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TAM STRONG       COMMENDING         UNITED STATES       OPENATION         DEPARTMENT OF THE INTERIOR       STRUMENT IN TRIPLICATE         No.		EAU	77	CD-HOBE	3 <b>S</b>		
APPLICATION FOR PERMIT TO DRILL OR DEEPEN         In Write of Wall         LINTEG WORK DOTTING TO DRILL OR DEEPEN         IN WE OF OWNER         OIL OR & OIL OR SINGLE ON MULTIPLE         NUME OF OWNER         OIL OR SINGLE ON MULTIPLE         NUME OF OWNER         IN WE OF OWNER         OTHER ZONE         OTHER ZONE         IN WORK OF OWNER         IN WORK OF OWNER         IN WE OF OWNER         IN WORK OF OWNER         IN WORK OF OWNER         IN WORK OF OWNER         IN WORK OF THOME TO THE OWNER OWNER         IN WORK OF OWNER         IN WORK OWNER OWNER <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
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APPLICATION FOR PERMIT TO DRILL OR DEEPEN         In Write of Wall         LINTEG WORK DOTTING TO DRILL OR DEEPEN         IN WE OF OWNER         OIL OR & OIL OR SINGLE ON MULTIPLE         NUME OF OWNER         OIL OR SINGLE ON MULTIPLE         NUME OF OWNER         IN WE OF OWNER         OTHER ZONE         OTHER ZONE         IN WORK OF OWNER         IN WORK OF OWNER         IN WE OF OWNER         IN WORK OF OWNER         IN WORK OF OWNER         IN WORK OF OWNER         IN WORK OF THOME TO THE OWNER OWNER         IN WORK OF OWNER         IN WORK OWNER OWNER <t< td=""><td>(July 1992)</td><td>UNITED STATES</td><td></td><td>ARI</td><td></td><td>Expires:</td><td></td></t<>	(July 1992)	UNITED STATES		ARI		Expires:	
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In The Gravities     DRUL D     DEEPEN     DRUL D     DEEPEN     DEEEPEN     DEEEPENE     DEEEPENE     DEEEPENE     DEEEPENE     DEEEPENE	<b></b>	APPLICATION FOR PERM			6	IF INDIAN, ALLOTTE	S OR TRIBE NAME
Instruct Procession         SINCLE         MULTIPLE         NM-70984-A (Maduro Unit)           2: MAGE OF DEFAURT         OTHER         ZONE         NM-70984-A (Maduro Unit)         * AMAGEREGARE MAGE MULTIPLE           2: MAGE OF DEFAURT         Contacts         LG2A93         P03031         Maduro Unit No. 8 -           3: Addessa And DEFAURATION OF VALL         OPENATION OF DEFAURT AND INFORMATION OF	1a. TYPE OF WORK	····		1			
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I NUME OF OREADON         Madure Unit No. 2           Cimarex Energy Co. of Colorado         Madure Unit No. 2           A COMESSA MARK ENERGINE MO         P.O. Box 140907 Invite TX 75014 972-401-3111         Madure Unit No. 2           CI CONTOR WELL         Observation of the Control of WELL         Observation of the Control of WELL         Madure Unit No. 2           1740 FSL & 6607 FWL         CAPITAN CONTROLLED WATER SIN         Cern: Matrixo, Gas           25 miles Work and an audit for the control of the Cont				3 <u> </u>			
Chinake Energy CC, NO CONDADD       ICLUS 2, 23 30 31       IN WELL YOUR YOUR YOUR YOUR YOUR YOUR YOUR YOUR			THER ZONE	ZONE	<sup>8</sup>	FARM OR LEASE N	AME, WELL NO. 230053
A ADDRESS MOTELEPHONE MO         D. Box 140007 Triving TX 75014 972-401-3111         D. Box 140007 Triving TX 75014 972-401-3111         D. Box 140007 Triving TX 75014 972-401-3111           A. IOCATION OF WELL         (Report location disurf) and in accountarious with any Gable requestments. T         The RELEY PHONE (Report location disurf) and in accountarious with any Gable requestments. T         The RELEY PHONE (Report location disurf) and in accountarious with any Gable requestments. T           17.00 FSL & 660' FWL         CAPTTAN CONTROLLED WATER         SIN         The RELEY PHONE (Report location disurf) and in accountarious with any Gable requestments. T           17.00 FSL & 660' FWL         CAPTTAN CONTROLLED WATER         SIN         The RELEY PHONE (Report location disurf) and in accountarious with any Gable requestments. T           17.00 FSL & 660' FWL         CAPTTAN CONTROLLED WATER         SIN         The RELEY PHONE (Report location disurf) and in accountarious with any Gable requestments. T           17.00 FSL & 660' FWL         CAPTTAN CONTROLLED WATER         SIN         The RELEY PHONE (Report location disurf) and the accountarious with any Gable requestion and the angle requestion and the angle requesting a variance of the CARLE TO CA           17.00 FSL & 660' FWL         CAPTTAN CONTROLLED WATER         SIN         WI 2000' Report Re	Cimarex Energy	y Co. of Colorado	Sila.	03 03	031	Maduro Unit N	0.8 🖌
1.000000000000000000000000000000000000		-		an frailes		くい	A ATT JOAN
1 CENTED OF WELL       (Pepertication clearly and a subcretation with any balar requestered.)       Gen:: Without, Gas         1740 FSL & 660' FWL       CAPITAN CONTROLLED WATER       In Sec. With Scott AND SURVEY         25 miles West of Hobbs, NM       In Sec. Sec. AND SURVEY       Section 28-T19S-R33E         16: GEN:: With State From Proceeding       In NO. OF ACRES IN LEASE UND       NM         16: GEN:: With State From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         17: GENERATE From Proceeding       In NO. OF ACRES IN LEASE       NM         18: GENERATE From Proceeding       N/A       14000'       Rotary         19: ELEVATORS Prove whether U. Britling C. OWH ETEED, ONE       N/A       14000'       Rotary         21: ELEVATORS Prove whether D. RT, GRADE SEZE OF CASING       WEIGHT PER FOOT       SETTING DEPTH       GUANTITY OF CEMENT         12:10:-0       3533' GR       PROPOSED CASING AND CEMENTING PROCEARM       1200 x circula	P.O. Box 1409	07 Irving TX 75014 972-401-31	11	10 <sup>2</sup>			0-025-382
1740° FSL & 660° FWL       CAPITAN CONTROLLED WATER SIN       It dec du lacock AND BUNNEY         11. DETAILED WALLED WALL CONTROLLED WATER SIN       It dec du lacock AND BUNNEY         25 miles West of Hobbs, NM       Is control water and the state of the state the state state of the state of the state of the state of the sta	4. LOCATION OF WEI	· · · · · · · · · · · · · · · · · · ·				or (	
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11. DBLACE IN MILES AND BRACHTOR HOW REART OFFICE'       12. COUNT OF ANALSH       13. STATE         25. milles Weit of Hobbs, NM       INM       INM         14. DBLACE THOM PROPOSED       INM       INM         12. ILL       INM       INM       INM         12. ILL       ILL       INM       INM         12. ILL	1770 136 00 0		7 2 4 3 W and 19 19 19 19 19 19 19 19 19 19 19 19 19	18 A 5	8	-1	
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LOCATION TO NEAREST PROPERTY OF LEASE LINE, T.O (Rato to namest dig unit line, if any)       TO THIS WELL         TO THIS WELL       W/2 320         It outstates Fragment Control       660         It outstates Fragment Control       660         It outstates Fragment Control       N/A         14 000'       Rotary         21 ELEVATIONS (PARPED FOR, ON THIS LEASE, FT.       N/A         21 ELEVATIONS (Content Control of Content Conten			OFFICE*	602	1:		
LOCATION TO NEAREST PROPERTY OF LEASE LINE, T.O. (Nato to named tig, unit line, 1 and)       TO THIS WELL         TO THIS WELL       TO THIS WELL         TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.       10         21. ELEVATONS (Brownshidew OF, RT, GR, de.)       II. PROPOSED CASING AND CEMENTING PROGRAM         21. ELEVATONS (Brownshidew OF, RT, GR, de.)       II. PROPOSED CASING AND CEMENTING PROGRAM         22. APPROX. DATE WORK WILL START       II.2.01-06         23. ELEVATONS (Brownshidew OF, RT, GR, de.)       II.2.01-06         24. TAPP TO THIS LEASE, FT.       N/A         25.22 OF HOLE       GRADE, SIZE OF CASING       WEIGHT PER FOOT         21.1/2"       II.4.000'       Rotary         21.1/2"       II.4.000'       1000 # 90 sx circulate         2.1/4"       I-55 9 5/8"       40 #       5050'       120 sx circulate         2.1/4"       I-55 9 5/8"       40 #       5050'       120 sx circulate         2.1/4"       I-15 1/2"       17#       14000'       1620 sx TOC 7300'         2.4/4"       I-15 1/2"       17#       14000'       1620 sx TOC 7300'         2.4/4"       I-15 1/2"       17#       14000'       1620 sx TOC 7300'         2.4/4"       I-10 5/2"       Sign per foot or 1500# psi, whichever is greater, but not to			18 NO OF ACRES IN	-61 81 4	1 91 91	Vea	NM
Idea         Idea         W2 320           TR DISTANCE FROM PROPOSED LOCATION*         10         W2 320           TR DISTANCE FROM PROPOSED LOCATION*         10         PROPOSED DEPTH         20. ROTARY OR CASE TOOLS           OR APPLIED FOR, ON THIS LEASE, FT.         N/A         14000'         Rotary           21. ELEVATIONS (Show whether DF, RT, GR, etc.)         12. APPROX. DATE WORK WILL START         12.01-06           3583' GR         12.01-06         III.         PROPOSED CASING AND CEMENTING PROGRAM           SIZE OF HOLE         GRADE, SIZE OF CASING         WEIGHT PER FOOT         SETTING DEPTH         QUANTITY OF CEMENT           12.1/12"         H-40 13 3/8"         48 #         1300'         490 sx circulate.           12.1/14"         J-55 9 5/8"         40 #         5050'         1200 sx circulate.           3/4"         P 110 5 1/2"         17#         14000'         1620 sx TOC 7300'           WL SAM & MARKARY DE STATURY OF CEMENT         12.00 sx circulate.         12.00 sx circulate.           12.1/12"         H-40 13 3/8"         40 #         5050'         1200 sx circulate.           12.1/2"         H-40 01 3 3/8"         40 #         1000 sc tor 0.2, which states all casing strings to 0.22 psi per foot or 1500/# psi, whichever is greater, but at 00.22 psi per foot or 1500/# psi, whichever is greater, but a	LOCATION TO	NEAREST	10. NO. OF ACRES IN				
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OR APPLIED FOR, ON THIS LEASE, FT.       N/A       14000'       Rotary         21 BLEVATONS (Show whether DF, RT, GR, etc.)       22 APPROX. DATE WORK WALL START*       12-01-06         21 BLEVATONS (Show whether DF, RT, GR, etc.)       12-01-06       12-01-06         21 BLEVATONS (Show whether DF, RT, GR, etc.)       12-01-06       QUANTITY OF CEMENT         21 CL2"       IF-40 13 3/8"       48 #       1300'       490 sx circulate         12-1/2"       IF-40 13 3/8"       40 #       5050'       1200 sx circulate         8-3/4"       P-110 5 1/2"       17#       14000'       1620 sx TOC 7300'         22 APPROVAL SUSS       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 right psi, and we are requesting a variance to test the 13-3/8". Gasing and BOP system to 1000# psi and use right pressure stricts depted whether groups.         31 AD CL2 CL2 DESCRIBE PROPOSED PROGRAM:       Marpoppaal is to deptor depend directomally, give pertiment data on		PROPOSED LOCATION*		ROPOSED DEPTH			LS
N/A       14000'       Rotary         21. ELEVATIONS (show whether OF, RT, GR, etc.)       12. APPROX. DATE WORK WILL START         3583 (GR)       12.01-06         2       PROPOSED CASING AND CEMENTING PROGRAM         SIZE OF HOLE       GRADE_SIZE OF CASING       WEIGHT PER FOOT         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'         W       Start face 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         nitipipte 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.       Juint Hut 1000*         INABOVE SPACE, DESCRIBE PROPOSED PROGRAM:       If proposal is to deepen dinetomaly, give petiment data on subsurface locations and							
21       ELEVATIONS (Brow whither DF, RT, GR, etc.)       22       APPROX DATE WORK WILL START         3583' GR       12-01-06         2       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"       I-55 9 5/8"       40 #       5050'       1200 sx circulate         8.3/4"       P-110 5 1/2"       17#       14000'       1620 sx TOC 7300'         20       Start face 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.         Junt Start Start Maximum internal yield. During the variance to test the 13-3/8" casing and BOP system to 1000# psi and use rig pumps instead of an independent service company.         Junt Start Start Maximum Internal yield an waburface locations and measured and th		•				_	
12-01-06         PROPOSED CASING AND CEMENTING PROGRAM         SIZE OF HOLE         SETTING DEPTH       QUANTITY OF CEMENT         17-1/2"       H-40 13 3/8"       48 #       1300'       490 sx circulate         12-1/2"       H-40 13 3/8"       40 #       SETTING DEPTH       QUANTITY OF CEMENT         12-1/2"       H-40 13 3/8"       SETTING DEPTH       QUANTITY OF CEMENT         12-1/2"       H-40 #       SUBJON CEMENTING PROGRAM         12-1/2"       H-40 #       SUBJON CEMENTING DEPTH       QUANTITY OF CEMENT         12-01-06         VEX of the 13-3/8"       SUBJON CEMENTING DEPTH       QUANTITY OF CEMENT         17/2"       H-40 #       SUBJON CEMENTING DEPTH       QUANTITY OF CEMENT         10/200 \$x circulate       SUBJON CEMENTING DEPTH       QUANTITY OF CEMENT         AUX Style Are was a stracked to 0.12 %       Aux for the 13-3/8" casing and BOP system.         Aux for the 13-3/8" surface casing and BOP system for 1000# <td>21. ELEVATIONS (Show</td> <td></td> <td>140</td> <td>00'</td> <td></td> <td></td> <td></td>	21. ELEVATIONS (Show		140	00'			
SIZE OF HOLE       GRADE,SIZE OF CASING       WEIGHT PER FOOT       SETTING DEPTH       QUANTITY OF CEMENT         17-1/2"       II-40 13 3/8"       48 #       1300'       490 sx circulate         12-1/4"       J-55 9 5/8"       40 #       5050'       1200 sx circulate         12-1/4"       J-55 9 5/8"       40 #       5050'       1200 sx circulate         3-3/4"       P-110 5 1/2"       17#       14000'       1620 sx TOC 7300'         CM       Stype and and an average SSS       555       555       555         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         nanufacturer's stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not         mtticipate 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.       Jup roposeil to define deependent service and proposed new productive zone.         If proposeil is to define deependentionally, give perifront data on aubauface locations and measured and true vertical d	3583'	GR					
17-1/2"       H-40 13 3/8"       48 #       1300'       490 sx circulate         12-1/2"       J-55 9 5/8"       40 #       5050'       1200 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 roc 7300'         Wut Stypes       JSS       From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000# psi BOP system.         We are requesting a variance for the 13-3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500# psi, whichever is greater, but not to exceed 70% of the nanufacturer'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.       June Optimer Opt	23		CASING AND CEMENT	ING PROGRAM			
12.1/4"       1-55 9 5/8"       40 #       5050'       1200 sx circulate         8-3/4"       P-110 5 1/2"       17#       14000'       1620 sx circulate         8-3/4"       P-110 5 1/2"       17#       14000'       1620 sx circulate         8-3/4"       P-110 5 1/2"       17#       14000'       1620 sx TOC 7300'         We start ace 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 nanuffacturer'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.         Junce State Construction program         Junce State and float ordepen directonely, give pertinent data on aubsurface locations and measured and true vertical depth.         APPROVAL program         Junce State and state and state and state and state state and proposed new productive zone.         Im	SIZE OF HOL		WEIGHT P			G DEPTH	QUANTITY OF CEMENT
3:3/4"       P-110 5 1/2"       17#       1400'       1620 sx thread at the state 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 nanufacturer's stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not inticipate 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.         Jul Use to Company from the surface pipe and the drilling of the intermediate hole we do not inticipate 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.         Jul Use to Company from the surface locations and measured and true vertical depths. Give blowut preventer program, it any.         24       SIGNED       APPROVAL pare         I'more set for faderal or State office use       APPROVAL DATE       Defec 1 9 2006         PREMIT No.       APPROVAL DATE       APPROVAL pare       Defec 1 9 2006         Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or define of the USENCT TO       See Instructions or Reverse Stdreman as to any maker to any department or theory of the United States any false, ficti						····	490 sx circulate
Aut Styp an property JSS         From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000# psi BOP system.         We are requesting a variance for the 13-3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500# psi, whichever is greater, but not to exceed 70% of the nanufacturer's stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not niticipate 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.         Jule Upp to Computing from Organian 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 difficit or deepen directionally, give pertinent data on subsurface locations and measured and rule vertical depths. Give biowout preventer program, if any.         If no deepen directionally, give pertinent data on subsurface locations and measured and rule vertical depths. Give biowout preventer program, if any.         If no deepen directionally, give pertinent data on subsurface locations and measured and rule vertical depths. Give biowout preventer program, if any.         If proposal is to delet on warren or defit bits the spectrat holds legal or seatilise like to bios rights in the rute structiona of Reverse Stdee       DATE       Def 1 9 2000         Check foreduatior Mater of the surface or regresentations as t			40 #				1200 sx circulate
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AND SPECIAL	STIPULATIONS
ATTACHED /	

#### **Operator - Landowner Agreement**

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

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

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

October 4, 2006

Date

enot - a Signature

Zeno Farris Manager, Operations Administration



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

# STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

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

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

County: Lea County, New Mexico

Formation (S): Morrow

Bond Coverage: Statewide BLM Bond

BLM Bond File No.: NM 2575

- enn Authorized Signature:

Representing Cimarex Energy Co. of Colorado

Name: Zeno Farris

Title: Manager, Operations Administration

Date: October 4, 2006

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 87505

# State of New Mexico Energy, Minerals and Natural Resources Department

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

Submit to Appropriate District Office OIL CONSERVATION DIVISION

State Lease - 4 Copies Fee Lease - 3 Copies

Revised October 12, 2005

Form C-102

□ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number				Pool Code		0 M	Pool Name		
30-025-38240				1370		Gem; Morrow	Gas		
Property (					operty Nam			Well Number 8	
300531			MADURO UNIT					Elevation	
OGRID No					perator Nam	OF COLORADO	<b>`</b>	358	
162683	)						,		
				Sur	face Loc	ation			
UL or lot No.	Section	Township	Range	Lot Idn Feet	from the	North/South line	Feet from the	East/West line	County
L	28	19 S	33 E		1740	SOUTH	660	WEST	LEA
			Bottom	Hole Location	If Diff	erent From Sur	face		
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	Code Order No					
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NO ALLO		ORAN	NON-STAN	DARD UNIT H	AS BEEN	APPROVED BY	THE DIVISION		
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							I hereby ce	rtify that the inform	ation
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				this organization either owns a wor interest or unleased mineral interest long including the proposed bottom					in the
NM-2757				location p				ng the proposed bottom hole suant to a contract with an ch a mineral or working interest.	
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			õ				the division.		
Maduro F	od Unit	- #5						Fauij10-	
nadaron	ed on p							10-10-1	
	1	Lat — N32*	<u>37</u> '43.7"		1		Signature		Date
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							correct to th	e best of my beliej	r.
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	Mac	luro Uni	t #8				Date Surveye		
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NM- 846	<b>41</b>						Certificate N	o. Gary L. Jones	7977
L					I		В	ASIN SURVEYS	

## **Application to Drill**

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

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

- 1 Location: 1740' FSL & 660' FWL
- 2 Elevation above sea level: GR 3583'
- 3 Geologic name of surface formation:

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: 14000'
- 6 Estimated tops of geological markers:

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

#### 7 Possible mineral bearing formation:

Oil
Oil
Gas
Gas
Gas
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

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

#### 9 Cementing & Setting Depth:

	13-3/8"	Surface		Set 1300' of 13-3/8" H-40 48 # ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
	9-5/8"	Intermediate	1	Set 5050' of 9-5/8" J-55 40# LT&C casing. Lead with 1460 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 <sup>°</sup> . 4/00 <sup>°</sup>
10 <u>Pressure</u>	on pre be co av wi			A 13 3/8" 5000 PSI working pressure B.O.P. consisting of blind rams and one set of pipe rams and a 5000 # annular type A choke manifold and 120 gallon accumulator with floor and erating stations and auxiliary power system. Rotating head 0'. A kelly cock will be installed and maintained in operable and a drill string safety valve in the open position will be on the rig floor. BOP unit will be hydraulically operated. BOP bled up on the 9 5/8" casing and will be operated at least once e drilling and the blind rams will be operated when out of hole s. No abnormal pressure or temperature is expected while

#### 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.
GA).	IFL	1300' - 5050'	9.7 - 10.0	28 - 29 ( <b>~~£ 47</b>	May lose circ.	
U	Switch ,	to fresh we	ter and	notify	approprieta	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole. <b>PET</b> Brine water. Paper for seepage. Lime for PH
		5050 - 8300	8.4 - 9.9	20 - 29	NC	(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.

drilling.

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

### **Application to Drill**

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

#### 12 Testing, Logging and Coring Program:

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

#### 13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a 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 <u>6000</u> PSI, estimated BHT <u>175</u>.

#### 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>35-45</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>Morrow</u> 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 Maduro Unit No. 8 Unit L Section 28 T19S-R33E Lea County, NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
  - A. Characteristics of H2S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H2S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
- 2 H2S Detection and Alarm Systems
  - A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
- 4 Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only emergency personnel admitted to location.
- 5 Well control equipment
  - A. See exhibit "E"
- 6 Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing not anticipated.

# Hydrogen Sulfide Drilling Operations Plan

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

- 8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H2S scavengers if necessary.



ORILLING OPERATIONS CHOKE MANIFOLD 5M SERVICE



Exhibit E Cont'd – Choke Manifold **Maduro Unit No. 8** Cimarex Energy Co. of Colorado Section 28-T19S-R33E 1740' FSL & 660' FWL Lea County, NM District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

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 X Type of action: Registration of a pit or below-grade tank X Closure of a pit or below-grade tank Telephone: 972-443-6489 e-mail address: zfarris@cimarex.com Operator: Cimarex Energy Co. of Colorado Address: P.O. Box 140907, Irving, Tx 75014-0907 Sec28 T19S R33E Facility or well name: Maduro Unit No. 8 API #: 30-025 U/L or Qtr/QtrL Longitude\_1034028.6 W Latitude 323743.7 N County: Lea NAD: 1927 🔲 1983 🖾 Surface Owner Federal 🛄 State 🛄 Private 🖾 Indian 🛄 Pit Below-grade tank Type: Drilling 🖾 Production 🗖 Disposal 🗍 \_bbl Type of fluid: \_ Volume: Workover 🔲 Emergency 🛄 Construction material: \_ Double-walled, with leak detection? Yes 🔲 If not, explain why not. Lined 🔀 Unlined 🔲 Liner type: Synthetic X Thickness 12 mil Clay Volume \_bbl Closed system, cuttings to be buried 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  $(N_0)$ ( 0 points) water source, or less than 1000 feet from all other water sources.) 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

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

**Ranking Score (Total Points)** 

date. (4) Groundwater encountered: No 🗌 Yes 🛄 If yes, show depth below ground surface\_\_\_\_\_\_ft. and attach sample results. (5) Attach soll 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 bellef. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit , or an (attached) alternative OCD-approved plan . Date: 10-04-06

Printed Name/Title Zeno Farris Manager Operations Administration

<u>= lno fans</u>

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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.

Signature

Approval: Date: Printed Name Title CHRIS WILLIAMS / DIST. 54 av Signature China Collians