

EA-541

Secretary's Office

AT507-298

Form 3100-3
(July 1992)

OCD-HOBBS

SUBMIT IN TRIPLICATE*

FORM APPROVED

OMB NO. 1004-0136

Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT(Other instructions on
reverse side)

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

1b. TYPE OF WELL

OIL ☐ GAS ☒
WELL WELLSINGLE ☒ MULTIPLE ☐
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.)

Unit P

990' FSL & 990' FEL

700 FSL & 1165' FEL - per attached SN dated 2-15-97

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

26 miles West of Hobbs, NM

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

(Also to nearest drg. unit line, if any) 990'

16. NO. OF ACRES IN LEASE

160

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.

19. PROPOSED DEPTH

13750'

20. ROTARY OR CABLE TOOLS

Rotary

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

3662' GR

22. APPROX. DATE WORK WILL START

04-01-07

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 #	1375'	925 sx circulate
12-1/4"	J-55 9 5/8"	40 #	5000'	1800 sx circulate
8-3/4"	P-110 5 1/2"	17#	13750'	1245 sx TOC 7300'

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.

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 prevention program, if any.

SIGNED

Zero Farris

TITLE

Mgr. Ops. Admin

DATE

02-05-07

(This space for Federal or State official 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

APR 10 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 reports, or any false or fraudulent written material in any matter within its jurisdiction.

APPROVAL FOR 1 YEAR

SEE ATTACHED FOR
CONDITIONS OF APPROVALGENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

OCD-HCBBB

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)
700' FSL & 1165' FEL
24-19S-33E

5. Lease Serial No.

NM-113415

6. If Indian, Allottee or Tribe Name

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

Pending

8. Well Name and No.

Afton 24 Federal Com No. 1

9. API Well No.

30-015

10. Field and Pool, or Exploratory Area

Quail Ridge; 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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input checked="" type="checkbox"/> Other Use flexible choke & kill line

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 recompleat 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.)

Cimarex is requesting variance from onshore order 2 to use flexible choke and kill line due to rig design instead of hard choke line.

Line is approximately 20' long and has a 10000 psi working pressure with 15000 psi test pressure.

See attached spec sheet and BOP diagram.

OK 3/23/07
[Signature]

DRP/

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

Zeno Farris

Signature

[Signature]

Title

Manager Operations Administration

Date

March 23, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

[Signature] Linda S.C. Rundell

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.

STATE DIRECTOR

Date APR 10 2007

Office

NM STATE OFFICE

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(Instructions on reverse)



Midwest Hose
& Specialty, Inc.

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium components. The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermiculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unbolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2", 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE

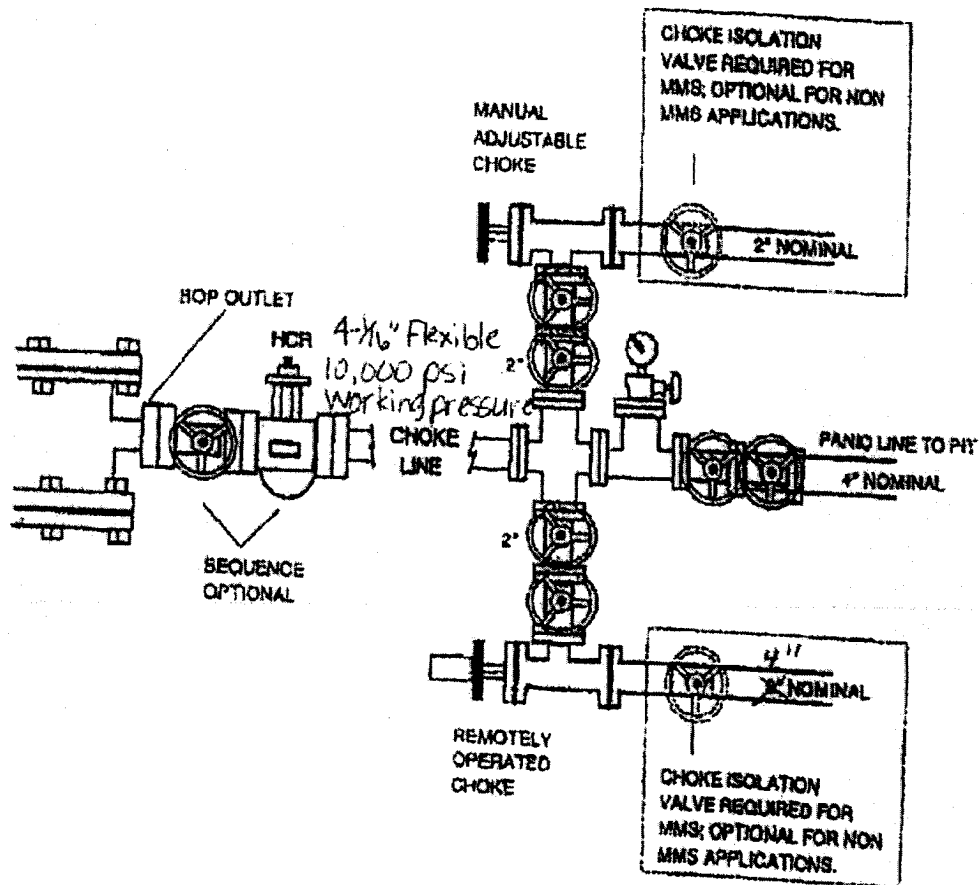


Exhibit E-1 – Choke Manifold Diagram
Afton 24 Federal Com No. 1
 Cimarex Energy Co. of Colorado
 24-19S-33E
 700' FSL & 1165' FEL
 Lea County, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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OMB No. 1004-0135
Expires July 31, 1996

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☐ Oil Well ☒ Gas Well ☐ Other

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972-401-3111

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700' FSL & 1165' FEL

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

Pending

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Afton 24 Federal Com No. 1

9. API Well No.

30-025-

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Quail Ridge; 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

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☒ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other Change SHL &
access road

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 recompleat 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 recompleat 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.)

Cimarex has changed the location of its proposed Afton 24 Federal Com No. 1 well to 700' FSL & 1165' FEL.

The proposed ccess road has also changed. Cimarex will now construct 3226.1' of road to access the Afton 24 Federal Com No. 1. Approximately 1613' of the road will be on lease, and approximately 1613' will be off-lease.

Please see attached plats.

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

Natalie Krueger

Signature

Title

Reg Analyst 1

Date

February 15, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Linda S.C. Rundell

Title **STATE DIRECTOR**

Date

APR 10 2007

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

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(Instructions on reverse)

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 87506

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 30-025-38388	Pool Code 83280	Pool Name Quail Ridge; Morrow (Gas)
Property Code 36456	Property Name AFTON "24" FEDERAL Com	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3661'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	24	19 S	33 E		700	SOUTH	1165	EAST	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	Joint or Infill	Consolidation Code	Order No.
320		P	

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-100861</p> <p>NM-113415</p> <p>Lot - N32°38'25.2" Long - W103°36'42.8" NMSPC - N 597439.346 E 763410.714 (NAD-83)</p> <p>Afton 24 New Sheriff 10 Fed Com #1</p> <p>3658.2' - 3663.6' 1165' 3655.1' - 3658.0'</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> 02-15-07 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>FEBRUARY 10, 2007</p> <p>Date Surveyed Signature of Surveyor Professional Surveyor</p> <p><i>Gary L. Jones</i> 7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>	

* per phone call to Zeno Farris
3/22/07

Application to Drill

Cimarex Energy Co. of Colorado
Afton 24 Federal Com No. 1
Unit P Section 24
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: ⁷⁰⁰ 990' FSL & ¹¹⁶⁵ 990' FEL
- 2 Elevation above sea level: GR 3662'
- 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	3135
Queen	4450
Bone Spring	8075
Wolfcamp	10820
Strawn	12075
Atoka	12345
Morrow Clastics	12965
Barnett	13500

7 Possible mineral bearing formation:

Morrow	Gas
Wolfcamp	Oil
Bone Spring	Oil
Yates	Oil

8 Casing program:

¹⁵⁵⁰

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17-1/2"	0 - 1375'	13-3/8"	48	8-R	ST&C	H-40
12-1/4"	0 - 5000'	9-5/8"	40	8-R	LT&C	J-55
8-3/4"	0 - 13750'	5-1/2"	17	8-R	LT&C	P-110

Application to Drill

Cimarex Energy Co. of Colorado
Afton 24 Federal Com No. 1
Unit P Section 24
T19S-R33E Lea County, NM

9 Cementing & Setting Depth:

13 3/8"	Surface	Set 1375' of 13 3/8" H-40 48# ST&C casing. Cement with 925 Sx. Of Premium Plus + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 5000' of 9 5/8" J-55 40# LT&C casing. Cement with 1800 Sx. Of Class Premium Plus + additives, circulate cement to surface.
5 1/2"	Production	Set 13750' of 5 1/2" P-110 17# LT&C casing. Cement with 1245 Sx. of Class POZ/C Cement + additives. Estimated top of cement 7300'.

SEE COR

Recommend bring cement up to 4400'. 600' inside Intermediate C/L.

10 Pressure control Equipment:

SEE COR

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:

1550

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 1375'	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.
1375' - 5000'	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.
5000' - 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' - 13750'	8.9 - 9.7	29 - 45	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
Afton 24 Federal Com No. 1
Unit P Section 24
T19S-R33E Lea County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: Two-man unit from 3000' 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 4000 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 potentialed as a gas well.

Hydrogen Sulfide Drilling Operations Plan

Cimarex Energy Co. of Colorado
Afton 24 Federal Com No. 1
Unit P Section 24
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
 - 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, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, 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 foremen's trailers or living quarters.
- 7 Drillstem Testing not anticipated.

Hydrogen Sulfide Drilling Operations Plan

Cimarex Energy Co. of Colorado

Afton 24 Federal Com No. 1

Unit P Section 24

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.

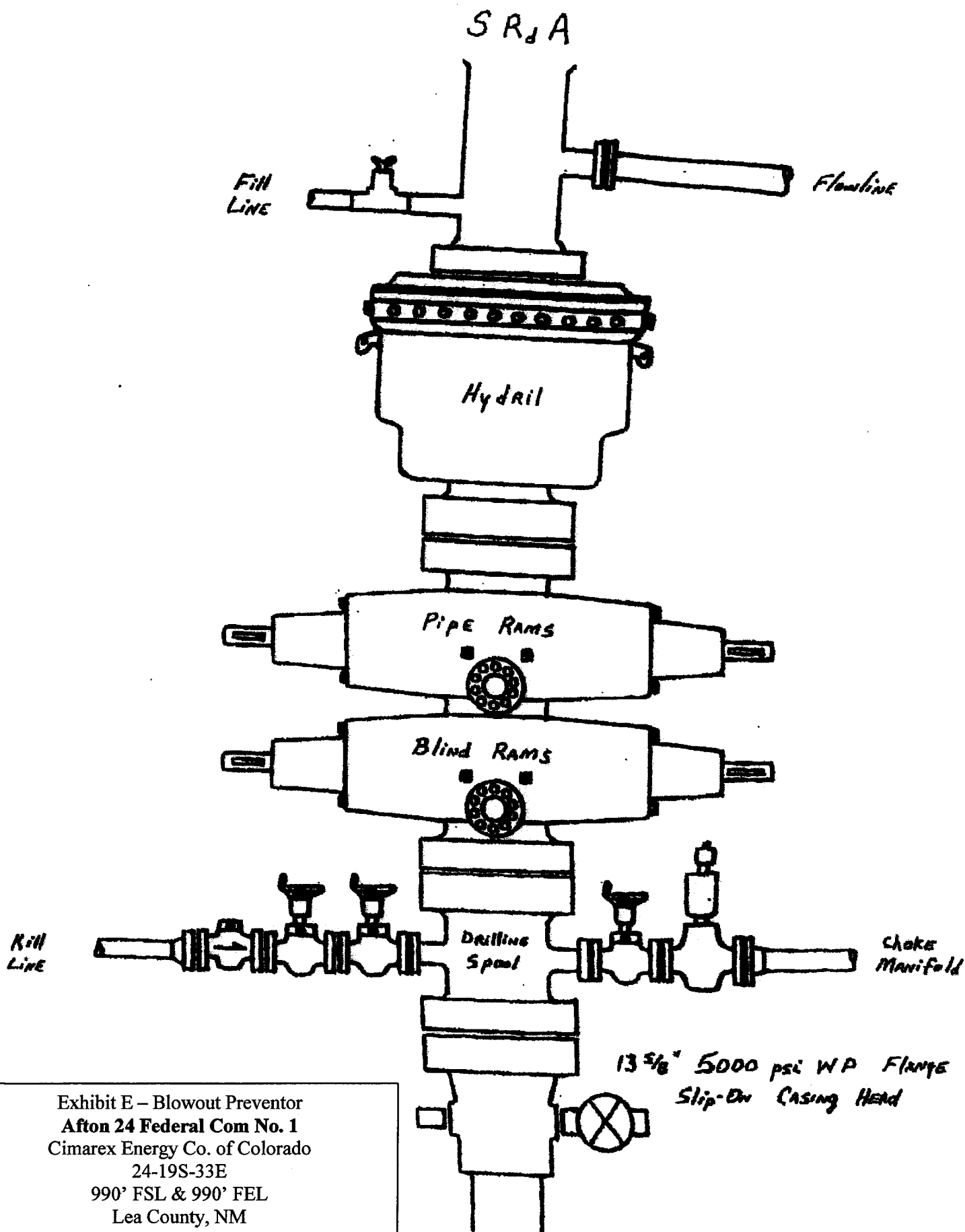


Exhibit E - Blowout Preventor
Afton 24 Federal Com No. 1
Cimarex Energy Co. of Colorado
24-19S-33E
990' FSL & 990' FEL
Lea County, NM

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Cimarex Energy Co. of Colorado
Well Name & No. Afton 24 Federal Com # 1
Location: 700'FSL, 1165'FEL, SEC24, T19S, R33E, Lea County, NM
Lease: NM-113415

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 13.375 inch 9.625 inch 5.5 inch
3. BOP tests

B. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the Yates formation. A copy of the plan shall be posted at the drilling site.

C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

D. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute. (R-111-P area only)

E. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

A. The 13.375 inch surface casing shall be set above the salt should it occur at a more shallow depth, at least 25 feet into the Rustler Anhydrite @ approximately 1550 feet and cement circulated to the surface.

1. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.

B. The minimum required fill of cement behind the 9.625 inch intermediate casing is circulate cement to the surface. If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the 5.5 inch production casing is cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.

D. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the intermediate casing well bore shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9.625 inch casing shall be 5000 psi.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
1. The tests shall be done by an independent service company.
 2. The results of the test shall be reported to the appropriate BLM office.
 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.
 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.
 5. BOP/BOPE must be tested by an independent service within 500 feet of the top of the **Wolfcamp** Formation. This test does not exclude the test prior to drilling out the casing shoe as per onshore order No. 2.
 6. A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

V. Hazards:

1. Our geologist has indicated potential for lost circulation in the Grayburg and Bone Spring formations.

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 2/26/07

12/28/14
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
June 1, 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: <u>Cimarex Energy Co. of Colorado</u> Telephone: <u>972-401-3111</u> e-mail address: <u>zfarris@cimarex.com</u>		
Address: <u>PO Box 140907, Irving, TX 75014-0907</u>		
Facility or well name: <u>Afton 24 Federal Com No. 1</u> API #: <u>30-025-38388</u> U/L or Qtr/Qtr <u>P</u> Sec <u>24</u> T <u>19S</u> R <u>33E</u>		
County: <u>Lea</u> Latitude <u>323828.1 N</u> Longitude <u>1033640.7 W</u> NAD: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/>		
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
Pit 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 <u>12</u> mil Clay <input type="checkbox"/> Pit Volume _____ bbl closed system, cuttings buried	Below-grade tank 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)
	<u>100 feet or more</u>	<u>(0 points)</u>
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)
	<u>No</u>	<u>(0 points)</u>
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)
	<u>1000 feet or more</u>	<u>(0 points)</u>
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: (check the onsite box if you are burying in place) 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.

Additional Comments:

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: 02.05.07

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:

Printed Name/Title CHRIS WILLIAMS / DIST. SURV Signature Chris Williams Date: 4/17/07