

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMLC064637

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
89100645308. Well Name and No.
HENSHAW DEEP UNIT 59. API Well No.
30-015-03913-00-S110. Field and Pool, or Exploratory
HENSHAW11. County or Parish, and State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

CHESAPEAKE OPERATING INC

Contact:

CINDY H MURILLO

E-Mail: CHERRAMURILLO@CHEVRON.COM

3a. Address

OKLAHOMA CITY, OK 73154-0496

3b. Phone No. (include area code)

Ph: 575-263-0431

Fx: 575-391-6679

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 23 T16S R30E NENE 660FNL 660FEL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Workover Operations
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including 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.)

CHEVRON USA INC. INTENDS TO WORKOVER THE ABOVE WELL;
ATTACHED RECOMPLETION PROCEDURE

** PLEASE NOTE THAT WE DISCUSSED ABANDONMENT WORK WITH JIM AMOS AND WORK WAS APPROVED VERBALLY BY JIM AMOS**

Accepted for record

NMOCD

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****RECEIVED**

DEC 19 2013

NMOCD ARTESIA

APPROVED

DEC 16 2013

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #226325 verified by the BLM Well Information System

For CHESAPEAKE OPERATING INC, sent to the Carlsbad

Committed to AFMSS for processing by JOHNNY DICKERSON on 11/13/2013 (14JLD1544SE)

Name (Printed/Typed) CINDY H MURILLO

Title PERMITTING SPECIALIST

Signature (Electronic Submission)

Date 11/12/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ

Title PETROLEUM ENGINEER

Date 12/16/2013

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Carlsbad

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 or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

11/5/2013
Henshaw Deep Unit #5
Re-completion

This procedure is meant to be followed. It is up to the WSM, Remedial Engineer and Production Engineer to make the decisions necessary to do SAFELY what is best for the well. In the extent that this procedure does not reflect actual operations, please contact RE, PE and Superintendent for MOC

Note: Current TOC behind 4 1/2" casing is 4,638'

Verify wellhead and connections are in good condition and are rated to a minimum of 5,000 psi

- 1 RU pump truck. Pressure test csg to 5,000 psi.
- 2 If casing holds, obtain a 30 minute chart for submittal to BLM.
- 3 Nipple up 5,000 psi Frac Valve assembly. Test to 5,000 psi
- 4 RU Gray wireline. Test lubricator on rack to 1000 psi. NU Lubricator. PU guage ring for 4-1/2" 11.6# csg. RIH to 5,925'. POOH
- 5 PU/RIH w/ GR + perforating guns. Correlate to GR on Neutron-Density log . Perforate csg @ (5,788' - 5,812') w/ 2 spf and 90 degree phasing (48 total holes). POOH/LD guns (check to make sure all shots fired). ND Lubricator. RD Gray
- 6 RU Petroplex. Titrate acids and verify concentration (HCl $\pm 1.5\%$). Load BS w/ BW, set pop-off to 500 psi. Spearhead 1,000 gal 15% NEFE HCL down to perfs (5,000 max psi). Over displace to bottom perf by 2 bbls w/ biocide treated fresh water (record rate and pressures). RD Petroplex
- 7 Prep for sand frac job on xx.
- 8 MIRU HAL - Hold JSA. Test iron to 5000 psi
- 9 Pump stage 1 of sand frac w/ 1,000 gal 15% HCL + 50,000 lb 20/40 + 10,000 lb 20/40 CRC sand @ 30 bpm, **max psi = 4500**. Record ISIP, 5, 10, & 15 min. pressures.
- 10 PU/RIH w/ GR + 4-1/2" CBP. Set 1st CBP @ 5,500'. POOH
- 11 PU/RIH w/ 2nd 4-1/2" CBP + perf gun. Set CBP @ 4,650'. Punch holes for cement job @ 4,570'. POOH/LD guns (check to make sure all shots fired). ND lubricator. RDMO frac spread and wireline

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

See COA

****Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**

- 12 Verify that well does not have pressure or flow. If well has pressure, note tubing and casing pressures on wellview report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
- 13 MIRU pulling unit and related equipment.
- 13 ND Frac Valve. NU 7-1/16" 5,000 psi BOP with 2-3/8" pipe rams over blind rams.
- 14 PU 4-1/2" tension pkr on one jt 2-3/8" L-80tbg and set @ ~25'. Test BOP rams to 250/500 psi.
- 15 Release packer. Run in hole with 4 1/2" packer to +/- 4,300'. Set pkr 270' above punch holes @ 4,570'

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

16 Establish injection rate and pressure. Verify good circulation to surface.

17 MIRU service company. Cement casing with 1,650 sx class C neat mixed at 14.8 ppg. (1.32 yield)

18 Displace cement to +/- 4,400' with 18 bbls fresh water.

19 Shut well in for a minimum of 12 hours.

20 Release packer. Pull out of hole with tubing and packer.

21 PU/TH w/ 3-3/4" MT bit + 3-1/8" DC's + 2-3/8" L-80 tbg & drillout/cleanout through CBP @ 4,650'. Circ well clean

22 POOH w/ 2-3/8" tbg & LD bit + DC's.

23 Move in and rig up wireline. Run CCL/CBL log from 4,700' to surface.

24 Nipple down BOP equipment. Nipple up and test 5,000 psi Frac valve.

25 Rig down pulling unit and equipment.

26 MIRU HAL - Hold JSA. Test iron to 5000 psi. NU Lubricator. Test lubricator on rack to 1000 psi

27 PU/RIH w/ GR + perforating guns. Perforate csg @ (5,095-98') (5,054-57') (5,045-47') (4,967-70') (4,906-09') (4,849-51') (4,836-39') (4,775-80') (4,730-35') (4,551-53') (4,536-39') w/ 3 spf and 120 degree phasing. POOH/LD guns (check to make sure all shots fired). ND Lubricator. RD Gray

28 Pump stage 2 of sand frac w/ 1,000 gal 15% HCL + 100,000 lb 20/40 + 20,000 lb 20/40 CRC sand @ 30 bpm, max psi = 4500.

29 PU/RIH w/ GR + perforating guns + 4-1/2" "flow-through" CBP. Set CBP @ 4,525'. Perforate csg @ (4,475-85') (4,445-55') (4,410-20') w/ 2 spf and 90 degree phasing. POOH/LD guns (check to make sure all shots fired). ND Lubricator. RD Gray

30 Pump stage 3 of sand frac w/ 1,000 gal 15% HCL + 100,000 lb 20/40 + 20,000 lb 20/40 CRC sand @ 30 bpm, max psi = 4500.

31 Record ISIP, 5, 10, & 15 min. pressures. RDMO HAL

32 RU flowback equipemnt. Stake lines w/ steel hobbles. Flow back well until it dies.

33 MIRU. RD frac valve and frac stack

34 PU/TH w/ 3-3/4" MT bit + 3-1/8" DC's + 2-3/8" L-80 tbg & drillout/cleanout to 5,925. Circ well clean

35 POOH w/ 2-3/8" tbg & LD bit + DC's

36 (Discuss production equipment setting with ALCR prior to running) PU production equipment & TH w/ 2-3/8" 4.7# L-80 production tbg down to 5,820. Set TAC @ 4,350'. ND BOP. NU WH. TH w/ rods and pump per ALCR. Hang well on. RDMO

37 Turn well over to operations

See COA

See COA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

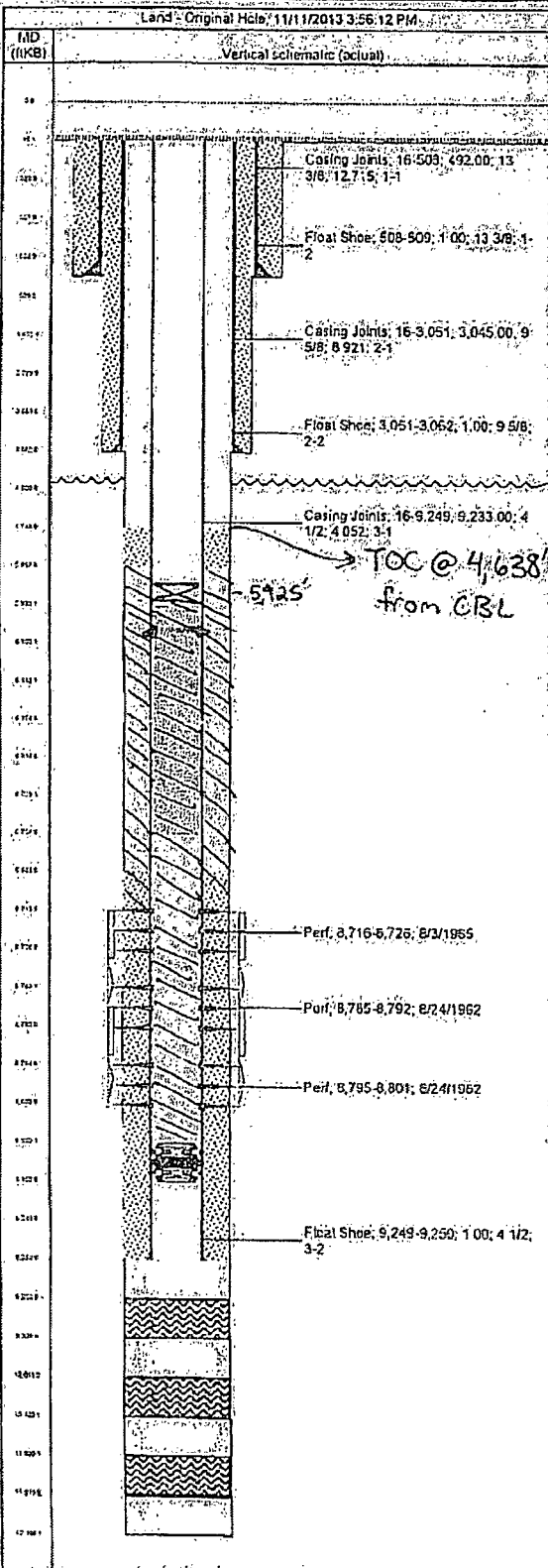
See COA

See COA



Wellbore Schematic

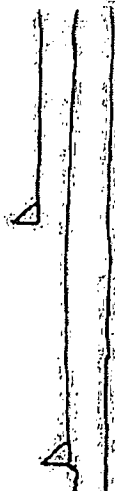
Well Name: CHK HENSHAW DEEP UNIT 005 Lease: HENSHAW DEEP UNIT Rig Name: Henshaw Wolfcamp Business Unit: Mid-Continent



Job Details					
Job Category			Start Date	Release Date	
Major Rig Work Over (MRWO)			8/23/2013		
Casing Strings					
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (MD) (ft)
Surface	13 3/8	48.00	H-40	8-RD	509
Intermediate	9 5/8	36.00	H-40	8-RD	3,062
Production	4 1/2	11.60	J-55	8-RD	9,250
Perforations					
Date	Top (ft)	Bot (ft)	Shal Dens (shots/ft)	Entered Shal Total	Zone & Completion
3/8/2013	400.0	400.0			
3/8/2013	1,475.0	1,475.0			
8/3/1965	8,716.0	8,726.0	2.0	22	WOLF CAMP Original Hole
8/24/1962	8,785.0	8,792.0	2.0	15	WOLF CAMP Original Hole
8/24/1962	8,795.0	8,801.0	2.0	15	WOLF CAMP Original Hole
Other Strings					
Run Date	Pull Date	Set Depth (ft)	Com		
Other In Hole					
Desc	Top (ft)	Even (ft)	Run Date	Pull Date	Com
PLUG BACK (TOP OF CEMENT)	5,995.0	6,755.0	9/4/2013		
Cast Iron Bridge Plug	6,128.0	6,178.0	2/25/2013	9/4/2013	
Milled casing section	6,718.0	6,725.0			
Packer	9,100.0	9,102.0	8/3/1965		

Henshaw Deep Unit #5
Casing Issue - Wellbore

30-0.5-03913



13 3/8

509' Circ. Cmt

9 5/8

3062' Circ. Cmt

New 4 1/2 11.6 CSA SURF TO 5956

Slip Joint @ 5956

BAD SPOT (TIGHT) 5985 - 6015
SWAGE OUT

3' CASING PART 6080 - 6083
RWD ALIGNMENT TOOL 0.502
2/4/13

CSA COLLAPSE 6723 - 6730

CSA COLLAPSE 6731 - ?

Pre's 8716' - 26'
8785' - 92'
8795' - 8.801'

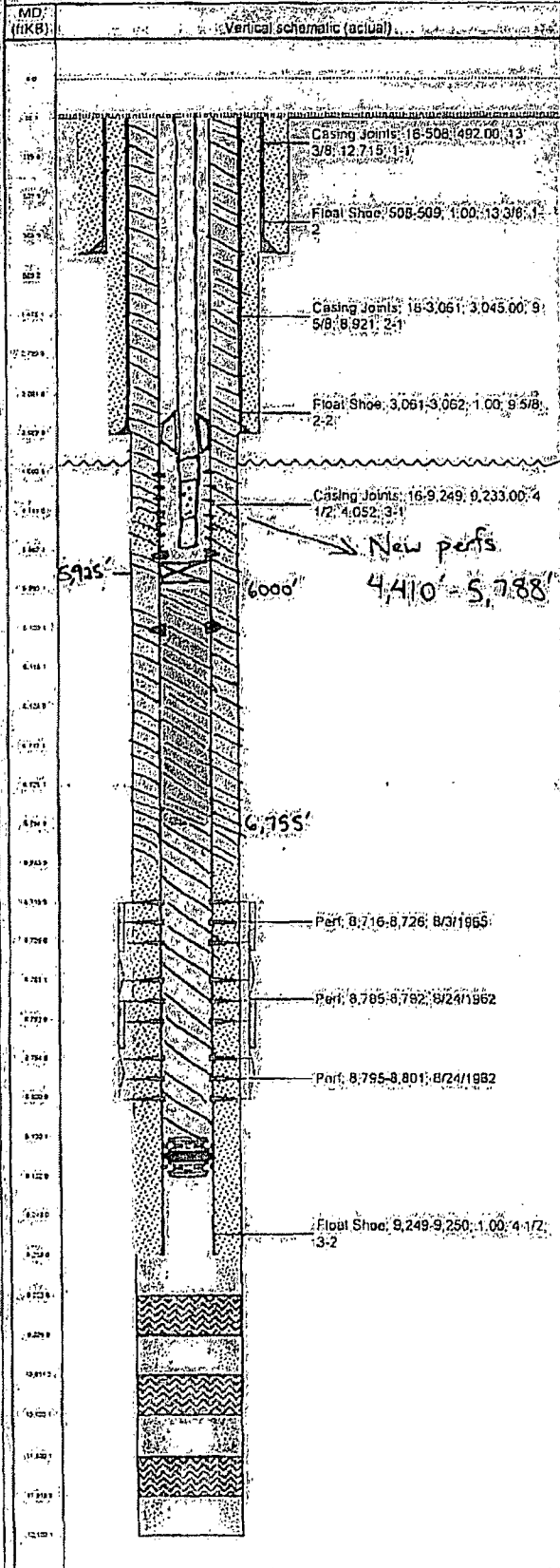
4 1/2 11.6 CSA SURF @ 9250
TOC @ 6984'



Proposed Wellbore Schematic

Well Name: CHIK HENSHAW DEEP UNIT 005 Lease: HENSHAW DEEP UNIT Field Name: Henshaw Wolfcamp Business Unit: Mid-Continent

Land: Original Hole 11/11/2013 3:04:56 PM



Job Details					
Job Category		Start Date		Release Date	
Major Rig Work Over (MRWO)		8/23/2013			
Casing Strings					
Csg Des	OD (in)	Wt/Ln (lb/ft)	Grade	Top Thread	Set Depth (MD) (ftKB)
Surface	13 3/8	48.00	H-40	8-RD	508
Intermediate	9 5/8	38.00	H-40	8-RD	3,062
Production	4 1/2	11.60	J-55	8-RD	9,250
Perforations					
Run Date	Top (ftKB)	Blm (ftKB)	Shot Density (shots/ft)	Entered Shot Total	Zone & Completion
3/8/2013	400.0	400.0			
3/8/2013	1,475.0	1,475.0			
8/3/1965	8,716.0	8,726.0	2.0	22	WOLFCAMP Original Hole
8/24/1962	8,785.0	8,792.0	2.0	15	WOLFCAMP Original Hole
8/24/1962	8,795.0	8,801.0	2.0	15	WOLFCAMP Original Hole
Other Strings					
Run Date	Pull Date	Set Depth (ftKB)	Com		
Other In Hole					
Csg Des	Top (ftKB)	Blm (ftKB)	Run Date	Pull Date	Com
PLUG BACK (TOP OF CEMENT)	5,995.0	6,755.0	9/4/2013		
Cast Iron Bridge Plug	6,128.0	6,178.0	2/25/2013	9/4/2013	
Milled casing section	6,718.0	6,725.0			
Packer	9,100.0	9,102.0	8/3/1965		

Henshaw Deep Unit #5 (30-015-03913)
Chevron USA Inc
Sundry dated November 12, 2013
Conditions of Approval

Work to be completed by February 28, 2013.

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

1. **Must conduct a casing integrity test (CIT) for 30 minutes before any perforating or fracturing can be done.** Make arrangements 24 hours before the CIT for BLM to witness. In Eddy County email Paul R. Swartz pswartz@blm.gov and/or phone 575-200-7902, if there is no response, 575-361-2822. **Submit results to BLM.** The CIT is to be performed on the production casing to max treating pressure.
2. **If CIT does not fail, work is approved with the following conditions of approval.**
3. Surface disturbance beyond the originally approved pad must have prior approval.
4. Closed loop system required.
5. 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.
6. Operator to have H2S monitoring equipment on location.
7. A **minimum** of a 3000 (3M) 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 (3M 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.

8. All pressure tests shall be document on chart recorder - the pressure test on a calibrated recorder chart shall register within 30 to 85 per cent of its full range. Greater than 10% pressure leak off will be viewed as a failed CIT. Less than 10% pressure leak off will be evaluated site specifically.
9. **Stage1 frac job**: the frac crew and Chevron personnel shall actively monitor and record the 9-5/8" x 4-1/2" annulus pressure during the frac job. During the frac job, if pressure increases above what is considered normal; the frac job shall be terminated immediately. A copy of the service company records monitoring the annulus shall be submitted to the BLM.
10. **Procedure step number 17**: Cement shall circulate to surface. Make arrangements 24 hours before the cement job for BLM to witness. In Eddy County email Paul R. Swartz pswartz@blm.gov and/or phone 575-200-7902, if there is no response, 575-361-2822.
11. **Procedure step number 23**: Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 4700' to surface. The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779. This CBL shall be evaluated by the BLM before proceeding with the recompletion from 4536' to 5098'.
12. **If CBL shows adequate cement bond and zonal isolation, frac stage 2 and 3 is approved. Chevron shall continue to** actively monitor and record the 9-5/8" x 4-1/2" annulus pressure during the frac job as per step 9 above.
13. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp <jchopp@blm.gov> 575.234.2227 or Bob Ballard <bballard@blm.gov> 575.234.5973
14. Subsequent sundry required detailing work done and completion report for the new formation. Operator to include well bore schematic of current well condition when work is complete.

EGF 121613