

## Energy, Minerals and Natural Resources

## Oil Conservation Division

**1220 S. St Francis Dr.**

**Santa Fe, NM 87505**

## APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CIMAREX ENERGY CO. 15 EAST 5TH STREET TULSA , OK 74103		2. OGRID Number 215099
		3. API Number 30-025-38645
4. Property Code 36898	5. Property Name SHAVANO 13 FEE	6. Well No. 006

## 7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	13	15S	37E	O	480	S	2160	E	LEA

## 8. Pool Information

DENTON-WOLFCAMP	17290
-----------------	-------

### Additional Well Information

Additional Well Information				
9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type Private	13. Ground Level Elevation 3772
14. Multiple N	15. Proposed Depth	16. Formation Wolfcamp	17. Contractor	18. Spud Date 1/5/2008
Depth to Ground water 45		Distance from nearest fresh water well		Distance to nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> mils thick    Clay <input type="checkbox"/> Pit Volume:      bbls    Drilling Method:				
Closed Loop System <input checked="" type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

## 19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	600	510	0
Int1	11	8.625	32	4500	1390	0
Prod	7.875	5.5	17	9800	565	4100
Liner1	4.75	2.875	6.5	11151	0	

**Casing/Cement Program: Additional Comments**

PEAK Completions Systems iso-packer, iso-port liner will be used and will not require cementing. KOP for the lateral will be 9212'.  
Projected TD at BHL is MD 11151, 'TVD 9403'.

### Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000	5000	Cameron

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Sharon LaValley	Approved By: Paul Kautz	
Title: Manager	Title: Geologist	
Email Address: slavalley@cimarex.com	Approved Date: 12/20/2007   Expiration Date: 12/20/2008	
Date: 12/19/2007   Phone: 918-295-1673	Conditions of Approval Attached	

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(505) 393-6161 Fax:(505) 393-0720

**District II**  
 1301 W. Grand Ave., Artesia, NM 88210  
 Phone:(505) 748-1283 Fax:(505) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-102  
 Permit 66451

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-38645	2. Pool Code 17290	3. Pool Name DENTON,WOLFCAMP
4. Property Code 36898	5. Property Name SHAVANO 13 FEE	6. Well No. 006
7. OGRID No. 215099	8. Operator Name CIMAREX ENERGY CO.	9. Elevation 3772

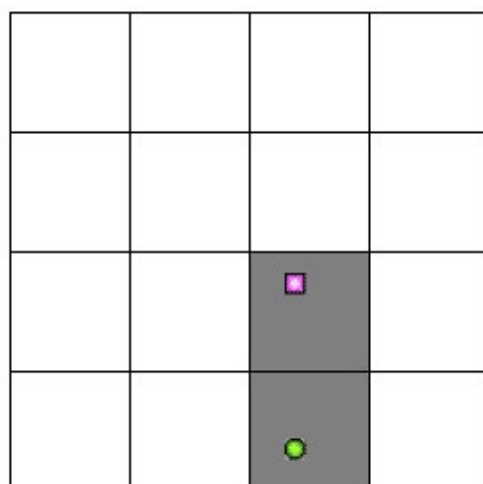
**10. Surface Location**

UL - Lot O	Section 13	Township 15S	Range 37E	Lot Idn	Feet From 480	N/S Line S	Feet From 2160	E/W Line E	County LEA
---------------	---------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	---------------

**11. Bottom Hole Location If Different From Surface**

UL - Lot J	Section 13	Township 15S	Range 37E	Lot Idn J	Feet From 2310	N/S Line S	Feet From 2160	E/W Line E	County LEA
12. Dedicated Acres 80.00		13. Joint or Infill		14. Consolidation Code			15. Order No.		

**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**



**OPERATOR CERTIFICATION**

*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(s) or has a right to drill this well at this 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.*

E-Signed By: Sharon LaValley

Title: Manager

Date: 12/19/2007

**SURVEYOR CERTIFICATION**

*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.*

Surveyed By: Gary L. Jones

Date of Survey: 11/16/2007

Certificate Number: 7977

## Permit Comments

Operator: CIMAREX ENERGY CO. , 215099

Well: SHAVANO 13 FEE #006

API: 30-025-38645

Created By	Comment	Comment Date
ZFARRIS1	C-102, C-144, and preliminary directional survey will be emailed to Donna Mull.	12/19/2007
ZFARRIS1	The Shavano 13 Fee 6 is a proposed horizontal Wolfcamp test with SHL in UL O and BHL in UL J. Therefore, the well will require a stand-up 80-acre spacing unit.	12/19/2007
ZFARRIS1	Cimarex Energy Co. does not anticipate that there will be enough H2S from the surface to the Wolfcamp formation to meet the OCD's minimum requirements for the submission of a contingency plan for this test.	12/19/2007

# Permit Conditions of Approval

Operator: CIMAREX ENERGY CO. , 215099

Well: SHAVANO 13 FEE #006

API: 30-025-38645

OCD Reviewer	Condition
pkautz	Pit construction and closure must satisfy all requirements of your approved plan, D.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines