Form 3180-3 (July 1992) DEPAI BUR	If earthen pits are association with t well, an OCD pit obtained prior to RTME EAU OF LAND MANAGEN	he drilling of this permit must be pit construction.	ARTESIA IN TRIPLICATE Wher instructions or verse side)	OM	
AP	PLICATION FOR PERMIT T	O DRILL OR DEEPE	N	6. IF INDIAN, ALLUTI	ES OR TRIBE NAME
1a. TYPE OF WORK				7. UNIT AGREEMEN	TNAME
1b. TYPE OF WELL OIL	GAS 🕅			Pending	
WELL		<i>_</i>		8. FARM OR LEASE	NAME, WELL NO. 31.27
2. NAME OF OPERATOR	Co. of Colorado			Shifting Sands	s 15 Federal Com No. 2
Cimarex Energy 3. ADDRESS AND TELEPHO		62683		9. API WELL NO.	
	Irving TX 75014 972-401-3111			30-015- 3	5385
4. LOCATION OF WELL	(Report location clearly and in accordance with			10. FIELD AND POOL	• • • • •
1000/ ECT @ 2000	EWI			Henshaw; Mo	
1980' FSL & 2080'				OR AREA	AND OUR VET
	ROSWELL CONT	ROLLED WATER BA	SIN		15-T16S-R30E
14. DISTANCE IN MILES AND DI 6 miles North and	RECTION FROM NEAREST TOWN OR POST OFFICE 2 miles East	E*		12. COUNTY OR PAR	
15. DISTANCE FROM PROP		16. NO. OF ACRES IN LEASE	17 10 0	Eddy FACRES ASSIGNED	NM
LOCATION TO NEA PROPERTY OR LEAS	REST	NO. TO. OF ADAED IN LEASE	TO THIS W	= -	
Also to nearest drig. unit	1000	880		W/2 320	
18. DISTANCE FROM PROP		19. PROPOS	ED DEPTH 20.	ROTARY OR CABLE TO	DOLS
OR APPLIED FOR, ON	DRILLING COMPLETED, I THIS LEASE, FT. NA	113	00'	Rotary	
21. ELEVATIONS (Show whe	ther DF, RT, GR, etc.)		·····	22. APPROX. DATE V	VORK WILL START
3772' GR				12-15-06	
SIZE OF HOLE	GRADE, SIZE OF CASING	SING AND CEMENTING P WEIGHT PER FC			QUANTITY OF CEMENT
17-1/2"	H-40 13-3/8" WITNESS	48#	· 450' 3		490 sx circulate
12-1/4"	J-55 9-5/8"	40#	3125'		1200 sx circulate
8-3/4"	P-110 5-1/2"	17#	11300'		1245 sx TOC 7000'
From the base of the	surface pipe through the running	of production casing, t	he well will be ea	uipped with a 50	•
all casing strings belo exceed 70% of the ma the intermediate hole 13-3/8" casing and B IN ABOVE SPACE, DI	esting a variance for the 13 3/8" s ow the conductor shall be pressur anufacturer's stated maximum int we do not anticipate any pressur OP system to 1000# psi and use p ESCRIBE PROPOSED PROGRAM:	e tested to 0.22 psi per ternal yield. During the es greater than 1000# p rig pumps instead of an	foot or 1500# psi, e running of the su si and are request independent serv data on present produc	whichever is g urface pipe and th ing a variance to ice company. tive zone and propose	reater, but not to he drilling of test the ed new productive the
24	pen directionally, give pertinent data on sub-	soliabe locations and measured	and true vertical depth	a. One blowbut pieve	enter program, if any 33
	enstans	TITLEMgr. Ops	s. Admin	DATE	5459
(This space for Federal or State of PERMIT No.	fice use)		PROVAL DATE		
Application approval does not wan CONDITIONS OF APPRO APPROVED BY APPROVED BY GENERAL ST	In the second se	te to those which the subject lease which the subject	rse Side	department or ager	OCT 3 0 2006
AND SPECH	N 5L-	- 5525	SEE ATTA	CHED FUE	

DISTRICT I 1625 N. French Dr., Hobbs, NM 68240 DISTRICT II

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1301 W. Grand Avenue, Artesia, NM 68210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION	PLAT
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		DOCATION	AND ACKER	GE DEDICATI	UN FLAI			
API Number	C	C (Pool Code			Pool Name			
	16826 Henshaw; Morrow							
Property Code		Property Name SHIFTING SANDS "15" FEDERAL COM					Well Number 2	
OGRID No.		Operator Name					<u> </u>	
162683		IMAREX F	-	OF COLORADO)	3772'		
			Surface Loca					
UL or lot No. Section	Township Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
K 15	16 S 30		1980	SOUTH	2080	WEST	EDDY	
I	Botto	m Hole Lo	cation If Diffe	erent From Sur	face		L	
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 on 320 NO ALLOWABLE W	(C		der No.	INTIL ALL INTER	ESTS HAVE BE	EN CONSOLIDA		
	OR A NON-ST	ANDARD UN	IT HAS BEEN	APPROVED BY	THE DIVISION			
ן ינ ינ	.at – N32*55 11.1" .ong – W103;57'41 IMSPCE–N 698540. –––– (NAD=83)	416 512			I hereby cer contained herei the best of my this organizatio interest or unle land including i location pursua ourse of such c or to a volunta compulsory pool the division Signature Zeno Fai Printed Name SURVEYO I hereby certify on this plat wo actual surveys supervison an	R CERTIFICAT that the well locati s plotted from field made by me or i that the same is best of my belief	ation ste to and that ing in the ing in the sole an interst, or a mitered by -2-06 Date Date ION on shown notes of under my true and	



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-0560378 – NW/4 LC-069641 – SW/4 Section 15-T16S-R30E
County:	Eddy County, New Mexico
Formation (S):	Atoka, Morrow
Bond Coverage:	Statewide BLM Bond
BLM Bond File No.:	NM 2575 COB00001
Authorized Signature	Zeno Farris
-	Representing Cimarex Energy Co. of Colorado
	Name: Zeno Farris
	Title: Manager, Operations Administration

Date: October 2, 2006

Application to Drill

Cimarex Energy Co. of Colorado Shifting Sands 15 Federal Com No. 2 Unit K Section 15 T16S - 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:	1980' FSL & 2080' FWL	-
2	Elevation abov	<u>e sea level:</u> <u>GR</u>	<u>8 3772'</u>
3	Geologic name	e of surface formation:	Quaternery Alluvium Deposits
4	Drilling tools ar	nd associated equipment:	Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 11300'

6 Estimated tops of geological markers:

San Andres	2950'	Atoka Clastics	10300'
Abo Shale	6425'	Morrow Clastics	10660'
Wolfcamp	7710'	Miss. Uncl.	10750'
Strawn LS	10080'		

7 Possible mineral bearing formation:

Lower Abo	Oil
Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade	_
17-1/2"	0-450'	13-3/8"	48	8-R	ST&C	H-40	•
12-1/4"	0-3125'	9-5/8"	40	8-R	LT&C	J-55	
8-3/4"	0-11300'	5-1/2"	17	8-R	LT&C	P-110	

Application to Drill

Cimarex Energy Co. of Colorado Shifting Sands 15 Federal Com No. 2 Unit K Section 15 T16S - R30E Eddy County, NM

9 Cementing & Setting Depth:

13-3/8"	Surface	Set 450' of 13-3/8" H-40 48 # ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9-5/8"	Intermediate	Set 3125' of 9-5/8" J-55 40# LT&C casing. 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 11300' of 5-1/2" P-110 17# LT&C casing. Cement with 1245 sx Super H + additives. TOC 7000'.

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 nippled 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 - 450'	8.4 - 8.6	30 - 32	May lose circ.	Fresh water spud mud. Add paper to control seepage and high viscosity sweeps to clean
450' - 3125'	9.7 - 10.0	28 - 29	Vay lose circ.	hole. Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
3125' - 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' - 11300'	8.9 - 9.7	29 - 45	NC	XCD Polymer mud system.

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 Shifting Sands 15 Federal Com No. 2 Unit K Section 15 T16S - R30E Eddy County, NM

12 <u>Testing, Logging and Coring Program:</u>

- A. Mud logging program: One-man unit from 3250' 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>4000</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>25 - 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>Morrow</u> pay will be perforated and stimulated. The well will be tested and potentialed as a gas well.





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Exhibit E Cont'd – Choke Manifold **Shifting Sands 15 Federal Com No. 2** Cimarex Energy Co. of Colorado Section 15-T16S-R30E 1980' FSL & 2080' FWL Eddy County, NM

CIMARE

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 subsidiary of Cimarex Energy Co. ◆ A NYSE Listed Company • "XEC"

October 2, 2006

Oil Conservation Division District II Office 1301 W. Grand Ave. Artesia, New Mexico 88210 Attn: Mr. Bryan Arrant

Re: Statewide Rule 118 Hydrogen Sulfide Gas Contingency Plan Proposed Shifting Sands 15 Federal Com No. 2 Well

Dear Mr. Arrant:

In accordance with NMAC 19.15.3.118 C. (1) governing the determination of the hydrogen sulfide concentration in gaseous mixtures in each of its operations, Cimarex Energy Co. of Colorado does not anticipate that there will be enough H2S from the surface to the Morrow formation to meet the OCD's minimum requirements for the submission of a contingency plan for the drilling and completion of the following test(s):

Shifting Sands 15 Federal Com No. 2 1980' FSL & 2080' FWL K-15-16S-30E Eddy County, NM

If anything further is needed regarding this issue, or if you have any questions, please feel free to contact the undersigned at 972-443-6489.

Yours truly,

ZenoFand

Zeno Farris Manager, Operations Administration