

AT5-07-13

EA # 27

OCD-HOBBS

Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SECRETARY'S POTASH
SUBMIT IN TRIPLICATE*

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

NM-84647

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

NM-70984-A (Maduro Unit)

8. FARM OR LEASE NAME, WELL NO. **(30053)**

Maduro Unit No. 8

9. WELL NO. **30-025-38240**

10. FIELD AND POOL, OR WILDCAT

Gem: Morrow, Gas

11. SEC. T.R.M., BLOCK AND SURVEY

OR AREA

Section 28-T19S-R33E

12. COUNTY OR PARISH

13. STATE

ca NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL DEEPEN

1b. TYPE OF WELL

OIL GAS SINGLE MULTIPLE
WELL WELL OTHER ZONE ZONE

2. NAME OF OPERATOR

Cimarex Energy Co. of Colorado

3. ADDRESS AND TELEPHONE NO.

P.O. Box 140907 Irving TX 75014 972-401-3111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

1740' FSL & 660' FWL **CAPTAN CONTROLLED WATER BASIN**

Unit L

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

25 miles West of Hobbs, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O

(Also to nearest drlg. unit line, if any) 660'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED TO THIS WELL

W/2 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

N/A

19. PROPOSED DEPTH

14000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3583' GR

22. APPROX. DATE WORK WILL START*

12-01-06

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	H-40 13 3/8"	48 #	1300'	490 sx circulate
12-1/4"	J-55 9 5/8"	40 #	5050'	1200 sx circulate
8-3/4"	P-110 5 1/2"	17#	14000'	1620 sx TOC 7300'

Note Steps on page 2 JSS

From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000# psi BOP system. We are requesting a variance for the 13-3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500# psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not anticipate any pressures greater than 1000# psi, and we are requesting a variance to test the 13-3/8" casing and BOP system to 1000# psi and use rig pumps instead of an independent service company.

See logs to cementing program. Chris Whelan

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24 SIGNED Zeno Farris TITLE Mgr. Ops. Admin DATE 10-04-06

(This space for Federal or State Office use) PERMIT No. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which are necessary to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Is/Linda S.C. Rundell TITLE STATE DIRECTOR DATE DEC 19 2006

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Operator - Landowner Agreement

Company: Cimarex Energy Co. of Colorado
Proposed Well: Maduro Unit No. 8
Federal Lease Number: NM-84647

This is to advise that Cimarex Energy Co. of Colorado has an agreement with: Kenneth Smith, Inc.; PO Box 764; Carlsbad, NM 88220, the surface owner, concerning entry and surface restoration after completion of drilling operations at the above described well.

After abandonment of the well, all pits will be filled and levelled and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

October 4, 2006
Date

Zeno Farris
Signature Zeno Farris
Manager, Operations Administration



Cimarex Energy Co. of Colorado

5215 North O'Connor Blvd. □ Suite 1500 □ Irving, TX 75039 □ (972) 401-3111 □ Fax (972) 443-6486
Mailing Address: P.O. Box 140907 □ Irving, TX 75014-0907
A wholly-owned subsidiary of Cimarex Energy Co., a NYSE Listed Company, "XEC"

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management
620 E. Greene St.
Carlsbad, New Mexico 88220
Attn: Ms. Linda Denniston

Cimarex Energy Co. of Colorado accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease No.: NM-84647 – SW/4
NM-27570 – NW/4
Section 28-T19S-R33E

County: Lea County, New Mexico

Formation (S): Morrow

Bond Coverage: Statewide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature: Zeno Farris
Representing Cimarex Energy Co. of Colorado

Name: Zeno Farris

Title: Manager, Operations Administration

Date: October 4, 2006

DISTRICT I
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 87410

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 Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-38240	Pool Code 77370	Pool Name Gem; Morrow, Gas
Property Code 300531	Property Name MADURO UNIT	
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Well Number 8
Elevation 3583'		

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	28	19 S	33 E		1740	SOUTH	660	WEST	LEA

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

Dedicated Acres 320	Joint or Infill Y	Consolidation Code U	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

<p>NM-27570</p> <p>1980'</p> <p>Maduro Fed Unit #5</p> <p>Lat - N32°37'43.7" Long - W103°40'28.6"</p> <p>1980'</p> <p>NMSPCE - N 593116.755 E 744130.554 (NAD-83)</p>	<p>1980'</p>	<p>3585.3'</p> <p>3585.0'</p> <p>660'</p> <p>3582.3'</p> <p>3581.7'</p> <p>1740'</p> <p>Maduro Unit #8</p>	<p>NM-84647</p>	<p>OPERATOR CERTIFICATION</p> <p>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 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.</p> <p><i>Zeno Farris</i> 10-4-06 Signature Date</p> <p>Zeno Farris Printed Name</p>
				<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>SEPTEMBER 28, 2006</p> <p>Date Surveyed</p> <p>GARY L. JONES Signature of Surveyor Professional Surveyor</p> <p>W.O. Jones</p>
<p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>				

Application to Drill

Cimarex Energy Co. of Colorado
Maduro Unit No. 8
Unit L Section 28
T19S-R33E Lea County, NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1 Location: 1740' FSL & 660' FWL

2 Elevation above sea level: GR 3583'

3 Geologic name of surface formation: Quaternary Alluvium Deposits

4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 14000'

6 Estimated tops of geological markers:

Yates	2965	Wolfcamp	10835
Capitan	3450	Strawn	12070
Delaware	5060	Atoka	12400
Bone Spring	7880	Morrow Clastics	13090

7 Possible mineral bearing formation:

Delaware	Oil
Bone Spring	Oil
Wolfcamp	Gas
Strawn	Gas
Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17-1/2"	0-1300'	13-3/8"	48	8-R	ST&C	H-40
12-1/4"	0-5050'	9-5/8"	40	8-R	LT&C	J-55
8-3/4"	0-14000'	5-1/2"	17	8-R	LT&C	P-110

Application to Drill

Cimarex Energy Co. of Colorado
 Maduro Unit No. 8
 Unit L Section 28
 T19S-R33E Lea County, NM

9 Cementing & Setting Depth:

13-3/8"	Surface	Set 1300' of 13-3/8" H-40 48 # ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9-5/8"	Intermediate	Set 5050' of 9-5/8" J-55 40# LT&C casing. Lead with 1400 ¹⁶⁰⁰ Sx. Of Class POZ/C Cement + additives, tail with 220 ³⁵⁰ Sx. Of Class "C" + additives, circulate cement to surface.
5-1/2"	Production	Set 14000' of 5-1/2" P-110 17# LT&C casing. Cement with 1245 sx Super H + additives. TOC 1300 ⁴¹⁰⁰

10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nipped up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 1300'	8.4 - 8.6	30 - 32	May lose circ.	Fresh water spud mud. Add paper to control seepage and high viscosity sweeps to clean hole.
1300' - 5050'	9.7 - 10.0	28 - 29	May lose circ.	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
5050' - 8300'	8.4 - 9.9	28 - 29	NC	Brine water. Paper for seepage. Lime for PH (9 - 9.5)
8300' - 10000'	8.45 - 8.9	28 - 29	NC	Cut brine. Caustic for pH control.
10000' - 14000'	8.9 - 9.7	29 - 45	NC	XCD Polymer mud system.

JPB.
 IF lost Circ. occurs in reef approx. 3388'
 switch to fresh water and notify appropriate PET

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Application to Drill

Cimarex Energy Co. of Colorado
Maduro Unit No. 8
Unit L Section 28
T19S-R33E Lea County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: Two-man unit from 4500' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DSTs or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a potential H2S hazard. An H2S drilling plan is attached. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 6000 PSI, estimated BHT 175.

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35-45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Morrow pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

Hydrogen Sulfide Drilling Operations Plan

Cimarex Energy Co. of Colorado
Maduro Unit No. 8
Unit L Section 28
T19S-R33E Lea County, NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - A. Characteristics of H2S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H2S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.

- 2 H2S Detection and Alarm Systems
 - A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.

- 3 Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.

- 4 Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only emergency personnel admitted to location.

- 5 Well control equipment
 - A. See exhibit "E"

- 6 Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

- 7 Drillstem Testing not anticipated.

Hydrogen Sulfide Drilling Operations Plan

Cimarex Energy Co. of Colorado
Maduro Unit No. 8
Unit L Section 28
T19S-R33E Lea County, NM

- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.

- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

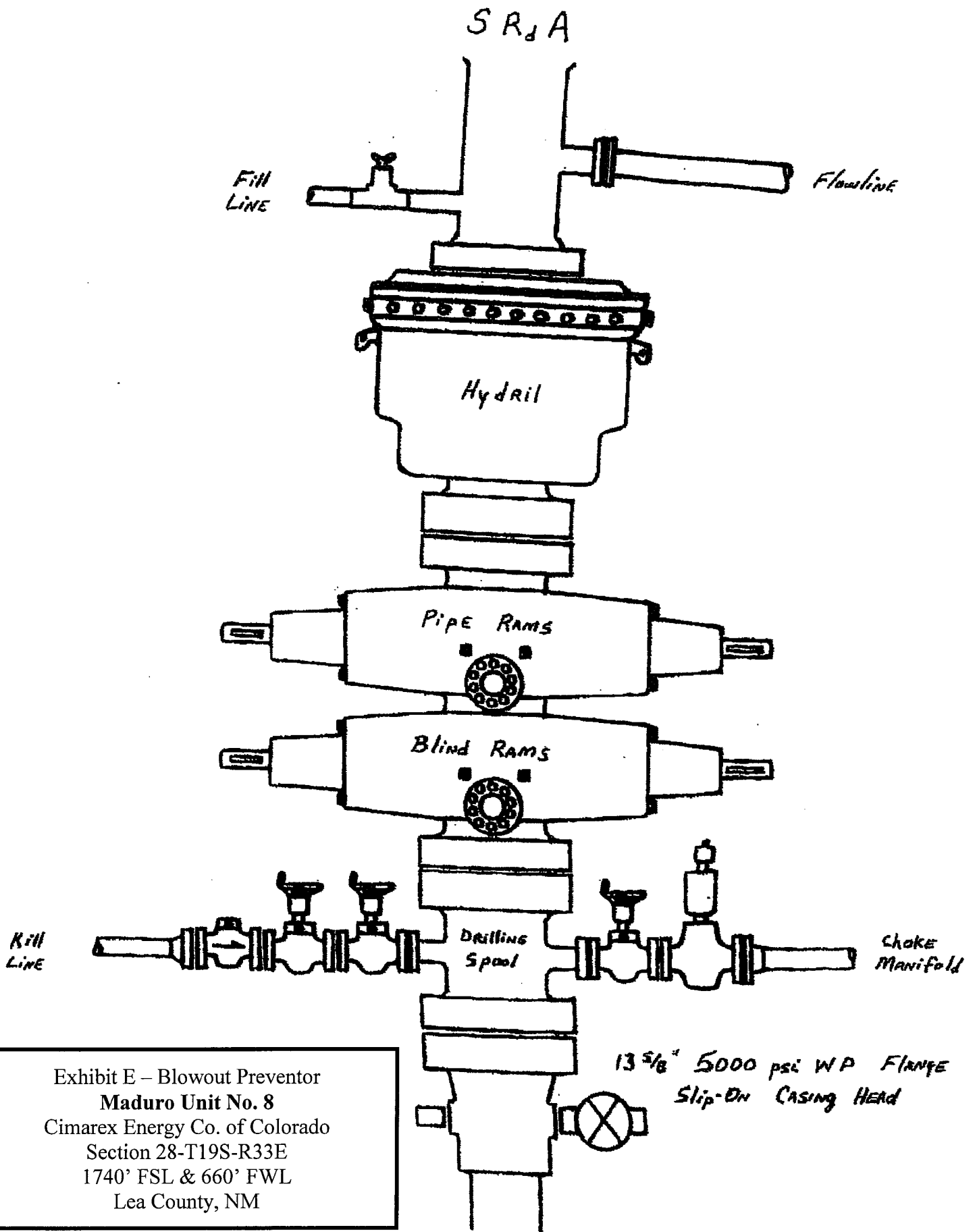


Exhibit E – Blowout Preventor
 Maduro Unit No. 8
 Cimarex Energy Co. of Colorado
 Section 28-T19S-R33E
 1740' FSL & 660' FWL
 Lea County, NM

DRILLING OPERATIONS
 CHOKE MANIFOLD
 5M SERVICE

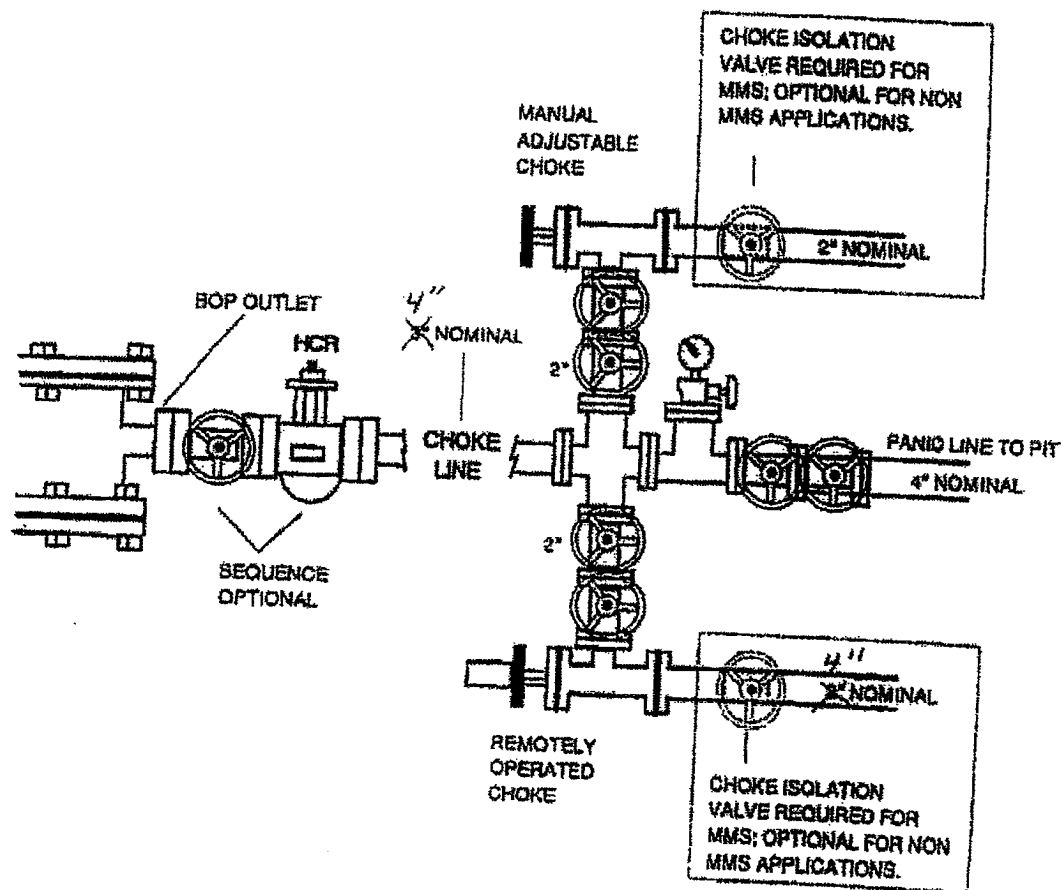


Exhibit E Cont'd – Choke Manifold
Maduro Unit No. 8
 Cimarex Energy Co. of Colorado
 Section 28-T19S-R33E
 1740' FSL & 660' FWL
 Lea County, NM

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

Form C-144
March 12, 2004

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

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes No
Type of action: Registration of a pit or below-grade tank Closure of a pit or below-grade tank

Operator: Cimarex Energy Co. of Colorado Telephone: 972-443-6489 e-mail address: zfarris@cimarex.com
Address: P.O. Box 140907, Irving, Tx 75014-0907
Facility or well name: Maduro Unit No. 8 API #: 30-025-39240 U/L or Qtr/QtrL Sec 28 T19S R33E
County: Lea Latitude 323743.7 N Longitude 1034028.6 W NAD: 1927 1983 Surface Owner Federal State Private Indian

Pit	Below-grade tank	
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness 12 mil Clay <input type="checkbox"/> Volume _____ bbl Closed system, cuttings to be buried	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No	(0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
Ranking Score (Total Points)		0

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite offsite If offsite, name of facility: _____ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No Yes If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .
Date: 10-04-06

Printed Name/Title: Zeno Farris Manager Operations Administration Signature: *Zeno Farris*

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: 1/3/07
Printed Name/Title: CHRIS WILLIAMS / DIST. SUAV Signature: *Chris Williams*