





RECEIVED OCD  
2012 SEP 13 P 12:30

September 11, 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  
Eata Fajita 8 State SWD #1  
Township 24 South, Range 33 East, N.M.P.M.  
Section 8: 2310' FNL & 2310' FWL  
Lea County, New Mexico

Dear Mr. Jones:

COG Operating LLC respectfully requests administrative approval for authorization to inject for the Eata Fajita 8 State SWD #1 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.

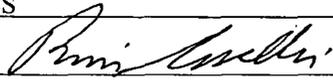
Sincerely,

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

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_  Yes \_\_\_\_\_ No
- II. OPERATOR: \_\_\_\_\_ COG OPERATING LLC \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ 2208 W. Main Street, ARTESIA, NM 88210 \_\_\_\_\_  
CONTACT PARTY: \_\_\_\_\_ BRIAN COLLINS \_\_\_\_\_ PHONE: \_\_\_\_\_ 575-748-6940 \_\_\_\_\_
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes \_\_\_\_\_  No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: \_\_\_\_\_ BRIAN COLLINS \_\_\_\_\_ TITLE: \_\_\_\_\_ Senior Operations Engineer \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_  \_\_\_\_\_ DATE: \_\_\_\_\_ 8/3/2012 \_\_\_\_\_
- E-MAIL ADDRESS: \_\_\_\_\_ bcollins@concho.com \_\_\_\_\_
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

C-108 Application for Authorization to Inject  
EATA FAJITA 8 STATE SWD #1  
Unit F, Sec 8 T24S R33E  
Lea County, NM

COG Operating, LLC, proposes to drill the captioned well to 7500' for salt water disposal service into the Delaware Sand from 5400' to 7500'. An APD will be submitted upon approval of this C-108.

- V. Map is attached.
- VI. Two wells within the ½ mile radius area of review penetrate the proposed injection zone. The Eata Fajita State #3H hasn't been drilled yet but it is on our drilling schedule.
- VII.
  - 1. Proposed average daily injection rate = 7000 BWPD  
Proposed maximum daily injection rate = 10000 BWPD
  - 2. Closed system
  - 3. Proposed maximum injection pressure = 1080 psi  
(0.2 psi/ft. x 5400' 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 5400' to 7500'. Any underground water sources will be shallower than 415'.
- IX. The Delaware sand injection interval might 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 sand.
- X. Well logs, if run, will be filed with the Division. A section of the neutron-density porosity log from an analogous well 3200' to the northwest 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: Eata Fajita 8 State SWO 1

WELL LOCATION: 231D' FNL 231D' FNL F 8 24s 33e  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

See Attached Schematic

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8" @ ±1250'

Cemented with: - sx. or 1750 ft<sup>3</sup>

Top of Cement: Surface Method Determined: Design

Intermediate Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_

Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Production Casing

Hole Size: 12 1/4" Casing Size: 9 5/8" @ ±5400'

Cemented with: - sx. or 3400 ft<sup>3</sup>

Top of Cement: Surface Method Determined: Design

Total Depth: 7500'

Injection Interval

5400' ± feet to 7500'

(Perforated or Open Hole indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 3 1/2" or 4 1/2" Lining Material: IPC / Duoline 20  
Type of Packer: Nickel plated double grip retrievable  
Packer Setting Depth: ± 5350'  
Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

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

2. Name of the Injection Formation: Delaware Sand

3. Name of Field or Pool (if applicable): Triple X, Johnson Ranch

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

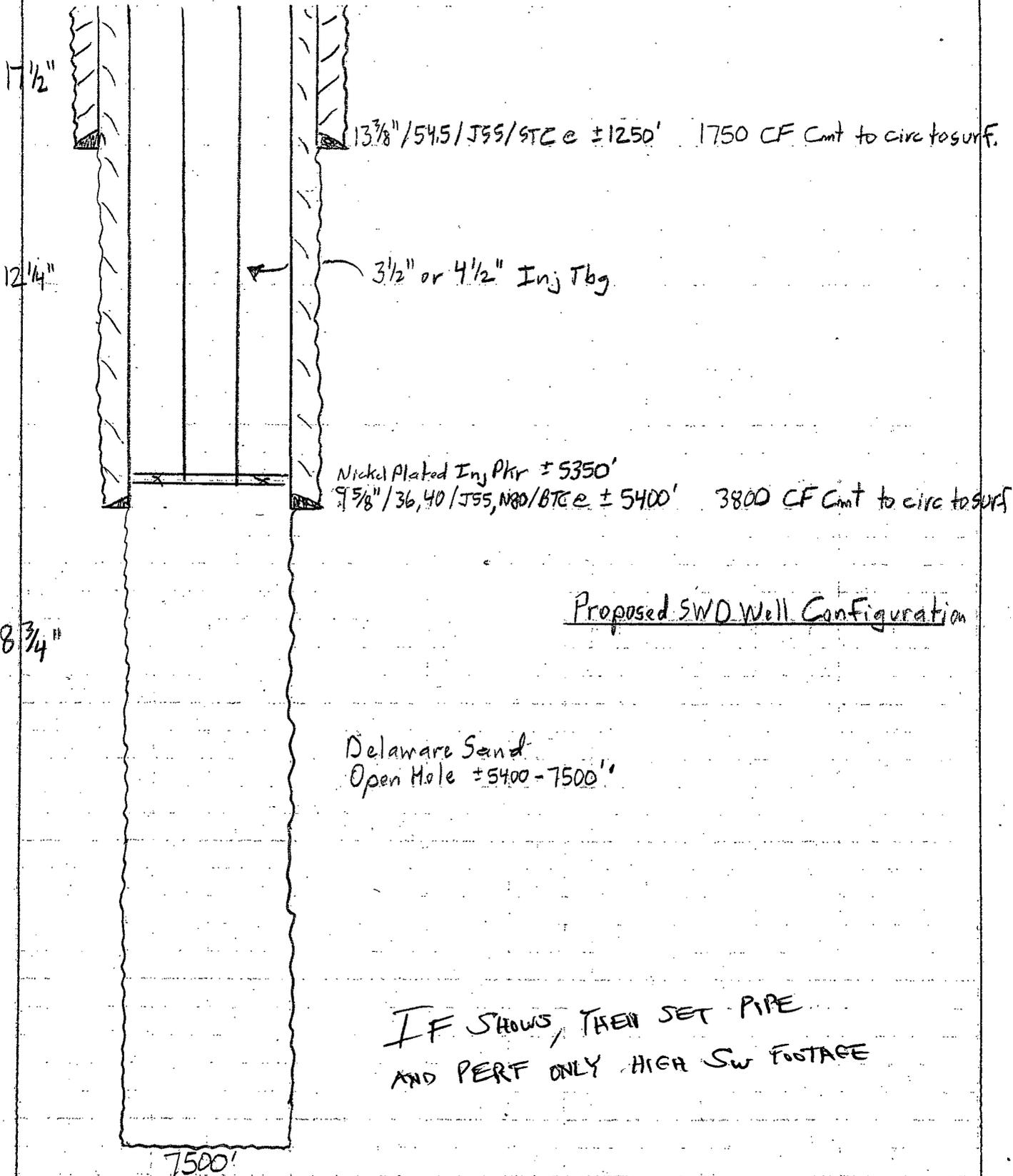
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

Overlying: Bell Canyon (Delaware) ± 4950' - ± 5000' Sec 12-24s-32e. Not productive Sec. 8  
24s-33e

Underlying: Bone Spring ± 9200' - ± 11000', Wolfcamp ± 13200',  
Strawn ± 14200', Atoka ± 14400', Morrow ± 15600'

30-025-

Eata Fajita 8 State SWD 1  
2310' FNL, 2310' FWL  
Unit F, Sec. 8-245-33e  
Lea, NM



**V.**

**MAP**

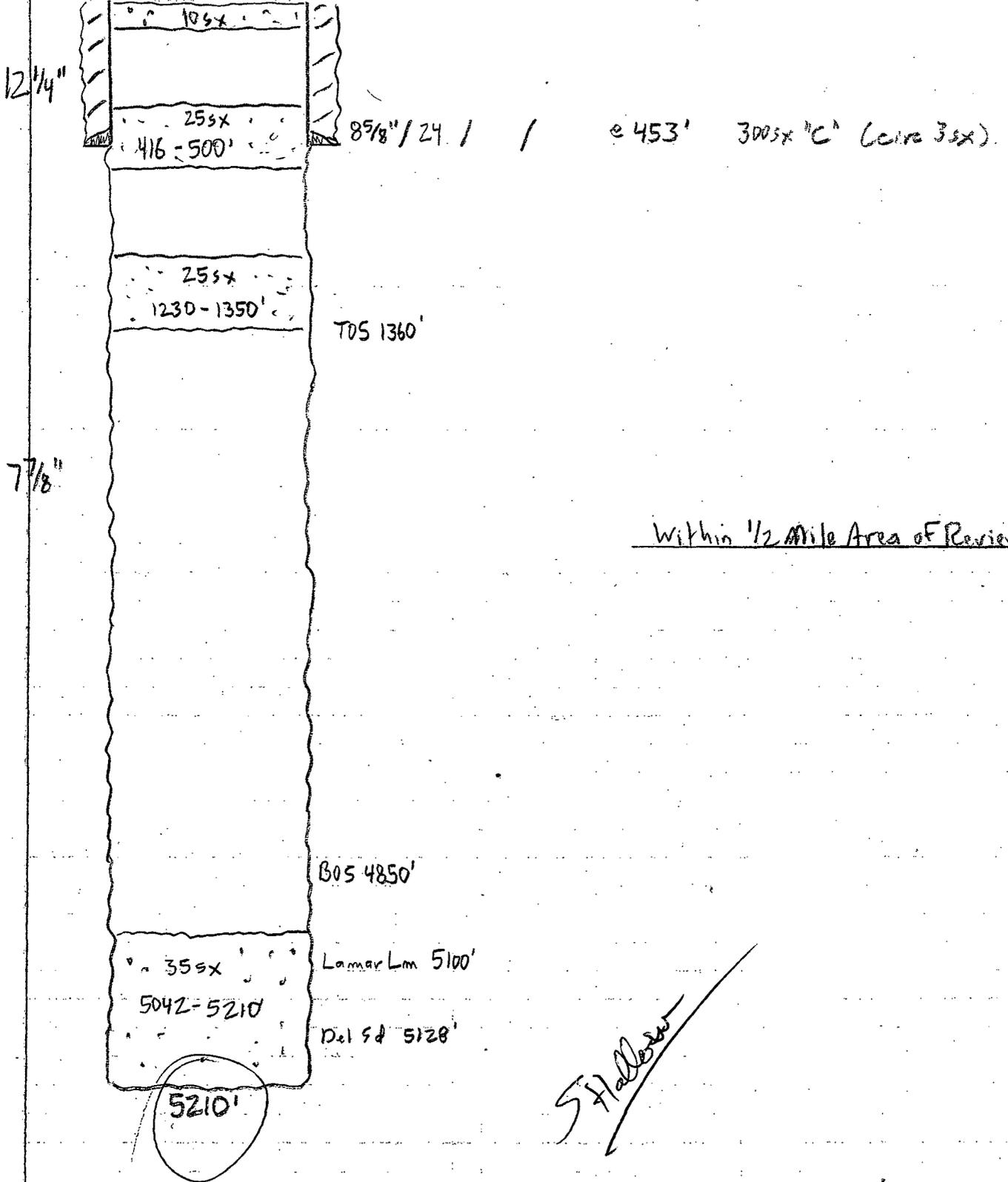


# VI.

## **Wells Penetrating Proposed Disposal Interval Within Half Mile Area of Review**

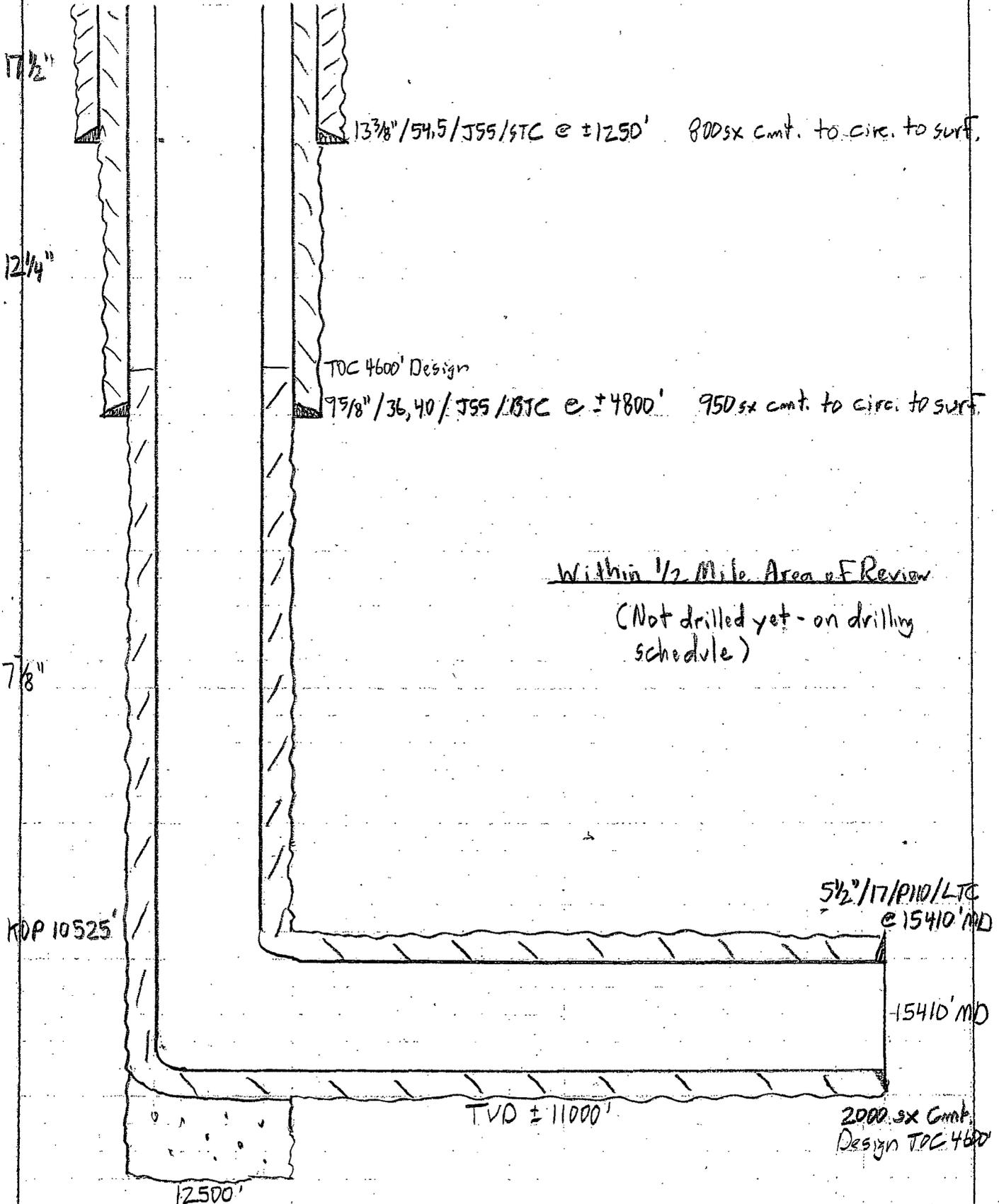
30-025-08370

New Mexico State AG-1  
660' FNL, 660' FWL  
D-8-245-33e  
Lea, NM

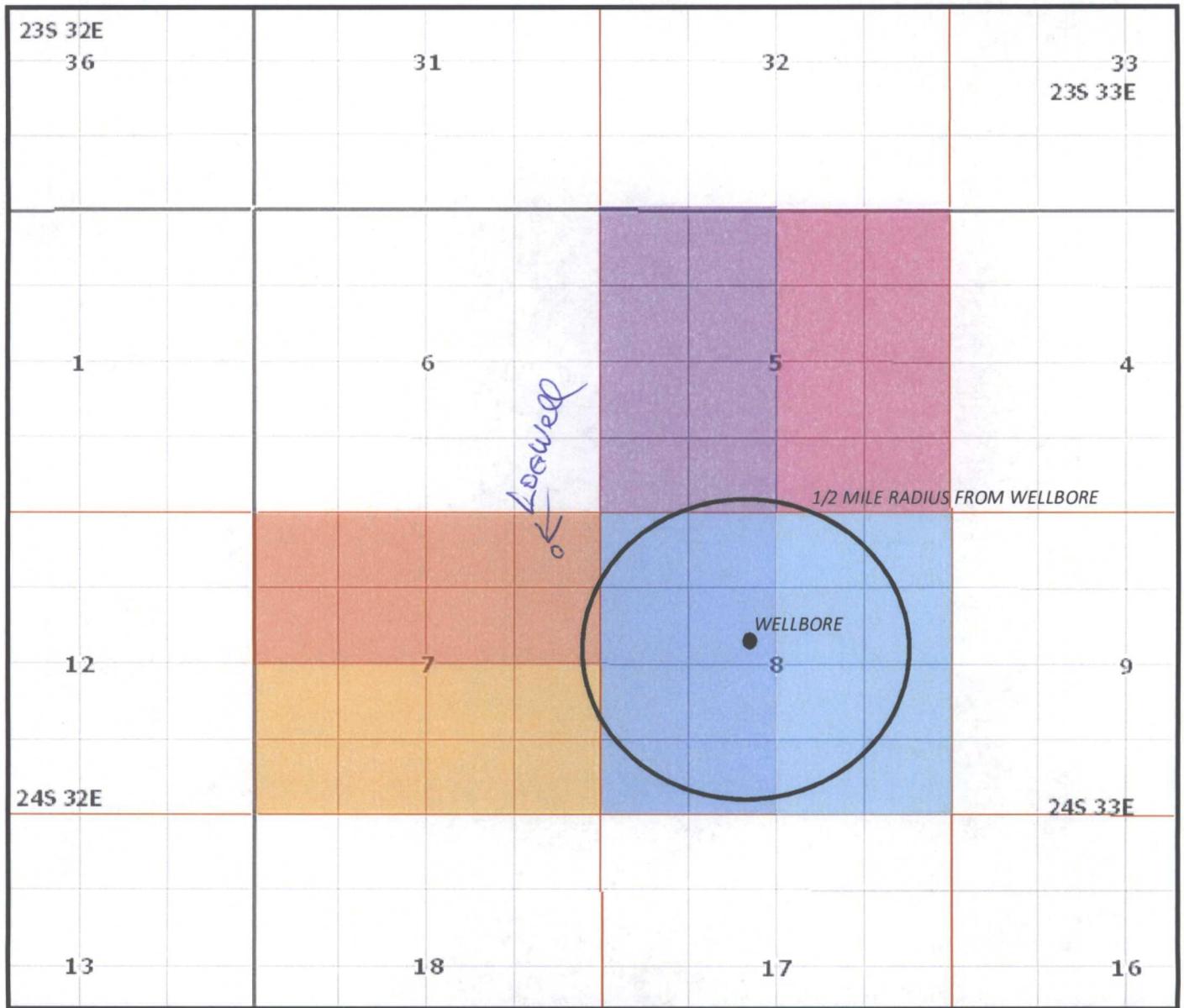


30-025-40571

Eata Fajita State 3H  
1870' FSL, 330' FWL  
L-8-24s-33e  
Lea, NM



Within 1/2 Mile Area of Review  
(Not drilled yet - on drilling schedule)



- Cimarex Energy Co.
- COG Production LLC
- COG Production LLC
- COG Production LLC
- COG Operating LLC
- COG Production LLC

**Eata Fajita 8 State SWD No. 1**  
**2310' FNL & 2310' FWL**  
**Sec. 8; T24s - R33e**  
**Lea County, New Mexico**

# **VII.**

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

Bone Spring Produced Water Sample

Analytical Laboratory Report for:

**MARBOR ENERGY CORPORATION**

Account Representative:  
Polk, Bill


B

Detailed Series

## Production Water Analysis

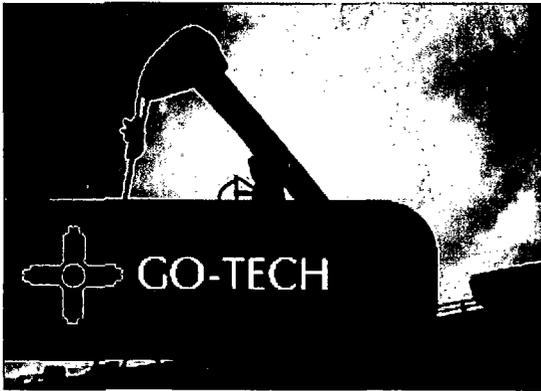
Listed below please find water analysis report from: LPC 31 FED, 1

Lab Test No: 2006151411      Sample Date: 12/13/2006

Specific Gravity: 1.135

TDS: 206426      pH: 6.49

Cations:	
mg/L	as
Calcium (Ca <sup>++</sup> )	11067
Magnesium (Mg <sup>++</sup> )	1751
Sodium (Na <sup>+</sup> )	64721
Iron (Fe <sup>++</sup> )	58.20
Potassium (K <sup>+</sup> )	1164.0
Barium (Ba <sup>++</sup> )	0.83
Strontium (Sr <sup>++</sup> )	407.00
Manganese (Mn <sup>++</sup> )	1.35
Anions:	
mg/L	as
Bicarbonate (HCO <sub>3</sub> <sup>-</sup> )	220
Sulfate (SO <sub>4</sub> <sup>-2</sup> )	1400
Chloride (Cl <sup>-</sup> )	126800
Gases:	
Carbon Dioxide	170
Hydrogen Sulfide	17



- ~ Home
- ~ Production Data ▶
- ~ Well Data ▶
- ~ NM Pricsheet
- ~ Water Data ▶
- ~ Projects ▶
- ~ Software ▶
- ~ Archive ▶
- ~ Other Links ▶
- ~ Help ▶

North American Oil and Gas News

IEA claims global warming may lead to 'Miami Beach in Boston' situation unless urgent action is taken

Enbridge reports second quarter adjusted earnings of \$277 million

Imperial Resources; SWDF full disposal test to commence

Drako Capital announces update on Stolberg well

Source: Oil Voice

**NYMEX LS Crude** 88.73

**Navajo WTXI** 0

**Henry Hub** 3.01

Updated : 8/1/2012

State Land Office Data Access

OCD well/log image files

PRRC NM-TECH NM-BGMR

*Delaware Sample Representative of Produced and Receiving Formations*

- ☐ NM WAIDS
  - ☐ Data
    - Produced Water
    - Ground Water
    - Conversion Tools
  - ☐ Scale
    - Scale details
    - Stiff
    - Oddo
    - Probable Mineral Composition mix
  - ☐ Corrosion
    - ☐ Theory
      - Uniform
      - Galvanic
      - Crevise
      - Hydrogen Damage
      - EIC
      - Erosion
    - ☐ Equipment

General Information About: Sample 4412			
HANAGAN B FEDERAL			
API	3002508151	Sample Number	
Unit/Section/Township/Range	O / 15 / 24S / 32E	Field	DOUBLE X
County	Lea	Formation	DEL
State	NM	Depth	
Lat/Long	32.21178 , -103.66422	Sample Source	UNKNOWN
TDS (mg/L)	229709	Water Type	
Sample Date (MM/DD/YYYY)		Analysis Date (MM/DD/YYYY)	
Remarks/Description			
Cation Information (mg/L)		Anion Information (mg/L)	
Potassium (K)		Sulfate (SO)	491
Sodium (Na)		Chloride (Cl)	142100

- Artificial
- Casing and Tubing
- Surface
- Enhanced
- Gases
  - O2
  - CO2
  - H2S
  - Microbes
- Prevention
- References
- Maps
  - Trend Maps
    - GW
    - PW
    - Geology
    - PLSS
    - Help
  - Online Map

Calcium (Ca)		Carbonate (CO <sub>3</sub> )	
Magnesium (Mg)		Bicarbonate (HCO <sub>3</sub> )	168
Barium (Ba)		Hydroxide (OH)	
Manganese (Mn)		Hydrogen Sulfide (H <sub>2</sub> S)	
Strontium (Sr)		Carbon Dioxide (CO <sub>2</sub> )	
Iron (Fe)		Oxygen (O)	

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801

**X.**

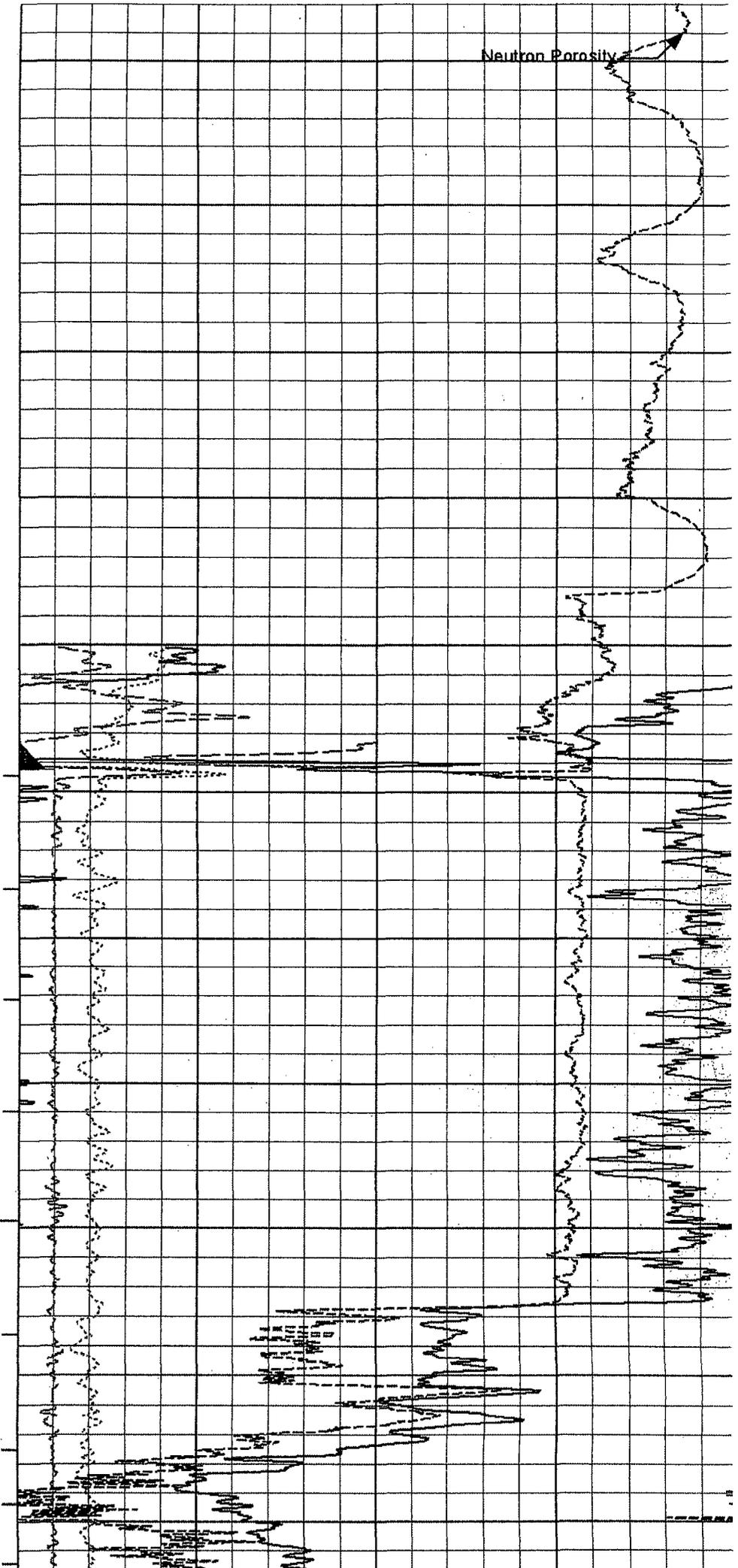
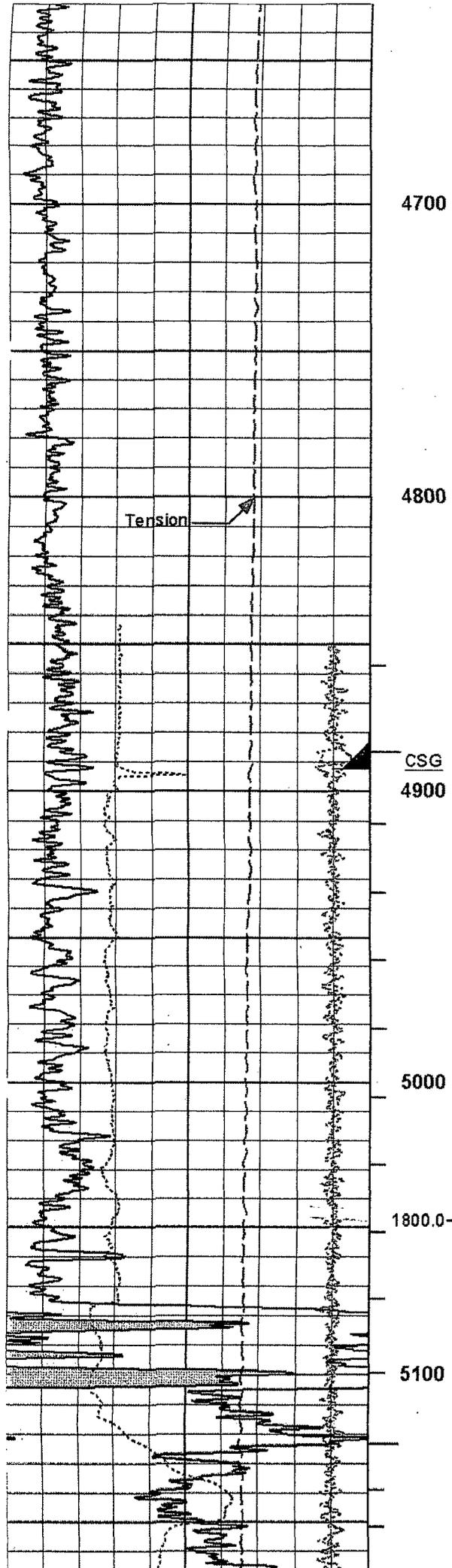
**Log Across Proposed  
Delaware Sand  
Injection Interval**

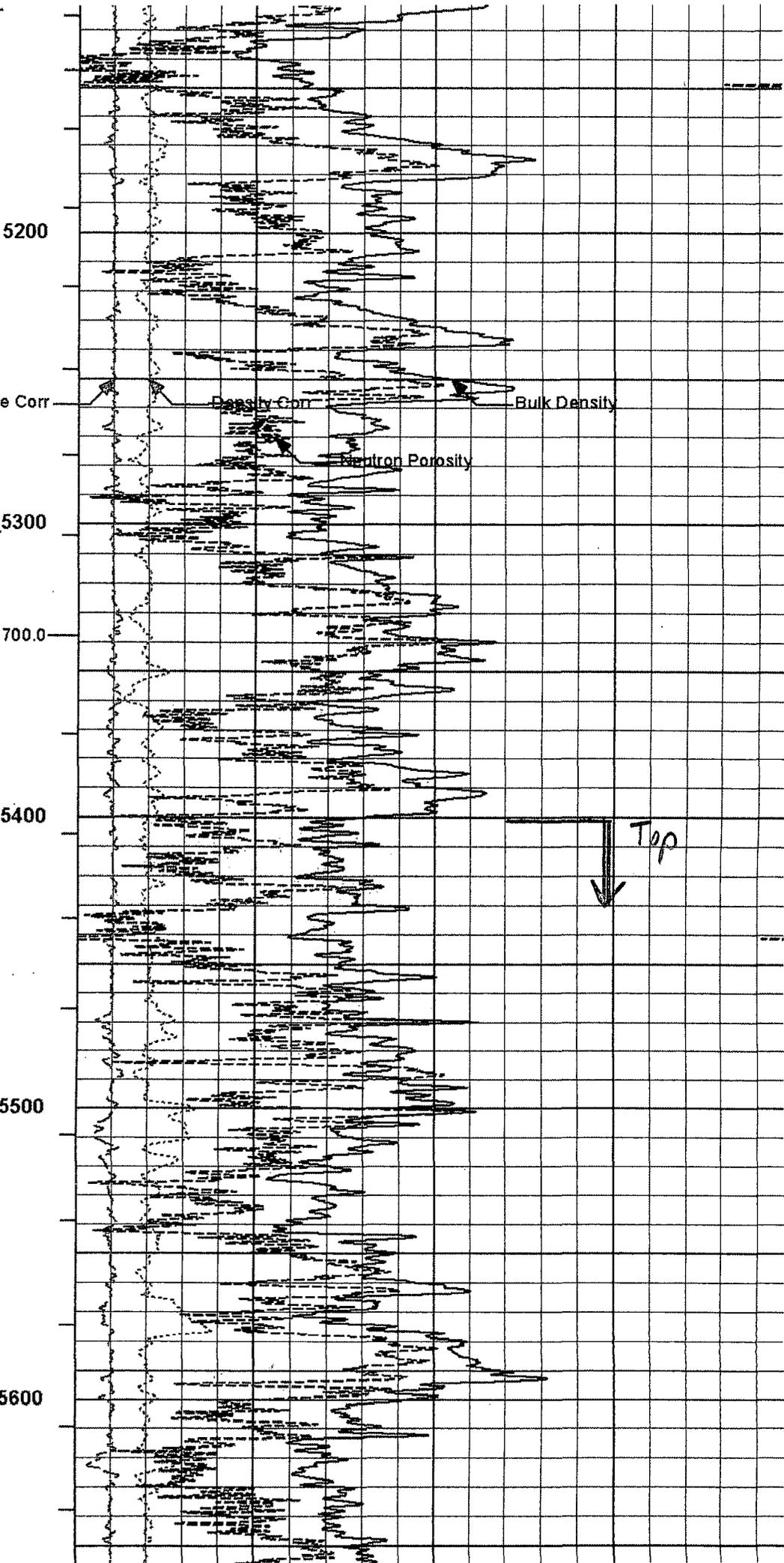
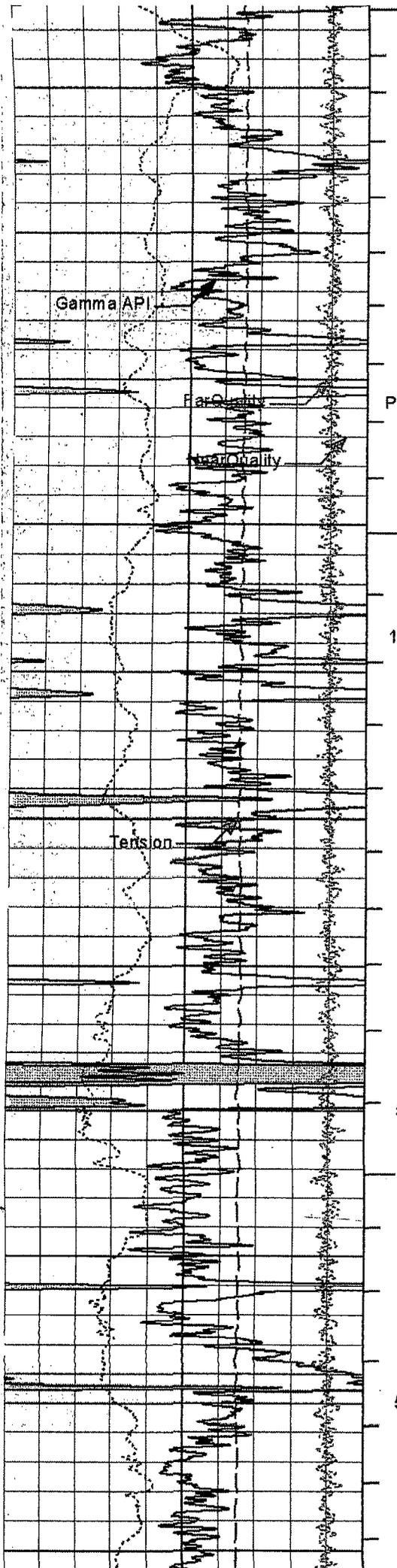
# HALLIBURTON

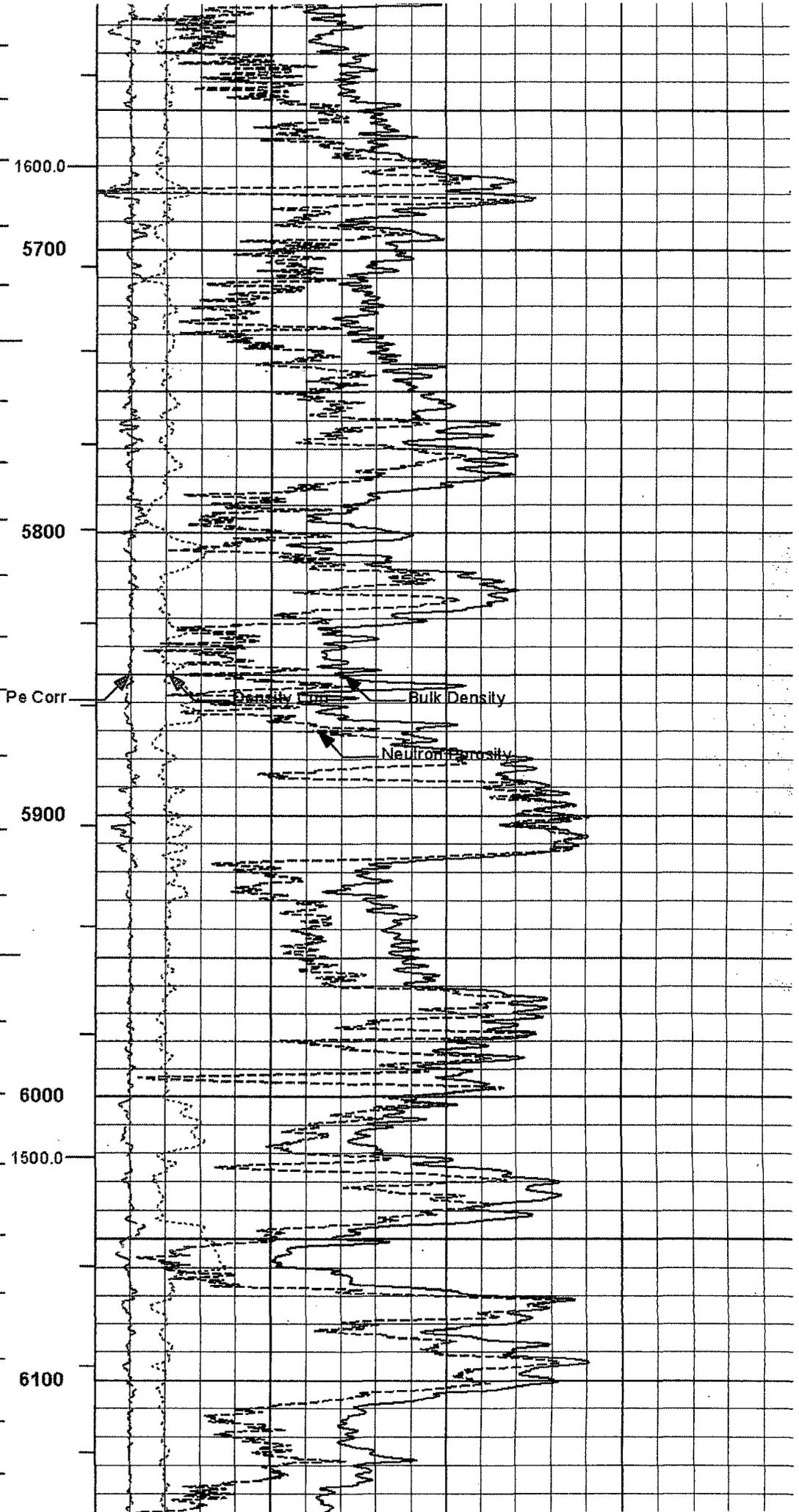
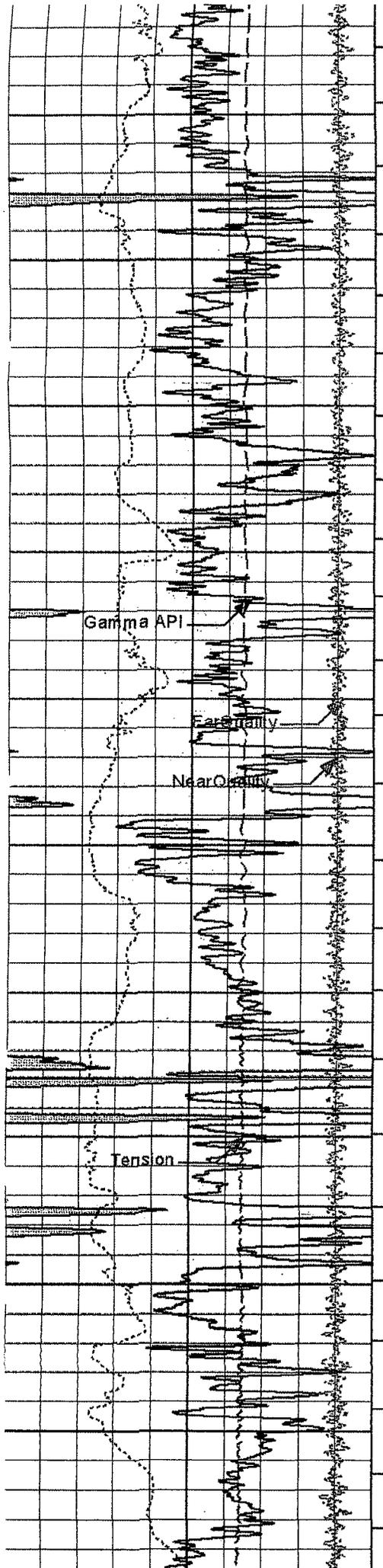
## DUAL SPACED NEUTRON SPECTRAL DENSITY COMP. SPECTRAL GAMMA RAY

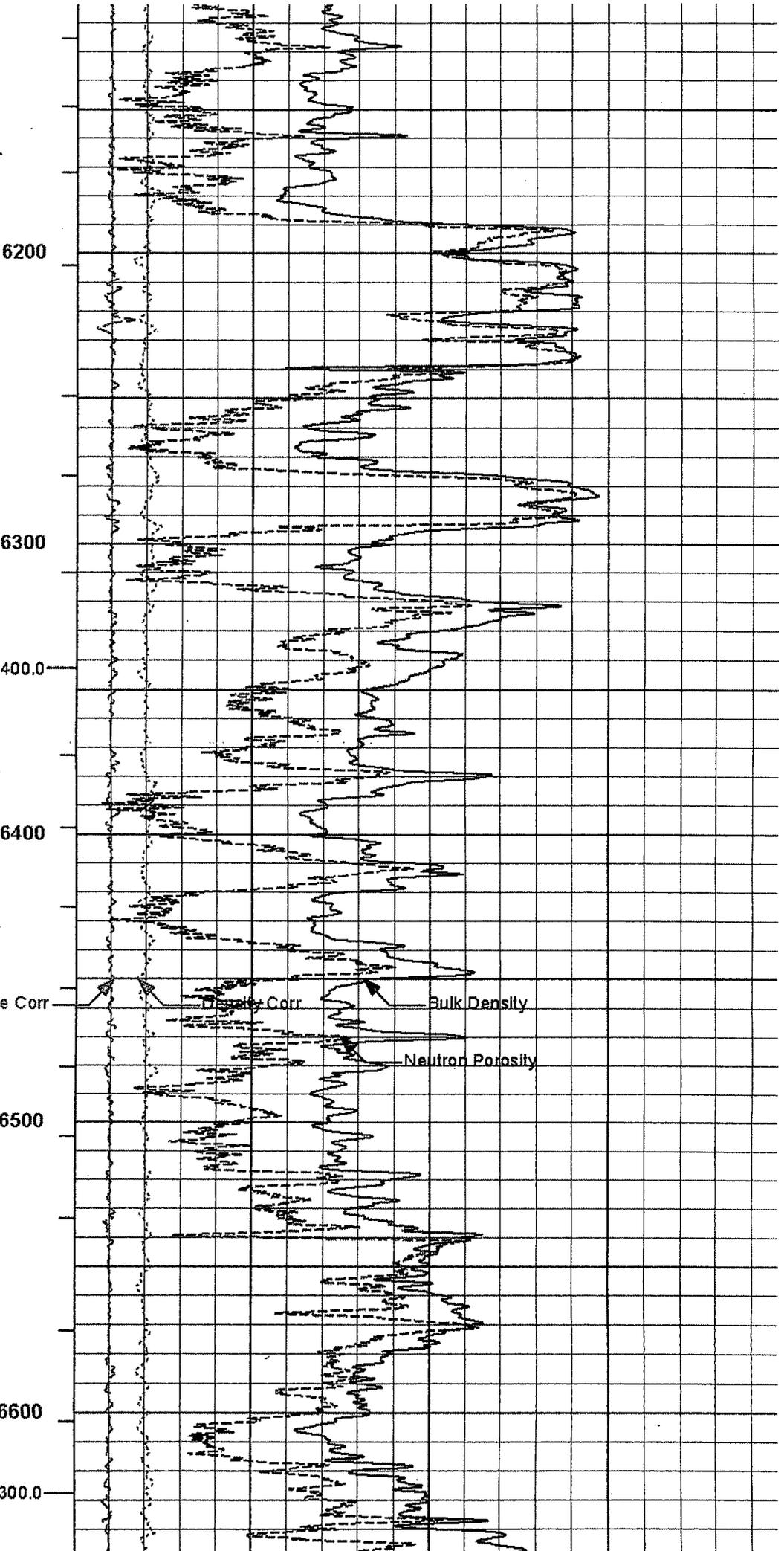
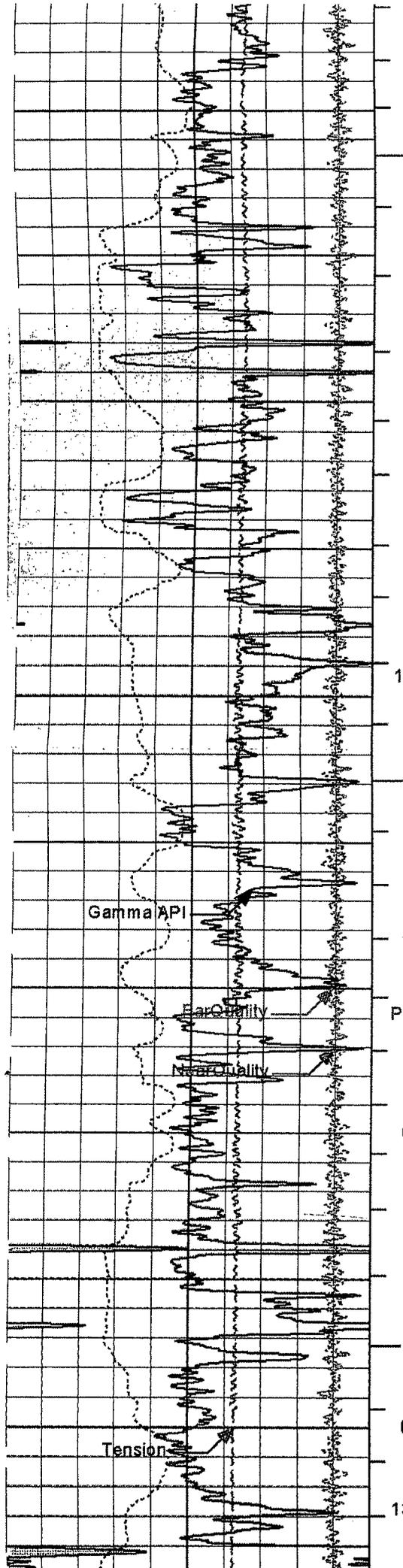
COMPANY		COG OPERATING, LLC	
WELL		MACHO NACHO STATE No. 1H	
FIELD		TRIPLE X; BONE SPRING, WEST	
COUNTY	LEA	STATE	NEW MEXICO
API No.	30-025-39882		
Location	380' FNL AND 330' FEL		
Other Services:	DLT/MGRD		
Sect.	7	Twp.	24S Rge. 33E
Permanent Datum	GL	Elev.	3627.0 ft
Log measured from	KB		21.0 ft above perm. Datum
Well measured from	KB		
Date	21-May-12		
Run No.	ONE		
Depth - Driller	12500.00 ft		
Depth - Logger	12504.0 ft		
Bottom - Logged Interval	12454 ft		
Top - Logged Interval	190 ft		
Depth - Driller	9.625 in	@	4900.0 ft @
Depth - Logger	4893.0 ft		
Well Size	7.875 in @		
Fluid in Hole	BRINE		
Density	Viscosity	10.0 ppg	28.00 s/qt
	Fluid Loss	7.00 pH	
Source of Sample	FLOWLINE		
@ Meas. Temperature	0.070 ohmm	@	75.00 degF @
if @ Meas. Temperature	0.05 ohmm	@	75.00 degF @
ic @ Meas. Temperature	0.086 ohmm	@	75.00 degF @
Source Rmf	Rmc	MEAS	MEAS
@ BHT	0.03 ohmm	@	165.0 degF @
Time Since Circulation	12.0 hr		
Time on Bottom	21-May-12 18:23		
Max. Rec. Temperature	165.0 degF	@	12504.0 ft @
Depthment	Location	798	HQBBS, NM
Recorded By	ALEXANDER PRICE		
Checked By	ANDREW MCCARTHY		

Service Ticket No.: 9518647		API Serial No.: 30-025-39882		PGM Version: WL INSITE R3.4.0 (Build 4)	
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES	
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth - Driller					
Type Fluid in Hole					
Density	Viscosity				
pH	Fluid Loss				
Source of Sample					
Rm @ Meas. Temp	@				
Rmc @ Meas. Temp	@				
Rmc @ Meas. Temp	@				
Source Rmf	Rmc				
Rm @ BHT	@				
Rmc @ BHT	@				
Rmc @ BHT	@				
RESISTIVITY EQUIPMENT DATA					
Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other	
EQUIPMENT DATA					
GAMMA			ACOUSSTIC		
Run No.	Run No.	Run No.	Run No.	NEUTRON	
Serial No.	Serial No.	Serial No.	Serial No.	ONE	ONE
Model No.	Model No.	Model No.	Model No.	1096540GRD-BK	1096540GRD-BK
Diameter	Diameter	Diameter	Diameter	SDLT-I	DSNT-I
Detector Model No.	No. of Cent.	Log Type	Log Type	4.5 in	3.625 in
Type	Spacing	Source Type	Source Type	GAM-GAM	NEU-NEU
Length	LSA [Y/N]	Serial No.	Serial No.	Cs - 137	Am241Be
Distance to Source	FWDA [Y/N]	Strength	Strength	5115GW	DSN - 314
		1.5 CI	1.5 CI		15 CI
LOGGING DATA					









Gamma API

Porosity

Porosity

Tension

Pe Corr

Density Corr

Bulk Density

Neutron Porosity

6200

6300

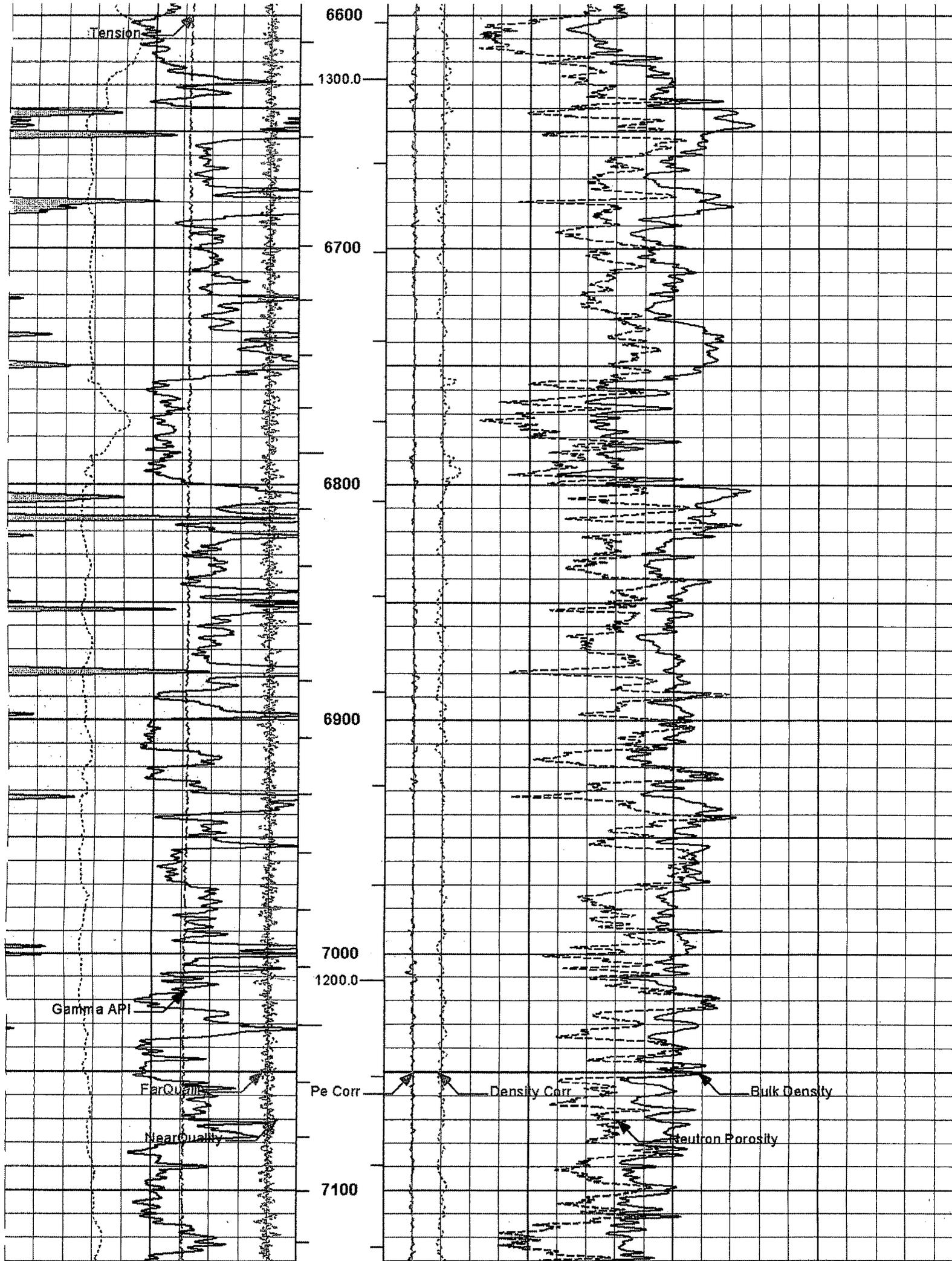
1400.0

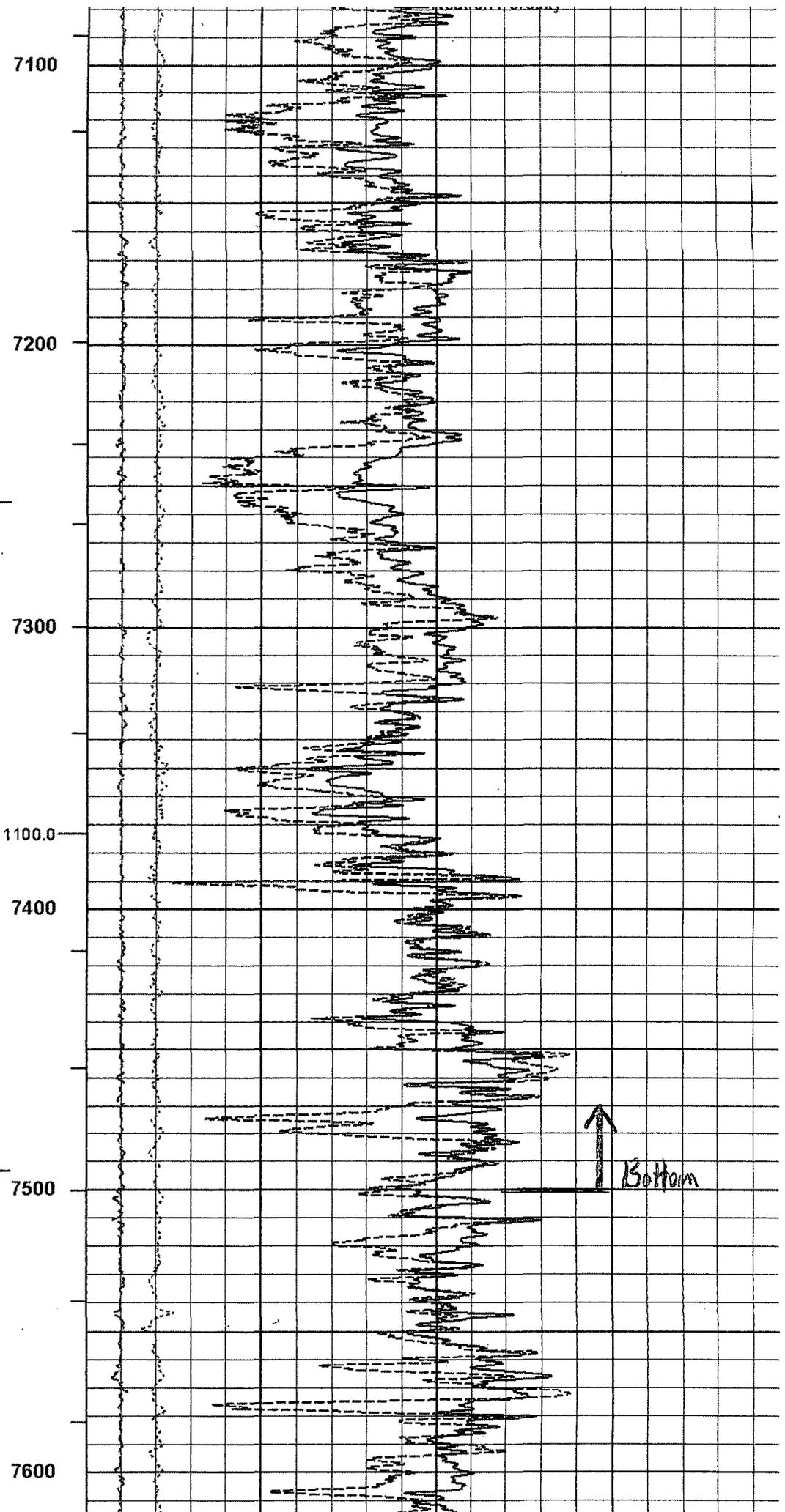
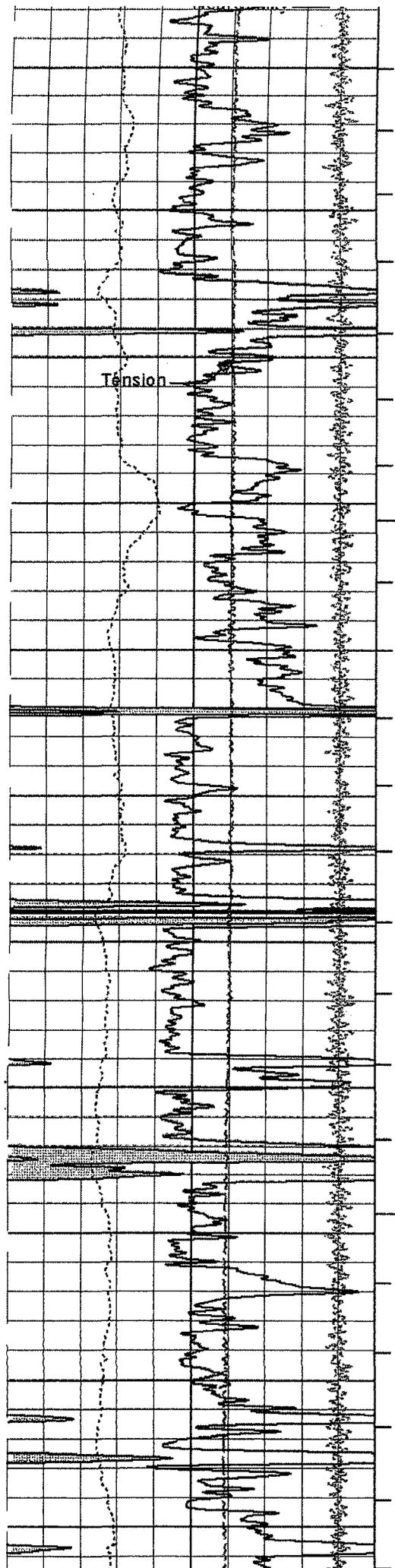
6400

6500

6600

1300.0





**XI.**

**Fresh Water Sample  
Analyses**



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	(acre ft per annum)				X	Y			
									Source	64	16	32					
<u>C 02430</u>		COM	64	MARK T. AND ANNETTE E. MCCLOY	LE	<u>C 02430</u>			Shallow	3	3	3	16	24S	33E	633377	3564732*
<u>C 02431</u>		COM	15	MARK T. AND ANNETTE E. MCCLOY	LE	<u>C 02431</u>			Shallow	4	4	4	17	24S	33E	633175	3564728*
<u>C 02432</u>		COM	128	MARK T. AND ANNETTE E. MCCLOY	LE	<u>C 02432</u>			Shallow	4	4	4	17	24S	33E	633175	3564728*

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

**Record Count:** 3

**PLSS Search:**

**Section(s):** 4, 5, 6, 7, 8, 9, 16, 17, 18    **Township:** 24S    **Range:** 33E

**Sorted by:** File Number

Outside 1 Mile  
 Radius Area of Review

\*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.



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
 O=orphaned,  
 C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Code	Subbasin	County	Q Q Q			Sec	Tws	Rng	X	Y	Depth	Depth	Water
				64	16	4						Well	Water	Column
<u>C 02430</u>			LE	3	3	3	16	24S	33E	633377	3564732*	643	415	228
<u>C 02431</u>			LE	4	4	4	17	24S	33E	633175	3564728*	525	415	110
<u>C 02432</u>			LE	4	4	4	17	24S	33E	633175	3564728*	640	415	225
Average Depth to Water:												<b>415 feet</b>		
Minimum Depth:												<b>415 feet</b>		
Maximum Depth:												<b>415 feet</b>		

**Record Count: 3**

**PLSS Search:**

**Section(s):** 4, 5, 6, 7, 8, 9, 16, 17, 18     **Township:** 24S     **Range:** 33E

\*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.



September 11, 2012

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

Re: **Legal Notice**  
**Salt Water Disposal Well**  
**Eata Fajita 8 State SWD #1**

To Whom It May Concern:

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

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

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

Sincerely,

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

Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

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

COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210 has filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Eata Fajita 8 State SWD No. 1 is located 2310' FNL & 2310' FWL, Section 8, Township 24 South, Range 33 East, Lea 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 5400' to 7500' at a maximum surface pressure of 1080 psi and a maximum rate of 10,000 BWPD. The proposed SWD well is located approximately 20 miles west of Jal. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210, or call 575-748-6940.

Published in the Hobbs News-Sun, Hobbs, New Mexico  
\_\_\_\_\_, 2012.



September 11, 2012

New Mexico State Land Office  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Re: **Application to Inject**  
**Eata Fajita 8 State SWD #1**  
**Township 24 South, Range 33 East, N.M.P.M.**  
**Section 8: 2310' FNL & 2310' FWL**  
**Lea County, New Mexico**

To Whom It May Concern:

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



September 11, 2012

Cimarex Energy Company  
600 N. Marienfeld, Ste. 600  
Midland, TX 79701

Re: Application to Inject  
Eata Fajita 8 State SWD #1  
Township 24 South, Range 33 East, N.M.P.M.  
Section 8: 2310' FNL & 2310' FWL  
Lea County, New Mexico

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Enclosed for your review is a copy of COG Operating LLC's C-108 Application to Inject for the above referenced well. We plan to drill this well for SWD service if our C-108 is approved. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter.

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Brian Collins  
Senior Operations Engineer

BC/sw  
Enclosures

Eata Fajita 8 State SWD #1  
 Sec. 8, T24S - R33E  
 2310' FNL & 2310' FWL

7011 1570 0003 6389 6711

<b>U.S. Postal Service™</b>	
<b>CERTIFIED MAIL™ RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at <a href="http://www.usps.com">www.usps.com</a>	
<b>OFFICIAL USE</b>	
Postage \$	Postmark Here
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Sent To <b>Cimarex Energy Company</b> <b>600 N. Marienfeld, Ste. 600</b> Street, Apt. No., or PO Box No. <b>Midland, TX 79701</b> City, State, ZIP+4® <b>Eata Fajita 8 St. SWD #1/Notification</b>	
PS Form 3800, August 2006 See Reverse for Instructions	

4029 6889 E000 0257 T102

<b>U.S. Postal Service™</b>	
<b>CERTIFIED MAIL™ RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at <a href="http://www.usps.com">www.usps.com</a>	
<b>OFFICIAL USE</b>	
Postage \$	Postmark Here
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Sent To <b>New Mexico State Land Office</b> <b>P.O. Box 1148</b> Street, Apt. No., or PO Box No. <b>Santa Fe, NM 87504-1148</b> City, State, ZIP+4® <b>Eata Fajita 8 St. SWD #1/Notification</b>	
PS Form 3800, August 2006 See Reverse for Instructions	

## Jones, William V., EMNRD

---

**From:** Jones, William V., EMNRD  
**Sent:** Sunday, October 21, 2012 4:44 PM  
**To:** Brian Collins  
**Cc:** Ezeanyim, Richard, EMNRD; Gonzales, Elidio L, EMNRD; Dawson, Scott  
**Subject:** Disposal application from Concho: Proposed Eata Fajita 8 State SWD #1 30-025-NA Delaware Open Hole 5400 to 7500 feet

Hello Brian,  
A few small items:

- a. The application is in the name of COG Operating LLC, but the ownership map shows COG Production LLC in this land area. Also the other wells are being proposed (As I see in our system) under COG Production LLC.
- b. Please send a copy of the actual newspaper ad as it appears in the newspaper along with the date of appearance.
- c. The Certified Mailers don't have dates that I can read – when were these mailed?
- d. Do you guys intend to log or mudlog this well or why not?
- e. Would you ask your geologist to relay where the Cherry Canyon, Brushy Canyon, and Bone Spring tops are at this location – or an estimate of those tops?
- f. For the large disposal intervals like this, we normally put in a requirement to run an injection survey within the first year. *(Temp Survey)*

Hope all is well.

Thank You for the application.

Regards,  
Will Jones

## Jones, William V., EMNRD

---

**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Monday, October 22, 2012 11:48 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Dean Chumbley; Savannah Wilkinson; David DaGian  
**Subject:** RE: Disposal application from Concho: Proposed Eata Fajita 8 State SWD #1 30-025-NA Delaware Open Hole 5400 to 7500 feet

Will:

Here's a few answers to your questions, the rest to follow:

- a. COG Operating, LLC is the operator for COG Production, LLC. COG Operating, LLC is the main Concho operating entity and in the not-too-distant future COG Production, LLC will be absorbed into COG Operating, LLC (there is a business reason for this, but I don't know the details).
- b. Savannah is scanning and mailing the newspaper ad to you today.
- c. Savannah is scanning and mailing the certified mailers to you today.
- d. I'm checking with geology on running mudlog and will let you know.
- e. I've asked geology for these formation tops and will send them to you when I get them.
- f. I would be uncomfortable running a complete injection profile in an open-hole section, but think a tracer/profile log run near the casing shoe would be a good idea to make sure no fluid is moving up hole behind the casing.

I'll get back with you on the geological requests as soon as I hear from geology. Thanks Will. ---Brian Collins

---

**From:** Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]  
**Sent:** Sunday, October 21, 2012 5:44 PM  
**To:** Brian Collins  
**Cc:** Ezeanyim, Richard, EMNRD; Gonzales, Elidio L, EMNRD; Dawson, Scott  
**Subject:** Disposal application from Concho: Proposed Eata Fajita 8 State SWD #1 30-025-NA Delaware Open Hole 5400 to 7500 feet

Hello Brian,  
A few small items:

- a. The application is in the name of COG Operating LLC, but the ownership map shows COG Production LLC in this land area. Also the other wells are being proposed (As I see in our system) under COG Production LLC.
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- f. For the large disposal intervals like this, we normally put in a requirement to run an injection survey within the first year.

Hope all is well.

Thank You for the application.

## Jones, William V., EMNRD

---

**From:** Brian Collins <BCollins@concho.com>  
**Sent:** Monday, October 22, 2012 1:42 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Dean Chumbley; Savannah Wilkinson  
**Subject:** Eata Fajita 8 State SWD 1 (8-24s-33e) C108 Questions

Will:

The estimated formation tops are:

Delaware (Lamar) 5089'  
Cherry Canyon 6007'  
Brushy Canyon 7496'  
Bone Spring 9064'



We will run a mudlog when we drill this well. If we see good mudlog shows within the proposed injection interval, we'll run 7" casing and selectively perforate Delaware intervals within the gross proposed interval to avoid injecting water into potentially productive zones. Hope this answers your questions.

I don't have a clue where some of our well names come from! Some of the old Marbob well names, especially those with acronyms, were interesting... Take care.

### Brian Collins

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



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October 22, 2012

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

RE: Affidavit of Publication/Certified Return Receipts  
Eata Fajita 8 State SWD #1  
Township 24 South, Range 33 East, N.M.P.M.  
Section 8: 2310' FNL & 2310' FWL  
Lea 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 that the Certified Mailers were sent out on September 11, 2012.

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

Sincerely,

A handwritten signature in black ink that reads "Brian Collins".

Brian Collins  
Senior Operations Engineer

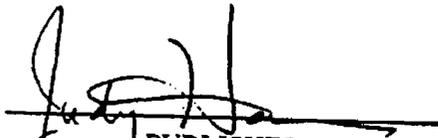
BC/sw  
Enclosures

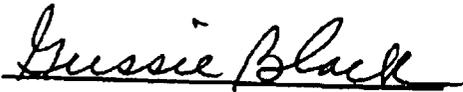
# Affidavit of Publication

State of New Mexico,  
County of Lea.

I, JUDY HANNA  
PUBLISHER  
of the Hobbs News-Sun, a  
newspaper published at Hobbs, New  
Mexico, do solemnly swear that the  
clipping attached hereto was  
published in the regular and entire  
issue of said newspaper, and not a  
supplement thereof for a period

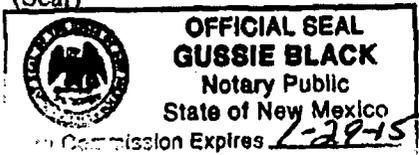
of 1 issue(s).  
Beginning with the issue dated  
September 14, 2012  
and ending with the issue dated  
September 14, 2012

  
PUBLISHER  
Sworn and subscribed to before me  
this 14th day of  
September, 2012



Notary Public

My commission expires  
January 29, 2015  
(Seal)



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

COG OPERATING, LLC  
RECEIVED

OCT 18 2012

ARTESIA WEST

### Legal Notice September 14, 2012

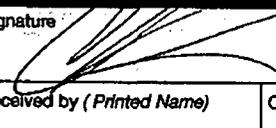
COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210 has filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Eata Fajita State SWD No. 1 is located 2310' FNL & 2310' FWL, Section 8, Township 24 South, Range 33 East, Lea 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 5400' to 7500' at a maximum surface pressure of 1080 psi and a maximum rate of 10,000 BWPD. The proposed SWD well is located approximately 20 miles west of Jal. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at COG Operating LLC, 2208 W. Main Street, Artesia, NM 88210, or call 575-748-6940.  
#27573

02107967      00100537  
COG OPERATING LLC  
FASKEN CENTER, TOWER II  
550 W. TEXAS AVE., STE 1300  
MIDLAND, TX 79701

**Eata Fajita 8 State SWD #1  
Sec. 8, T24S - R33E  
2310' FNL & 2310' FWL**

**\*\* Sent out Certified Mailers on 9/11/12**

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> Agent  <input type="checkbox"/> Addressee  <i>Sadil Garcia</i></p> <p>B. Received by (Printed Name)  <i>Sadil Garcia</i></p> <p>C. Date of Delivery  <i>9-13-12</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes            If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p align="center"><b>Cimarex Energy Company</b>  <b>600 N. Marienfeld Ste. 600</b>  <b>Midland, TX 79701</b>  <i>Eata Fajita 8 St. SWD #1/Notification</i></p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) <b>7011 1570 0003 6389 6711</b></p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> Agent  <input type="checkbox"/> Addressee  </p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input checked="" type="checkbox"/> Yes            If YES, enter delivery address below: <input type="checkbox"/> No</p> <p align="center"><b>SEP 13 2012</b></p>
<p>1. Article Addressed to:</p> <p align="center"><b>New Mexico State Land Office</b>  <b>P.O. Box 1148</b>  <b>Santa Fe, NM 87504-1148</b>  <i>Eata Fajita 8 St. SWD #1/Notification</i></p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) <b>7011 1570 0003 6389 6704</b></p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102596-02-M-1540</p>	

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

WFX \_\_\_\_\_ PMX \_\_\_\_\_ SWD 1361 Permit Date 10/14/12 UIC Qtr (B/N/D)

# Wells 1 Well Name(s): EATA FAJITA 8 STORE SWD #1

API Num: 30-0 25-NA Spud Date: New Drill New/Old: N (UIC primacy March 7, 1982)

Footages 2310FNL/2310FWL Unit F Sec 8 Tsp 245 Rge 33E County LEA

General Location: \_\_\_\_\_

Operator: COG OPERATING LLC Contact BRIAN COLLINS

OGRID: \_\_\_\_\_ RULE 5.9 Compliance (Wells) Yes (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed Yes Current Status: Proposed Na Drill

Planned Work to Well: Drill, DISPOSE

Diagrams: Before Conversion \_\_\_\_\_ After Conversion  Elogs in Imaging File: will be Run

Well Details:	Hole.....Pipe	Sizes	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New <input checked="" type="checkbox"/> Existing _____ Surface	<u>17 1/2</u>	<u>13 3/8</u>	<u>1250'</u>		<u>1750 c.F.</u>	<u>Surf</u>
New _____ Existing _____ Intern						
New <input checked="" type="checkbox"/> Existing _____ LongSt	<u>12 1/4</u>	<u>9 5/8</u>	<u>5400'</u>		<u>3400 c.F.</u>	<u>Surf</u>
New _____ Existing _____ Liner						
New <input checked="" type="checkbox"/> Existing _____ OpenHole	<u>8 3/4"</u>		<u>5400'-7500'</u>			

PLAN

Depths/Formations: \_\_\_\_\_

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	<u>5089</u>	<u>Loun</u>	<input checked="" type="checkbox"/>
Injection TOP:	<u>5400'</u>	<u>Bell C.</u>	Max. PSI <u>1080</u> OpenHole <input checked="" type="checkbox"/> Perfs _____
Injection BOTTOM:	<u>7500'</u>	<u>Cherry C.</u>	Tubing Size <u>2 7/8"</u> Packer Depth <u>5350'</u>
Formation(s) Below	<u>6007</u> <u>7496</u>	<u>Cherry C.</u> <u>Buddy C.</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Bell C. is Productive  
~ 4 mi EAST.

~~Capitan Reef? (Detach? Noticed?) (WIPP? Noticed?) Salado Top/Bot (1360-4850) (Unit House?)~~

Fresh Water: Depths: < 415' Formation \_\_\_\_\_ Wells? None Analysis? \_\_\_\_\_ Affirmative Statement

Disposal Fluid Analysis? Sources: BS/Del (AR as wells)

Disposal Interval: Analysis? Production Potential/Testing: 1962 MUDLOG

Notice: Newspaper Date 9/14/12 Surface Owner SLO Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Persons: C/Money/COG 9/13/12

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

.....Active Wells 1 Repairs? \_\_\_\_\_ Which Wells? \_\_\_\_\_

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

Issues: Run Temp Log Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_