

NM OIL CONSERVATION

ARTESIA DISTRICT

JUL 21 2017

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

RECEIVED

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5. Lease Serial No. NMNM130854
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____		6. If Indian, Allottee or Tribe Name
2. Name of Operator CIMAREX ENERGY COMPANY		7. Unit or CA Agreement Name and No.
Contact: TERRI STATHEM E-Mail: tstathem@cimarex.com		8. Lease Name and Well No. COTTONBERRY 20 FEDERAL COM 4H
3. Address 202 S CHEYENNE AVE., STE. 1000 TULSA, OK 74103	3a. Phone No. (include area code) Ph: 432-620-1936	9. API Well No. 30-015-43658
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NENE 330FNL 700FEL At top prod interval reported below NENE 330FNL 700FEL At total depth SESE 331FSL 656FEL		10. Field and Pool, or Exploratory WC BONE SPRING
14. Date Spudded 02/01/2017		11. Sec., T., R., M., or Block and Survey or Area Sec 20 T25S R27E Mer
15. Date T.D. Reached 02/18/2017		12. County or Parish EDDY
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 06/11/2017		13. State NM
17. Elevations (DF, KB, RT, GL)* 3139 GL		

18. Total Depth: MD 11975 TVD 7445	19. Plug Back T.D.: MD 11972 TVD	20. Depth Bridge Plug Set: MD TVD
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) NONE		22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55	48.0	0	435		580		0	
12.250	9.625 J55	36.0	0	1990		730		0	
8.500	5.500 L80	17.0	0	11975		2275		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	7022	7022						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	7444	11955	7444 TO 11955	0.430	455	OPEN
B)						
C)						
D)						

26. Perforation Record

Depth Interval	Amount and Type of Material
7444 TO 11955	123695 BBLS TOTAL FLUID; 9247657# SAND

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
06/17/2017	07/05/2017	24	→	767.0	1478.0	747.0	48.2		GAS LIFT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
44/64	750	1000.0	→	767	1478	747	1926	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

Pending BLM approvals will subsequently be reviewed and scanned

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #381564 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED

7-25-17

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)

SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
BELL CANYON	2050	2970	WATER	SALADO	1230
CHERRY CANYON	2970	4000	WATER	CASTILLE	1790
BRUSHY CANYON	4000	5520	WATER OIL AND GAS	BELL CANYON	2050
BONE SPRING	5520	7460	WATER OIL AND GAS	CHERRY CANYON	2970
				BRUSHY CANYON	4000
				BONE SPRING	5520

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #381564 Verified by the BLM Well Information System.
For CIMAREX ENERGY COMPANY, sent to the Carlsbad

Name (please print) TERRI STATHEM Title MANAGER REGULATORY COMPLIANCE

Signature _____ (Electronic Submission) Date 07/18/2017

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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.
NMNM130854

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

COTTONBERRY 20 FEDERAL COM 4H

2. Name of Operator

CIMAREX ENERGY COMPANY

Contact: TERRI STATHEM

E-Mail: tstatthem@cimarex.com

9. API Well No.

30-015-43658

3a. Address

202 S CHEYENNE AVE
TULSA, OK 74103

3b. Phone No. (include area code)

Ph: 432-620-1936

10. Field and Pool or Exploratory Area
BONE SPRING

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

Sec 20 T25S R27E 330FNL 700FEL

11. County or Parish, State

EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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	Drilling 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 recompleat 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Drilling

02/01/17 Spud well @ 4:30 am. TD 17-1/2" surface hole @ 435'. RIH w/ 13-3/8", 48#, J55, STC csg & set @ 435'. Mix & pump 580 sx Class C, 14.8 ppg, 1.35 yld. Circ 208 sx to surface. WOC 8 hrs.

02/02/17 Test csg to 1500# for 30 mins. Good test.

02/04/17 TD 12-1/4" hole @ 1990'. RIH w/ 9-5/8", 36#, J55 LTC csg & set @ 1990'. Mix & pump lead: 530 sx Class C, 13.5 ppg, 1.82 yld; tail w/ 200 sx Class C, 14.8 ppg, 1.35 yld. Circ 148 sx to surface. WOC 8 hrs.

02/05/17 Test csg to 1500# for 30 mins. Good test.

02/08/17 TD 8-3/4" vertical hole @ 7019'. TOH & LD BHA.

02/09/17 PU 8-3/4" curve BHA & drill curve.

02/10/17 TOH w/ curve BHA. TIH w/ 8-1/2" lateral assembly & drill lateral.

02/18/17 TD 8-1/2" hole @ 11975'.

NM OIL CONSERVATION
ARTESIA DISTRICT

JUL 21 2017

RECEIVED

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

**Electronic Submission #381400 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Carlsbad**

Name (Printed/Typed) TERRI STATHEM

Title MANAGER REGULATORY COMPLIANCE

Signature (Electronic Submission)

Date 07/16/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

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

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly:
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdictionPending BLM approvals will
subsequently be reviewed
and scanned

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED**

BC 7-25-17

Additional data for EC transaction #381400 that would not fit on the form

32. Additional remarks, continued

02/19/17 LDDP. RIH w/ 5-1/2", 17#, L80, BTC/LTC csg & set @ 11975'. Mix & pump lead: 880 sx Class H, 11.0 ppg, 2.9 yld; tail w/ 1295 sx Class H, 14.5 ppg, 1.34 yld. Circ 76 sx surf. WOC.
02/20/17 Release rig.

Completion

05/20/17 Test csg to 925# for 30 mins ? ok. Test csg to 7025# for 30 mins. OK.

06/08/17 to

6/09/17 Perf Bone Spring @ 7444-11955' w/ 455 holes, .43. Frac w/ 123695 bbls total fluid and 9247657# sand.

06/10/17 Mill out plugs and CO to PBTD @ 11972'.

06/11/17 Flowback well.

06/13/17 SI well pending tbg installation.

06/17/17 RIH w/ 2-3/8" tbg, pkr & GLV & set @ 7022'. Turn well to production.