-				ATS-0	7-88
Form 3160-3 (July 1892)	UNITED STATES	CD-HOBBS	SUBMIT IN TRIPLI	CATE* OME	RM APPROVED 3 NO. 1004-0136 : February 28, 1995
	PARTMENT OF THE IN	NTERIOR/	reverse side)	5. LEASE DESIGNATI	ON AND SERIAL NO.
E	BUREAU OF LAND MANAGI	EMENT /		NM-3622	
	APPLICATION FOR PERMIT	TO DRILL OR DE	EPEN	6. IF INDIAN, ALLOTTI	ES OR TRIBE NAME
1a. TYPE OF WORK	DRILL X	DEEPEN		7. UNIT AGREEMENT	F NAME
1b. TYPE OF WELL		L	MINISTER F	_	
OIL WELI 2. NAME OF OPERAT		SINGLE X	MULTIPLEZONE	8. FARM OR LEASE	NAME, WELL NO. (35708)
	ergy Co. of Colorado	1.1	a. aal	Scout 18 Fede	ral No. 10
3. ADDRESS AND TE	<del></del>	<u> </u>	2683>	9. API WELL NO.	
	907; Irving TX 75014; 972-401-31	111 252	62728293		8250
4. LOCATION OF WE		vith any State requirements.*)	- 3	10. FIELD AND POOL	
2210' FNL &	& 2100' FWL		· · · · []	Tonto; 7 River	\2 14 1 <i>U</i> /
2010 1110		62		OR AREA	OCK AND SURVEY
	Slait F	.a.	Aria C	0	9S-34E
14. DISTANCE IN MILES	AND DIRECTION FROM NEAREST TOWN OR POST OF	tice. 6.	100 31 0	12. COUNTY OR PARI	SH 13. STATE
	of Hobbs, NM			Lea	NM
5. DISTANCE FROM LOCATION TO		16. NO. OF ACRES IN		NO. OF ACRES ASSIGNED THIS WELL	
	LEASE LINE, T.O			•	
(Also to nearest drig	PROPOSED LOCATION*	1076.4	ROPOSED DEPTH	40 20. ROTARY OR CABLE TO	voi e
TO NEAREST WI	ELL, DRILLING COMPLETED, R, ON THIS LEASE, FT.				
	N/A	5000	O,	Rotary	
21. ELEVATIONS (Sho 3719'	w whether DF, RT, GR, etc.) GR			22. APPROX. DATE W 01-15-06	ORK WILL START
3		ASING AND CEMENT	NG PROGRAM		
SIZE OF HOL		WEIGHT PE		SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	J-55 8-5/8" ST&C	24#		25 900	400 sx Lite/C circ surf
7-7/8"	J-55 5-1/2" ST&C	15.5#	50	000'	2500 sx Lite/C circ surf
					1
	ll will be drilled to a depth of 5000				
om the base of	the surface pipe through the runnin	g of production casi	ng, the well will	be equipped with a 30	00 - psi BOP
rstem.	the surface pipe through the runnin			SUBJE	CMENTS
CAPITAN CO	NTROLLED WATER BASIN		APP	ROVALREQUI	REMINATIONS
			GE	ROVAL SUBJE NERAL REQUI	TEDA
	CHED FOR		AN	ROVAL SUBIL NERAL REQUI ID SPECIAL ST STACHED	
ONDITIO	NS OF APPROVAL		A	MACHED	
f proposal is to drill o	E, DESCRIBE PROPOSED PROGRAM r deepen directionally, give pertinent data on su	" broboom in to doope		productive zone and propose I depths. Give blowout prever	
SIGNED	ZenoFarry	TITLE Mgr	. Ops. Admin	DATE	11-17-06

APPROVAL DATE

FIELD MANAGER

\*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.

JAN -3 2007

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:

(This space for Federal or State office use)

PERMIT No.

APPROVED BY



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-3622 – SE/4NW/4 Section 18-T19S-R34E

County:

Lea County, New Mexico

Formation (S):

Morrow

Bond Coverage:

Statewide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature:

Zono Farris

Representing Cimarex Energy Co. of Colorado

Name: Zeno Farris

Title: Manager, Operations Administration

Date: November 17, 2006

# **Application to Drill**

Cimarex Energy Co. of Colorado Scout 18 Federal No. 10 Unit F Section 18 T19S R34E 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:

2210' FNL & 2100' FWL

2 Elevation above sea level:

GR 3719'

3 Geologic name of surface formation:

**Quaternery 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:

5000'

6 Estimated tops of geological markers:

Rustler	1575
Yates	3365
7 Rivers	3890
Queen	4395
Capitan	5000

7 Possible mineral bearing formation:

7 Rivers

Oil

Queen

Oil

8 Casing program:

 Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade	
 11"	0-425 900	8-5/8"	24#	8-R	ST&C	J-55	•
7-7/8"	0-5000'	5-1/2"	17#	8-R	LT&C	J-55	

# **Application to Drill**

Cimarex Energy Co. of Colorado Scout 18 Federal No. 10 Unit F Section 18 T19S R34E Lea County, NM

# 9 Cementing & Setting Depth:

8-5/8" Intermediate

Set 425' of 8-5/8" J-55 24# ST&C casing. Cement lead with 250 Sx. Of Lite Cement + additives, tail with 150 Sx. Of Class C + additives, circulate cement to surface.

5 1/2" Production

Set 5000' of 5 1/2" J-55 17# ST&C casing. Cement with lead of 2100 Sx. of Lite Cement + additives and tail of 400 Sx of

10 Pressure control Equipment:

Exhibit "E". A series 900 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1" is a Choke manifold and closing unit. BOP will be nippled up on the 8 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. Flo sensor, PVT, full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

Class C. Estimated top of cement surface.

#### 11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0-425'	8.6 - 8.9	29 - 36	NC	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
425' - 5000'	10 - 10 - 3	29 - 38		Fresh water spud mud to the top of the Rustler then switch to brine water add paper as needed to control seepage and add lime to control pH. Use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, 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 Scout 18 Federal No. 10 Unit F Section 18 T19S R34E Lea County, NM

## 12 Testing, Logging and Coring Program:

- A. Open hole logs: Dual Laterolog, Side Wall Neutron, Density Gamma Ray Caliper from TD to 975'
- B. Run Gamma Ray, Neutron from 475' to surface.
- C. No DSTs, cores or Mud Logger are planned at this time.

#### 13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a potiential 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 <u>15-30</u> 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 <u>7 Rivers pay</u> will be perforated and stimulated. The well will be tested and potentialed as an oil well.

# **Hydrogen Sulfide Drilling Operations Plan**

Cimarex Energy Co. of Colorado Scout 18 Federal No. 10 Unit F Section 18 T19S R34E 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
  - 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 Scout 18 Federal No. 10 Unit F Section 18 T19S R34E 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 seperator will be brought into service along with H2S scavengers if necessary.

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

1220 S. St. Francis Dr., Santa Fe. NM 87505

| 19 S |

18

34 E

DISTRICT III

DISTRICT IV

F

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

#### Submit to Appropriate District Office

**WEST** 

LEA

2100

State Lease - 4 Copies Fee Lease - 3 Copies

# OIL CONSERVATION DIVISION 1000 Rio Brazos Rd., Aztec, NM 87410

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

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

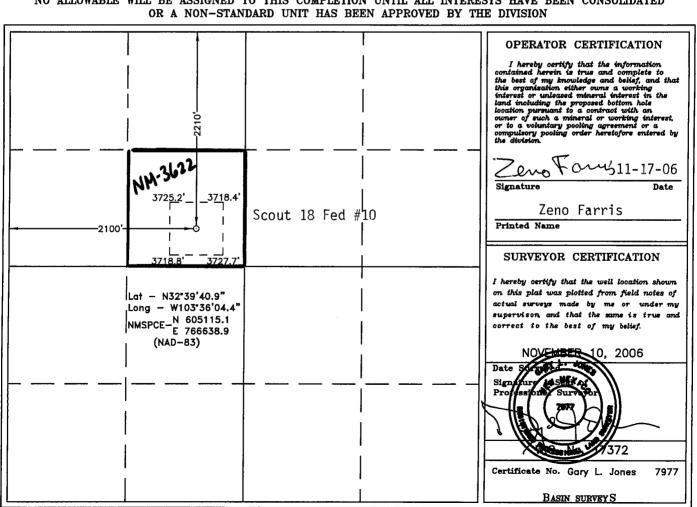
30.025	Number - 382	50		Pool Code 【4フレ	<b>)</b>	Pool Name Tonto; 7 Rivers			
Property (3578				SC	Property Nam OUT "18" FE	Well Number 10			
ogrid no. 162683			Operator Name CIMAREX ENERGY CO. OF COLORADO					Elevat 371	
Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

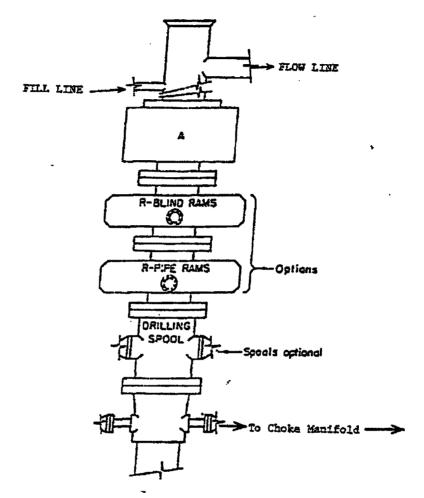
# 2210 Bottom Hole Location If Different From Surface

**NORTH** 

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 o	r Infill Co	nsolidation (	ode Or	der No.				
40	N N			Joac John					

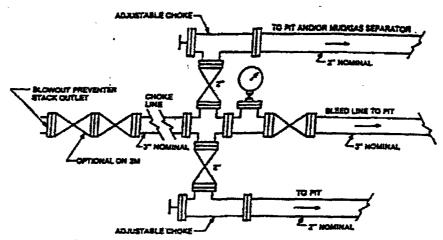
# NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED





# ARRANGEMENT SRRA 900 Series 3000 PSI WP

Exhibit E – Blowout Preventor
Scout 18 Federal No. 10
Cimarex Energy Co. of Colorado
Section 18-T19S-R34E
2210' FNL & 2100' FWL
Lea County, NM



Typical choke manifold assembly for 3M WP system

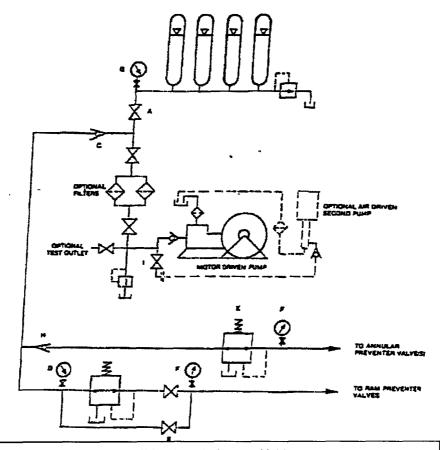


Exhibit E1 – Choke Manifold
Scout 18 Federal No. 10
Cimarex Energy Co. of Colorado
Section 18-T19S-R34E
2210' FNL & 2100' FWL
Lea County, NM

#### CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

10-Scout 18 Federal

**Operator's Name:** 

Cimarex Energy Co. of Colorado

Location:

2210FNL, 2100FWL, Section 18, T-19-S, R-34-E

Lease:

NM-3622

## I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5972 or (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:
- A. Spudding
- B. Cementing casing: 8-5/8 inch 5-1/2 inch
- C. BOP tests
- 2. H2S has been reported in Sections 4, 6, and 7 ranging from 200-600 ppm in the gas streams of the La Rica and Quail Ridge fields. A Hydrogen Sulfide (H2S) Drilling Plan is attached to the APD.
- 3 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.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. 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.

# II. CASING:

1. The <u>8-5/8</u> inch surface casing shall be set <u>approximately 900 feet</u>, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

Fresh water mud to be used to the top of the Rustler Anhydrite approximately 1620 feet.

Possible lost circulation in the Redbeds, Grayburg and Bone Spring formations.

2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall circulate</u> to surface.

## **III. PRESSURE CONTROL:**

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **8-5/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>8-5/8</u> inch casing shall be <u>3M</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

Engineer on call phone: 505-706-2779

**WWI 121206** 

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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# 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

ng and production facilities, submit to

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 No

Type of action: Registration of a pit	or below-grade tank 🔀 Closure of a pit or below-gr	ade tank 🔟
Operator: Cimarex Energy Co. of Colorado Telephone:	972-443-6489 e-mail address; zfarris@cimarex.com	1
DO D 140007 I . T 75014 0007		
Facility or well name: Scout 18 Federal No. 10 API #: 30-025-	38250 U/L or Qtr/QtrF Sec 18 T1	9S p34E
	604.4 W NAD: 1927 1983 Surface C	
Lantude Longhude Longhude	INTO. 1927 E 1909 & Sulface of	Which redetal 24 State [] I Hvale [] Hubbs []
Pit	Below-grade tank	
Type: Drilling ☑ Production ☐ Disposal ☐	Volume:bbl Type of fluid:	
Workover  Emergency	Construction material:	_
Lined \( \sqrt{Unlined} \) Unlined \( \sqrt{Unlined} \)	Double-walled, with leak detection? Yes 🔲 If no	ot, explain why not.
Liner type: Synthetic ☑ Thickness 12 mil Clay ☐ Volume 12000bbl		· · · · · · · · · · · · · · · · · · ·
	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more	(0 points)
	Yes	(20 points)
Wellhead protection area: (Less than 200 feet from a private domestic	No	(0 points)
water source, or less than 1000 feet from all other water sources.)	NO CONTRACTOR OF THE PROPERTY	( о рошая)
	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	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) Indic	ate disposal location:
onsite Offsite If offsite, name of facility	(3) Attach a general description of remedial act	ion taken including remediation start date and end
date. (4) Groundwater encountered: No 🔲 Yes 🔲 If yes, show depth belo		<del>-</del>
diagram of sample locations and excavations.		
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines [A], a Date; 11-17-06	general permit 🔲, or an (attached) alternative O	CD-approved plan 🔲.
Printed Name/Title Zeno Farris Manager Operations Administration	_Signature Zano Fam	7
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	relieve the operator of liability should the contents of	f the pit or tank contaminate ground water or
Approval:		
Date: 1/9/07 Printed Name/Title CHRIS WILL AMS / DIST. SUP	DI- 110.	, `
Printed Name/Title CHRIS WILLI AMS / DIST. SUP	USignature Mus Wille	em