

6011

AT3-07-12

162

OCD-HOBBS

SECRETARY'S POTASH

Form 3180-3  
(July 1992)

SUBMIT IN TRIPLICATE\*

FORM APPROVED  
ON 10-04-0136

Expires: February 21, 1995

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

(Other instructions on  
reverse side)

5. LEASE DESIGNATION AND SERIAL NO.

NM-14794

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

1b. TYPE OF WELL

OIL ☐ GAS ☒  
WELL WELL

SINGLE ☒ MULTIPLE ☐  
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.)

1860' FSL & 1650' FWL

CAPITAN CONTROLLED WATER BASIN

7. UNIT AGREEMENT NO.

NM 0984-A (Maduro Unit)

8. FORM OR LEASE NAME, WELL NO.

Maduro Unit No. 7

9. API WELL NO.

20-025-

10. FIELD AND POOL, OR WILDCAT

Gen Morrow, Gas

11. SEC. T.R. & B. SURVEY

OR AREA

Section 29-T19S-R33E

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

26 miles West of Hobbs, NM

12. COUNTY OR PARISH

Lea

13. STATE

NM

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

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

1650'

16. NO. OF ACRES IN LEASE

400

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

S/2 320

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

1654'

19. PROPOSED DEPTH

14000'

20. ROTARY OR CABLE TOOLS

Bond 2575

Rotary

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

3590' 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 COA on page 2

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.

Note: chg on cement tops CUL.

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.

SIGNED Zeno Farnish 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 would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY 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



## 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-38181 – W2SW4  
NM-14794 – NE4SW4, N2SE4  
NM-29702 – SE4SW4, S2SE4  
Section 29-T19S-R34E

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**OCD-HOBBS**  
**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
Cimarex Energy Co. of Colorado

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

3b. Phone No. (include area code)  
972-401-3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
29-19S-33E  
1860' FSL & 1800' FWL

5. Lease Serial No.

NM-14794

6. If Indian, Allottee or Tribe Name

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

NM-70984-A (Maduro Unit)

8. Well Name and No.

Maduro Unit No. 7

9. API Well No.

30-015

10. Field and Pool, or Exploratory Area

Gem; Morrow (Gas)

11. County or Parish, State

Lea County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change SHL</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>location</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Per the BLM's request (in order to avoid sand dunes), Cimarex Energy Co. of Colorado is moving its location for the Maduro Unit No. 7 to 1860' FSL & 1800' FWL.  
Please see attached plats.

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

Natalie Krueger

Title

Reg Analyst 1

Signature

Date

October 31, 2006

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

Approved by

/s/ Linda S.C. Rundell

STATE DIRECTOR

Date DEC 19 2006

Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**NM STATE OFFICE**

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.

(Instructions on reverse)

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1901 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 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 <b>30-025-38237</b>	Pool Code <b>77370</b>	Pool Name Gem; Morrow (Gas)
Property Code <b>300531</b>	Property Name <b>MADURO UNIT</b>	
OGRID No. <b>162683</b>	Operator Name <b>CIMAREX ENERGY CO. OF COLORADO</b>	Well Number <b>7</b>
		Elevation <b>3590'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	29	19 S	33 E		1860	SOUTH	1800	WEST	LEA

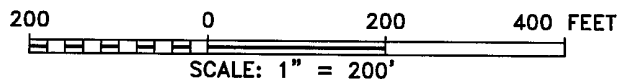
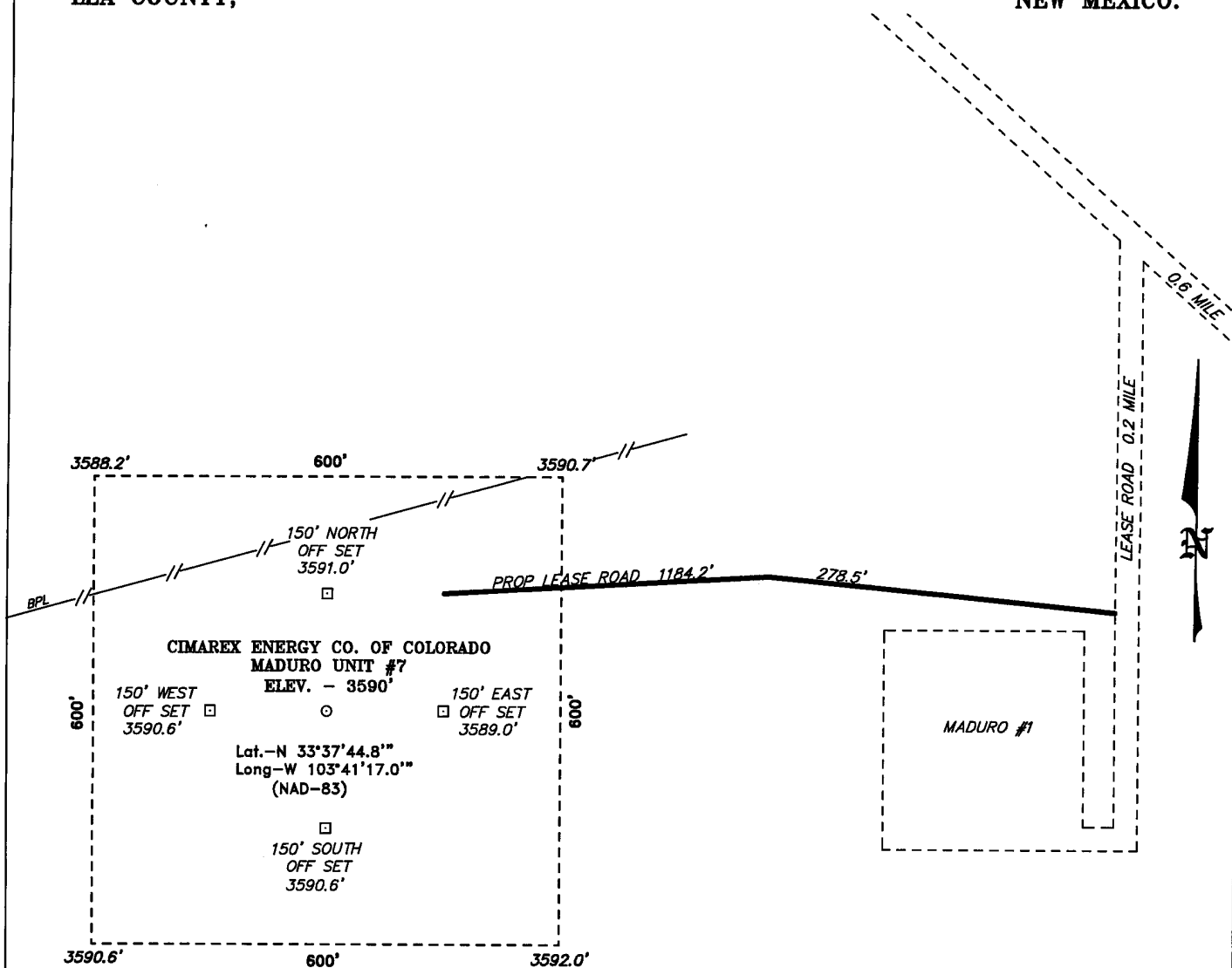
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>320</b>	Joint or Infill <b>Y</b>	Consolidation Code <b>U</b>	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>Lat - N32°37'44.8"</p> <p>Long - W103°41'17.0"</p> <p>NMSPCE - N 462231.147</p> <p>E 740767.580</p> <p>(NAD-83)</p>		<p><b>OPERATOR CERTIFICATION</b></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><b>Zeno Farris</b> 10-31-06</p> <p>Signature Date</p> <p><b>Zeno Farris</b></p> <p>Printed Name</p>	
<p><b>Maduro Unit #7</b></p> <p>3588.2' 3590.7'</p> <p>1800'</p> <p>3590.6' 3592.0'</p> <p><b>NM-38181</b></p>		<p><b>Maduro Unit #1</b></p> <p>1980'</p> <p><b>NM-14794</b></p> <p>1980'</p> <p><b>NM-29702</b></p>	
<p><b>Basin Surveys</b></p>		<p><b>SURVEYOR CERTIFICATION</b></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>OCTOBER 29, 2006</p> <p>Date Surveyed</p> <p><b>GARY L. JONES</b></p> <p>Signature</p> <p><b>Professional Surveyor</b></p> <p><b>7977</b></p> <p>Certificate No. <b>7977</b></p>	

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF US HWY 62-180 AND CO.  
RD. H-55 (SMITH RANCH), PROCEED NORTH 2.0  
MILE TO LEASE ROAD, ON LEASE ROAD PROCEED 3.3  
MILE WEST, THENCE PROCEED 1.3 MILE NORTH,  
THENCE PROCEED 0.8 MILE NORTHWEST, THENCE  
PROCEED 0.6 MILE NORTHWEST, THENCE PROCEED  
0.2 MILE SOUTHWEST TO MADURO #1 AND  
PROPOSED LEASE ROAD.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 17291

Drawn By: J. M. SMALL

Date: 10-31-2006

Disk: JMS 17291W

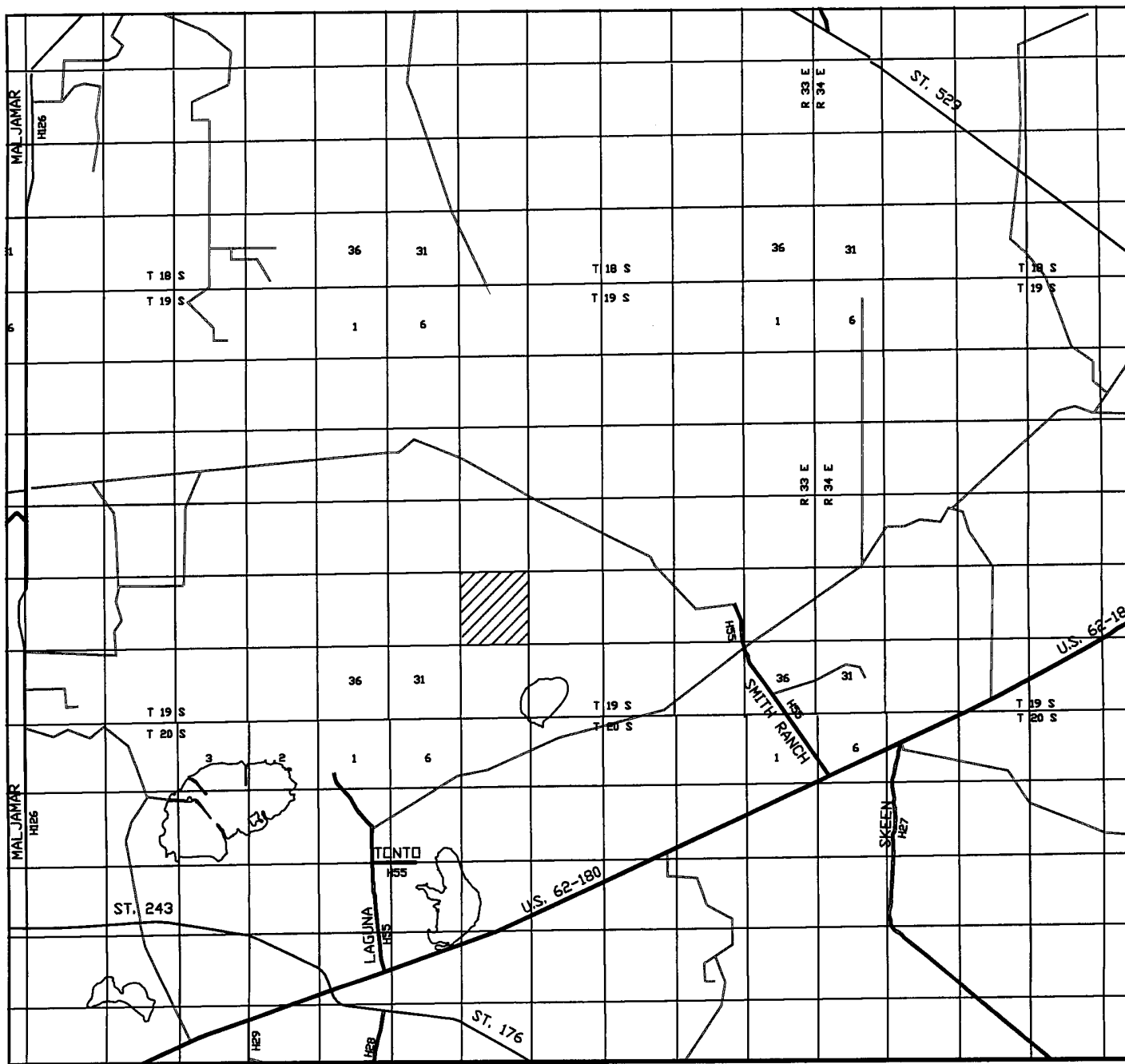
**CIMAREX ENERGY CO. OF COLORADO**

REF: MADURO UNIT #7 / WELL PAD TOPO

THE MADURO UNIT 7 LOCATED 1860' FROM  
THE SOUTH LINE AND 1800' FROM THE WEST LINE OF  
SECTION 29, TOWNSHIP 19 SOUTH, RANGE 33 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 10-29-2006

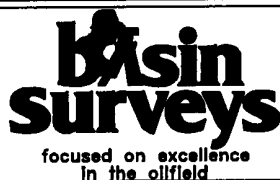
Sheet 1 of 1 Sheets



# MADURO UNIT #7

Located 1860' FSL and 1800' FWL

Section 29, Township 19 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico.



P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

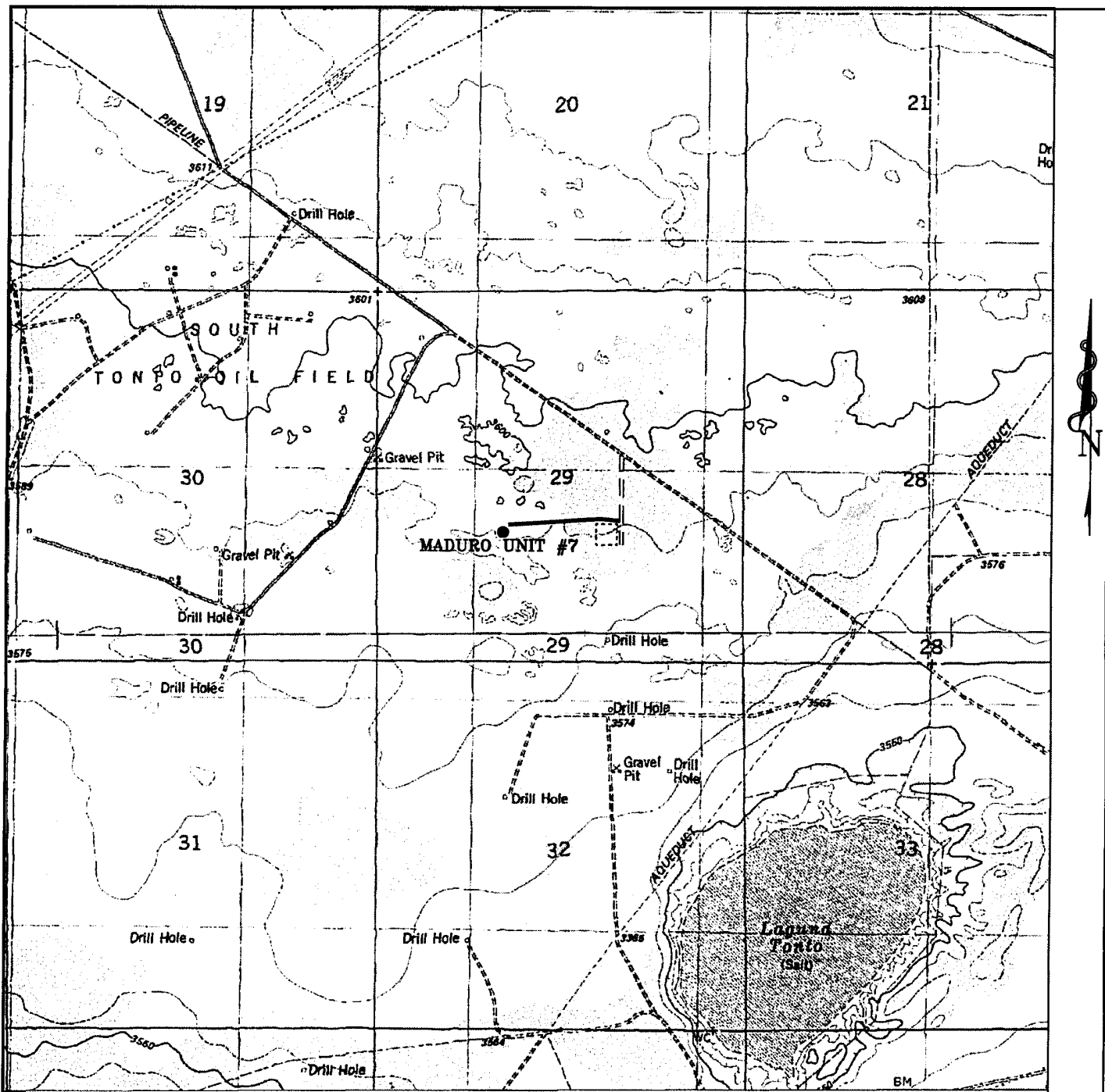
W.O. Number: JMS 17291T

Survey Date: 10-29-2006

Scale: 1" = 2000'

Date: 10-31-2006

CIMAREX  
ENERGY CO.  
OF COLORADO



### MADURO UNIT #7

Located 1860' FSL and 1800' FWL

Section 29, Township 19 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico.

**basin**  
**surveys**

focused on excellence  
in the oilfield

P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

W.O. Number: JMS 17291T

Survey Date: 10-29-2006

Scale: 1" = 2000'

Date: 10-31-2006

**CIMAREX**  
**ENERGY CO.**  
**OF COLORADO**

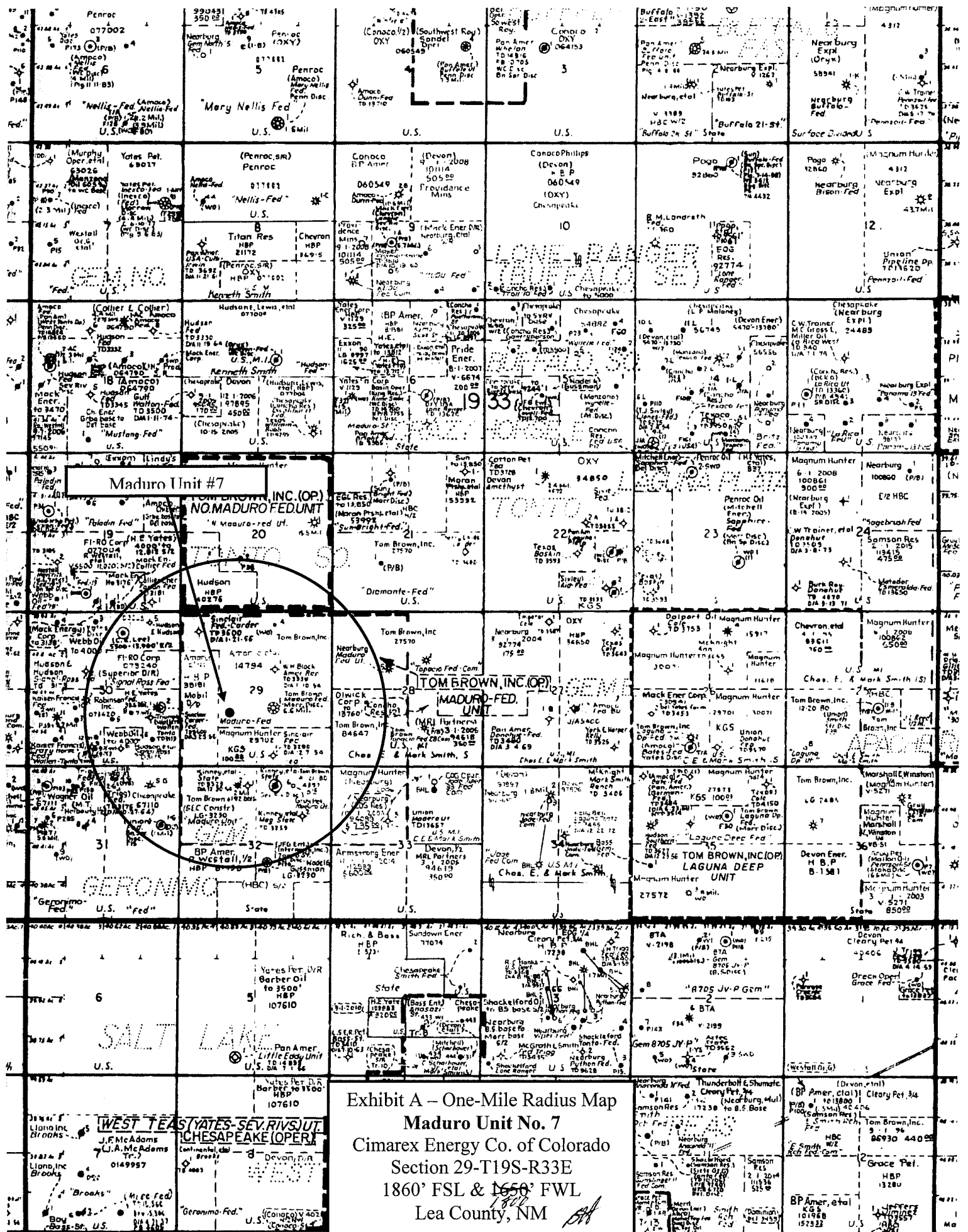


Exhibit A - One-Mile Radius Map  
Maduro Unit No. 7  
Cimarex Energy Co. of Colorado  
Section 29-T19S-R33E  
1860' FSL & 1650' FWL  
Lea County, NM



## Application to Drill

Cimarex Energy Co. of Colorado  
Maduro Unit No. 7  
Unit K Section 29  
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: 1860' FSL & <sup>1900</sup>~~1850~~' FWL *SA*

2 Elevation above sea level: GR 3590'

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. 7  
 Unit K Section 29  
 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 Sx. Of Class POZ/C Cement + additives, tail with 220 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 7300'. <i>1545 sx 4520' - 4600' Ching Williams</i>

### 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.

*Most circulation occurs in reef approx. 3308 switch to fresh water & 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. 7  
Unit K Section 29  
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. 7  
Unit K Section 29  
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. 7

Unit K Section 29

T19S-R33E Lea County, NM

- 8 Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9 If H<sub>2</sub>S 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 H<sub>2</sub>S scavengers if necessary.

## Surface Use Plan

Cimarex Energy Co. of Colorado  
Maduro Unit No. 7  
Unit K Section 29  
T19S-R33E Lea County, NM

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the proposed well site as staked.
  - B. From the junction of US Hwy 62-180 and Co Rd H-55 (Smith Ranch), proceed North 2.0 miles to lease road. On lease road, proceed 3.3 miles West. Thence proceed 1.3 miles North. Thence proceed 0.8 miles Northwest. Thence proceed 0.6 miles Northwest. Thence proceed 0.2 miles Southwest to Maduro Unit 1 and proposed lease road.
- 2 PLANNED ACCESS ROADS: 1612.7' of proposed access road will be constructed on-lease.
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"
  - A. Water wells - None known
  - B. Disposal wells - None known
  - C. Drilling wells - None known
  - D. Producing wells - As shown on Exhibit "A"
  - E. Abandoned wells - As shown on Exhibit "A"

## **Surface Use Plan**

Cimarex Energy Co. of Colorado  
Maduro Unit No. 7  
Unit K Section 29  
T19S-R33E Lea County, NM

- 4 If on completion this well is a producer Cimarex Energy Co. of Colorado will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied by a Sundry Notice.

5 LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the roads or piped in flexible lines laid on top of the ground.

6 SOURCE OF CONSTRUCTION MATERIAL:

If possible, construction will be obtained from the excavation of drill site. If additional material is needed, it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7 METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be separated by a series of solids removal equipment and hauled to the cuttings drying area and then disposed of in the cuttings burial cell.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Drilling fluids will be contained in steel pits in a closed circulating system. Fluids will be cleaned and reused. Water produced during testing will be contained in the steel pits and disposed of at a state approved disposal facility. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8 ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

## Surface Use Plan

Cimarex Energy Co. of Colorado  
Maduro Unit No. 7  
Unit K Section 29  
T19S-R33E Lea County, NM

### 9 WELL SITE LAYOUT

- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of the 100' X 100' cuttings drying area.
- C. Mud pits in the closed circulating system will be steel pits and the cuttings drying area will be surrounded by a 2' X 2' ring levee and a 2' earthen berm. A 12 mil liner will cover the cuttings drying area and extend a minimum of 2' over the earthen berm where it will be anchored down. A pump off system will pump any accumulated fluids in the ring levee to the rig holding tanks to be cleaned and reused.
- D. After drying cuttings will be disposed of in a 50' X 50' cuttings burial cell. The bottom will be lined with a 12 mil liner. Drill cuttings will be hauled from the cuttings drying area and encapsulated in a 12 mil liner. The 12 mil liner will be folded over the cuttings and capped with a 20 mil membrane cap. The cell will be filled with 3' to 4' of top soil and leveled and contoured to conform to the original surrounding area.
- E. If the well is a producer, the cuttings burial area and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

### 10 PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and cuttings burial cell will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the drill cuttings will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The cuttings burial area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recountoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.



## Surface Use Plan

Cimarex Energy Co. of Colorado  
Maduro Unit No. 7  
Unit K Section 29  
T19S-R33E Lea County, NM

### 11 OTHER INFORMATION:

- A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by US Department of the Interior's Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.
- D. There are no know dwellings within 1 1/2 miles of this location.

### 12 OPERATOR'S REPRESENTATIVE:

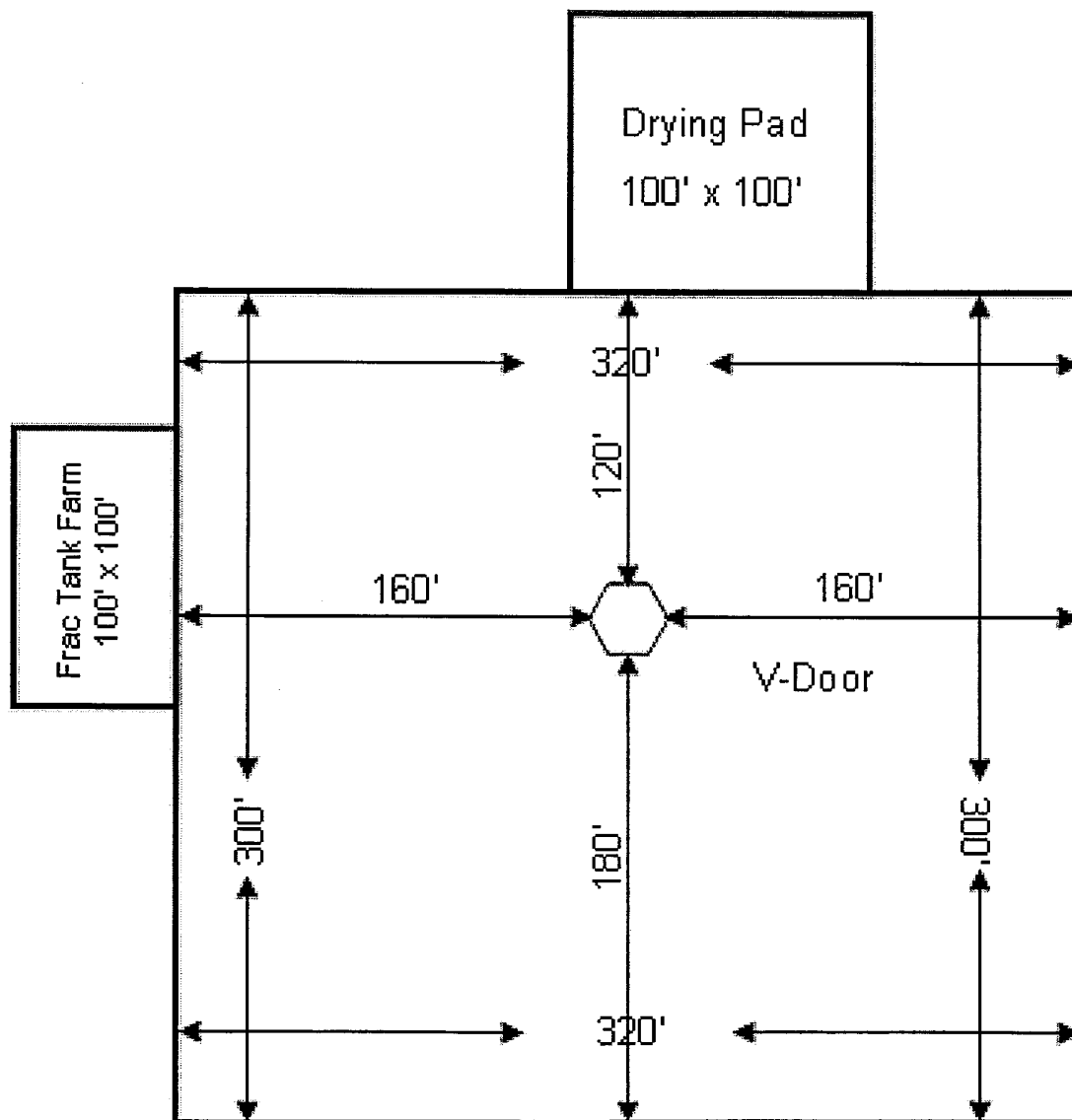
Cimarex Energy Co. of Colorado  
P.O. Box 140907  
Irving, TX 75014  
Office Phone: (972) 443-6489  
Zeno Farris

- 13 CERTIFICATION: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cimarex Energy Co. of Colorado and/or its contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME: Zeno Farris

DATE: October 4, 2006

TITLE: Manager, Operations Administration



## Rig 107

Cimarex Energy Co.  
of Colorado

Exhibit D – Rig Layout

**Maduro Unit No. 7**

Cimarex Energy Co. of Colorado

Section 29-T19S-R33E

1860' FSL & ~~1650'~~ <sup>1800'</sup> FWL

Lea County, NM

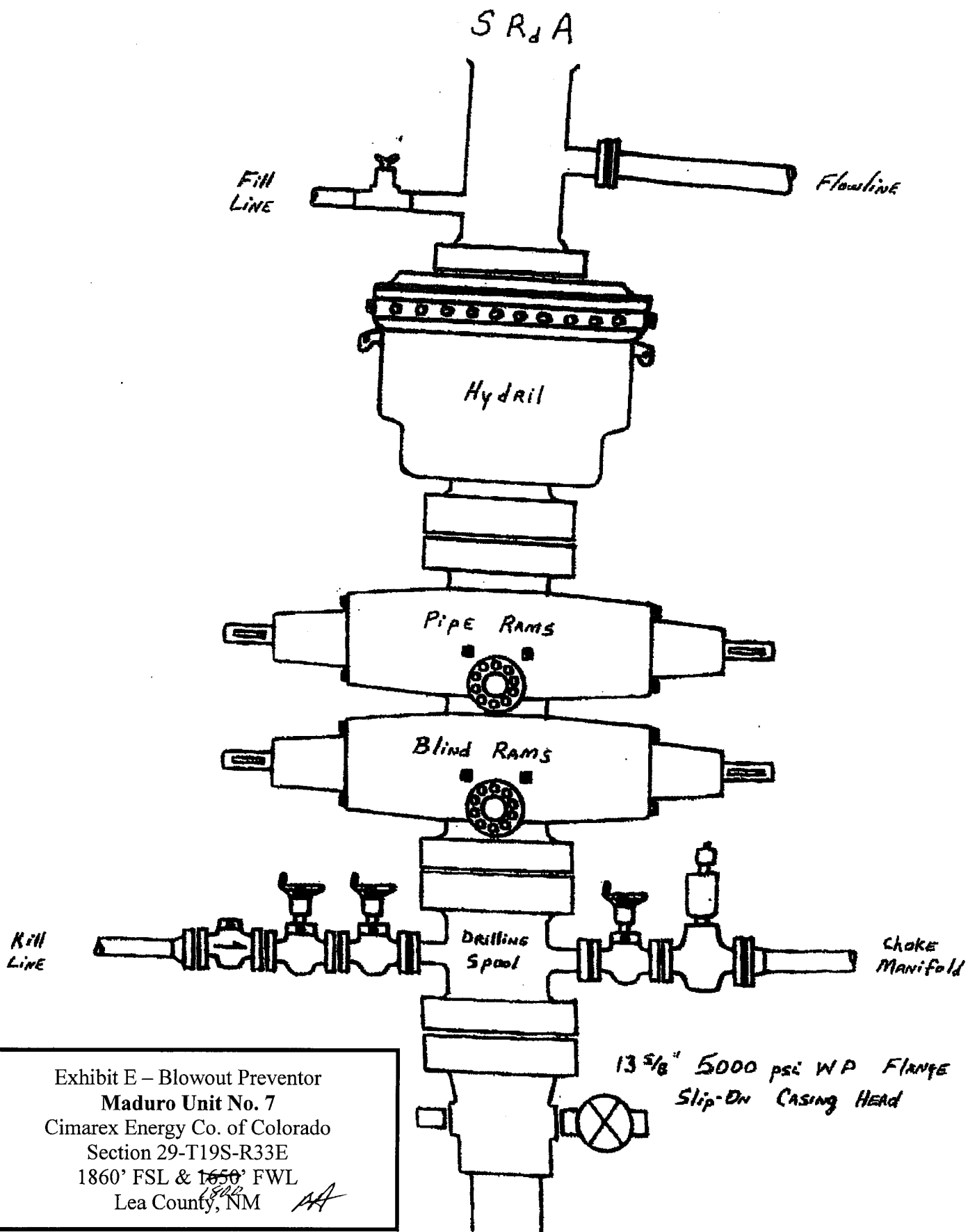


Exhibit E – Blowout Preventor  
**Maduro Unit No. 7**  
 Cimarex Energy Co. of Colorado  
 Section 29-T19S-R33E  
 1860' FSL & 1650' FWL  
 Lea County, NM

DRILLING OPERATIONS  
CHOKE MANIFOLD  
5M SERVICE

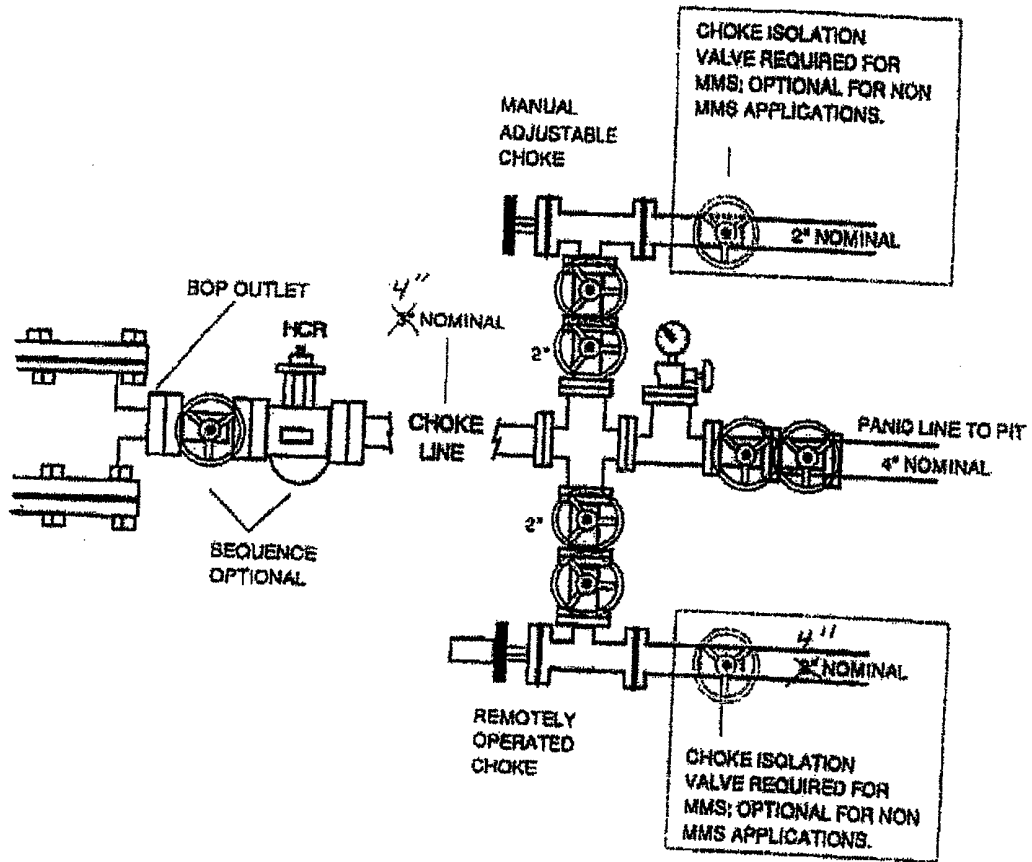


Exhibit E Cont'd - Choke Manifold  
**Maduro Unit No. 7**  
 Cimarex Energy Co. of Colorado  
 Section 29-T19S-R33E  
 1860' FSL & 1650' FWL  
 Lea County, NM

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

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

Form C-144  
March 12, 2004

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. 7 API #: 30-025-38237 U/L or Qtr/QtrK Sec 29 T19S R33E

County: Lea Latitude 323744.9 N Longitude 1034118.8 W NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume

\_\_\_\_\_ bbl Closed system, cuttings to be buried

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ 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:

*1/2/07*

Printed Name/Title CARIS WILLIAMS / DIST. SURV.

Signature

*Chris Williams*