

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101
Revised July 18, 2013

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 03 2017

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Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| | | |
|--|----------------------------------|--------------------------|
| 1. Operator Name and Address Cimarex Energy Co. of Colorado 202 S. Cheyenne Ave Tulsa, OK 74103 | | 2. GRID Number 162683 |
| 3. API Number 30015-22747 | | |
| 4. Property Code | 5. Property Name State 14 Com | 6. Well No. 1 |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| E | 14 | 19S | 29E | | 1980 | North | 660 | West | Eddy |

8. Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| | | | | | | | | | |

9. Pool Information

| Pool Name | Pool Code |
|----------------------------|-----------|
| Turkey Track; Strawn (Gas) | 96669 |

Additional Well Information

| | | | | |
|------------------------|------------------------------------|--|-----------------------|------------------------------------|
| 11. Work Type S | 12. Well Type Gas | 13. Cable/Rotary | 14. Lease Type Fee | 15. Ground Level Elevation 3319 |
| 16. Multiple | 17. Proposed Depth PBTD: 10596' | 18. Formation Strawn | 19. Contractor | 20. Spud Date |
| Depth to Ground water: | | Distance from nearest fresh water well | | Distance to nearest surface water |

☐ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

*Csg previously set

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|-------|-----------|-------------|------------------|---------------|-----------------|---------------|
| *Surf | 14.75 | 11-3/4" | 42.0 | 320 | 500 | circ |
| *Int | 11 | 8-5/8" | 24.0 | 2856 | 1200 | circ |
| *Prod | 7.875 | 4-1/2" | 11.6 | 11554 | 860 | 7740' |

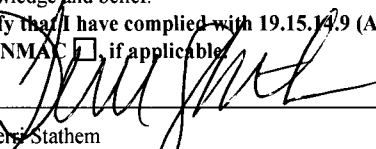
Casing/Cement Program: Additional Comments

| |
|--|
| |
|--|

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------|------------------|---------------|--------------|
| | | | |

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☐ if applicable.
Signature: 

Printed name Teri Statham

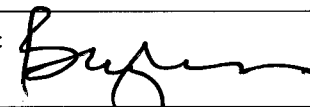
Title: Manager Regulatory Compliance

E-mail Address: tstatham@cimarex.com

Date: 12-29-2016

Phone: 432-620-1936

OIL CONSERVATION DIVISION

Approved By: 

Title: DII SUPERVISOR

Approved Date: 06 JAN 17

Expiration Date: 02 JAN 19

Conditions of Approval Attached

NM OIL CONSERVATION ARTESIA DISTRICT

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State of New Mexico **JAN 03 2017**
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|--|--|
| ¹ API Number 30-015-22747 | ² Pool Code 96669 | ³ Pool Name Turkey Track; Strawn (Gas) |
| ⁴ Property Code 21733 | ⁵ Property Name State 14 Com | |
| ⁷ OGRID No. 162683 | ⁸ Operator Name Cimarex Energy Co. of Colorado | |
| | | ⁶ Well Number 1 |
| | | ⁹ Elevation 3319' |

10 Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| E | 14 | 19S | 29E | | 1980 | North | 660 | West | Eddy |

11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 320 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

| | |
|---|--|
| <div style="border: 1px solid black; padding: 10px; margin-bottom: 10px;"> </div> | <div> <p>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p style="text-align: right;">12/30/2016</p> <p>Signature: <i>Terri Stathem</i> Date: _____</p> <p>Printed Name: Terri Stathem</p> <p>E-mail Address: tstathem@cimarex.com</p> </div> <div> <p>18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey: _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Certificate Number: _____</p> </div> |
|---|--|



AFE No: 3816096RC

Procedure Sheet – Hobbs District
PLEASE COMMENCE WITH WORK PER PROCEDURE

State 14 Com 1

Squeeze Wolfcamp Perfs and Recomplete to Strawn formation

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 03 2017

Wellbore Data

| | |
|--------|--|
| GL | 3219' |
| KB | 3238' |
| TD | 11,556' |
| PBTD | 10,596' (CIBP @ 10,630' w/ 35' cement) |
| Perfs | Wolfcamp (9049' -9070', 9118' -9133', 9142' -9153'; 3 SPF, 144 holes) |
| Casing | 11-3/4" 42# H-40 ST&C set @ 320' cmt d w/ 500 sx, cmt circ 8-5/8" 24# K-55 ST&C set @ 2,856', cmt d w/ 1,200 sx, cmt circ 4-1/2" 11.6# N-80 LT&C set @ 11,554', cmt d w/ 860 sx, TOC 7740' |
| Tubing | 285 jts 2-3/8" 4.7# L-80 8rd EUE |

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Procedure:

1. MIRU pulling unit. Have RU and operational safety meeting on location; discuss all risk and potential dangers. Check surface pressures.
2. If necessary, blow down or kill well as needed w/ 2% KCL water w/ biocide additive.
3. Remove horsehead. LD stuffing box and polished rod.
4. TOH and lay down rods and pump. Describe and take pictures of any scale, paraffin, rod wear, etc. Send pictures to Midland and send necessary samples in with chemical company. Send pump in with pump company and report back teardown results to Midland. Send off rods to yard.
5. ND wellhead and flowline. NU 5K BOP and spool.
6. RU tubing scanners. Release TAC. TOH while scanning w/ Tbg/BHA. LD BHA and LD/replace any joints scanning out less than yellow-band grade. Email/send scan report to Midland. Describe and take pictures of any scale, paraffin, tubing wear, etc. Send pictures to Midland and send necessary samples in with chemical company.



AFE No: 3816096RC

7. PU and TIH w/ 3-3/4" bit, 4-1/2" scraper, and 2-3/8" Tbg to $\pm 10,550'$. TOH. LD bit and scraper.
8. PU and TIH w/ 4-1/2" X 2-3/8" Treating Packer and 2-3/8" Tbg. Set @ $\pm 9000'$.
9. RU pump truck and test casing to 1000 psi for 30 minutes with chart recorder. If the pressure does not hold, call for further directions. If test successful, bleed off casing pressure.
10. Pump freshwater down tubing, establishing injection rate and report results to Midland.
(Cementing design could change based on injection rate results)
11. Bleed off pressure. Unset packer, TOH w/ TBG and packer. LD packer.

Cement Squeeze

12. Move in and set 1 half pit tank along with necessary iron and connections.
13. PU and TIH w/ cement retainer and 2-3/8" Tbg. Set retainer @ $\pm 8900'$.
14. Sting out of retainer and reverse circulate wellbore clean w/ 34 bbls of fresh water.
15. Sting back into retainer. Pressure up backside to 200 psi and begin injecting fresh water down tubing to establish rate.
16. Once rate is established mix and pump 275 sacks of 16.4# class H cement (ensure to use clean city water for mixing with cement w/o biocide additive), squeezing Wolfcamp perms (9,049' – 9,153').
17. Displace cement w/ freshwater within 1 BBL of cement retainer @ $\pm 8900'$ (~33 BBL calculated).
18. Once all cement is displaced or as much as the well allows, sting out of retainer, PU TBG 10', and reverse out with 50 bbls of fresh water or until cement cleans up.
19. SI for 24 hours to give proper time for cement to set.
20. RIH w/ 3-7/8" mill tooth bit, bit sub, 6 3-1/8" drill collars, and 2-3/8" Tbg to 8900' and drill out the first retainer/cement below retainer down to 9,153'. Work string up and down to ensure an even clean around the wellbore. (If cement is green call Midland office)



21. RU pump truck and close rams on casing side. Pump down tubing and pressure test squeeze interval (9,049'- 9,153') to 200 psi for 30 minutes to ensure proper squeeze. If the pressure does not hold, call for further directions.

22. Bleed off pressure. TOH w/ bit and collars and stand back 2-3/8" tubing. LD bit and collars.

Perforate

23. Rig up wireline and install 5K lubricator.

24. MU & RIH w/ 3-1/8" select fire casing guns on wireline (74 total holes, 0.42" diameter holes, 60° phasing) and perforate Strawn at 2 SPF as follows:

| Top Shot | Bottom Shot | Length | Space | Perforations |
|----------|-------------|--------|-------|--------------|
| 10,516 | 10,517 | 1 | 1 | 2 |
| 10,514 | 10,515 | 1 | 1 | 2 |
| 10,512 | 10,513 | 1 | 1 | 2 |
| 10,510 | 10,511 | 1 | 1 | 2 |
| 10,508 | 10,509 | 1 | 1 | 2 |
| 10,506 | 10,507 | 1 | 1 | 2 |
| 10,504 | 10,505 | 1 | 1 | 2 |
| 10,502 | 10,503 | 1 | 1 | 2 |
| 10,500 | 10,501 | 1 | 27 | 2 |
| 10,472 | 10,473 | 1 | 1 | 2 |
| 10,470 | 10,471 | 1 | 1 | 2 |
| 10,468 | 10,469 | 1 | 1 | 2 |
| 10,466 | 10,467 | 1 | 1 | 2 |
| 10,464 | 10,465 | 1 | 1 | 2 |
| 10,462 | 10,463 | 1 | 15 | 2 |
| 10,446 | 10,447 | 1 | 1 | 2 |
| 10,444 | 10,445 | 1 | 1 | 2 |
| 10,442 | 10,443 | 1 | 1 | 2 |
| 10,440 | 10,441 | 1 | 1 | 2 |
| 10,438 | 10,439 | 1 | 1 | 2 |
| 10,436 | 10,437 | 1 | 17 | 2 |
| 10,418 | 10,419 | 1 | 1 | 2 |
| 10,416 | 10,417 | 1 | 72 | 2 |



AFE No: 3816096RC

| | | | | |
|--------|--------|---|----|---|
| 10,343 | 10,344 | 1 | 1 | 2 |
| 10,341 | 10,342 | 1 | 1 | 2 |
| 10,339 | 10,340 | 1 | 1 | 2 |
| 10,337 | 10,338 | 1 | 20 | 2 |
| 10,316 | 10,317 | 1 | 1 | 2 |
| 10,314 | 10,315 | 1 | 1 | 2 |
| 10,312 | 10,313 | 1 | 1 | 2 |
| 10,310 | 10,311 | 1 | 36 | 2 |
| 10,273 | 10,274 | 1 | 1 | 2 |
| 10,271 | 10,272 | 1 | 1 | 2 |
| 10,269 | 10,270 | 1 | 1 | 2 |
| 10,267 | 10,268 | 1 | 1 | 2 |
| 10,265 | 10,266 | 1 | 1 | 2 |
| 10,263 | 10,264 | 1 | | 2 |

Depth Reference Log: Dresser Atlas Compensated Densilog Compensated Neutron

Log Dated: January 27, 1979

25. Report observed pressures to Midland.
26. Pull perf guns and inspect to ensure all shots fired. Shut well in.
27. MU and RIH on wireline w/ Pump out plug, 1.875" XN profile nipple, 2-3/8" X 10' L-80 tubing sub, and 4-1/2" X 2-3/8" 10K Globe AS1-X packer w/ 1.875" X profile nipple. Set packer @ \pm 10,230' w/ 15K compression. POH. (Set shear value for pump out plug to be at 1,000-1,500 over well pressure)
28. ND 5K lubricator. Rig down and release wireline.
29. PU and TIH w/ On/Off tool, and 2-3/8" Tbg. Hydro-test all 2-3/8" tubing to 5K psi while TIH and replace any failed joints. Latch up into On/Off tool. (See proposed tubing detail in WBD)
30. Bleed well down. Mark tubing on surface to identify depth. Release On/Off tool and space out tubing w/ necessary subs to the marked surface joint. Reverse circulate 104 BBL of packer fluid. Latch up into On/Off tool.
31. Install tubing hanger. ND 5K BOP and spool, NU WH. Install 5K right hand tree.



Acidize

32. Move in and set 1 lined frac tank along with necessary iron and connections. Fill frac tank w/ 390 BBL freshwater w/ biocide additive. Mix freshwater in frac tank with raw acid per Pro Petro recommendation.
33. Move in and rig up Acid crew. Test lines to 6,000 psi. Pressure up on tubing to blow out pump out plug, establish injection rate, and acidize perms 10263'- 10518' w/ 20,000 gals, gelled 15% HCL @ 12 bpm or as high of a rate as the well allows. Pump first 500 gals then pump salt blocks in even time increments and volumes. Flush well with 45 bbls of freshwater. Observe and report ISIP, 5, 10, 15 minute pressures. Max pressure: 5000 psi. Send acid job report to Midland.
34. Flow well back until well dies or sufficient production data is achieved. Swab well in if necessary.
35. Based on swab results, treatment pressures, and ISIP,5,10,15 minute results, await further instructions from Midland.
36. RDMO WSU.
37. Return well to production.

