

DATE IN <u>3-2-10</u>	SUSPENSE	ENGINEER <u>Jones</u>	LOGGED IN <u>3-2-10</u>	TYPE <u>SWD</u>	APP NO. <u>100615 2179</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



PT6W  
COG  
(224137)  
04  
Empire State SWD #2

**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]

Edy

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

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

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

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

Mark A. Fairchild Mark A. Fairchild Senior Ops. Engineer 2/3/2010  
 Print or Type Name Signature Title Date  
 MFairchild@conchoresources.com  
 e-mail Address

**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: 550 West Texas, Ste 100, Midland, TX 79701  
CONTACT PARTY: Mark A. Fairchild PHONE: 432-686-3021
- 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: Mark A. Fairchild TITLE: Senior Ops. Engineer  
SIGNATURE: Mark A. Fairchild DATE: 2/3/2010  
E-MAIL ADDRESS: MFairchild@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: \_\_\_\_\_

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower-oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

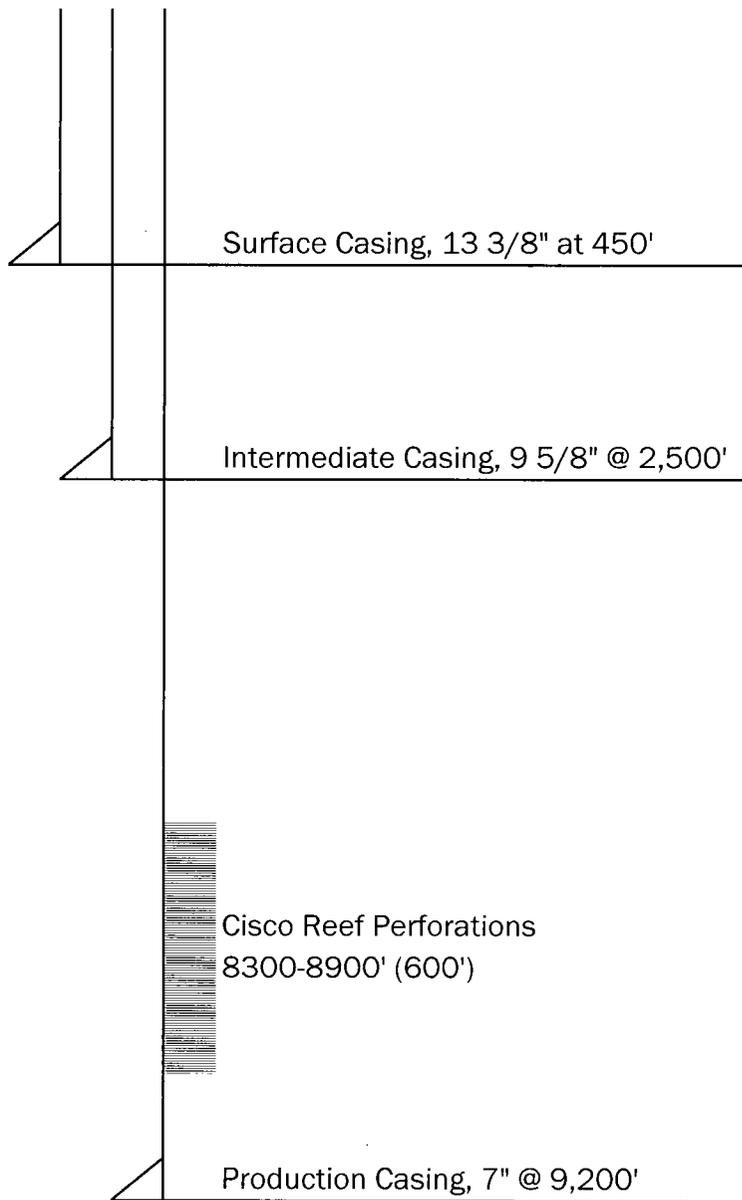
- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Date: 02/10/10  
Company: COG Operating LLC  
OGRID: 229137  
Lease: Empire State SWD  
Well: #2  
Location: 1980' FNL and 1980' FWL, Sec 9, T17S; R29E  
Co. Eddy  
State: NM



**Date:** 2/10/2010  
**Company:** COG Operating LLC  
**OGRID:** 229137  
**Lease:** Empire State SWD  
**Well:** #2  
**Location:** 1980' FNL and 1980' FWL, Sec 9, T17S; R29E  
**Co.** Eddy  
**State:** NM

Casing & Fluids:	String	Bit		Casing			Mud			
		Hole	Size	From	To	Ftg	Type	Weight	Vis	FL
Conductor:		24"	20"	40	0	40				
Surface:		17 1/2"	13 3/8"	450	0	450	Fresh/Spud	8.6-9.2	28-34	NC
Intermediate:		12 1/4"	9 5/8"	2,500	0	2,500	Cut Brine	9.8-10.1	28-29	NC
Long:		8 3/4"	7"	9,200	0	9,200	Cut Brine	8.7-9.3	28-34	10-12 log
Tubing:			3 1/2"			8,250	8rd, EUE, IPC			
Packer:	Nickel Plated, Compression set w/ nipples									

Cement:		TOC		Lead	Tail
		Surface	Lead		
Conductor:	Surface				
Surface:	Surface	250 sxs, 14.8 ppg, 1.35 cuft/sx			250 sxs, 14.8 ppg, 1.35 cuft/sx
Intermediate:	Surface	550 sxs, 13.5 ppg, 1.75 cuft/sx			200 sxs, 14.8 ppg, 1.35 cuft/sx
Long:	Surface	1st Stage, DV tool at 7,200			
		300 sxs, 50/50 poz 14.2 ppg, 1.32 cuft/sx			
		2nd Stage			
		650 sxs, lite, 12.4 ppg, 2.14 cuft/sx			100 sxs, CI C, 15.6 ppg, 1.19 cuft/sx

**Objective:** Formation: Cisco Reef  
 TD: 9,200  
 Perforations: 8300-8900' (600')  
 Injection Rate: 15-20K BWPD

**Tops:** Rustler: 400'  
 Yates: 800'  
 Seven Rivers: 1200'  
 Queen: 1750'  
 Grayburg: 2150'  
 San Andres: 2500'  
 Glorietta: 3900'  
 Tubb: 5,325'  
 Wolfcamp: 7150'  
 WC Reef Disposal: 7400-7600' (200')  
 Cisco: 8150'  
 Cisco Reef Disposal: 8300-8900' (600')

Date: 02/10/10  
 Company: COG Operating LLC  
 OGRID: 229137  
 Lease: Empire State SWD  
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 Location: 1980' FNL and 1980' FWL, Sec 9, T17S; R29E  
 Co. Eddy  
 State: NM

19. Proposed Casing and Cement Program

Type	Hole Sz	Csg Sz	Csg Wt	Set Depth	Sacks	TOC
Conductor	24"	20"		40		Surface
Surface	17 1/2"	13 3/8"	48	450	500	Surface
Intermediate	12 1/4"	9 5/8"	36	2500	750	Surface
Long	8 3/4"	7"	26	9200	1050	Surface

Additional Comments

COG proposes to drill a 24" hole and set 20" conductor casing, cemented to surface with fresh mud. A 17 1/2" hole will be drilled to approximately 450' to set 13 3/8" casing and cement to surface. The Surface hole will be drilled with fresh water spud mud. The intermediate 12 1/4" hole will be drilled w/ cut brine to approximately 2,500' where 9 5/8" casing will be set and cemented to surface. Cut brine will be used to drill the long string hole to approximately 9,200' where 7" casing will be set and cemented to surface with a DV tool at approximately 7,000'.

INJECTION WELL DATA SHEET

OPERATOR: COG Operating, LLC

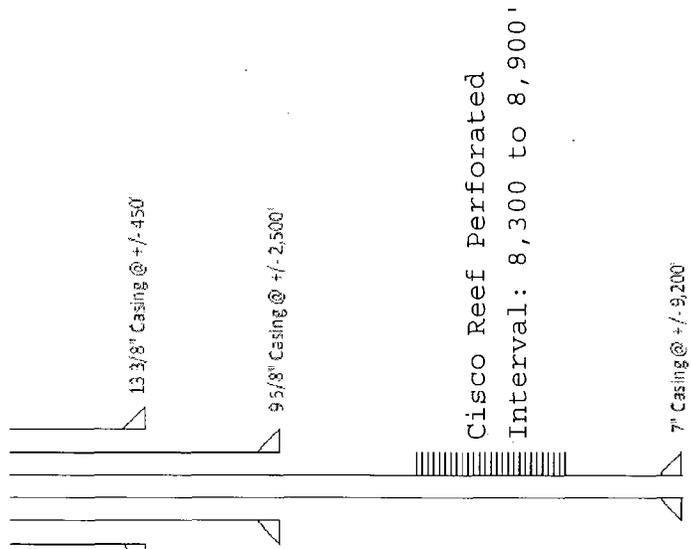
WELL NAME & NUMBER: Empire State SWD #2

WELL LOCATION: 1,980' FNL and 1,980' FWL F UNIT LETTER SECTION TOWNSHIP RANGE  
FOOTAGE LOCATION 9 T17S R29E

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Hole Size: 17 1/2"	Casing Size: 13 3/8"
Cemented with: _____ sx.	or 660 ft <sup>3</sup>
Top of Cement: Surface	Method Determined: Circulated
	<u>Intermediate Casing</u>
Hole Size: 12 1/4"	Casing Size: 9 5/8"
Cemented with: _____ sx.	or 1,402 ft <sup>3</sup>
Top of Cement: Surface	Method Determined: Circulated
	<u>Production Casing</u>
Hole Size: 8 3/4"	Casing Size: 7"
Cemented with: _____ sx.	or 927 ft <sup>3</sup>
Top of Cement: Surface	Method Determined: Circulated
Total Depth: 9,200	



Injection Interval

8,300 feet to 8,900

(Perforated or Open Hole; indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 3 1/2", 8rd, EUE Lining Material: Internal Plastic coating

Type of Packer: Compression set

Packer Setting Depth: 50 to 100' above top perf

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection?  Yes  No

If no, for what purpose was the well originally drilled? \_\_\_\_\_

2. Name of the Injection Formation: Cisco

3. Name of Field or Pool (if applicable): None

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: \_\_\_\_\_

Queen at 1,750'; Grayburg @ 2,150; San Andres @ 2,500



ATTACHMENT TO APPLICATION C-108

COG Operating Inc.  
Empire State SWD #2  
Se. 9, T-17-S, R-29-E  
Eddy County, NM

- III. WELL DATA – See attached on reverse side of form as requested.
- V. MAP ATTACHED
- VI. LIST OF WELLS AND DATA ATTACHED.
- VII. PROPOSED OPERATIONS
  - 1. The injection volume will average 10,000-15,000 BWPD while the maximum injection volumes are expected to be 20,000 BWPD.
  - 2. This will be a closed loop system.
  - 3. Proposed average and maximum injection pressure: Vacuum
  - 4. Analysis attached, only produced water.
  - 5. This well is not yet drilled. COG will swab the formation and recover fluid samples for analysis and reporting to NMOCD. Research disposal zone formation water and attach and chemical analysis.
- VIII. SEE ATTACHED
- IX. SEE ATTACHED
- X. Logging and test data will be run on the well when drilled.
- XI. No fresh water found or recorded by state engineer or OCD.

- XII. The disposal formation will have several thousand feet of overburden on top of it. In these several thousands of feet of impermeable shale and evaporate zones of various thickness exists. These zones will stop any hydraulic communication between geologic strata.
- XIII. Notice (this application) has been sent to the surface owner (NMSLO), operators of all wells, and lessees, working interest, or lease operating right holders, and lessors within a half mile.

**COG SENM SWD Well Questionnaires**

**Date: 2/10/2010**

**By: Mark A. Fairchild, Office: 432-686-3021**

What will be the well name?

Empire State SWD #2

What logs have been/will be run in the well?

Logs will be run as follows: porosity and resistivity

How will you re-enter/drill/convert the well?

The well will be drilled 100% with rotary tools.

How will you test the mechanical integrity of the casing?

A State of NM supervised MIT test to 500 psig will be run on the tubing/casing annulus.

What size tubing do you plan to use?

The tubing will be 3 1/2" Nominal OD.

How will tubing be internally lined?

The tubing will be internally plastic coated.

What type packer will be used?

A nickel plated compression set packer will be utilized.

Where will packer be set?

Within 50 to 100' above top perf.

Will there be any other type of casing/tubing seal?

No.

What is the fracture gradient?

Approx 0.75

Will the well be stimulated?

Yes

If yes, how will the well be stimulated?

Large conventional acid job.

Into what perforated intervals will you inject?

Cisco Reef, 8,300 to 8,900'

What will be the average daily volume injected?

10-15,000 BWPD

What will be the maximum daily volume injected?

20, 000 BWPD

What will be the average injection pressure?

Vacuum

What will be the maximum injection pressure?

1720            psig

Will water be trucked or piped to the well?

Piped

What wells will dispose into it?

Various wells owned exclusively by COG on our SWD water line system

Any non-COG wells?

No outside operated water will be disposed of.

What surface facilities (e.g.; tanks, pumps, filters) will be installed?

4 - 750 Bbl water storage tanks, 1 - 1,000 Bbl Gun Barrel

2 - 500 Bbl steel tanks, 1 - 400 BHP H pump

Do you have an analysis of the produced water you plan to inject?

Yes

Do you have an analysis of the formation water into which you'll inject?

No, these well are on a vacuum and do not produce.

How will the geology prevent migration into fresh water zones (e.g., thickness of shale or salt layers)?

Various impervious geological barriers exist between the Cisco and the surface.

Will the system be open or closed?

Closed

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
1301 W. Grand Avenue, Artesia, NM 88210

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name	
<sup>4</sup> Property Code		<sup>5</sup> Property Name EMPIRE STATE SWD			<sup>6</sup> Well Number 2
<sup>7</sup> OGRID No. 229137		<sup>8</sup> Operator Name COG OPERATING, LLC			<sup>9</sup> Elevation 3582.5'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	9	17 S.	29 E.		1980	NORTH	1980	WEST	EDDY

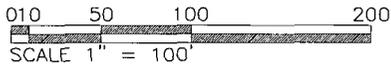
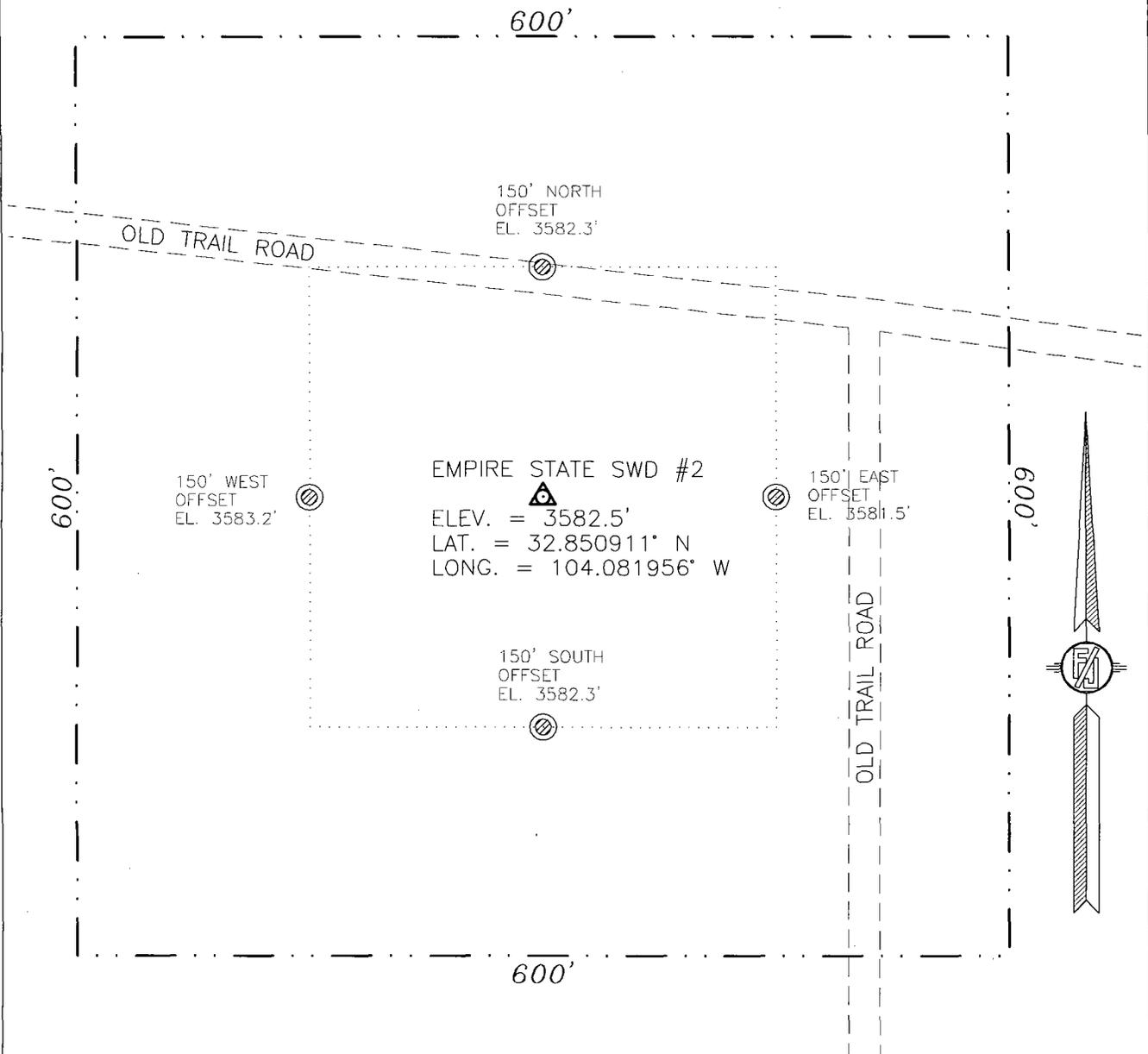
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<sup>16</sup> 	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
(NAD-83) LAT: 32°51'03.3" LONG: 104°04'55.0" Y=673387.889 N X=618515.919 E ELEV.=3582.5'	<sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Certificate Number: 12797 MADRON SURVEYING, INC.	

SECTION 9, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO



**DIRECTIONS TO LOCATION**

FROM U.S. HWY. 82 AND CR. #211 (OLD LOCO)  
 GO NORTH ON CR. #211 2.4 MILES AND TURN  
 RIGHT ON CALICHE LEASE ROAD AND GO EAST  
 0.5 MILES, BEND LEFT AND GO NORTH 0.3  
 MILES, BEND RIGHT AND GO EAST 0.1 MILE TO  
 THE CIMAREX BARBWIRE STATE #1 WELL AND  
 LOCATION IS 1320' EAST

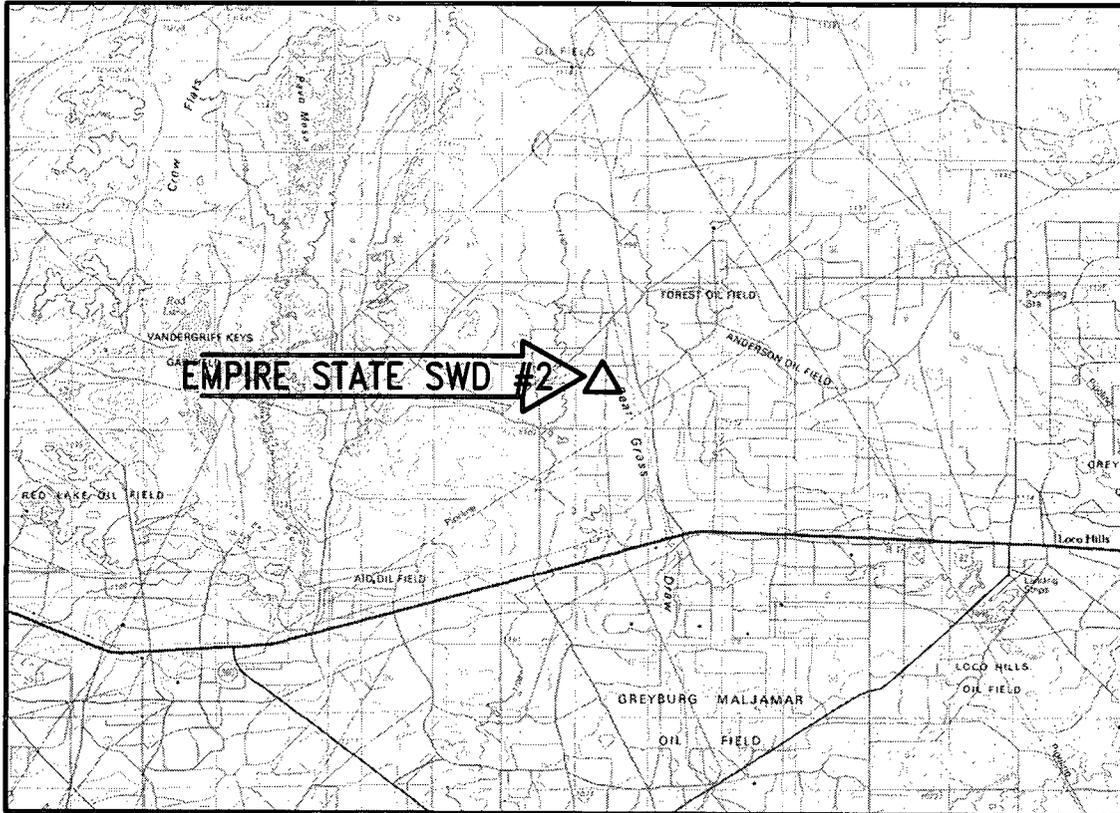
COG OPERATING LLC  
 EMPIRE STATE SWD #2  
 LOCATED 1980 FT. FROM THE NORTH LINE  
 AND 1980 FT. FROM THE WEST LINE OF  
 SECTION 9, TOWNSHIP 17 SOUTH,  
 RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

DECEMBER 22, 2009

SURVEY NO. 059

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
 (575) 887-5830

SECTION 9, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 VICINITY MAP



**DIRECTIONS TO LOCATION**

FROM U.S. HWY. 82 AND CR. #211 (OLD LOCO)  
 GO NORTH ON CR. #211 2.4 MILES AND TURN  
 RIGHT ON CALICHE LEASE ROAD AND GO EAST  
 0.5 MILES, BEND LEFT AND GO NORTH 0.3  
 MILES, BEND RIGHT AND GO EAST 0.1 MILE TO  
 THE CIMAREX BARBWARE STATE #1 WELL AND  
 LOCATION IS 1320' EAST

NOT TO SCALE

SEC. 9 TWP. 17-S RGE. 29-E  
 SURVEY N.M.P.M.  
 COUNTY EDDY STATE NEW MEXICO  
 DESCRIPTION 1980' FNL & 1980' FWL  
 ELEVATION 3582.5  
 OPERATOR COG OPERATING LLC  
 LEASE EMPIRE

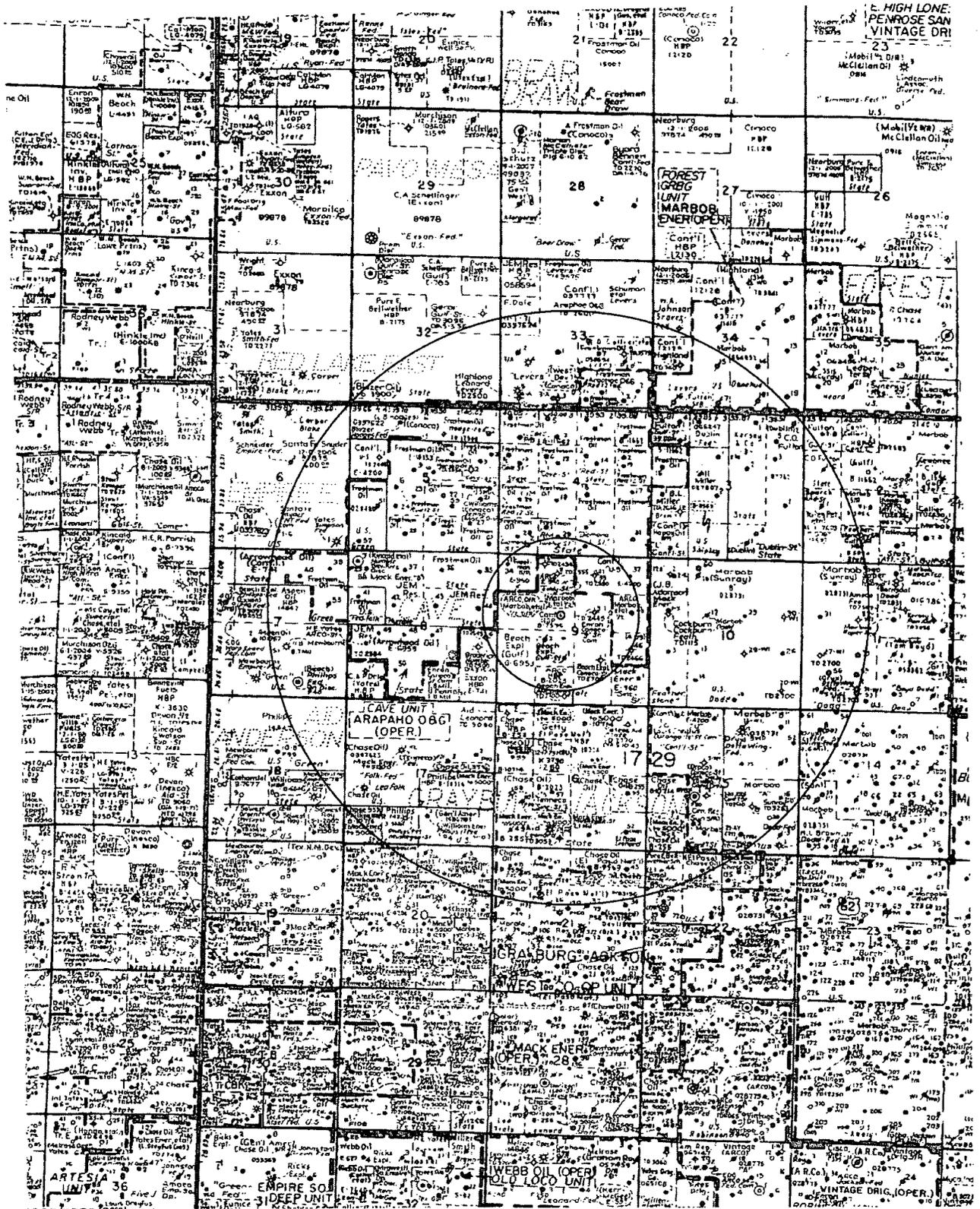
COG OPERATING LLC  
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 LOCATED 1980 FT. FROM THE NORTH LINE  
 AND 1980 FT. FROM THE WEST LINE OF  
 SECTION 9, TOWNSHIP 17 SOUTH,  
 RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

DECEMBER 22, 2009

SURVEY NO. 059

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
 (575) 887-5830





Disposal Well

API #	PROPERTY NAME	#	OPERATOR	TD	TYPE	STATE	CO	LAND	U/L	SEC	TWN	RNG	N/S	E/W
	Empire State SWD	2	COG OPERATING LLC	9,200'	SWD	NM	EDDY	State		9	17S	29E	1,980'N	1980'W

Wells within 1/2 mile which penetrate proposed disposal interval

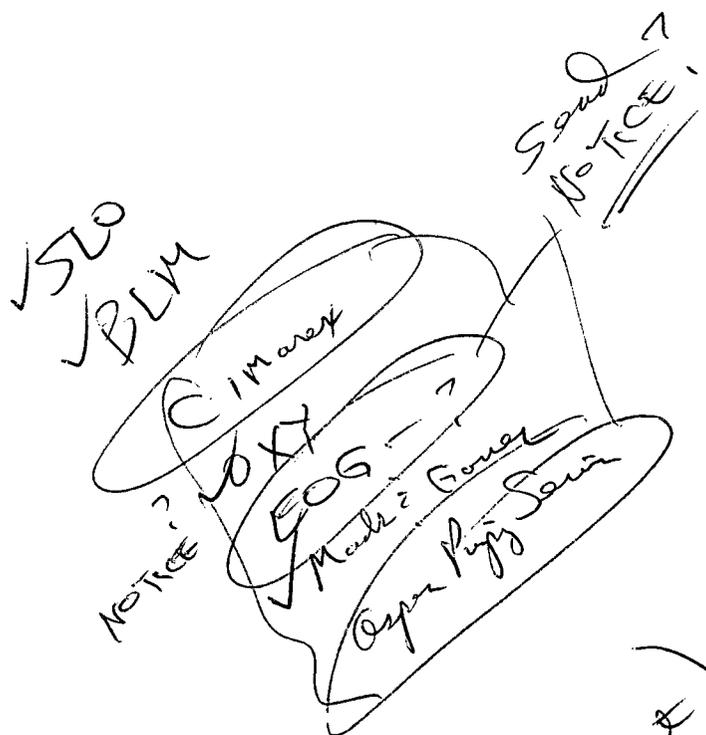
API #	PROPERTY NAME	#	OPERATOR	TD	TYPE	STATE	CO	LAND	U/L	SEC	TWN	RNG	N/S	E/W
30-015-36134	Barbwire 9 State Com	1	Cimarex Energy Co. of Colorado	10,830'	Gas	NM	Eddy	State	E	9	17S	29E	1,980'N	1,380'E
30-015-36394	Flameskimmer	2	Cimarex Energy Co. of Colorado	9,900'	Gas	NM	Eddy	State	K	9	17S	29E	2,150'S	1,800'W
30-015-30690	Conoco 9 State Com	1	EOG Resources Inc.	11,000'	Gas	NM	Eddy	State	G	9	17S	29E	1,980'N	1,350'E
30-015-35219	Oxy Flameskimmer State	1	Oxy USA WTP Limited Ptnshp	10,850'	Gas	NM	Eddy	State	K	9	17S	29E	1,650'S	1,880'W

(7850')  
Horizontal

CIRC

not drilled yet

PEA - sand DIAGRAM (WC not isolated)



Break out  
NO TRACE  
Notice

# DIVISION GENERATED AOR LIST

COG Operating LLC  
Empire State SWD #2

API	WELL_NAME	COG Operating LLC	1980 N	1980 W	F	9 17S	29E	0-015-0000 C	WLS	COMPL STATUS
3001536394	FLAMESKIMMER 002	CIMAREX ENERGY CO. OF COLORADO	2150 S	1800 W	K	9 17S	29E	1,164	N	Not drilled or c
3001536134	BARBWIRE 9 STATE COM 001	CIMAREX ENERGY CO. OF COLORADO	1980 N	660 W	E	9 17S	29E	1,320	A	Active
3001535219	OXY FLAMESKIMMER STATE 001	OXY USA WTP LIMITED PARTNERSHIP	1650 S	1880 W	K	9 17S	29E	1,653	A	Unknown
3001530690	CONOCO 9 STATE COM 001	EOG RESOURCES INC	1980 N	1350 E	G	9 17S	29E	1,950		Plugged
3001524760	DIAMOND STATE 002	MARKS AND GARNER PRODUCTION LTD CO	330 S	990 W	M	4 17S	29E	2,513	A	Active
3001524759	DIAMOND STATE 001	MARKS AND GARNER PRODUCTION LTD CO	330 S	2310 E	O	4 17S	29E	2,513	A	Active
3001524588	GULF STATE 001	ASPEN PUMPING SERVICE	1650 S	2310 W	K	9 17S	29E	1,683	A	Active
3001502884	CAVE POOL UT 029	JEM RESOURCES	660 S	1980 W	N	4 17S	29E	2,640	P	Plugged
3001502932	SINCLAIR STATE 002	JOHN M KELLY	330 N	1650 W	F	9 17S	29E	1,683	P	Plugged
3001502934	CAVE POOL UT 034	JEM RESOURCES	330 N	330 W	D	9 17S	29E	2,333	P	Plugged
3001524671	CONOCO ST 001	BEACH EXPL INC	1650 S	1650 E	J	9 17S	29E	2,333	P	Plugged
3001502935	CAVE POOL UT 045	JEM RESOURCES	1980 N	660 E	H	9 17S	29E	2,640	P	Plugged
3001502929	STATE "U" 009	CONTINENTAL OIL COM	1980 N	1980 E	G	9 17S	29E	1,320	P	Plugged
3001502933	STATE EDDY "33" 002	SINCLAIR OIL & GAS	660 N	1980 W	C	9 17S	29E	1,320	P	Plugged
3001502920	CAVE POOL UT 044	JEM RESOURCES	1980 N	660 E	H	8 17S	29E	2,640	P	Plugged
3001502928	CAVE POOL UNIT 033	JEM RESOURCES, INC.	660 N	1980 E	B	9 17S	29E	1,867	P	Plugged
3001502923	HUMBLE 8 006	KINCAID-WATSON	2310 S	330 E	I	8 17S	29E	2,513	P	Plugged
3001524809	GULF ST 002	BEACH EXPL INC	2310 S	1650 W	K	9 17S	29E	1,044	P	Plugged

PERMANENT BALLOUT

~~I need to check~~  
~~PERMANENT BALLOUT~~

REWORK

CHECK production of well

Shallow in AOR

**Jones, William V., EMNRD**

---

**From:** Mark Fairchild [MFairchild@conchoresources.com]  
**Sent:** Friday, April 09, 2010 8:52 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Keith Corbett; Robert Ready; Ramon Reyes; Sammie Hodges  
**Subject:** COG Empire State SWD #2  
**Attachments:** OXY Flameskinner State #1WBD.xls; DL\_CONOCO 9 ST 1 TYPE LOG.jpg; Barbwire 9 State WBS.xls; Conoco 9 State Com WBS.xls

William, in response to your questions of 3/15/2010 items 'o.' and 'p.' COG respectfully submits the following for your review.

- A. Per 'o.' all of the Wellbore diagrams of the P&A'd wells in the AOR. ✓
- B. Per 'p.' a detailed, annotated log with tops and cement plugs of the Conoco 9 State Com #1 well. COG contends that the cement plug in the Cisco does isolate the porous reef injection interval in this wellbore and that the well is adequately plugged.
- C. Please note, our NMOCD research of 30-015-36394 shows a permit but no drilled well documentation. ✓

Please let me know what you decide.

M.A. Fairchild  
COG OPERATING LLC  
Office: 432-686-3021  
Cell: 432-230-7170



**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.

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CIMAREX ENERGY CO. OF COLORADO 3215 N. O'CONNOR BLVD. IRVING, TX 75039		2. OWM Number 163883
		3. API Number 10-015-35294
4. Property Code 37228	5. Property Name FLAMESKINNER	6. Well No 008

7. Surface Location									
UTM - East	Section	Township	Range	Lot Blk	Foot Blk	R/W Line	Plot Blk	B/W Line	County
K	9	17S	29E	1	2130	S	1200	W	ELBY

8. Pool Information	
WGS STRA WGS (C)	97526

Additional Well Information				
9. Well Type New Well	10. WAG Type OAS	11. Color/Gray	12. Lease Type State	13. Ground Level Elevation 3586
14. Direction N	15. Proposed Depth 5900	16. Production Steam	17. Cementor	18. Spud Date 7/15/2008
Depth to bound water		Distance from nearest fresh water well		Distance to nearest surface well
19. Line: Synthetic <input type="checkbox"/> Cased Log: System <input type="checkbox"/>	20. mho. thick <input type="checkbox"/>	Clay <input type="checkbox"/>	Pt. Volume <input type="checkbox"/>	21. Drilling Method 22. Well Dr. Line <input type="checkbox"/> 23. Post-Drill/Reel <input type="checkbox"/> 24. Cement <input type="checkbox"/>

19. Proposed Casing and Cement Program						
Type	Hole Size	Casing Type	Casing Weight	Setting Depth	Sack of Cement	Estimated TOC
Surf	13.5	13.375	48	350	340	0
Int1	12.25	9.625	40	3000	680	0
Prod	8.75	5.5	17	9900	1436	2490

Casing/Cement Program: Additional Comments  
 Complete mud, casing, cementing, and BOP details will be emailed to Kimberly Wilson.

Proposed Blowout Prevention Program			
Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000	5000	Cameron

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling will be conducted according to BUREAU guidelines, a permit permit, or an approved alternative O&G-approved plan.	<b>OIL CONSERVATION DIVISION</b>	
	Approved By: Tim Gunn	
	Title: District Supervisor	
	Approved Date: 6/26/2008	Expiration Date: 6/26/2010
	Conditions of Approval Attached	
Printed Name: Electronically Filed by Leno Ferris		
Title: Manager Operations Administration		
Email Address: lferris@oag.nmehunter.com		
Date: 6/25/2008	Phone: 912-447-6439	

Well NOT DRILLED yet

Submit To Appropriate District Office  
 State Lease - 6 copies  
 Fee Lease - 5 copies  
 District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W Grand Avenue, Artesia, NM 88210  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-105  
 Revised June 10, 2003

WELL API NO.  
 30-015-36134

5. Indicate Type of Lease  
 STATE  FEE

State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:  
 OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_  
 b. Type of Completion:  
 NEW  WORK  DEEPEN  PLUG  DIFF.  
 WELL OVER BACK RESVR.  OTHER \_\_\_\_\_

7. Lease Name or Unit Agreement Name

Barbwire 9 State

2. Name of Operator  
 Cimarex Energy Co. of Colorado(162683)

AUG 12 2008

8. Well No.  
 001

3. Address of Operator  
 PO Box 140907; Irving, TX 75014-0907

OCD-ARTESIA

9. Pool name or Wildcat  
 Anderson; Wolfcamp, Wildcat

4. Well Location  
 SHL: Unit Letter E 1980 Feet From The North Line and 660 Feet From The West Line  
 BHL: Unit Letter \_\_\_\_\_ Feet From The \_\_\_\_\_ Line and \_\_\_\_\_ Feet From The \_\_\_\_\_ Line  
 Section 9 Township 17S Range 29E NMPM \_\_\_\_\_ County Eddy

10. Date Spudded 3-17-08 11. Date T.D. Reached 4-13-08 12. Date Compl. (Ready to Prod.) 5-15-08 13. Elevations (DF& RKB, RT, GR, etc) 3590' GR 14. Elev. Casinghead

15. Total Depth 10,830' 16. Plug Back T.D. 10779' 17. If Multiple Compl. How Many Zones? \_\_\_\_\_ 18. Intervals Drilled By \_\_\_\_\_ Rotary Tools \_\_\_\_\_ Cable Tools \_\_\_\_\_  
 Rotary

19. Producing Interval(s), of this completion - Top, Bottom, Name Anderson; Wolfcamp' 20. Was Directional Survey Made NO

21. Type Electric and Other Logs Run PEX, HRLA, BHC, Sonic, HNGS, CBL 22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/4"	48	186'	17 1/2"	400 sx, circ 46 sx	
9 1/4"	40	3017'	12 1/4"	1150 sx, circ 130 sx	
5 1/2"	17	10830'	8 3/4"	1640sx, TOC 2420' CBL	✓

LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 1/2"	7901'	Tac @ 7602'

26. Perforation record (interval, size, and number)  
10086'-10102' .43 72 holes covered by CIBP set @ 10000' w/15' cement on top  
7822'-7836' .43 96 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
10086'-10102'	1500 gal 15% NEFE HCL acid
10000'	CIBP with 15' Cement on top
7822'-7836'	1500 gal 15% NEFE HCL acid

28. PRODUCTION

Date First Production 5-18-08		Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> ) Pumping - 2 1/2" x 1 1/2" x 20' Sub surface Pump			Well Status ( <i>Prod. or Shut-in</i> ) Producing		
Date of Test 05-9-08	Hours Tested 24	Choke Size 48/64	Prod'n For Test Period	Oil - Bbl 20	Gas - MCF 10	Water - Bbl. 14	Gas - Oil Ratio 500
Flow Tubing Press. 120	Casing Pressure 50	Calculated 24 Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - ( <i>Corr</i> ) 39.36	

29. Disposition of Gas (*Sold, used for fuel, vented, etc.*)  
 \*First Gas production - 5-18-08 sold

30. List Attachments  
 Deviation Report

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

Signature Scott Haynes Printed Name Scott Haynes Title Regulatory Analyst Date 8/11/2008

E-mail Address shaynes@cimarex.com

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

FEB - 4 2009

Form C-101  
May 27, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



Submit to appropriate District Office

AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address Cimarex Energy Co. of Colorado 5215 N. O'Connor Blvd., Ste 1500 Irving, TX 75039		<sup>2</sup> OGRID Number 162683
		<sup>3</sup> API Number 30-015-36134
<sup>4</sup> Property Code 37012	<sup>5</sup> Property Name Barbwire 9 State Com	<sup>6</sup> Well No. 001
<sup>9</sup> Proposed Pool 1 Anderson; Wolfcamp		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	9	17S	29E		1980	North	660	West	Eddy

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	9	17S	29E		1980	North	660	East	Eddy

Additional Well Information

<sup>11</sup> Work Type Code A	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3590' GL
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 11762' (lateral MD)	<sup>18</sup> Formation Wolfcamp	<sup>19</sup> Contractor N/A	<sup>20</sup> Spud Date When Approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> ___mils thick Clay <input type="checkbox"/> Pit Volume: ___ bbls Drilling Method:				
Closed-Loop System <input checked="" type="checkbox"/> Flowback Tanks Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17½"	13¾"	48#	186'	400	Surface
12¼"	9¾"	40#	3017'	1150	Surface
8¾"	5½"	17#	10830'	1640	2420'
6¾"	3½"	9.3#	11762'	No cmt, PEAK	

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. 10086-10102

Well currently producing from Wolfcamp 7822-36.' Atoka perms 1008-102' with CIBP @ 10000' w/ 15' cmt. Cimarex proposes the following operations to recomplate horizontally in the Wolfcamp:

- Kill well. NU 5K BOP. Squeeze Wolfcamp perms @ 7822-36.' Set CIBP @ 7672' w/ 2 sx sand.
  - Mill window from 7650' to 7665.' Kick off 6¾" hole at 7660.' Land curve @ 7957' MD and drill to TD of 11762' MD and 7917' TVD.
  - Run 3½" 9.3# P-110 EUE 8rd liner from RSB packer at 7560' to TD of 11762' MD. Liner will be PEAK completion assembly with no cement.
  - Fracture treat in several stages as needed through iso-ports (separated by iso-packers).
- Please see attached preliminary directional survey and C-102.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .

*Natalie Krueger*  
Printed name: Natalie Krueger  
Title: Regulatory Analyst  
E-mail Address: nkrueger@cimarex.com  
Date: January 27, 2009 Phone: 469-420-2723

OIL CONSERVATION DIVISION  
Approved by: *Jacqui Reeves*  
Title: District 11 Geologist  
Approval Date: 2/10/09 Expiration Date: 2/10/2011  
Conditions of Approval Attached

# Cimarex Energy Co. of Colorado

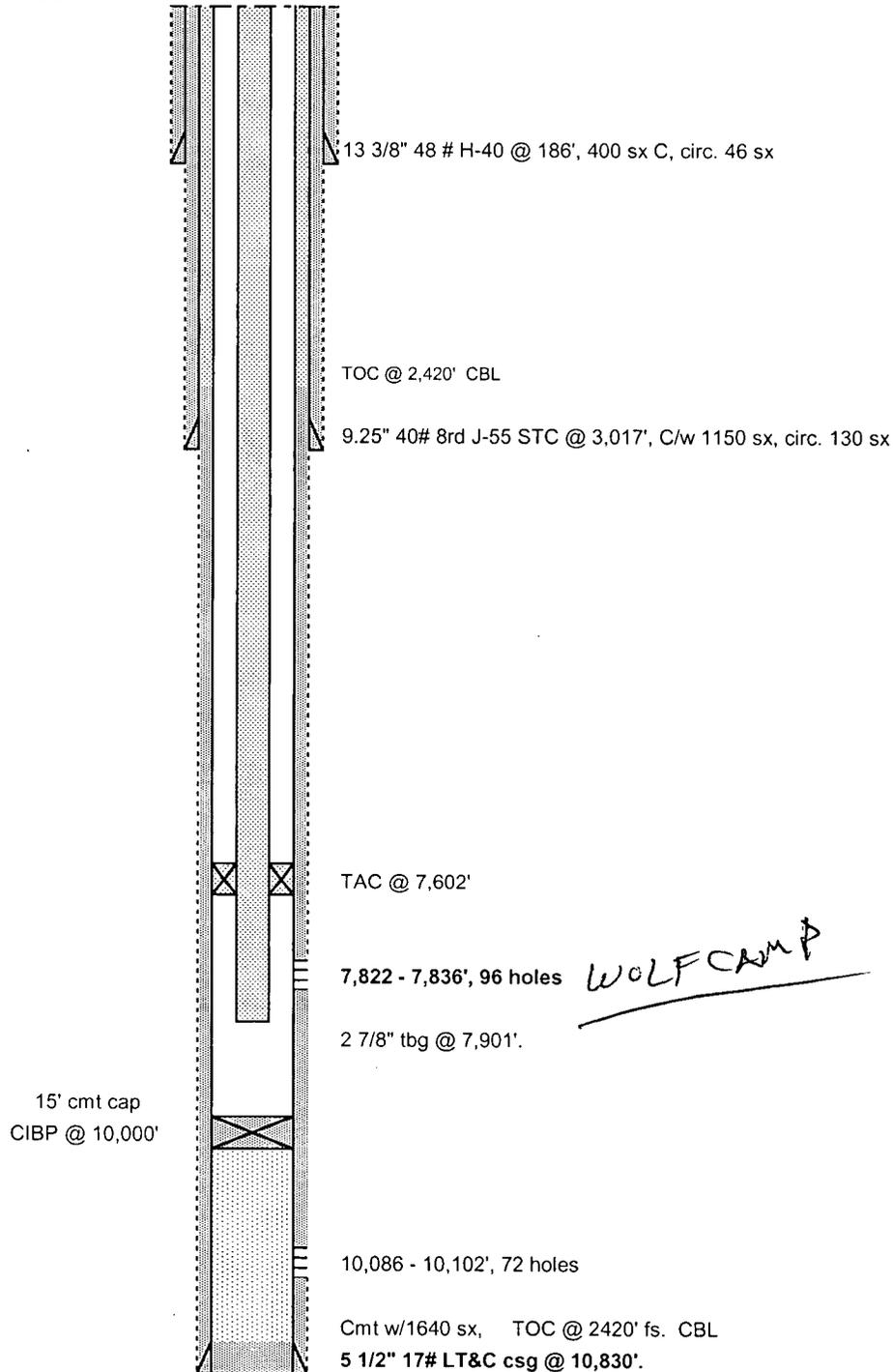
Lease & Well #  
30 015 36134

Barbwire 9 State #1

SPUD - 3/17/2008

Eddy Co., NM  
Sec 9 T17S R29E 1980 FNL & 660 FWL

Elevation - 3590'



# Cimarex Energy Co. of Colorado

SERVICE RIG

DRLG F/ 10200 TO 10232, 32', AVG ROP = 6 FPH, WOB = 55, RPM = 60  
SV @ 10183' = .25 DEG

DRLG F/ 10232 TO 10364, 132', AVG ROP = 8 FPH, WOB = 55, RPM = 60

Date: 03/14/2007

DRLG F/ 10364 TO 10389, 25', AVG ROP = 10 FPH, WOB = 55, RPM = 60  
SERVICE RIG & PUMPS

DRLG F/ 10389 TO 10585, 196', AVG ROP = 9 FPH, WOB = 55, RPM = 60

Date: 03/15/2007

DRLG F/ 10585 TO 10605, 20', AVG ROP = 7 FPH, WOB = 55, RPM = 60

SERVICE RIG

DRLG F/ 10605 TO 10729, 124', AVG ROP = 7 FPH, WOB = 55, RPM = 60

SV @ 10675 = .25 DEG

DRLG F/ 10729 TO 10737, 8', AVG ROP = 5 FPH, WOB = 55, RPM = 60

Date: 03/16/2007

DRLG f/ 10737' - 10760' ( 23' ), AVG ROP = 4.6 FPH, WT = 55, RPM = 60

SERVICE RIG

DRLG f/ 10760' - 10850' ( 90' ), TD 8 3/4" HOLE @ 03:30 HRS, 3-16-2007 @ 10850', AVG ROP = 5.5 FPH, WT = 55, RPM = 60

CIRC BOTTOMS UP

DROP TOTCO

TOH FOR LOGS

Date: 03/17/2007

FNSH TOH

L/D DRLG BHA & BIT

PRE-JOB SAFETY MEETING w/ BAKER ATLAS & McVAY RIG PERSONNEL

R/U BAKER ATLAS WIRELINE TRUCK, P/U LOGGING TOOLS, RIH w/ TRIPLE COMBO TOOL, RAN LOGS, POH, L/D TRIPLE COMBO TOOL, P/U STAR LOGGING TOOL, RIH, LOGGING OPEN HOLE WITH STAR LOGGING TOOL

Date: 03/18/2007

TIH W/ BIT

WASH TO BOTTOM

CIRC

HELD A PRE-JOB SAFETY MEETING AND TOH LDDP AND DCS

MIRU BULL ROGERS CSG CREW AND HELD A PRE-JOB SAFETY MEETING. TIH W/ FS, 1 JT, FC, AND 5.5" 17# HCP-110 LTC CASING AT REPORT TIME

Date: 03/19/2007

COMPLETED RUNNING CSG TO 10850 W/ 262 JTS OF 5.5" 17# HCP-110 LTC & SET @ 10850'

CIRC WHILE WAITING ON HALLIBURTON'S CEMENT

HALLIBURTON CEMENTED CSG W/ 840 SK OF INTERFILL "H" FB 870 SK OF SUPER "H". CIRC 26 SK TO PIT

ND BOPE AND SET SLIPS

JET & CLEAN PITS, NU WELL HEAD & RELEASED RIG AT 6:00 PM, 03/18/2007

SHUT DOWN FOR NIGHT. PREP TO COMPLETE RD THIS AM

30-015-35219  
OXT Flomaskin State #1

*But See Next Page*

**OXY FLAMESKIMMER STATE #1**

04/18/2007 CMIC: Barton  
MIRU.

04/19/2007 CMIC Barton

Move in rig up. Nipple up 5K hyd BOP. Unload and rack 363 jts new 2 3/8" L80 tbg. (11,465.69'). Pick up and run 4 3/4" bit, 5 1/2" csg scraper, on 342 jts tbg. Tag @ 10,813'. Test casing to 1500# - OK. Displace with 240 bbls 6% kcl claystay pkr fluid. Pull bit up hole to 10,787'. SION. Prep to POOH - Run CBL - CCL.

04/20/2007 CMIC Barton

Hold safety meeting. Trip out with 341 jts 2 3/8" tbg. Load csg with 18 bbls pkr fluid. Rig Halliburton wireline up. Run CBL from 10,804' to 7,800'. Run repeat log under 1000# psi. Rig wireline down. SION. Cement good from 8450' down. Fair to poor cement from 8450' - 4500'. No cement above 4500'.

04/21/2007 CMIC: Barton

hold safety meeting, assemble tcp guns, pkr., on/off tool & rih on 2 3/8" tbg., miru baker atlas wl, rih w/gamma ray tool & correlate to open hole log, pooh, rd wl, space out guns to perf. 10,566'-84', set pkr. @ 10,492', test csg. & pkr. to 500#(OK)nd bop, nu tree, si, rig down p/u & r/u, sd for weekend.

1-2 3/8" L-80 pup jt.	-	4.06
1-2 3/8" x 1.815"F" nipple	-	.98
1-2 3/8" L-80 pup jt.	-	6.21
1-2.38" x 5.5" baker hornet pkr.	-	9.14
1-2 3/8" x 1.875" L-10 on/off tool	-	1.65
2-jts. 2 3/8" L-80 tbg.	-	63.27
1-2 3/8" L-80 pup jt.	-	6.15
328-jts. 2 3/8" L-80 tbg.	-	10358.21
3-2 3/8" L-80 pup jts.(12',10'6")	-	28.11
1-jt. 2 3/8" L-80 tbg.	-	31.64
TOTAL	-	10509.42
KB	-	3.09
BOTTOM OF TBG.	-	10512.51
PKR. @ 10492.12	1.87 @ 10490.47	1.81 @ 10507.47

05/01/2007 CMIC: Barton

Drop bar. Tubing pressure went to 3000#. Open up and flow on various choke settings for 2 hours. Recover 25 bbls. of water. (100% load recovery) Flow well on 24/64 choke, 2750# FTP, 975 MCF/day rate for one hour. Recover 12 bbls. (37 bbls total) Open choke to 42/64. Flow rate 1.95 @ 1950# FTP. Recover 11 bbls in first hour. (48 bbls total). Flow well @ 1.95 rate for a total of 2.5 hours. Flowing tubing pressure 1800#. Well made 13 bbls of water the last hour for a total of 61 bbls. Load to recover was 23 bbls.

05/02/2007 CMIC: Barton

Wait on Pro Wireline. Rig up Pro Wireline and RIH. Release TCP assembly and follow them down hole. Tag top of assembly @ 10,763'. POOH RIH W/single pressure gauge to 10,575' and acquire bottom hole pressure. Open well to sales.

# OXY USA

Lease & Well #  
30 015 35219

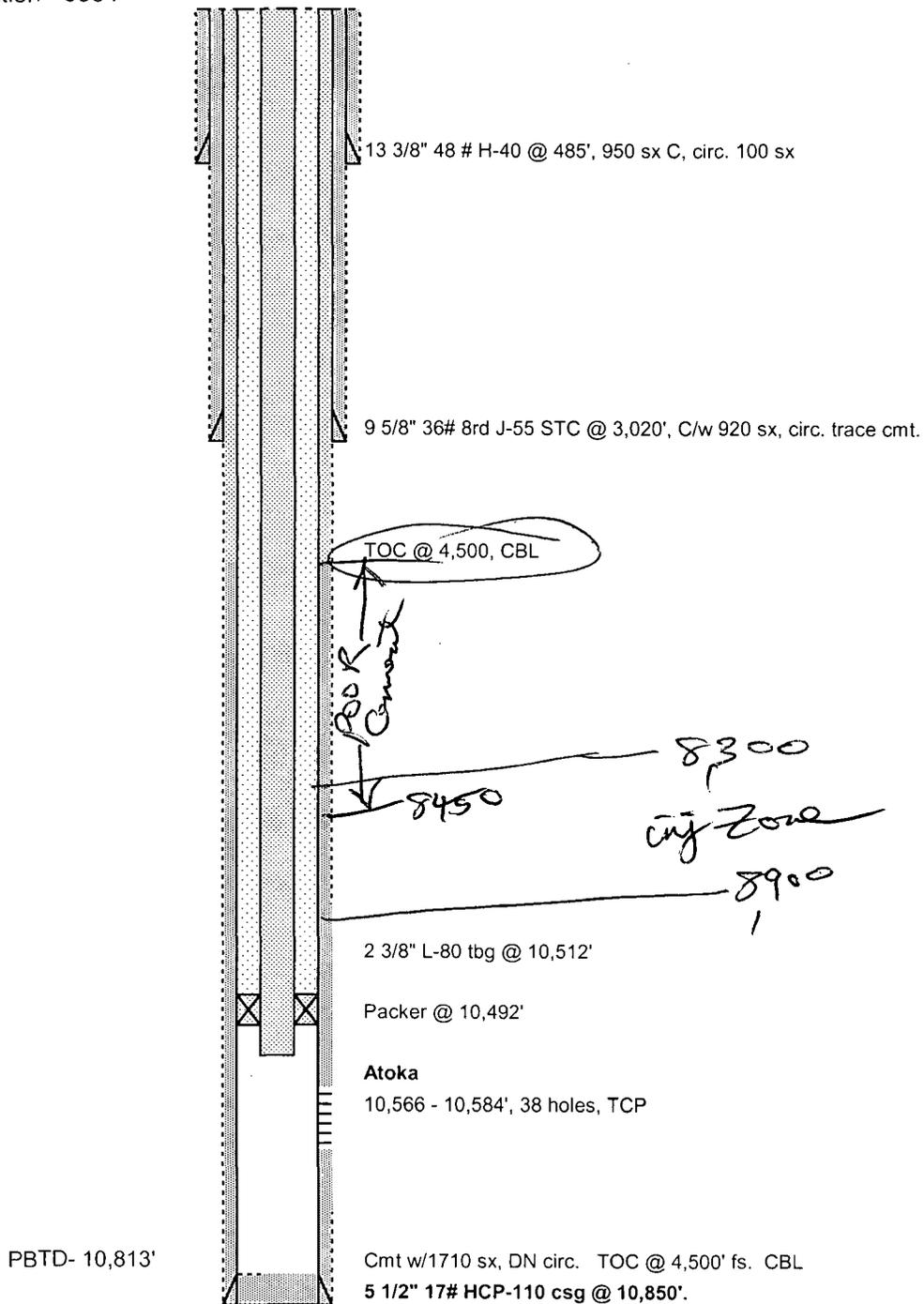
OXY Flameskimmer State #1

SPUD - 2/13/2007

Eddy Co., NM

Sec 9 T17S R29E 1650 FSL & 1880 FEL

Elevation - 3584'



OXY USA

4/9/2010

OXY Flameskinner State #1WBD.xls

SHodges

ENRON OIL & GAS COMPANY  
CONOCO "9" STATE COM NO. 1  
API 30-015-30690  
PAGE 2 OF C-103  
10/11/99

1950' AWAY FROM SUBJECT WELL

8/7/99

Cement plug 10,488-10,388'. 100' plug, cement pumped - 40 sx Premium Class "H", 16.4#/gal, 1.06 cu ft/sk  
Cement plug 8620-8520'. 100' plug, cement pumped - 45 sx Premium Class "H", 16.4#/gal, 1.06 cu ft/sk  
Cement plug 7230-7138. 92' plug, cement pumped - 40 sx Premium Class "H", 16.4#/gal, 1.06 cu ft/sk  
Cement plug 6014-5914'. 100' plug, cement pumped - 45 sx Premium Class "H", 16.4#/gal, 1.06 cu ft/sk.  
Cement plug 3900-3800'. 100' plug, cement pumped - 40 sx Premium Class "H", 16.4#/gal, 1.06 cu ft/sk.  
Cement plug 2700-2600'. 100' plug, cement pumped 30 sx Premium Plus "C", 15.6#/gal, 1.18 cu ft/sk.  
Pulled 5 stds DP. Waited on cement two (2) hrs - tagged cement at 2,600' with 8000# wt.  
Cement plug 489-389'. 100' plug, cement pumped 25 sx Premium Plus "C", 15.6#/gal, 1.18 cu ft/sk.  
Cement plug 50' - surface. 50' plug, cement pumped 15 sx Premium Plus "C", 15.6#/gal, 1.18 cu ft/sk.

8/8/99

Nipple down BOP. Install dry hole marker.

1999 DRY HOLE

W.C. ROY / W.C. ROY / W.C. ROY  
7,230' → 8,620'  
OPEN

NO CASING RUN TO TD

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

**OIL CONSERVATION DIVISION**

DISTRICT I  
P.O. Box 1980, Hobbs NM 88241-1980

2040 Pacheco St.  
Santa Fe, NM 87505

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO. <b>30-015-30690</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name <b>Conoco "9" State Com</b>
8. Well No. <b>1</b>
9. Pool name or Wildcat <b>Sand Tank (Morrow)</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
OIL WELL  GAS WELL  OTHER

2. Name of Operator   
**Enron Oil & Gas Company**

3. Address of Operator  
**P.O. Box 2267 Midland, TX 79702**

4. Well Location  
Unit Letter **G** : **1980** Feet From The **North** Line and **1350** Feet From The **East** Line  
Section **9** Township **17S** Range **29E** NMPM **Eddy** County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
**3565' GL**

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. 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.

8/3/88 - TD at 10,960' at 10:00 p.m.  
8/4/99 - Log well with Dual Induction/GR/COM Z Densilog/Comp Neutron/Digital Acousticlog  
8/7/99 - Plug and abandon well.  
See attached page for further details.



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

SIGNATURE Mike Francis TITLE Agent DATE 10/11/99

TYPE OR PRINT NAME Mike Francis TELEPHONE NO. 915/686-3714

(This space for State Use)

APPROVED BY Jim W. Burns TITLE District Supervisor DATE 10-20-99

CONDITIONS OF APPROVAL, IF ANY:

# Enron Oil Gas Company

Lease & Well #  
30 015 30690

Conoco 9 State Com. #1

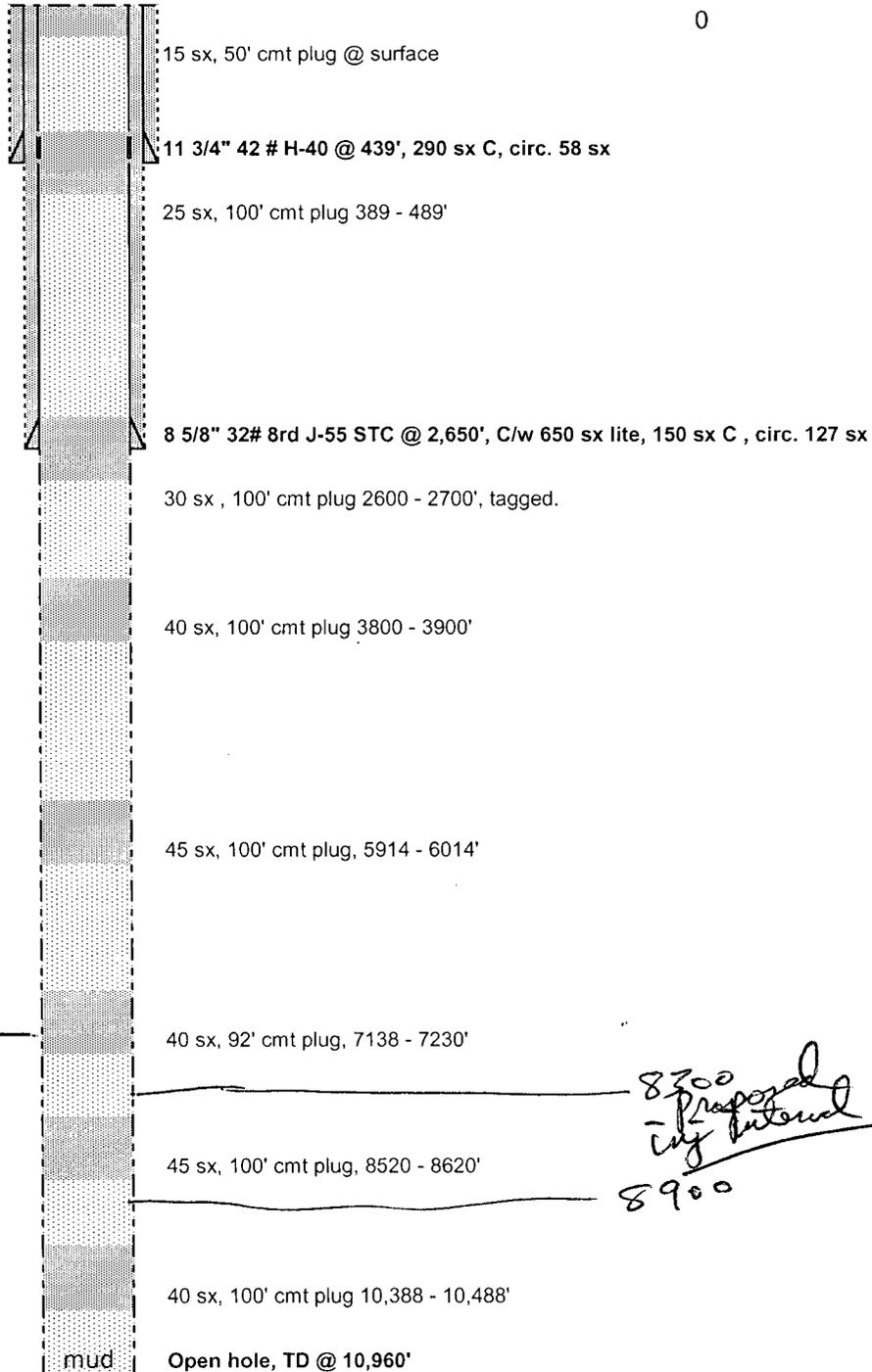
**P&A, 8/8/1999**

SPUD - 7/13/99

Eddy Co., NM  
Sec 9 T17S R29E 1980 FNL & 1350 FEL

Elevation - 3565'

0



*~ 7185'  
Top (WC)*

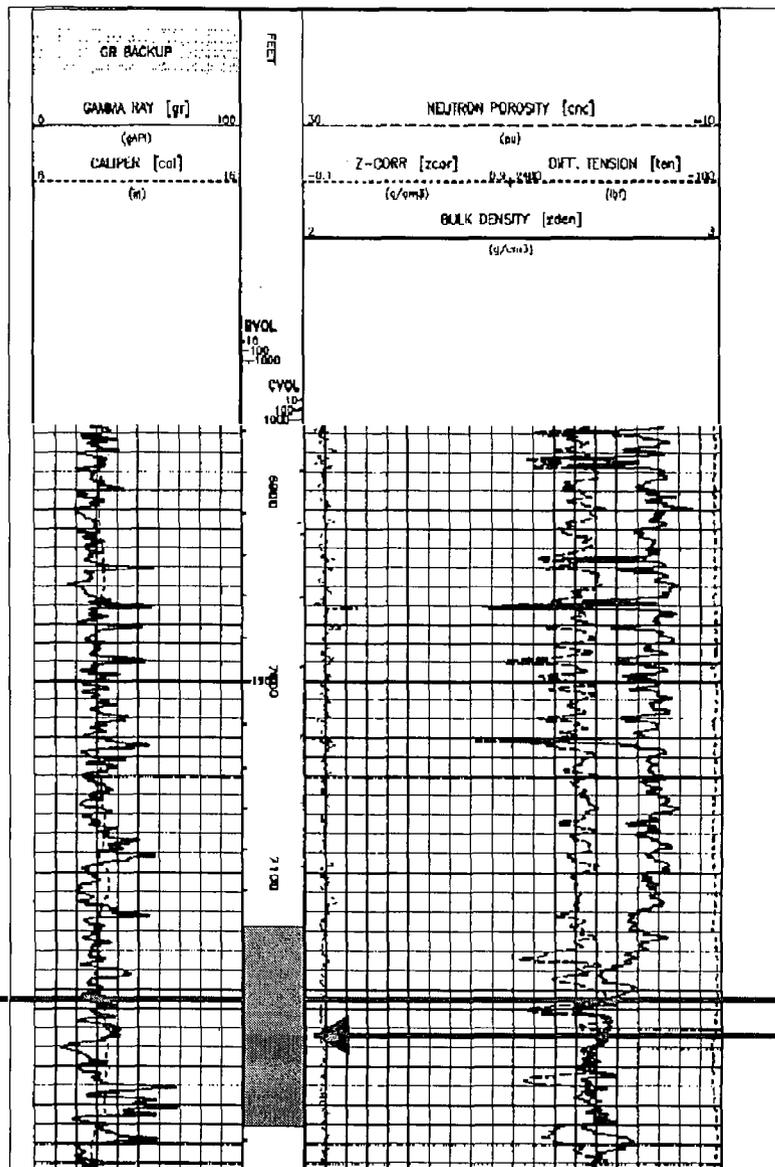
*8300  
Proposed  
casing interval  
8900*



300153069000



ENRON OIL & GAS CO  
CONOCO '9' STATE CO 1  
1980 FNL 1350 FEL  
TWP: 17 S - Range: 29 E - Sec. 9  
Datum=3583



T/ Wolfcamp

41



New Mexico Office of the State Engineer  
**Point of Diversion by Location**  
(with Owner Information)

UTM/NAD83 Radius Search (in meters):

Easting (X): 585701

Northing (Y): 3635328

Radius: 1610

• No PODs found.

2/19/2010: Fresh Water Well Search, COG SENM Empire State SWD #2,  
1 mile radius of location. No wells found

## **Legal Notice**

**COG Operating LLC** is applying to drill the Empire State SWD #2 as a water disposal well.

The well is located in 1980' FNL & 1980' FWL, Sec. 9, T. 17 S., R. 29 E., Eddy County, NM. The well will be dispose of water produced from oil and gas wells into the Cisco Reef zone at a depth of 8300' to 8900' at a maximum rate of 20,000 barrels of water per day and at a maximum pressure of 1,720 psi.

Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 12220 South Saint Francis Dr., Santa Fe, NM 87505, within 15 days.

Additional information can be obtained  
by contacting Tye Orr  
Veritas 321 Energy Partners, LP  
P.O. Box 173  
Midland, TX  
(432) 349-4729



# VERITAS 321

ENERGY PARTNERS, LP

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

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Sent To: New Mexico State Land Office  
Street, Apt. No.,  
or PO Box No. P.O. Box 1148  
City, State, ZIP+4 Santa Fe NM 87504

7007 2560 0003 3661 9027



# VERITAS 321

ENERGY PARTNERS, LP

Bureau of Land Management  
620 E Greene Street  
Carlsbad, NM 88220

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Total Postage & Fees	\$ 5.71	
Sent to Bureau of Land Management Street, Apt. No. or PO Box No. 620 Greene Street City, State, ZIP+4 Carlsbad NM 88220		



# VERITAS 321 ENERGY PARTNERS, LP

ConocoPhillips  
PO Box 2197  
Houston, TX 77252

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Total Postage & Fees	\$ 5.71	

Sent to Conoco Phillips  
 Street, Apt. No., or PO Box No. P.O. Box 2197  
 City, State, ZIP+4 Houston TX 77252

PS Form 3800, August 2006 See Reverse for Instructions

0001 2560 0003 3681 9300 7007



# VERITAS 321 ENERGY PARTNERS, LP

Doral Energy Corp  
111 N. Sepulveda Blvd, Suite 250  
Manhattan Beach, CA 90266

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

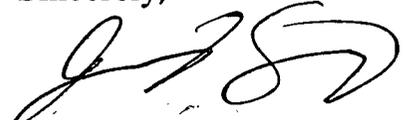
Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

  
Tony Esslinger

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Sent To Doral Energy Corp.  
 Street, Apt. No., or PO Box No. 111 N. Sepulveda Blvd #250  
 City, State, ZIP+4 Manhattan Beach, CA 90266

PS Form 3800, August 2006 See Reverse for Instructions

7007 2560 0003 3681 9089



# VERITAS 321

ENERGY PARTNERS, LP

Marks & Garner Prod Co Ltd  
PO Box 1089  
Hobbs, NM 88241

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71
Postmark Here	
Sent To: Marks & Garner Prod. Ltd. Co.	
Street, Apt. No., or PO Box No. P.O. Box 1089	
City, State, ZIP+4 Hobbs NM 88241	

4626 199E E0NN N952 7NN7



# VERITAS 321

ENERGY PARTNERS, LP

J.E. Roye and Rozelle V. Roye  
2014 Gila Rd  
Odessa, TX 79763

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Total Postage & Fees	\$ 5.71
Postmark Here	
Sent to J.E. Roye & wife Rozelle V. Roye	
Street, Apt. No., or P.O. Box No. 2014 Gila Rd.	
City, State, ZIP+4 Odessa TX 79763	



# VERITAS 321

ENERGY PARTNERS, LP

Gayle S. Smith  
9430 Manor Dr  
La Mesa, CA 91942

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Total Postage & Fees	\$ 5.71	
Sent To		
Gayle S. Smith		
Street, Apt. No., or PO Box No.		
9430 Manor Dr.		
City, State, ZIP+4		
La Mesa, CA 91942		

1406 1895 5888 9047



# VERITAS 321

ENERGY PARTNERS, LP

JEM Resources, Inc.  
512 W Texas Ave  
Artesia, NM 88210

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

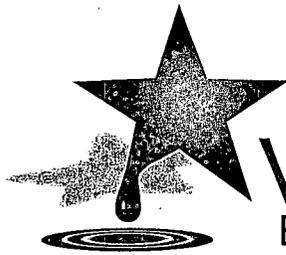
Sincerely,

Tony Esslinger

9506 199E E000 0952 2001

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Postmark Here	
Sent To: JEM Resources, Inc.	
Street, Apt. No. or PO Box No.: 512 W. Texas Ave.	
City, State, ZIP+4: Artesia NM 88210	





# VERITAS 321

ENERGY PARTNERS, LP

Pitch Energy Corp.  
PO Box 304  
Artesia, NM 88211

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.71	

Sent To Pitch Energy Corp.  
 Street, Apt. No.,  
 or PO Box No. P.O. Box 304  
 City, State, ZIP+4 Artesia NM 88211

7007 2560 0000 9157



# VERITAS 321

ENERGY PARTNERS, LP

Magnum Hunter Production, Inc.  
600 Las Colinas Blvd, Suite 1100  
Irving, TX 75039

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

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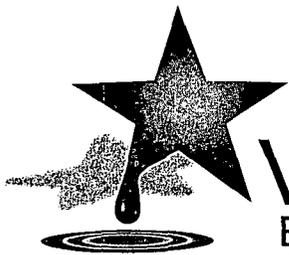
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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71

Postmark Here

Sent To Magnum Hunter Production, Inc.  
Street, Apt. No. or PO Box No. 5215 N O'Connor, Ste. 1500  
City, State, ZIP+4 Irving, TX 75039



# VERITAS 321

ENERGY PARTNERS, LP

Magnum Hunter Production, Inc.  
5215 N O'Connor, Suite 1500  
Irving, TX 75039

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

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Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

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Please call me if you have any questions.

Sincerely,

Tony Esslinger

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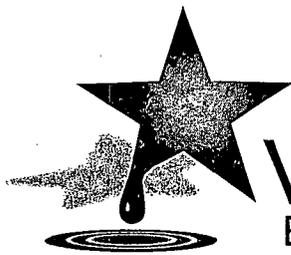
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Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71

Postmark  
Here

Sent To: Magnum Hunter Production Inc.  
Street, Apt. No. or PO Box No. 100 Las Colinas Blvd. Ste. 1100  
City, State, ZIP+4 Irving, TX 75039

7007 2560 0003 3681 9188



# VERITAS 321

ENERGY PARTNERS, LP

Enercorp Resources, Inc.  
101 W Goodwin Ave  
Victoria, TX 77901

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

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Please call me if you have any questions.

Sincerely,

Tony Esslinger

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**OFFICIAL USE**

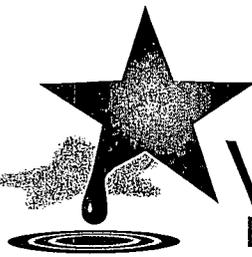
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Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71

Postmark  
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Sent To Enercorp Resources, Inc.  
Street, Apt. No.,  
or PO Box No. 101 W. Goodwin Ave  
City, State, ZIP Victoria, TX 77901

9702 • 432.682.4002 • 432.684.4741 fax

Consulting Landman



# VERITAS 321

ENERGY PARTNERS, LP

Marbob Energy Corp.  
PO Box 227  
Artesia, NM 88211

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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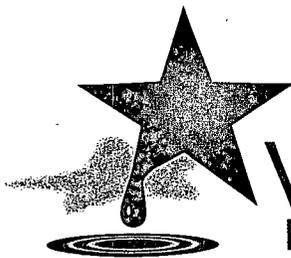
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Postage	\$ 0.61
Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71

Postmark  
Here

Sent To Marbob Energy Corp.  
 Street, Apt. No., or PO Box No. P.O. Box 227  
 City, State, ZIP+4 Artesia, NM 88211

PS Form 3800, August 2006 See Reverse for Instructions



# VERITAS 321

ENERGY PARTNERS, LP

Brock Resources, Inc.  
225 Baronne St Suite 700  
New Orleans, LA 70112

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

7007 2560 0003 3681 9126

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<b>OFFICIAL USE</b>	
Postage	\$ 0.61
Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71
Postmark Here	
Sent To <i>Brock Resources, Inc.</i>	
Street, Apt. No., or PO Box No. <i>225 Baronne St. Ste 700</i>	
City, State, ZIP+4 <i>New Orleans, LA 70112</i>	
PS Form 3800, August 2006	
See Reverse for Instructions	



# VERITAS 321

ENERGY PARTNERS, LP

Freedom Energy, LLC  
RR 649 N 13<sup>th</sup> Street  
Lake Arthur, NM 88253

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,



Tony Esslinger

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Postage	\$ 0.61	Postmark Here
Certified Fee	2.80	
Return Receipt Fee (Endorsement Required)	2.30	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.71	

Sent To Freedom Energy, LLC  
Street, Apt. No.,  
or PO Box No. RR 649 N. 13th Street  
City, State, Zip+4 Lake Arthur, NM 88253

PS Form 3800, August 2006 See reverse for instructions

1107 7092 ENNN 9171



# VERITAS 321

ENERGY PARTNERS, LP

BP America Production Co.  
PO Box 3092  
Houston, TX 77253

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E

Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Postage	\$ 0.11	Postmark Here
Certified Fee	2.80	
Return Receipt Fee (Endorsement Required)	2.30	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.71	

Sent To BP America Production Co.  
 Street, Apt. No.,  
 or PO Box No. P.O. Box 3092  
 City, State, ZIP+4 Houston, TX 77253

PS Form 3800, August 2005 See Reverse for Instructions

7007 2560 0003 3681 9202



# VERITAS 321

ENERGY PARTNERS, LP

Devon Energy Corp.  
20 North Broadway Ave Ste 1500  
Oklahoma City, OK 73102

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2  
Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900)  
Location: 1980' FNL & 1980' FWL Sec 9, T 17S, R29E  
Eddy County, NM  
Approximate Location: 3 miles East of Artesia, NM  
Applicant Name: COG Operating LLC (432) 685-4340  
Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tony Esslinger

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Postage	\$ 0.61
Certified Fee	2.80
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.71
Postmark Here	
Sent To: Devon Energy Corp.	
Street, Apt. No., or PO Box No.: 20 N. Broadway Ste. 1500	
City, State, ZIP+4: Oklahoma City, OK 73102	
PS Form 3800, August 2006 See Reverse for Instructions	

9702 • 432.682.4002 • 432.684.4741 fax

**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Monday, March 15, 2010 3:21 PM  
**To:** 'Mark Fairchild'  
**Cc:** Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD; 'Wesley\_Ingram@blm.gov'; Warnell, Terry G, EMNRD  
**Subject:** Disposal Application from COG Operating LLC: Empire State SWD #2 30-015-NA Proposed new well for disposal into the Cisco Reef 8300 - 8900

Hello Mark: ANOTHER EMAIL FOR ANOTHER WELL

After reviewing I have the following requests:

- ? a. Please send a list of all anticipated formation names that will be contributing waters to this well and a "typical" analysis for each.
- ? b. Your application shows a search of the State Engineer site to look for water wells. Please ask your field people to locate the nearest Windmill or Cattle tank and get a sample for analysis if located within 1 mile of this well.
- OK c. The newspaper notice was confusing as listing Veritas 321 Energy Partners as contact info – is this correct? If not, please renote. Another point is that newspaper notices should have an informal location in addition to a legal location that gives the reader a general idea of where the well is located – for example, 4 miles NW of Loco Hills, NM.
- ? d. We ask that the applicant break up the ½ mile AOR into consistently owned "tracts" of land and list these tracts with the owners of each tract. Please note that if there is a Lessee of a tract of land at Cisco Reef depths, then you don't have to notice the mineral interest owner(s) of the Cisco Reef depth. That being said, THANK YOU for being thorough with the notice.
- ? e. I did see that Cimarex, EOG, and Aspen Pumping Services operate shallower wells and therefore may own rights to the Cisco depths – if there is a question, please send them notice also. *Sand Complete G-1085*
- include in my permit f. This is a new proposed well in an area where the well records indicate older wells had difficulty circulating adequate cement – See the records on 30-015-35219. Therefore any approved injection permit may have a stipulation that a cement bond log be run not only to locate cement tops, but to locate areas will poor cement bond.
- ✓ g. Your AOR well list failed supply Wellbore Diagrams for P&Aed wells and only listed "proposed" casing/cementing data. Please send wellbore diagrams for P&Aed wells and "actual" records of casing/cement.
- Re plugs h. The Conoco 9 State Com #1 30-015-30690 well is plugged in the AOR with plugs that do not isolate the Wolfcamp from the Cisco formations. That well will have to be re-entered and replugged so as to isolate the Cisco Reef from formations located above or below the disposal interval. The SWD permit issued will have a stipulation to this effect. *(1950 Feet away)*
- ? i. This is a "State" owned well, so it should not take long to obtain an APD from the district office. As soon as the API number is available for the subject well – send it to my attention, so we can update our database.

Thank You for this application.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Monday, April 12, 2010 4:05 PM  
**To:** 'Mark Fairchild'  
**Cc:** Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD  
**Subject:** Disposal Application from COG Operating LLC: Empire State SWD #2 30-015-NA Proposed new well for disposal into the Cisco Reef formation 8300 - 8900

Hello again Mark:

Thank you for the reply back on many of the 3/15/10 requested items.

There are still a few issues, but the main one in this case is the issue of the Conoco 9 State Com #1 30-015-30690. This well is not plugged such that the Wolfcamp is isolated from the proposed disposal interval – and Cimarex operates a Wolfcamp well in the Area of Review. Also, notice was not sent to Cimarex in this case – that I have a record of.

In addition, this Conoco 9 State Com #1 is not plugged to isolate the proposed disposal interval from deeper – upper Penn intervals.

We cannot approve this disposal application unless you agree to re-enter this well and set new plugs to isolate the proposed Cisco disposal interval from upper and lower strata.

The OCD could approve a permit with the provision this Conoco 9 State Com #1 well be re-entered and re-plugged. Let me know if you want this? If so, please answer the following questions that from my records, appear remaining from the 3/15/10 email:

- with sound* a. Please send a list of all anticipated formation names that will be contributing waters to this well and a “typical” analysis for each.
- As Tim* b. Your application shows a search of the State Engineer site to look for water wells. Please ask your field people to locate the nearest Windmill or Cattle tank and get a sample for analysis if located within 1 mile of this well.
- OK* c. Please break up the ½ mile AOR into consistently owned “tracts” of land and list these tracts with the owners of each tract. Please note that if there is a Lessee of a tract of land at Cisco Reef depths, then you don’t have to notice the mineral interest owner(s) of the Cisco Reef depth.
- NO RIGHTS* d. I did see that Cimarex, EOG, and Aspen Pumping Services operate shallower wells and therefore may own rights to the Cisco depths – if there is a question, please send them notice also.
- ?* e. Does the State Land Office own the surface where the well is to be located?
- f. As soon as the API number is available for the subject well – send it to my attention, so we can update our database.

**Since it appears the plugged Conoco 9 State Com #1 30-015-30690 must be re-entered and re-plugged, COG could consider re-entering this well, installing casing, and using it for an SWD well? Of course, a new AOR would need to be examined.**

You always have the option of appearing before an examiner and providing additional evidence.

Thank You again for this application.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

## Jones, William V., EMNRD

---

**From:** Mark Fairchild [MFairchild@conchoresources.com]  
**Sent:** Tuesday, April 13, 2010 7:59 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: Disposal Application from COG Operating LLC: Empire State SWD #2 30-015-NA Proposed new well for disposal into the Cisco Reef formation 8300 - 8900  
**Attachments:** representative\_sample\_blinebry\_formation.pdf;  
representative\_sample\_paddock\_formation.pdf

*William, the two representative water samples are attached. Each zone contributes approximately 50% of the volume we dispose of.*

M.A. Fairchild  
COG OPERATING LLC  
Office: 432-686-3021  
Cell: 432-230-7170



**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.

---

**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Monday, April 12, 2010 5:05 PM  
**To:** Mark Fairchild  
**Cc:** Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD  
**Subject:** Disposal Application from COG Operating LLC: Empire State SWD #2 30-015-NA Proposed new well for disposal into the Cisco Reef formation 8300 - 8900

Hello again Mark:

Thank you for the reply back on many of the 3/15/10 requested items.

There are still a few issues, but the main one in this case is the issue of the Conoco 9 State Com #1 30-015-30690. This well is not plugged such that the Wolfcamp is isolated from the proposed disposal interval – and Cimarex operates a Wolfcamp well in the Area of Review. Also, notice was not sent to Cimarex in this case – that I have a record of.

In addition, this Conoco 9 State Com #1 is not plugged to isolate the proposed disposal interval from deeper – upper Penn intervals.

We cannot approve this disposal application unless you agree to re-enter this well and set new plugs to isolate the proposed Cisco disposal interval from upper and lower strata.

The OCD could approve a permit with the provision this Conoco 9 State Com #1 well be re-entered and re-plugged. Let me know if you want this? If so, please answer the following questions that from my records, appear remaining from the 3/15/10 email:

- a. Please send a list of all anticipated formation names that will be contributing waters to this well and a "typical" analysis for each.
- b. Your application shows a search of the State Engineer site to look for water wells. Please ask your field people to locate the nearest Windmill or Cattle tank and get a sample for analysis if located within 1 mile of this well.
- c. Please break up the ½ mile AOR into consistently owned "tracts" of land and list these tracts with the owners of each tract. Please note that if there is a Lessee of a tract of land at Cisco Reef depths, then you don't have to notice the mineral interest owner(s) of the Cisco Reef depth.
- d. I did see that Cimarex, EOG, and Aspen Pumping Services operate shallower wells and therefore may own rights to the Cisco depths – if there is a question, please send them notice also.
- e. Does the State Land Office own the surface where the well is to be located?
- f. As soon as the API number is available for the subject well – send it to my attention, so we can update our database.

**Since it appears the plugged Conoco 9 State Com #1 30-015-30690 must be re-entered and re-plugged, COG could consider re-entering this well, installing casing, and using it for an SWD well? Of course, a new AOR would need to be examined.**

You always have the option of appearing before an examiner and providing additional evidence.

Thank You again for this application.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

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Catalyst Oilfield Services  
 11999 E Hwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

### Water Analysis Report

Customer: COG Operating LLC - NM Sample #: 6861  
 Area: Artesia Analysis ID #: 216  
 Location: Typical Blinebry 0  
 Sample Point: Wellhead

Sampling Date:	1/11/07	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	2/7/07	Chloride:	152968.0	4314.67	Sodium:	57440.1	2498.5
Analyst:	Mitchell Labs	Bicarbonate:	62.8	1.03	Magnesium:	4065.0	334.4
TDS (mg/l or g/m3):	244706.2	Carbonate:			Calcium:	29844.8	1489.26
Density (g/cm3):	1.17	Sulfate:	320.0	6.66	Strontium:		
Hydrogen Sulfide:	5				Barium:		
Carbon Dioxide:	61.6				Iron:	4.9	0.18
Comments:		pH at time of sampling:		6.5	Manganese:	0.600	0.02
		pH at time of analysis:					
		pH used in Calculation:		6.5	Conductivity (micro-ohms/cm):		225000
		Temperature @ lab conditions (F):		70	Resistivity (ohm meter):		.0444

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.38	2.22	-0.24	0.00	-0.20	0.00	0.00	0.00	0.00	0.00
100	0.45	2.77	-0.31	0.00	-0.21	0.00	0.00	0.00	0.00	0.00
120	0.51	3.33	-0.37	0.00	-0.18	0.00	0.00	0.00	0.00	0.00
140	0.57	3.88	-0.41	0.00	-0.13	0.00	0.00	0.00	0.00	0.00



Catalyst Oilfield Services  
 11999 E Hwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

### Water Analysis Report

Customer: COG Operating LLC - NM Sample #: 6518  
 Area: Artesia Analysis ID #: 166  
 Location: Typical Paddock 0  
 Sample Point: Wellhead

Sampling Date:	10/18/06	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	10/20/06	Chloride:	118129.8	3332.01	Sodium:	63736.9	2772.4
Analyst:	Mitchell Labs	Bicarbonate:	125.7	2.06	Magnesium:	1356.6	111.6
TDS (mg/l or g/m3):	193512.6	Carbonate:			Calcium:	9326.4	465.39
Density (g/cm3):	1.135	Sulfate:	800.0	16.66	Strontium:		
Hydrogen Sulfide:	5				Barium:		
Carbon Dioxide:	57				Iron:	36.1	1.3
Comments:		pH at time of sampling:		6.9	Manganese:	1.070	0.04
		pH at time of analysis:					
		pH used in Calculation:		6.9	Conductivity (micro-ohms/cm):		375000
		Temperature @ lab conditions (F):		75	Resistivity (ohm meter):		.0267

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.68	7.56	-0.23	0.00	-0.20	0.00	0.00	0.00	0.00	0.00
100	0.72	8.72	-0.30	0.00	-0.21	0.00	0.00	0.00	0.00	0.00
120	0.75	9.89	-0.36	0.00	-0.19	0.00	0.00	0.00	0.00	0.00
140	0.79	11.05	-0.41	0.00	-0.15	0.00	0.00	0.00	0.00	0.00

**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Tuesday, April 13, 2010 11:21 AM  
**To:** 'Mark Fairchild'  
**Subject:** Disposal Applications from COG Operating LLC: Empire State SWD #2 and Federal #3

Mark:

Let me know after you check with Veritas about noticing Marbob and Hanson Energy on the #3 well?

Also, let me know if these footage locations are fixed? (The disposal permits are site specific, so once the permit is issued, if the footage location changes, the permit would no longer be valid and it would require a new application.)

Thanks for the water analysis.

Will

**Jones, William V., EMNRD**

---

**From:** Tye Orr [tye@veritas321.com]  
**Sent:** Friday, April 16, 2010 2:11 PM  
**To:** Jones, William V., EMNRD  
**Cc:** mfairchild@conchoresources.com  
**Subject:** Extended Notices  
**Attachments:** Extended Notice (Aspen).pdf; ATT3669687.txt; Extended Notice (Cimarex).pdf; ATT3669688.txt; Extended Notice (EOG).pdf; ATT3669689.txt; Extended Notice (Hanson).pdf; ATT3669690.txt; Extended Notice (Marbob).pdf; ATT3669691.txt

William, attached are the notices you had in question for the Empire State SWD #2 and #3 wells that I have applied for on behalf of Concho. All have been mailed as of today. These are for your records per your request. Please let me know if you have any questions. Thanks.

*R. Jones*  
5/3/10

**Jones, William V., EMNRD**

---

**From:** Mark Fairchild [MFairchild@conchoresources.com]  
**Sent:** Friday, April 16, 2010 8:40 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Robert Ready; Tye Orr  
**Subject:** RE: Empire Area SWD wells #2 and 3

*Just talked to Ty and he will mail today!*

M.A. Fairchild  
COG OPERATING LLC  
Office: 432-686-3021  
Cell: 432-230-7170



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**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Friday, April 16, 2010 9:40 AM  
**To:** Mark Fairchild  
**Subject:** RE: Empire Area SWD wells #2 and 3

Mark:  
Sounds like a plan.  
If you noticed other parties other than the BLM, please send the receipts.

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87305  
505-476-3448

**From:** Mark Fairchild [mailto:MFairchild@conchoresources.com]  
**Sent:** Friday, April 16, 2010 7:50 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Erick Nelson; Robert Ready; Tye Orr; Phyllis Edwards; Robyn Odom; Keith Corbett  
**Subject:** Empire Area SWD wells #2 and 3

William, just got off the phone with Mr. Ingram of the BLM and he has #3 on his desk and all is good. Should sign this date. Will await the now 14 days for release of SWD permit and then send the API's to you when y'all issue them. Please let me know of anything that needs our attention. Thanks!



EOG Resources, Inc.  
 4000 N. Big Spring St # 500  
 Midland, TX 79705

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2  
Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')  
Location: 1980' FNL & 1980 FWL Sec 9, T17S, R29E  
 Eddy County, NM  
Approximate Location: 3 miles East of Artesia, NM  
Applicant Name: COG Operating LLC (432) 685-4340  
Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tye Orr  
 Consulting Landman  
 (432) 349-4729

0 1 2 3 4 5 6 7 8 9

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Postage	\$	.78	Postmark Here
Certified Fee		2.30	
Return Receipt Fee (Endorsement Required)		2.30	
Restricted Delivery Fee (Endorsement Required)			
Total Postage & Fees	\$	5.38	
Sent To			
EOG Resources, Inc.			
Street, Apt. No., or PO Box No. 4000 N. Big Spring St # 500			
City, State, ZIP+4 <sup>®</sup> Midland, TX 79705			



Cimarex Energy Co.  
600 N. Marienfeld St. # 600  
Midland, TX 79701

COG Operating LLC is applying (see attached application) to drill a salt water disposal well as described below. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Empire State SWD #2

Proposed Disposal Zone: Cisco Reef (from 8,300' to 8,900')

Location: 1980' FNL & 1980 FWL Sec 9, T17S, R29E  
Eddy County, NM

Approximate Location: 3 miles East of Artesia, NM

Applicant Name: COG Operating LLC (432) 685-4340

Applicant's Address: 550 West Texas, Suite 1300, Midland, TX 79701

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Tye Orr  
Consulting Landman  
(432) 349-4729

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
(Domestic Mail Only, No Insurance Coverage Provided)

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

**OFFICIAL USE**

Postage	\$ .78	Postmark Here
Certified Fee	2.30	
Return Receipt Fee (Endorsement Required)	2.30	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 5.38	

Sent to Cimarex Energy Co.  
Street, Apt. No.,  
or PO Box No. 600 N. Marienfeld St. # 600  
City, State, ZIP+4 Midland, TX 79701



Aspen Pumping Services  
1218 W. Pueblo Ave.  
Hobbs, NM 88240

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Postmark  
Here

To	Aspen Pumping Services
Street, Apt. No.	1218 W. Pueblo Ave.
PO Box No.	
City, State, ZIP+4	Hobbs, NM 88240



April 23, 2010

MFairchild@conchoresources.com

C.O.G. Operating  
550 W. Texas, Ste 100  
Midland, TX 79701

Attn: **MARK FAIRCHILD**

**RE: CONOCO 9 STATE COM #1  
Eddy County, NM**

Procedures:

1. M.I. R.U. P&A equip. Build WH. NU to drill out well – Reverse Unit, 6 collars
2. After well drilled out – RIH w/ 2 7/8" WS to 10,488' – Spot 40sx cmt. WOC to Tag
3. Tag plug. Mix circulate hole w/ MLF.
4. PUH to 9,880' – Spot 40sx cmt.
5. ~~PUH to 8,380' – Spot 65sx cmt.~~ *add 8900' PLUG*
6. PUH to 7,450' – Spot 65sx cmt.
7. PUH to 6,014' – Spot 45sx cmt.
8. PUH to 3,900' – Spot 40sx cmt.
9. PUH to 2,700' – Spot 40sx cmt. WOC-Tag.
10. PUH to 489' – Spot 40sx cmt. WOC-Tag.
11. 60sx cmt to surface.
12. R.D. M.O.

**Estimate: \$34,976.00 for Plugging**

**Estimate: \$12,874.00 for Reverse Unit (5 days)**

**(\$3,879 1<sup>st</sup> Day, \$1,900/day after, \$159/day for stripper rubber, \$600 water)**

**Prices are subject to change after P & A procedure begins if problems arise during plugging procedure. This bid does not include any "Off Turn Key" charges. Any Off Turn Key charges will be added at the end of the job, if we do job as a bid. Location must be cleared/cleaned before P & A Rig can move in/out.**

Estimate will expire 90 days from April 23, 2010.

Basic Energy Services will furnish the workstring.

Any drilling that has to be done will be at Company's own expense. Also, Workstring will have to be furnished for drilling.

Bid includes 2 3/8" Workstring, BOP, pumps & cement equipment. Basic Energy will provide Wireline services per estimate (CIBP, perforating, cutting, etc.)

All fluids "hauled off" will be charged to COG Operating. Disposal will be furnished by COG Operating.

COG Operating will furnish their own flow pit according to the O.C.D. & B.L.M. rules & regulations. Basic Energy Services will furnish the split frac tank for all M.L.F.

If any changes are made in the field by the B.L.M., O.C.D. or Texas Railroad Commission, additional charges will be incurred.

In Texas, it is required that the oil company is to provide a company representative on location while cementing.

This Estimate is based on information furnished to Basic Energy by your company. In the event operations are delayed or restricted because of unknown wellbore conditions or changes beyond our control to original approved regulatory form, charges will revert to standard hourly rates until such problems are corrected. In the event that this occurs, your company representative will be notified. As of March 01, 2003, all anchors must have been tested within the last two years. If a Basic Energy Services flow pit is used to circulate into, it will be cleaned at Customer's expense.

**\*\*\* Due to shortage Water Truck availability, any "unforeseen" downtime, due to waiting on Water Trucks, will be charged at regular rig rate.**

Thank you for this opportunity to furnish this Estimate for your plugging and abandonment.

Sincerely,

Randall Minear,  
P & A Supervisor

RM/gb

1214 Injection Permit Checklist 11/30/09

(A)(1)(A)

Case \_\_\_\_\_ R- \_\_\_\_\_ SWD ~~1214~~ VFX \_\_\_\_\_ PMX \_\_\_\_\_ IPI \_\_\_\_\_ Permit Date 3/13/10 UIC ~~1214~~

# Wells 1 Well Name: EMPIRE State SWD #2

API Num: (30-) 015-NA Spud Date: Newwell New/Old: N (UIC primacy March 7, 1982)

Footages 1980FNL/1980FWL Unit F Sec 9 Tsc 17S Rge 29E County EDDY

Operator: COG Operating, LLC Contact Mark A. Fairchild

OGRID: 229B7 RULE 5.9 Compliance (Wells) 6/1588 (Finan Assur) OK OK

Operator Address: 550 West TEXAS, SUITE 100, MIDLAND, TX 79701

Location and Current Status: New Well Planned For Injection

Planned Work to Well: DRILL/EQUIP/INT Planned Tubing Size/Depth: 3 1/2

NEW

	Surface	Sizes		Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
		Hole.....	Pipe			
Existing	Surface	17 1/2	13 3/8	450	250/250	Swf
Existing	Intermediate	12 7/8	9 5/8	2500	550/200	Swf
Existing	Long String	8 3/4	7"	9200	300 / 250/100	Swf

CLOSED PIPED SYSTEM

DV Tool 7200 Liner \_\_\_\_\_ Open Hole \_\_\_\_\_ Total Depth 9200

Well File Reviewed NONE yet

Diagrams: Before Conversion  After Conversion  Elogs in Imaging File: will be run

Near Cave UNIT

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)	<u>7450</u>	<u>WC Reef</u>	
Above (Name and Top)	<u>8150</u>	<u>C1500</u>	
Injection Interval TOP:	<u>8300</u>	<u>C1500 Reef</u>	<u>NO</u>
Injection Interval BOTTOM:	<u>8900</u>	<u>C1500 Reef</u>	<u>NO</u>
Below (Name and Top)	<u>8964</u>	<u>Conyon</u>	

1660 PSI Max. WHIP

Sensitive Areas: Capitan Reef Cliff House Salt Depths 400'-800'

... Potash Area (R-111-P) \_\_\_\_\_ Potash Losses \_\_\_\_\_ Noticed? \_\_\_\_\_

Fresh Water: Depths: none Walls \_\_\_\_\_ Analysis? \_\_\_\_\_ Affirmative Statement

Disposal Fluid Sources: \_\_\_\_\_ Analysis? \_\_\_\_\_

Disposal Interval Production Potential/Testing/Analysis Analysis: will Swab Test & Get Sample

Notice Newspaper(Y/N) 1 Surface Owner SLO-1 Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Parties: \_\_\_\_\_

Area of Review: Adequate Map (Y/N)  and Well List (Y/N)

Active Wells 3 Num Repairs 0 Producing in Injection Interval in AOR NO

...P3A Wells 0 Num Repairs 1 All Wellbore Diagrams Included? no

Questions to be Answered: Rm CBL for Prod. PIPE  
Address Site # wrong on Navigator No. 1588  
Case OK? ✓  
Reply Concom 9588 Com. #1

Who is the owner Veritas

Required Work on This Well: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply \_\_\_\_\_

AOR Repairs Needed: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply \_\_\_\_\_

Request Sent \_\_\_\_\_ Reply \_\_\_\_\_

8300  
1660

X

X