Form 316C-5 (November 1994)

Final Abandonment Notice

3a. Address

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

JUN 25 2007

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

i po , aban	5 Lease Serial No A LC-028784-C 6 If Indian, Allottee or Tribe Name 7 If Unit or CA/Agreement, Name and/a								
SUBMIT IN TRIPLICATE - Other instructions on reverse side					70954 A	Ď			
Type of Well Gas Well Other					yburg Deep Unit Well Name and No.				
Name of Operator					Grayburg Deep Unit No. 22				
Cimarex Energy Co. of Colorado				9.	API Well No				
Address		3b. Phone No (includ	le area code)	30-015- 35598					
PO Box 140907; Irving, TX 75	972-401-3111		10	Field and Pool, or Exploratory Area					
Location of Well (Footage, Sec., T., R., M, or Survey Description)					Loco Hills; Wolfcamp, NE				
1940' FNL & 330' FWL					11 County or Parish, State				
25-17S-29E	Eddy County, NM								
12. CHECK APPI	ROPRIATE BOX(ES) TO INDICATE NATU	RE OF NOTICE	, REP	ORT, OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION								
X Notice of Intent	Acidize	Deepen	Production (Start/	Resume)	Water Shut-Off				
	X Alter Casing	Fracture Treat	Reclamation		Well Integrity				
Subsequent Report	Casing Repair	New Construction	Recomplete		Other				

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 recomplete 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)

Plug and Abandon

Plug Back

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Temporarily Abandon

Water Disposal

Cimarex is changing the casing plans for this well to the following:

Change Plans

Convert to Injection

Surface:

In 17-1/2" hole, set 375' 13-3/8" 48# H-40 STC. Cement with lead of 134 sx Light Premium Plus + 0.125# Poly-E-Flake + 1% CaCl and tail of 220 sx Premium Plus + 2% CaCl. TOC 0.'

Intermediate:

In 11" hole, set 4700' 8-5/8" 32# J/K-55 LTC. Cement with lead of 733 sx Interfill C + 0.125# Poly-E-Flake and tail of 200 sx Premium Plus + 1% CaCl. TOC 0.1

Production:

In 7-7/8" hole, set 9400' 5-1/2" 17# N-80 LTC. Cement with lead of 305 sx Super H + 0.5% Halad-344 + 0.4% CFR-3 + 1# Salt + 5# Gilsonite + 0.125# Poly-E-Flake + 0.35% HR-7 and tail of 311 sx Super H + 0.5% Halad-344 + 0.4% CFR-3 + 1# salt + 5# Gilsonite + 0.125# Poly-E-flake + 0.35% HR-7. TOC 4500.'

14 I hereby certify that the foregoing is true and correct									
Name (Printed/Typed)	Title								
37 - 11 - 77									
Natalie Krueger	Reg Analy	alyst l							
Signature	Date								
\mathcal{L}									
Watabu Amege	June 19, 2	.007				7			
THIS SPAC	E FOR FEDERAL OR STA	ATE OFFICE L	JSE		TED:	$\overline{\perp}$: .:		
Approved by		Title		OPKING					
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Conditions of Approval, if any, are attached. Approval of this notice doe	s not warrant or	Office	1 1		207				
certify that the applicant holds legal or equitable title to those rights in the subject lease			1 1	2 1	5001 /		1		
which would entitle the applicant to conduct operations thereon.			JUN 2 1	\	١	1			
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly	and willfully to make to any de	partment or agei	ncv of the Unit	ed States any false.	fictitious oa T	T	 		
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly fraudulent statements or representations as to any matter within its jurisc	diction		1	LEDERICK	WRIGHE	R_	لـ		
(Instructions on reverse)				FROOLEUM					

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Cimarex Energy Co. of Colorado

Well Name & No.

Grayburg Deep Unit #22

Location:

1940' FNL, 330'FWL, SEC25, T17S, R29E, Eddy County, NM

Lease:

LC-028784-C

I. DRILLING OPERATIONS REQUIREMENTS:

- **A.** The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
 - 1. Spudding well
 - 2. Setting and/or Cementing of all casing strings
 - 3. BOPE tests
 - Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- **B.** A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the <u>Seven Rivers</u> formation.
- 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.** 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 at least 25 feet into the Rustler Anhydrite and at least 25 feet above the salt, should it occur more shallow @ approximately 375 feet and cemented 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 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 - 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 - 4. If cement falls back, remedial action will be done prior to drilling out that string.
- **B.** The minimum required fill of cement behind the <u>8.625</u> inch intermediate casing is cementing to surface. If cement does not circulate see A.1 thru 4.

- C. The minimum required fill of cement behind the <u>5.5</u> inch production casing is cement shall circulate to at least 200 feet above the shoe of the 8.625 inch intermediate casing.
- **D.** If hard band 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 I joints of the drill pipe will be installed prior to continuing drilling operations.

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 (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **_2000_** psi.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the <u>8.625 inch</u> Intermediate casing shoe shall be <u>3000</u> psi.
- **D.** 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 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, section 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - 5. BOP/BOPE must be tested by an independent service company 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 surface casing to the reduced pressure of <u>1000</u> psi with the rig pumps is approved.
 - 7. A variance to use the proposed steel flexline between the BOP stack and the choke manifold is granted.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> formation, and shall be used until production casing is run and cemented.

- 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:

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- 1. Our geologist has indicated that there is potential for flows in the Salado and Artesia Groups.
- 2. Our geologist has indicated that there is potential for abnormal pressure in the Wolfcamp formation.

Engineering can be reached at 505-706-2779 for variances.

FWright 6/21/07