

70th CX

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

ARTESIA
TERIOR
MENT

SUBMIT IN TRIPlicate
JAN 6 2005
RECEIVED
(Other Instructions on Reverse Side)
OCD - ARTESIA

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

LEASE DESIGNATION AND SERIAL NO.

NM-0467934

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.)

990' FNL & 1880' FEL

ROSWELL CONTROLLED WATER BASIN

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

2 Miles South of Loco Hills

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

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

330'

16. NO. OF ACRES IN LEASE

600

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

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

N/A

19. PROPOSED DEPTH

8800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3610' GR

22. APPROX. DATE WORK WILL START*

02-01-06

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 #	500' *	490 sx circulate
12-1/4"	J-55 9 5/8"	40 #	4000'	1200 sx circulate
7-7/8"	P-110 5 1/2"	17 #	8800'	1400 sx TOC 2700'

*Set surface casing 25' into the top of the Rustler, which is estimated to be between 350' and 500'.

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#, 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#, 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.

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 Faris TITLE Mgr. Ops. Admin DATE 12-21-06

(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 /s/ James Stovall

ACTING FIELD MANAGER

DATE JAN 12 2007

*See Instructions On Reverse Side

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 FOR 1 YEAR
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-0467934 – NW4 NE4 33-17S-30E

County: Eddy County, New Mexico

Formation (S): Bone Spring

Bond Coverage: Statewide BLM Bond

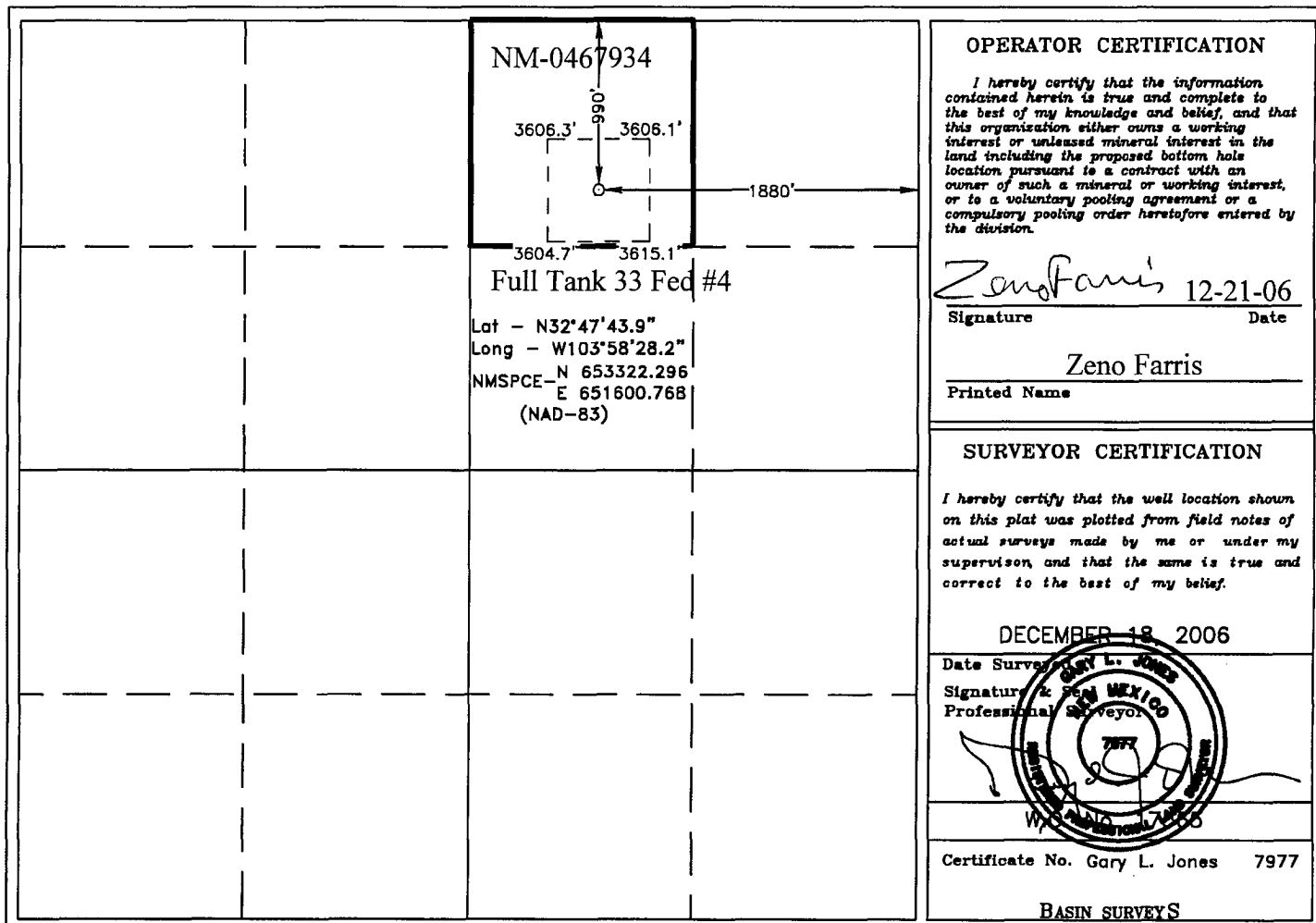
BLM Bond File No.: NM 2575

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

Name: Zeno Farris

Title: Manager, Operations Administration

Date: December 21, 2006

☐ AMENDED REPORT

Application to Drill

Cimarex Energy Co. of Colorado
Full Tank 33 Federal No. 4
Unit B Section 33
T17S - R30E Eddy 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: 990' FNL & 1880' FEL
- 2 Elevation above sea level: GR 3610'
- 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: 8800'
- 6 Estimated tops of geological markers:

San Andres	3400'
Bone Spring	5300'
3rd Bone Spring Dolomite	7440'
Wolfcamp Detrital	8175'
- 7 Possible mineral bearing formation:

Bone Spring	Oil
Wolfcamp	Oil

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17 1/2"	0-500'	13 3/8"	48#	8-R	ST&C	H-40
12 1/4"	0-4000'	9 5/8"	40#	8-R	LT&C	J-55
7 7/8"	0-8800'	5 1/2"	17#	8-R	LT&C	P-110

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9 Cementing & Setting Depth:

13 3/8"	Surface	Set 500' of 13 3/8" J-55 48# ST&C casing to a depth of 25' into the Rustler. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 4000' of 9 5/8" J-55 40# LT&C casing. Cement lead with 1000 Sx. Of Class POZ/C Cement + additives, tail with 200 Sx. Of Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 8800' of 5 1/2" P-110 17# LT&C casing. Cement in two stages, first stage cement with 1000 Sx. of Class POZ/C Cement + additives. Second stage cement with 400 Sx of Class "C" Estimated top of cement 2700'.

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 - 500'	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.
500' - 4000'	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.
4000' - 8300'	8.4 - 9.9	28 - 29	NC	Brine water. Paper for seepage. Lime for PH (9 - 9.5)
8300' - 8800'	8.45 - 8.9	28 - 29	NC	Cut brine. Caustic for pH control.

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
Full Tank 33 Federal No. 4
Unit B Section 33
T17S - R30E Eddy County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: One-man unit from 4000' 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 2000 PSI, estimated BHT 155.

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 Bone Spring pay will be perforated and stimulated. The well will be tested and potentialized as an oil well.

Hydrogen Sulfide Drilling Operations Plan

- 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
 - 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

- 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.

Surface Use Plan

Cimarex Energy Co. of Colorado
Full Tank 33 Federal No. 4
Unit B Section 33
T17S - R30E Eddy 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 The United States Department of the Interior, 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.

12 OPERATORS REPRESENTATIVE:

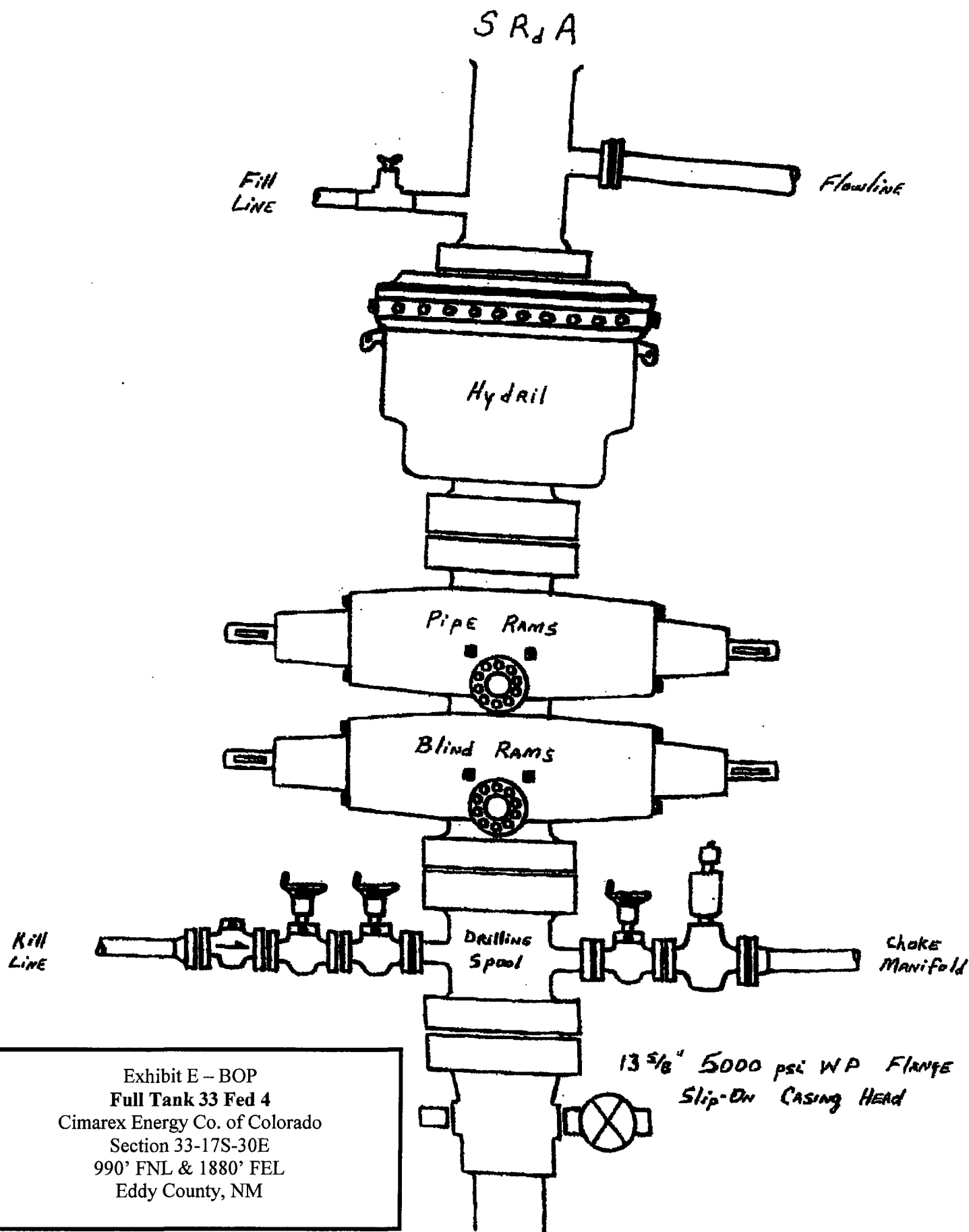
Cimarex Energy Co. of Colorado
P.O. Box 140907
Irving, TX 75014
Office Phone: (972) 443-6489
Zeno Farris

- 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: December 21, 2006

TITLE: Manager, Operations Administration



DRILLING OPERATIONS
CHOKE MANIFOLD
SM SERVICE

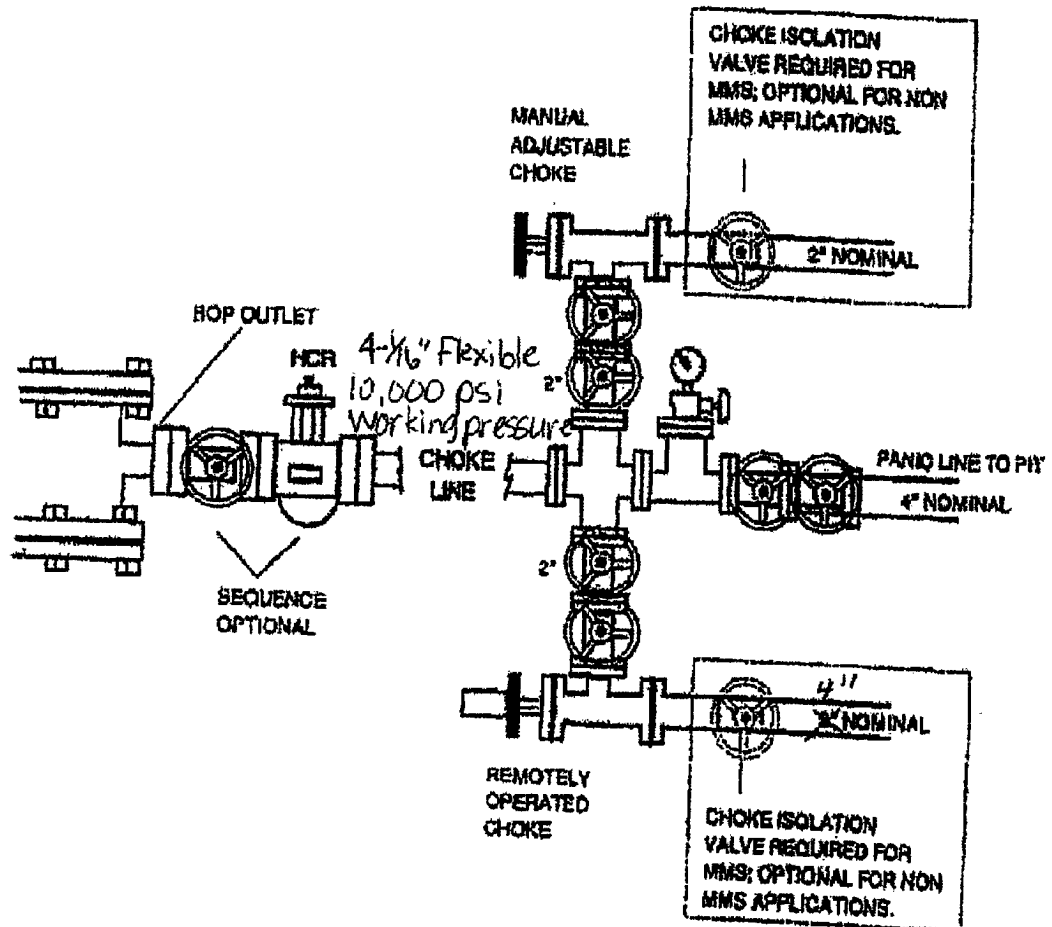


Exhibit E-1 – Choke Manifold Diagram
Full Tank 33 Fed 4
Cimarex Energy Co. of Colorado
Section 33-17S-30E
990' FNL & 1880' FEL
Eddy County, NM