

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
OCD ArtesiaFORM 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.  
NMLC065457

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.

J M GATES FEDERAL NCT-1 4

2. Name of Operator

CIMAREX ENERGY COMPANY OF CO

Contact: NATALIE E KRUEGER

E-Mail: nkrueger@cimarex.com

9. API Well No.

30-015-35461-00-S1

3a. Address

600 NORTH MARIENFELD STREET SUITE 600  
MIDLAND, TX 79701

3b. Phone No. (include area code)

Ph: 432-620-1936

Fx: 432-620-1940

10. Field and Pool, or Exploratory

WHITE CITY

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

Sec 30 T24S R26E NENW 1000FNL 1700FWL

11. County or Parish, and State

EDDY COUNTY, NM

## 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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 recompleate 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 recompleation 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.)

This well was completed in Wolfcamp in 12-2007. Wolfcamp perfs @ 9740-9750. Morrow perfs @ 11508-11547 behind CIBP @ 10000 with 35 ft cmt. Cimarex proposes to add Wolfcamp perfs as shown below:

Procedure.

1. Kill well with FW. ND WH, NU BOP, Release pkr, TOOH & LD tbg. RU wireline and run gauge ring to 11490. Change out 5K wellhead for 10K wellhead. ND BOP and RU 10K goat head frac valve. RDMO pulling unit.

2. RU wireline truck and mast unit. Perforate Wolfcamp (9481 ? 9484, 9499 ? 9503, 9535 ? 9538, 9555 ? 9558, 9587 ? 9590, 9625 ? 9630, 9659 ? 9664, 9683 ? 9687) (9478 ? 9481, 9496 ? 9500, 9532 ? 9535,

RECEIVED  
SEE ATTACHED FOR DEC 29 2011  
CONDITIONS OF APPROVAL

NMOCD ARTESIA

Accepted for record  
10/24/11  
NMOCD

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

Electronic Submission #114885 verified by the BLM Well Information System

For CIMAREX ENERGY COMPANY OF CO, sent to the Carlsbad

Committed to AFMSS for processing by KURT SIMMONS on 08/10/2011 (11KMS2301SE)

Name (Printed/Typed) NATALIE E KRUEGER

Title REGULATORY

Signature

(Electronic Submission)

Date 08/09/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By (BLM Approver Not Specified)

Title

DEC 27 2011

Date 12/27/2011

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

/s/ Chris Walls

BUREAU OF LAND MANAGEMENT

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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## **Additional data for EC transaction #114885 that would not fit on the form**

### **32. Additional remarks, continued**

9552 ? 9555, 9584 ? 9587, 9622 ? 9627, 9656 ? 9661, 9680 ? 9684) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 90 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007.

3. Acidize and frac Wolfcamp perfs (9481 ? 9750) down 4.5 inch csg with 8000 gals acid followed by 362,324 gals slick water containing 35,000# 100 mesh & 300,000# 30/50 sand. Set flow thru composite plug @ 9450.

4. Perforate Wolfcamp (9210 ? 9212, 9231 ? 9233, 9252 ? 9254, 9271 ? 9274, 9294 ? 9296, 9321 ? 9323, 9338 ? 9340, 9366 ? 9368, 9383 ? 9386) (9207 ? 9209, 9228 ? 9230, 9249 ? 9251, 9268 ? 9271, 9291 ? 9293, 9318 ? 9320, 9335 ? 9337, 9363 ? 9365, 9380 ? 9383) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007.

5. Acidize and frac Wolfcamp perfs (9210 ? 9386) down 4.5 inch csg with 8000 gals acid followed by 312,447 gals slick water containing 30,000# 100 mesh & 250,000# 30/50 sand. Set flow thru composite plug @ 9190.

6. Perforate Wolfcamp (8931 ? 8933, 8952 ? 8954, 8968 ? 8970, 8988 ? 8990, 9019 ? 9021, 9054 - 9056, 9086 ? 9088, 9116 ? 9118, 9149 ? 9151, 9168 ? 9170) (8928 ? 8930, 8949 ? 8951, 8965 ? 8967, 8985 ? 8987, 9016 ? 9018, 9051 - 9053, 9083 ? 9085, 9113 ? 9115, 9146 ? 9148, 9165 ? 9167) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007. RD wireline.

7. Acidize and frac Wolfcamp perfs (8931 ? 9170) down 4.5 inch csg with 8000 gals acid followed by 312,150 gals slick water containing 30,000# 100 mesh & 250,000# 30/50 sand. RD Stimulation company.

8. RU 1.75 inch coiled tbg unit. TIH with 3.75 inch butterfly mill & extreme downhole motor on 1.75 inch CT and drill out sand and composite plugs @ 9190 and 9450. Make a minimum of 2 gel sweeps while drilling out composite plugs. FIH with coiled tbg and CO sand to 9850. TOOH with mill, motor, & CT. RD coiled tbg unit.

9. Flow back well until sand production cleans up, the SI well overnight.

10. RU wireline and full 10K lubricator. RIH with 3.75 inch GR to 8900. TIH with 10K pkr with on-off tool, and a pump out plug (pinned for 7500 psi BHP) in place and set @ + 8850. RD wireline and full lubricator.

11. ND goat head and frac valve. NU BOP, TIH with on-off tool and tbg, testing tubing below slips to 8000 psi to 8800. Circ hole with packer fluid. FIH with tbg and latch on to pkr. ND BOP, NU WH. RD pulling unit.

12. RU PT & pressure up to 4000 psig to pump out plug. Put well on production.

**J M Gates NCT-1 Federal #4  
Wolfcamp Recompletion Procedure**

Well Data:

KB	19 above GL
TD	12000
PBTD	9990
Casing	13.375 inch 48# H-40 @ 308. Cmtd with 440 sx. Cmt circ. 9.625 inch 40# K-55 @ 2397. Cmtd with 750 sx. Cmt circ. 4.5 inch 11.6# P-110 @ 11996. Cmtd with 900 sx. TOC @ 9100 by CBL. DV Tool @ 7830. Cmtd with 1510 sx. TOC @ 2720 by CBL.
Bradenhead	Squeezed annulus with 460 sx. TOC @ surface, BOC @ 2720 by CBL.
Perfs	Wolfcamp – (9740 – 9750)

Procedure:

1. Kill well with FW. ND WH, NU BOP, Release pkr, TOOH & LD tbg. RU wireline and run gauge ring to 11490. Change out 5K wellhead for 10K wellhead. ND BOP and RU 10K goat head frac valve. RDMO pulling unit.
2. RU wireline truck and mast unit. Perforate Wolfcamp (9481 – 9484, 9499 – 9503, 9535 – 9538, 9555 – 9558, 9587 – 9590, 9625 – 9630, 9659 – 9664, 9683 – 9687) (9478 – 9481, 9496 – 9500, 9532 – 9535, 9552 – 9555, 9584 – 9587, 9622 – 9627, 9656 – 9661, 9680 – 9684) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 90 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007.
3. Acidize and frac Wolfcamp perfs (9481 – 9750) down 4.5 inch csg with 8000 gals acid followed by 362,324 gals slick water containing 35,000# 100 mesh & 300,000# 30/50 sand.. Set flow thru composite plug @ 9450.
4. Perforate Wolfcamp (9210 – 9212, 9231 – 9233, 9252 – 9254, 9271 – 9274, 9294 – 9296, 9321 – 9323, 9338 – 9340, 9366 – 9368, 9383 – 9386) (9207 – 9209, 9228 – 9230, 9249 – 9251, 9268 – 9271, 9291 – 9293, 9318 – 9320, 9335 – 9337, 9363 – 9365, 9380 – 9383) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007.
5. Acidize and frac Wolfcamp perfs (9210 – 9386) down 4.5 inch csg with 8000 gals acid followed by 312,447 gals slick water containing 30,000# 100 mesh & 250,000# 30/50 sand. Set flow thru composite plug @ 9190.

6. Perforate Wolfcamp (8931 – 8933, 8952 – 8954, 8968 – 8970, 8988 – 8990, 9019 – 9021, 9054 - 9056, 9086 – 9088, 9116 – 9118, 9149 – 9151, 9168 – 9170) (8928 – 8930, 8949 – 8951, 8965 – 8967, 8985 – 8987, 9016 – 9018, 9051 - 9053, 9083 – 9085, 9113 – 9115, 9146 – 9148, 9165 – 9167) 3 JSPF at 120 degree phasing with 3.125 inch casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 21, 2007. Depth reference Halliburton Cement Bond Log dated June 12, 2007. RD wireline.
7. Acidize and frac Wolfcamp perms (8931 – 9170) down 4.5 inch csg with 8000 gals acid followed by 312,150 gals slick water containing 30,000# 100 mesh & 250,000# 30/50 sand. RD Stimulation company.
8. RU 1.75 inch coiled tbg unit. TIH with 3.75 inch butterfly mill & extreme downhole motor on 1.75 inch CT and drill out sand and composite plugs @ 9190 and 9450. Make a minimum of 2 gel sweeps while drilling out composite plugs. FIH with coiled tbg and CO sand to 9850. TOOH with mill, motor, & CT. RD coiled tbg unit.
9. Flow back well until sand production cleans up, the SI well overnight.
10. RU wireline and full 10K lubricator. RIH with 3.75 inch GR to 8900. TIH with 10K pkr with on-off tool, and a pump out plug (pinned for 7500 psi BHP) in place and set @  $\pm$  8850. RD wireline and full lubricator.
11. ND goat head and frac valve. NU BOP, TIH with on-off tool and tbg, testing tubing below slips to 8000 psi to 8800. Circ hole with packer fluid. FIH with tbg and latch on to pkr. ND BOP, NU WH. RD pulling unit.
12. RU PT & pressure up to 4000 psig to pump out plug. Put well on production.

**CIMAREX**

CURRENT WBD

KB: 19' above GL

**Cimarex Energy Co. of Colorado**

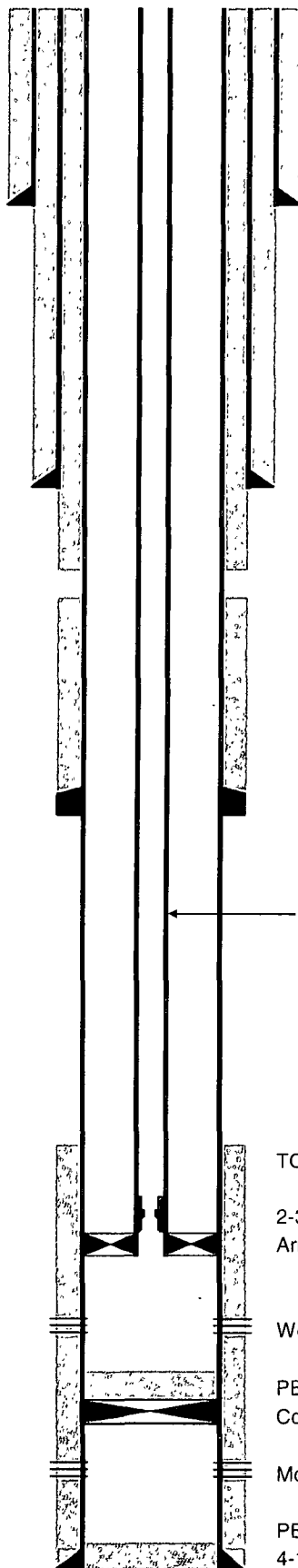
J M Gates NCT-1 Federal #4

1000' FNL &amp; 1500' FWL

Sec. 30, T-24-S, R-26-E, Eddy Co., NM

S. Gengler

02/10/2011

13-3/8", 48# H-40 csg @ 308'  
cmtd w/ 440 sx, cmt circ9-5/8", 40# K-55 csg @ 2397'  
cmtd w/ 750 sx, cmt circ

Base of cmt @ 2720'

TOC @ 3070'

DV Tool @ 7830'  
cmtd w/ 1510 sx

297 jts 2-3/8" 4.7# L-80 Tbg

TOC @ 9100'

2-3/8" SN @ 9682'  
Arrowset 1-X pkr @ 9688'

Wolfcamp perms (9740' - 9750')

PBTD @ 9990'  
Composite BP @ 10000'

Morrow perms (11508' - 11547')

PBTD @ 11910'  
4-1/2" 11.6# P-110 @ 11996' cmtd w/ 900 sx  
TD @ 12000'



PROPOSED WBD

KB: 19' above GL

Cimarex Energy Co. of Colorado

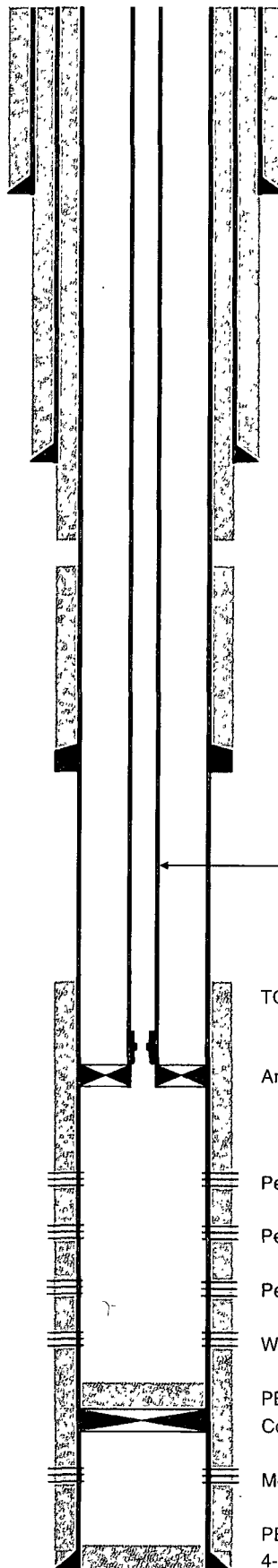
J M Gates NCT-1 Federal #4

1000' FNL & 1500' FWL

Sec. 30, T-24-S, R-26-E, Eddy Co., NM

S. Gengler

02/10/2011



13-3/8", 48# H-40 csg @ 308'  
cmtd w/ 440 sx, cmt circ

9-5/8", 40# K-55 csg @ 2397'  
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Base of cmt @ 2720'

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cmtd w/ 1510 sx

2-3/8" 4.7# L-80 Tbg

TOC @ 9100'

Arrowset 1-X pkr @ 8850

Perf Wolfcamp 8931-9167

Perf Wolfcamp 9210-9383

Perf Wolfcamp 9481-9684

Wolfcamp perfs (9740' - 9750')

PBTD @ 9990'

Composite BP @ 10000'

Morrow perfs (11508' - 11547')

PBTD @ 11910'

4-1/2" 11.6# P-110 @ 11996' cmtd w/ 900 sx  
TD @ 12000'

**JM Gates Federal NCT-1 #4  
30-015-35461  
Cimarex Energy Co. of Colorado  
December 27, 2011  
Conditions of Approval**

1. **The Morrow perforations were not plugged according to Onshore Order #2. A CIBP must be set 50 to 100 feet above the top perforation with 35' of class H cement bailed on top or 25sx if pumped. Also a cement plug is required across the top of the Morrow formation at approximately 11055'-10855' (minimum of 25 sx class H). The plugging must be corrected prior to selling the well, plugging back or final abandonment.**
2. Surface disturbance beyond the originally approved pad must have prior approval.
3. Closed loop system required.
4. 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 (2M 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.
5. Subsequent sundry required.

**CRW 122711**