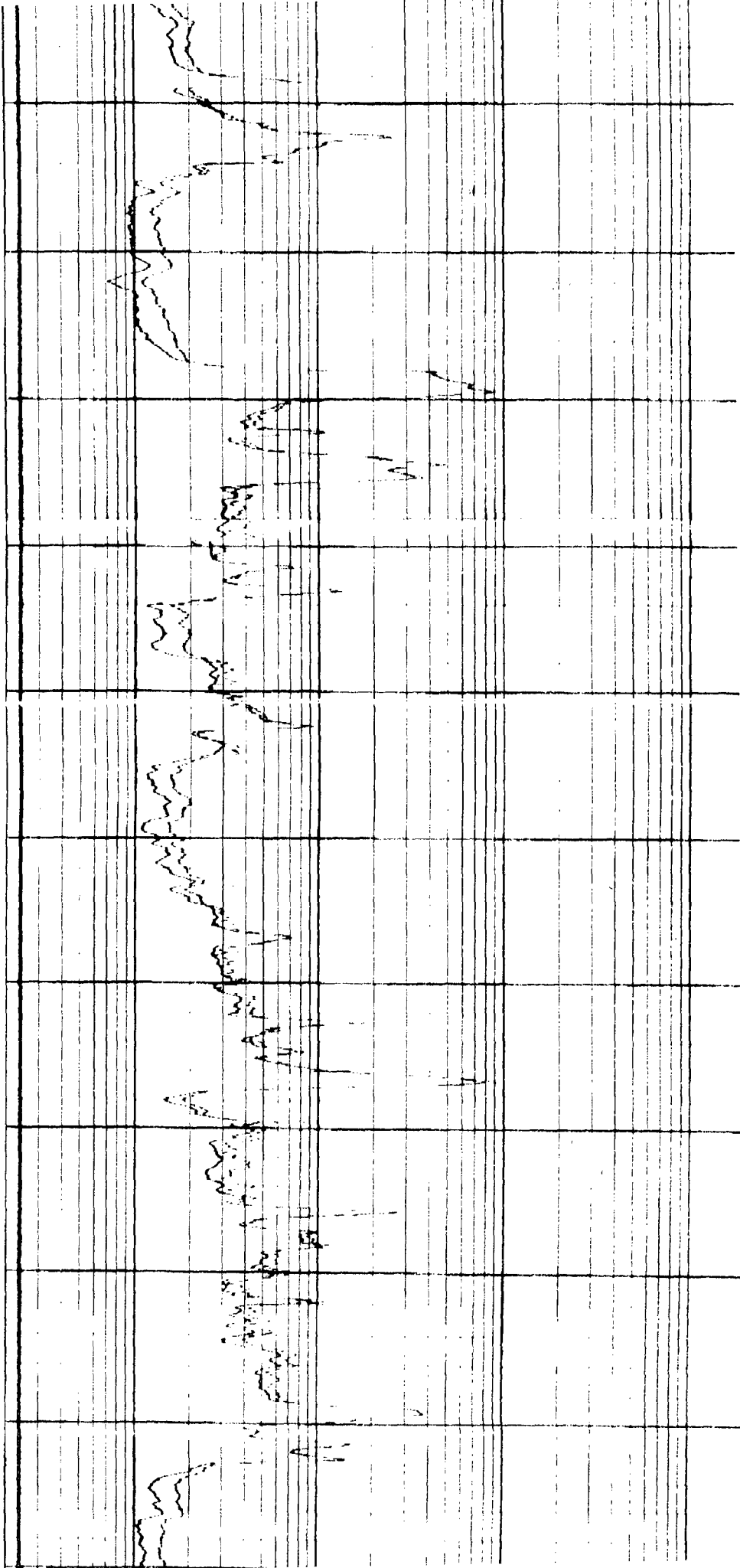
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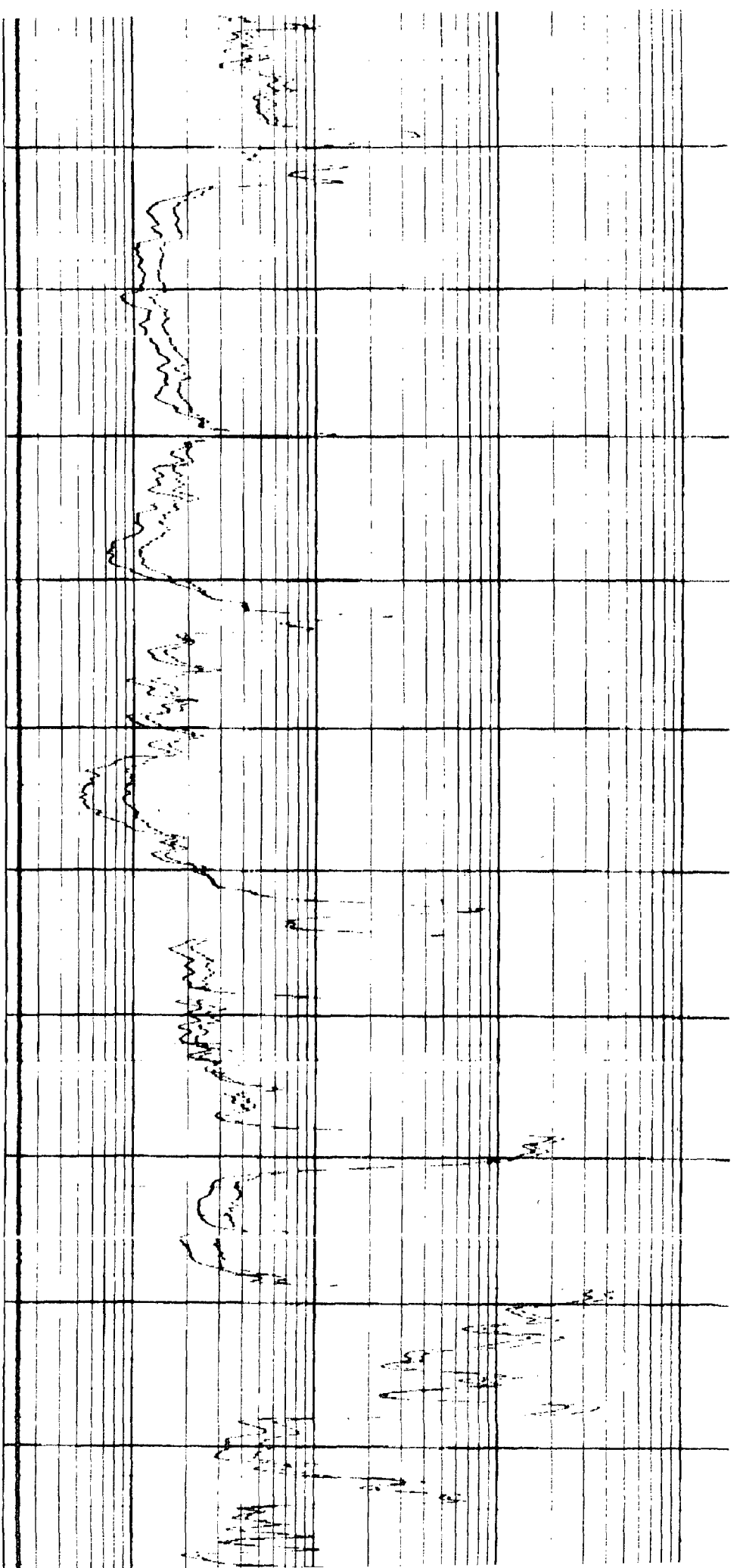
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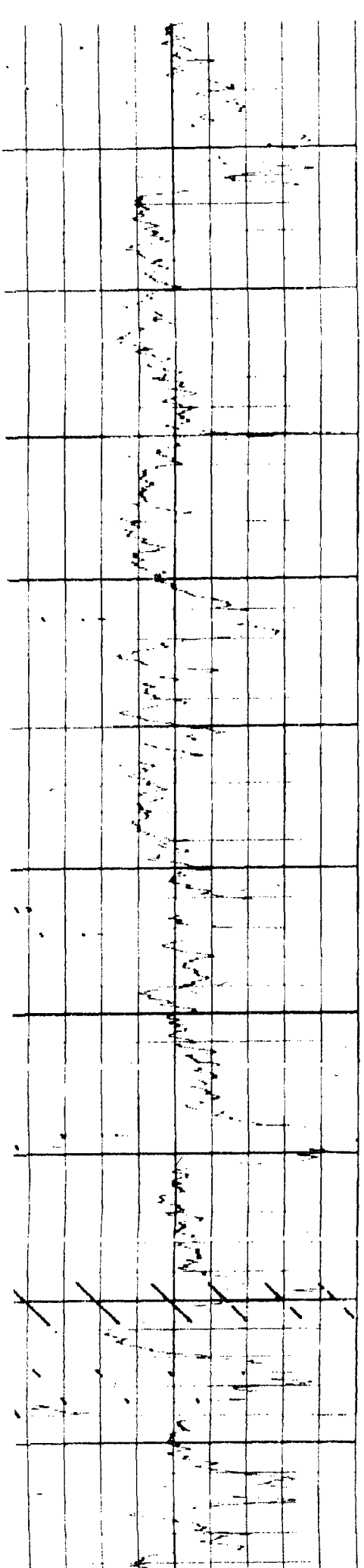
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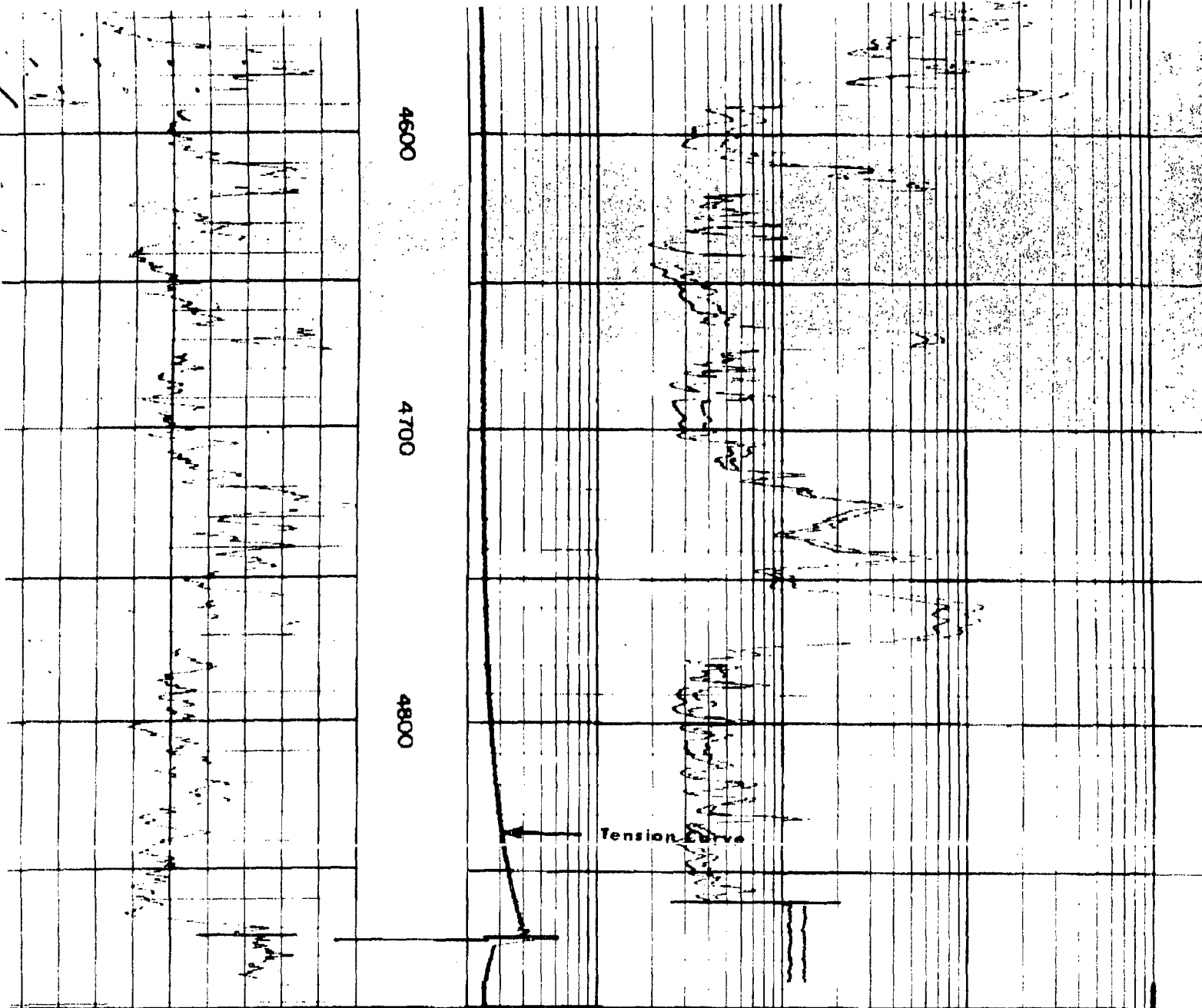
4300

4400

4500

4600





<div>16</div>		<div>.2 1.0 10 100 1000</div>
<div>HOLE SIZE - INCHES</div>		<div>DEEP LATEROLOG</div>
<div>API UNITS 100</div> <div>10 API/CD</div>		<div>.2 1.0 10 100 1000</div>
		<div>SHALLOW LATEROLOG</div>
		<div>.2 1.0 10 100 1000</div>
<div>GAMMA RAY &amp; CALIPER</div>	<div>DEPTH</div>	<div>RESISTIVITY</div> <div>Ohms m<sup>2</sup>/m</div>

# **XI.**

## **Fresh Water Sample Analyses**

# HALLIBURTON

## PERMAIN BASIN OPERATIONS LABORATORY WATER ANALYSIS REPORT HOBBS, NEW MEXICO

COMPANY Marbob  
Stock Water Well  
SE/4 NE/4 SE/4 Sec. 20. 25s-28e

REPORT DATE W09-059  
July 30, 2009  
DISTRICT Hobbs

SUBMITTED BY \_\_\_\_\_

WELL Stock Tanks DEPTH FORMATION  
COUNTY FIELD SOURCE

SAMPLE	5-26S-28C	C-2160 5-S	C03413	
Sample Temp.	70 °F	70 °F	70 °F	°F
RESISTIVITY	15.8	3.41	3.41	
SPECIFIC GR.	1.000	1.002	1.002	
pH	8.57	8.12	7.89	
CALCIUM	700 mpl	1,000 mpl	1,150 mpl	mpl
MAGNESIUM	390 mpl	750 mpl	750 mpl	mpl
CHLORIDE	45 mpl	1,222 mpl	316 mpl	mpl
SULFATES	Light mpl	Moderate mpl	Moderate mpl	mpl
BICARBONATES	170 mpl	366 mpl	292 mpl	mpl
SOLUBLE IRON	0 mpl	0 mpl	0 mpl	mpl
KCL	Negative	Negative	Negative	
Sodium	mpl	mpl	mpl	0 mpl
TDS	mpl	mpl	mpl	0 mpl
OIL GRAVITY	@ °F	@ °F	@ °F	@ °F

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MPL = Milligrams per liter  
Resitivity measured in: Ohm/m2/m

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ANALYST: JH



# New Mexico Office of the State Engineer

## Point of Diversion by Location

(with Drilling Information)

Sub		(acre ft per annum)		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)		(NAD83 UTM in meters)		(in feet)	
WR File Nbr	basin	Use	Diversion	County	POD Number	Grant	Source	q q q	Depth
C 01276	STK	3	ED	C 01278					Well
C 01522	DOM	3	ED	C 01522					205
C 01573	PRO	3	ED	C 01573					150
C 03413	STK	3	ED	C 03413	POD1				176
C 12761	STK	-	ED	C 12761					96

Record Count: 5

POD Search:

POD Basin: Carlsbad

PLSS Search:

Section: 16, 17, 20, 21, Township: 25S Range: 28E  
22, 28, 29

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/22/09 10:33 AM

Page 1 of 1

POINT OF DIVERSION BY LOCATION



November 23, 2010

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

Re: Legal Notice  
Water Disposal Well

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 black ink, appearing to read "Dean Chumbley", written over a horizontal line.

Dean Chumbley  
Land Advisor

DC/sd

enclosure



**ARTESIA DAILY PRESS**  
**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 MYOX 21 #1, is located 1980' FNL 660' FWL, Sec. 21, Township 25 South, Range 28 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware and Bone Spring formations. The disposal water will be injected into the Delaware formation at a depth of 3500-4850' at a maximum surface pressure of 700 psi and a maximum rate of 5000 BWPD. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Street, Santa Fe, New Mexico, 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Dean Chumbley at COG Operating, LLC at [dchumbley@conchoresources.com](mailto:dchumbley@conchoresources.com) or 575-748-6940.

Published in the Artesia Daily Press, Artesia, New Mexico  
\_\_\_\_\_, 2010.



November 23, 2010

Devon Energy Corporation  
Delta Drilling  
20 N. Broadway, Ste. 1500  
Oklahoma City, OK 73102-8260

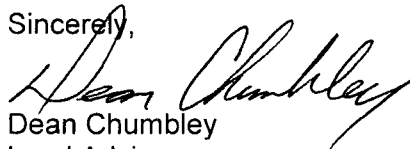
Re: Application to Inject  
MYOX 21 SWD #1  
Township 25 South, Range 28 East, NMPM  
Section 21: 1980 FNL 660 FWL, Unit E  
Eddy County, New Mexico

Ladies and Gentlemen:

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

Please do not hesitate to contact us should you have any questions.

Sincerely,

  
Dean Chumbley  
Land Advisor

DC/sd  
enclosure

**Jones, William V., EMNRD**

---

**From:** Brian Collins [BCollins@conchoresources.com]  
**Sent:** Monday, November 22, 2010 12:17 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Stormi Davis; Matt Corser; Morris Keith  
**Subject:** MYOX 21 SWD 1, SWD-1196, 30-015-22434

Will:

We just finished the work on this well and Richard Enge told us the C-108 had expired. I was wondering if you had any record of a request to extend the approval date? I know I sent you requests to extend approval on SWD 1193, SWD 1194 and SWD 1187 which you approved (6 mos extension on SWD 1193 and 1194, one year on SWD 1187). I didn't find anything in my records indicating I asked for an extension on the captioned C-108. I apologize if I dropped the ball and didn't request an extension on the MYOX 21 SWD 1.

If you didn't approve a C-108 extension, would you email Matt Corser ([mcorser@conchoresources.com](mailto:mcorser@conchoresources.com)) and Stormi Davis ([sdavis@conchoresources.com](mailto:sdavis@conchoresources.com)) and let them know what needs to be done to secure C-108 approval? My last day at Concho is tomorrow so I won't be handling this. Thanks.

Brian Collins  
COG OPERATING LLC  
2208 W Main St  
Artesia, New Mexico 88210-3720



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**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Tuesday, November 23, 2010 8:38 AM  
**To:** Stormi Davis; Matt Corser; Morris Keith  
**Cc:** Inge, Richard, EMNRD; Gray, Darold, EMNRD; Ezeanyim, Richard, EMNRD  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Hello to you guys at COG (please send your contact info and titles in OUTLOOK format?):

As Brian requested, I looked through our files and could not find any request to extend this permit, so it has expired per the stip. In the Rules.

Please send in another C-108 requesting to use this well for disposal. You can basically use the recently submitted C-108 as a template or just copy it.

However, I looked this over and it seems the notices sent out with the previous application may have been lacking. Devon was the only party noticed along with a newspaper notice. I see in the file, this is a FEE tract, but nothing as to who that surface owner is and whether they were noticed.

Please supply your landman with the Midland map of this location with the ½ mile circle drawn on it and ask your Landman to provide you with whomever controls the minerals in every separately owned tract in the ½ mile circle. Please identify these tracts and list those owners. Below is the definition of whom should be noticed:

**19.15.26.7 DEFINITIONS:**

**A. "Affected person"** means the division designated operator; in the absence of an operator, a lessee whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant files the application; or in the absence of an operator or lessee, a mineral interest owner whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant filed the application for permit to inject.

**(2)** The applicant shall furnish, by certified or registered mail, a copy of the application to each **owner of the land surface on which each injection or disposal well is to be located** and to each leasehold operator or other **affected person** within any tract wholly or partially contained within one-half mile of the well.

Many Regards,

Will Jones  
New Mexico  
Oil Conservation Division  
Images Contacts

---

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Will:

2208 W Main St  
Artesia, New Mexico 88210-3720  
575.748.6946



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**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Tuesday, November 23, 2010 9:20 AM  
**To:** Stormi Davis  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Hello Stormi:

Yes, new newspaper notice and new certified notice and statement from landman as to Devon owning the surface and the other ownership within the AOR.

Thank You,

Will Jones  
New Mexico  
Oil Conservation Division  
[Images](#) [Contacts](#)

---

**From:** Stormi Davis [mailto:SDavis@conchoresources.com]  
**Sent:** Tuesday, November 23, 2010 9:05 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Good morning.

I am getting the application ready to send. The surface owner is also Devon. Do we need to place another legal notice in the newspaper?

Thank you for your help.

**Stormi Davis**  
Regulatory Analyst  
COG OPERATING LLC  
2208 W Main St  
Artesia, New Mexico 88210-3720  
575.748.6946



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## Jones, William V., EMNRD

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**Brian Collins**

## Jones, William V., EMNRD

---

**From:** Stormi Davis [SDavis@conchoresources.com]  
**Sent:** Monday, November 29, 2010 8:22 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

I checked again with Dean, and he said there are no other owners.

**Stormi Davis**  
Regulatory Analyst  
COG OPERATING LLC  
2208 W Main St  
Artesia, New Mexico 88210-3720  
575.748.6946



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**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Tuesday, November 23, 2010 5:00 PM  
**To:** Stormi Davis  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Good for the surface owner – thank you. Send the proof of notice to Devon for that, or the certified receipt number.

Does Devon and COG control all minerals (have leases) within ½ mile of this well? No one else has a lease?

Will Jones  
New Mexico  
Oil Conservation Division  
[Images](#) [Contacts](#)

---

**From:** Stormi Davis [mailto:SDavis@conchoresources.com]  
**Sent:** Tuesday, November 23, 2010 11:53 AM  
**To:** Jones, William V., EMNRD  
**Subject:** FW: MYOX 21 SWD 1, SWD-1196, 30-015-22434

The emails exchanged below verify that Delta Drilling was acquired by Devon. Do you need something more official, or will this work for you? I sent the application this morning.

**Stormi Davis**  
Regulatory Analyst  
COG OPERATING LLC  
2208 W Main St  
Artesia, New Mexico 88210-3720  
575.748.6946





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**From:** Gray, Ken [mailto:Ken.Gray@dvn.com]  
**Sent:** Tuesday, November 23, 2010 11:24 AM  
**To:** Dean Chumbley  
**Subject:** RE: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Dean, Delta Drilling was acquired by Kerr McGee who was acquired by Devon in 1996 or 97, so Devon should be the owner of the surface and the minerals on all of those Delta Drilling lands in that area.

---

**From:** Dean Chumbley [mailto:dchumbley@conchoresources.com]  
**Sent:** Tuesday, November 23, 2010 11:46 AM  
**To:** Gray, Ken  
**Cc:** Stormi Davis  
**Subject:** FW: MYOX 21 SWD 1, SWD-1196, 30-015-22434

Ken

Would you be willing and able to verify that Delta Drilling is the private surface owner of the involved lands and that Devon owns and manages this lands. Messages below can be reviewed for that source of this request.

Thanks and have a Happy Thanksgivings,

**Dean Chumbley**  
COG OPERATING LLC  
Phone 575.748.6940  
Fax 575.748.6950  
2208 W Main St  
Artesia, New Mexico 88210-3720



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**From:** Stormi Davis  
**Sent:** Tuesday, November 23, 2010 9:42 AM  
**To:** Dean Chumbley  
**Subject:** FW: MYOX 21 SWD 1, SWD-1196, 30-015-22434

**Stormi Davis**  
Regulatory Analyst  
COG OPERATING LLC

—

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Northwestern New Mexico

OIL OR GAS SANDS OR ZONES

## IMPORTANT WATER SANDS

No. 1, from.....to.....feet. ....

No. 2, from.....to.....feet. ....

No. 3, from.....to.....feet. ....

No. 4, from.....to.....feet. ....

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	539	539	Surface and Anhydrite				
539	990	451	Red Bed and Anhydrite				
990	1669	679	Anhydrite				
1669	2290	621	Anhydrite and Salt				
2290	2523	233	Anhydrite and Shale				
2523	4636	2113	Sand and Anhydrite				

NO. OF COPIES RECEIVED	3
DISTRIBUTION	
AREA OFF	1
FILE	1
J.S.G.S.	
AND OFFICE	
OPERATOR	1

**RECEIVED**  
NEW MEXICO OIL CONSERVATION COMMISSION

APR 21 1978

**O. C. C.**  
ARTESIA, OFFICE

Form C-103  
Supersedes C-101  
C-102 and C-103  
Effective 1-1-65

**SUNDARY NOTICES AND REPORTS ON WELLS**

(DO NOT USE THIS FORM FOR OPERATIONS TO BE DONE IN A DIFFERENT RESERVOIR.  
USE THIS FORM FOR REPORTS ON OPERATIONS IN THE SAME RESERVOIR.)

Oil Well <input checked="" type="checkbox"/>	Gas Well <input type="checkbox"/>	OTHER: 30-015-22434
Name of Operator C. E. LaRue and B. N. Muncy, Jr. ✓		
Address of Operator P O Box 196 Artesia, NM 88210		
Location of Well UNIT LETTER E 1980 FEET FROM THE North LINE AND 660 FEET FROM West T1L, SECTION 21, TOWNSHIP 25 S, RANGE 28 E, NMPL.		

5a. Indicate Type of Lease State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.
7. Unit Agreement Date
8. Form of Lease Notice Harmond
9. Well No. 1
10. Field and Pool, or Wildcat Wildcat Delaware
12. County Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
ERECT REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
EMPHATICALLY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
ULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Plugged well 3/21/78, by pumping 35 sack cement plug from 3350' - 3450', 35 sack cement plug from 2500' - 2600', 35 sack cement plug from 2150' - 2250', 35 sack cement plug from 1100' - 1200', 35 sack cement plug from 500' - 600' and 15 sack cement plug at surface, with heavy mud between all plugs. Set dry hole marker and cleaned up location.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

WFO <i>[Signature]</i>	TITLE Operator	DATE 4/18/78
APPROVED BY <i>[Signature]</i>	TITLE OIL AND GAS INSPECTOR	DATE JUN 1 1982
CONDITIONS OF APPROVAL, IF ANY:		

# Affidavit of Publication

NO.

21463

STATE OF NEW MEXICO

County of Eddy:

Walter L. Green

*Walter L. Green*

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 28, 2010

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

29th day of November 2010



OFFICIAL SEAL  
Danny Scott  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 3/18/2014

*Danny Scott*

Danny Scott  
Notary Public, Eddy County, New Mexico

# Copy of Publication:

## LEGAL NOTICE

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 MYOX 21 #1, is located 1980' FNL 660' FWL, Sec. 21, Township 25 South, Range 28 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware and Bone Spring formations. The disposal water will be injected into the Delaware formation at a depth of 3 500-4850' at a maximum surface pressure of 700 psi and a maxi-

mum rate of 5000 BWPD. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Street, Santa Fe, New Mexico, 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Dean Chumbley at COG Operating, LLC at dchumbley@conchoresources.com or 575-748-6940. Published in the Artesia Daily Press, Artesia, N.M., November 28, 2010. Legal No. 21463.

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

WFX PMX SWD 1196-A Permit Date 12/29/10 UIC Qtr (O/N/D)

# Wells 1 Well Name(s): MYOX 21 SWD #1 (Formerly Hammond #1)

API Num: 30-015-22434 Spud Date: 3/4/78 New/Old: 0 (UIC primacy March 7, 1982)

Footages 1980 FNL/660 FWL Unit E Sec 21 Tsp 25S Rge 28E County EDDY

General Location: S. of LOVING on 62/180

Operator: COG OPERATING LLC Contact DEAN CHUMBLEY

OGRID: 229137 RULE 5.9 Compliance (Wells) 8/28/50 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed Current Status:

Planned Work to Well:

Cleanup To 4910'

Diagrams: Before Conversion After Conversion Elogs in Imaging File:

Well Details:		Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New Existing	Surface	11 8 5/8	532	—	190	CIRC
New Existing	Interm					
New Existing	LongSt	7 7/8 5 1/2	4910'	(20000) →		(Plan to CIRC)
New Existing	Liner					
New Existing	OpenHole					

Depths/Formations:

	Depths, Ft.	Formation	Tops?
Formation(s) Above			
Injection TOP:	3500	3500 Del	Max. PSI 700 OpenHole Perfs ✓
Injection BOTTOM:	4850	4850 Del	Tubing Size 2 7/8 Packer Depth 3450
Formation(s) Below			

Capitan Reef? (Potash? Noticed?) [WIPR? Noticed?] Salado Top/Bot 1669-2290 Cliff House?

Fresh Water: Depths: 0-532' Formation Wells? yes Analysis? Affirmative Statement ✓

Disposal Fluid Analysis? Sources: Del / Bone SPRING

Disposal Interval: Analysis? Production Potential/Testing:

Notice: Newspaper Date 11/28/10 Surface Owner DEVON Mineral Owner(s)

RULE 26.7(A) Affected Persons: DEVON

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

.....Active Wells 10 Repairs? 0 Which Wells? —

.....P&amp;A Wells 0 Repairs? — Which Wells? —

Issues:

Request Sent Reply: