Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION ARTESIA DISTRICT

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

Lease Serial No. NMLC065347

SUNDRY NOTICES	AND REPORTS ON WELLS
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Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposable CEIVED

6. If Indian, Allottee or Tribe Name

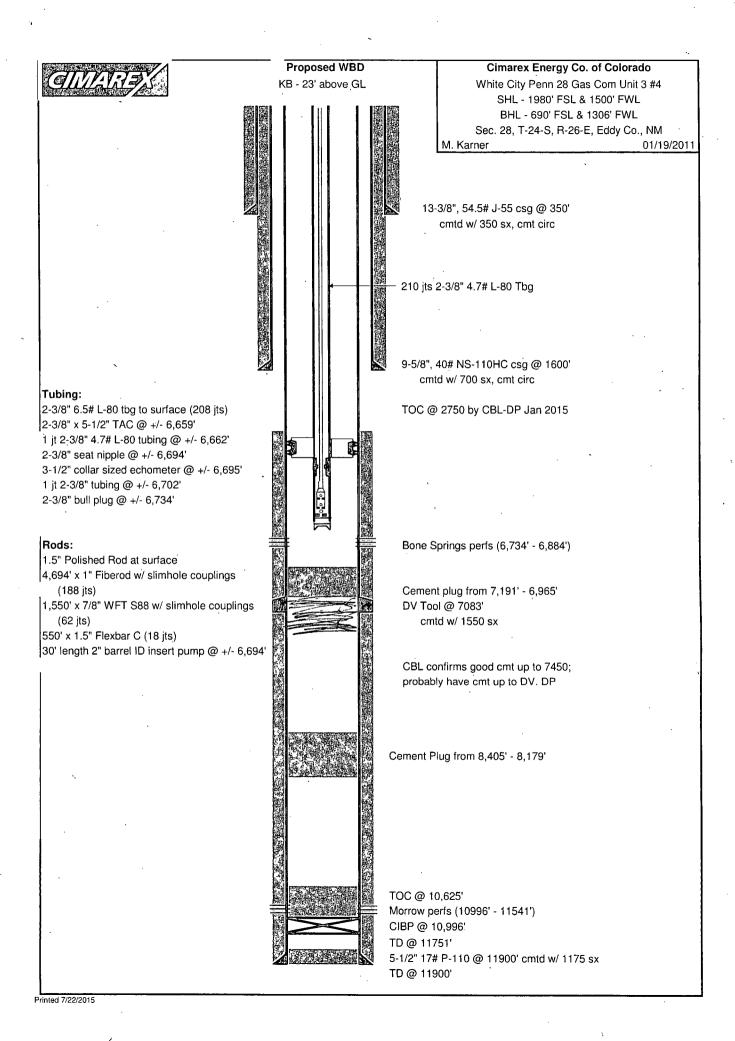
SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agreement, Name and/or No.		
1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other					8. Well Name and No. WHITE CITY PENN 28 GAS COM UTI 4		
2. Name of Operator Contact: ARICKA EASTERLING CIMAREX ENERGY COMPANY OF CO-Mail: aeasterling@cimarex.com					9. API Well No. 30-015-33862-00-S1		
3a. Address 202 S CHEYENNE AVE SUIT TULSA, OK 74103.4346	(include area code) 0-7060)	10. Field and Pool, or Exploratory WHITE CITY				
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)					11. County or Parish, and State		
Sec 28 T24S R26E NESW 1980FSL 1500FWL					EDDY COUNTY, NM		
i	·						
12. CHECK APPR	ROPRIATE BOX(ES) TO) INDICATE	NATURE OF 1	NOTICE, RE	PORT, OR OTHER	R DATA	
TYPE OF SUBMISSION	TYPE OF ACTION					,	
D Notice of Interes	☐ Acidize ☐		Deepen Prod		on (Start/Resume)	☐ Water Shut-Off	
M Notice of Intent	Notice of Intent Alter Casing		ture Treat	☐ Reclamation		■ Well Integrity	
☐ Subsequent Report	☐. Casing Repair ☐ New		Construction	☐ Recomp	lete	☐ Other	
☐ Final Abandonment Notice	Change Plans	Plug	and Abandon	□ Tempora	rily Abandon		
	☐ Convert to Injection	🛮 Plug	Back .	■ Water D	isposal		
	operations. If the operation repandonment Notices shall be filinal inspection.) approval to recomplete the current WBD and property of the current WBD and pr	sults in a multipled only after all the White City	e completion or recequirements, included Penn 28 Unit 3	ompletion in a n ding reclamation #4 to the Bor	ew interval, a Form 316, have been completed,	0-4 shall be filed once and the operator has	
	struc and correct. Electronic Submission # For CIMAREX ENI nitted to AFMSS for proces EASTERLING	ERGY COMPA	NY OF CO, sent IFER SANCHEZ	to the Carlsba	ad (15JAS0443SE)		
			ď			-[
Signature (Electronic Submission)			Date 07/23/2015 AFPR()VFI)				
THIS SPACE FOR FEDERAL OR STATE OFFICE USE							
Approved By Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to conditions.	uitable title to those rights in th		Title Office	JI FOREAU (JL 24 2015 DF LAND MANYEM	AV M	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department of agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

- 1. Test anchors prior to moving in rig.
- 2. Move in rig up pulling unit.
- 3. Kill well as necessary with 2% KCl.
- 4. Nipple down wellhead, nipple up 5,000 psi blow out preventer stack. Send wellhead with Cameron company representative for inspection and to replace seals in tubing hanger. Call Cameron company representative 1-2 days prior to starting operations to arrange having equipment picked up so that it can be returned within a few days.
- 5. TOOH w/ 2-3/8" 4.7# L-80 tbg and stand back tbg.
- 6. MIRU wireline and 5k short lubricator
- 7. RIH with 4.60" gauge ring and junk basket down to +/- 11,000'
- 8. PU CIBP on WL and RIH to set CIBP @ +/- 10,996 (OD of CIBP = 4.24").
- must be 50 above 9. TIH w/ 2-3/8" 4.7# L-80 tbg to tag CIBP at +/- 10,996'. Hydrotest to 8,500 psi while TIH.
- 10. Fill annulus with 2% KCl prior to pumping cement to avoid U-tubing.
- 11. Pump 321' (35 sx) of Class H cement on top of CIBP abandoning the Morrow. (covers perfs and 50' above top of morrow at 10,724') Displace with 2% KCl.
- 12. TOOH slowly to 9,675' (TOC at 10,625'). Reverse circulate 48 bbls 2% KCl (tubing volume + 10 bbls).
- 13. WOC at least 6-8 hours
- 14. RU pump truck and pressure test casing to 5,000 psi w/ 2% KCl.
- 15. TIH to tag TOC at +/- 10,625'.
- 16. TOOH w/ 2-3/8" 4.7# L-80 tbg to 8,405'
- 17. Fill annulus with 2% KCl prior to pumping cement to avoid U-tubing.
- 18. Spot 226' (25 sx) Class H cement @ 8,405'
- 19. TOOH slowly to 7,191' (expected TOC 8,179'). Reverse circulate 40 bbls 2% KCl (tubing volume + 10 bbls).
- 20. Test casing to 500 psi.
- 21. Make sure annulus is filled with 2% KCl prior to pumping cement to avoid U-tubing
- 22. Spot 226' (25 sx) Class H cement @ 7,191'
- 23. TOOH w/ 4.7# L-80 tbg and lay down tubing.
- 24. WOC at least 6-8 hours
- 25. RU pump truck and test csg to 5,000 psi with FW.
- 26. ND BOP, NU WH, RDMO pulling unit
- 27. MIRU frac tanks (14 frac tanks is 25% excess).
- 28. Test frac valves and flow cross prior to job. Arrange for these items, manlift, forklift, and Pace testers to be on location the day before the frac job to test so that we do not have the frac waiting on a good test the following day.
- 29. RU 15K Guardian stage tool, frac valves, & WL with 5k short lubricator.
- 30. RU pump truck and test casing to 8,500 psi (maximum treating pressure).
- 31. RIH w/ 4.60" gauge ring and junk basket down to 6,900'.
- 32. Perforate Bone Springs (6,734' 6,884') with 28 perfs. Note change in pressure on report. Correlate to Halliburton Dual Spaced Neutron Spectral Density Log dated April 12, 2005.



- 33. RDMO WL & 5k lubricator.
- 34. Frac Bone Springs perfs as per design down 5-1/2" csg through stage tool.
- 35. RDMO frac and 15K Guardian stage tool
- 36. Flow back well as necessary.
- 37. MIRU pulling unit, ND WH, NU 5K BOP
- 38. TIH w/ bit and casing scraper on 2-3/8" 4.7# L-80 tbg to 6,890'.
- 39. TOOH w/ bit and casing scraper on 2-3/8" 4.7# L-80 tbg
- 40. TIH w/ tbg string as per procedure to set tubing anchor catcher at +/- 6,655'. From downhole up:
 - a. 2-3/8" bull plug set at +/- 6,734'
 - b. 1 jt 2-3/8" 4.7# L-80 tubing @ 6,702'
 - c. 3-1/2" collar sized echometer @ +/- 6,695'
 - d. 2-3/8" seat nipple @ +/- 6,694'
 - e. 1 jt 2-3/8" 4.7# L-80 tubing @ +/- 6,662'
 - f. 2-3/8" x 5-1/2" TAC @ +/- 6,659'
 - g. 2-3/8" 4.7# L-80 tbg to surface
- 41. ND BOP, NU wellhead
- 42. RIH w/ 1.5" insert pump and rod string as per design. From downhole up:
 - a. 2" x 1-1/2" x 30' RHBC (rod pump, heavy wall, bottom cup type) HVR (hollow valve rod, prevents gas locking) frac pump, HWSCID (heavy wall steel chrome ID barrel), 6' smgroovemp (spray metal, groove type plunger, monel pin), ss trim (stainless steel), DV (double valve) T/C T/C alt (titanium over carbide), SV (standing valve) T/C alt, ¾" pin (1.5" flexbar C has ¾" pin), 2" fn (fishing neck), 1-1/4" GAC (gas anchor catcher, doesn't really matter since we will not run a Mother Hubbard), 271" stroke (this is a 1.5" insert pump).
 - b. 450' of 1.5" Flexbar C sinker bars
 - c. 1,550' of 7/8" Weatherford S88 steel rods
 - d. 4,694' of 1" Fiberod (fiberglass rods)
- 43. Load tbg and test to 500 psi.
- 44. Install C640-305-168 pumping unit & set in 1st crank hole. Set pump at 7.25 SPM
- 45. Send excess 4.7# 2-3/8" L-80 tubing back to Midland yard.
- 46. Put well on production.



Current WBD Cimarex Energy Co. of Colorado KB - 23' above GL White City Penn 28 Gas Com Unit 3 #4 SHL - 1980' FSL & 1500' FWL BHL - 690' FSL & 1306' FWL Sec. 28, T-24-S, R-26-E, Eddy Co., NM 01/19/2011 S. Gengler 13-3/8", 54.5# J-55 csg @ 350' cmtd w/ 350 sx, cmt circ 9-5/8", 40# NS-110HC csg @ 1600' cmtd w/ 700 sx, cmt circ TOC @ 2750 by CBL-DP Jan 2015 - 343 jts 2-3/8" 4.7# L-80 Tbg DV Tool @ 7083' cmtd w/ 1550 sx CBL confirms good cmt up to 7450; probably have cmt up to DV. DP 1.812" Baker F Profile nipple @ 10869' WLEG @ 10902' Morrow perfs (10996' - 11541') PBTD @ 11751' 5-1/2" 17# P-110 @ 11900' cmtd w/ 1175 sx TD @ 11900'

Printed 6/11/2015

White City Penn 28 Gas Com UTI 4 30-015-33862 Cimarex Energy Company of CO July 24, 2015 Conditions of Approval

Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.

Work to be completed by October 24, 2015.

- 1. Operator shall set a CIBP at 10,946' (50' above top most perf) and Class H cement on top. Tag required at a minimum of 10,625'.
- 2. Operator shall set a solid Class H plug from 8,405'-8,179' as proposed.
- 3. Operator shall set a solid Class C plug from 7,133'-6,965' to cover the DV tool as proposed. Tag required.
- 4. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.
- 5. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
- 6. Surface disturbance beyond the originally approved pad must have prior approval.
- 7. Closed loop system required.
- 8. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 9. Operator to have H2S monitoring equipment on location.

- 10. A minimum of a **5000** (**5M**) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (5M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
- 11. Subsequent sundry required detailing work done and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.
- 12. See attached for general requirements.

JAM 072415

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Production Zone Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.

- 2. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either **Neat Class "C"**, for up to 7,500 feet of depth or **Neat Class "H"**, for deeper than 7,500 feet plugs.

6. Subsequent Plug back Reporting: Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. Show date work was completed.

7. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.