

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) 748-1281 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1230 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐ 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., Suite 1000		⁴ OGRID Number 162683
		⁵ API Number 30-015-33985
⁶ Property Code 303007	² Property Name NM DD State Com	³ Well No. #3

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	32	24S	26E		295	North	750	West	Eddy

*** Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	32	24S	26E		994	North	996'	West	Eddy

⁹ Pool Information

⁹ Pool Name Purple Sage Wolfcamp Gas & White City Penn Gas	¹⁰ Pool Code 98220/87280
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Additional Well Information

¹¹ Work Type PB	¹² Well Type Gas	¹³ Cable/Rotary	¹⁴ Lease Type State	¹⁵ Ground Level Elevation 3468'
¹⁶ Multiple	¹⁷ Proposed Depth PBTD 10781'	¹⁸ Formation Cisco Canyon/ Wolfcamp	¹⁹ Contractor	²⁰ Spud Date
Depth to Ground water 300'		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

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17 1/2"	13 3/8" H40	48#	222'	700 sks	Surface
Intermediate	12 1/4"	9 5/8" J55	40#	1680'	1975 sks	Surface
Production	8 3/4"	5 1/2" P-110	17#	11734'	2520 sks	Surface

Casing/Cement Program: Additional Comments

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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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> if applicable. Signature: <i>Amithy Crawford</i>		OIL CONSERVATION DIVISION	
Printed name: Amithy Crawford		Approved By: <i>Raymond H. Bodang</i>	
Title: Regulatory Analyst		Title: <i>Geologist</i>	
E-mail Address: acrawford@cimarex.com		Approved Date: <i>9-5-17</i> Expiration Date: <i>9-5-19</i>	
Date: 9/1/2017 Phone: 432-620-1909		Conditions of Approval Attached	

** All Casing Previously set**

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State of New Mexico
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 30-015-33985		² Pool Code 87280		³ Pool Name White City (Penn) Gas	
⁴ Property Code		⁵ Property Name NM DD State Com			⁶ Well Number 3
⁷ OGRID No. 162683		⁸ Operator Name Cimarex Energy Co of Colorado			⁹ Elevation 3398'

¹⁰ Surface Location

U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	24S	26E		295	North	750	West	Eddy

¹¹ Bottom Hole Location If Different From Surface

U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	24S	26E		994'	North	996'	East	Eddy

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

	¹² 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 undivided 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 by the division.	
	Signature: <i>Amithy Crawford</i> Date: 9/1/2017	
	Printed Name: Amithy Crawford E-mail Address: acrawford@cimarex.com	
	¹³ 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.	
	Date of Survey: Signature and Seal of Professional Surveyor:	
	Certificate Number:	

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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-33985	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp Gas
⁴ Property Code	⁵ Property Name NM DD State Com	⁶ Well Number 3
⁷ OGRID No. 162683	⁸ Operator Name Cimarex Energy Co of Colorado	⁹ Elevation 3398'

¹⁰ Surface Location

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	24S	26E		295	North	750	West	Eddy

¹¹ Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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 undivided 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 this division.</p> <p>Signature: <i>[Signature]</i> Date: 9/1/2017</p> <p>Printed Name: Amithy Crawford</p> <p>E-mail Address: acrawford@cimarex.com</p>	
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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>	



Proposed

KB - 23' above GL

Cimarex Energy Co. of Colorado

New Mexico DD State Com #3

SHL - 295' FNL & 750' FWL

BHL - 994' FNL & 936' FWL

Sec. 32, T-24-S, R-26-E, Eddy Co., NM

S. Runyan

08/18/17

13-3/8", 48# H-40 csg @ 218'
cmtd w/ 250 sx, 1" to surface w/ 400 sx

9-5/8", 40# J-55 csg @ 1680'
cmtd w/ 1775 sx, cmt circ

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

DV Tool @ 7313'
cmtd w/ 1590 sx, cmt circ

AS1X pkr @ 8,300'

Wolfcamp Perforation (8,397'-9,676')

Cisco Canyon Perforations (9,710'-9,941')

CIBP @ 10,816 with 35' of CMT
PBD @ 10,781

Morrow perms (10868' - 11284')

5-1/2" 17# P-110 @ 11734' cmtd w/ 930 sx, cmt circ
TD @ 11734'

Current



KB - 23' above GL

Cimarex Energy Co. of Colorado

New Mexico DD State Com #3

SHL - 295' FNL & 750' FWL

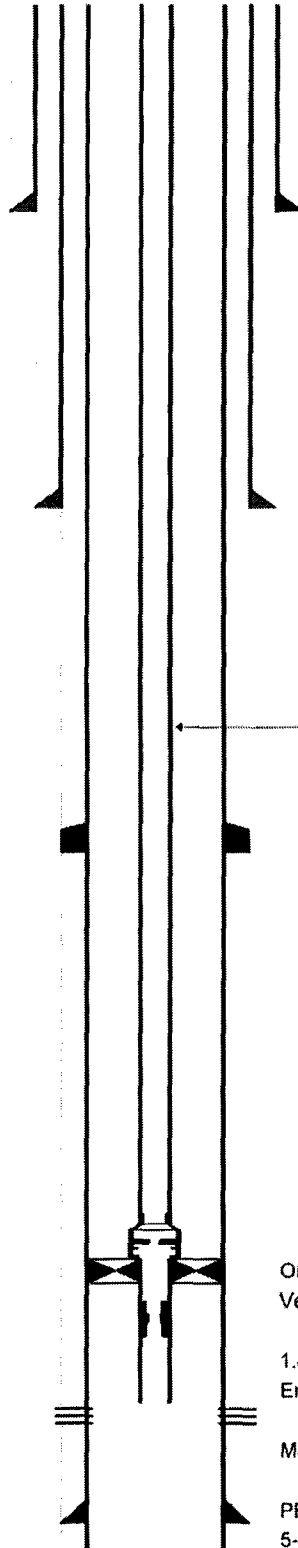
BHL - 994' FNL & 996' FWL

Sec. 32, T-24-S, R-26-E, Eddy Co., NM

S. Gengler

01/31/2012

9/22/2015



13-3/8", 48# H-40 csg @ 218'
cmtd w/ 250 sx, 1" to surface w/ 400 sx

9-5/8", 40# J-55 csg @ 1680'
cmtd w/ 1775 sx, cmt circ

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

DV Tool @ 7313'
cmtd w/ 1590 sx, cmt circ

On-off Tool w/ 1.875" X Profile nipple @ 10832'
Versa Set pkr @ 10837'

1.875" XN Profile Nipple @ 10844'
End of tbg @ 10845'

Morrow perfs (10868' - 11284')

PBDT @ 11626'
5-1/2" 17# P-110 @ 11734' cmtd w/ 930 sx, cmt circ
TD @ 11734'



Appendix C: Recompletion Procedure – New Mexico DD State #3

Well Data

KB	23'
TD	11,734'
PBTD	11,626'
Casing	13-3/8" 48# H-40 @ 218'. Cmt'd w/ 400 sx, cmt to sfc 9-5/8" 40# J-55 @ 1,680'. Cmt'd w/ 1,775 sx, cmt circ 5-1/2" 17# P-110 @ 11,734'. Cmt'd w/ 930 sx, cmt circ @ 1,250'
Tubing	2-3/8" 4.7# L-80 8rd, EOT @ 10,845'
Proposed RC Perfs	Wolfcamp (8,570' – 9,506') & Cisco Canyon (9,864' – 10,100')

Procedure

Notify BLM 24 hours prior to start of workover operations.

1. Test anchors prior to MIRU PU.
2. MIRU PU, rental flare, and choke manifold.
3. Kill well with produced water if available or FW as necessary.
4. ND WH, NU 5K BOP
5. Release Halliburton PLS packer with ¼ RH turn and POOH w/339 jts 2-3/8" 4.7# L-80/N-80 tbg standing back.
6. MIRU WL.
7. RIH w/ GR/JB to +/- 10,816'.
8. RIH w/ WL to set CIBP at +/- 10,816'.
9. RIH w/ WL to bail 35' of cement on top of CIBP at +/- 10,816'.
a. **Note: This will put TOC @ +/- 10,781'.**
10. RU Pump truck and pressure test casing to 8,500 psi on a chart for 30 minutes with no more than 10% leak off.
11. ND 5k BOP, RDMO PU.
12. RU two 10k frac valves and flow cross.
13. MIRU water transfer with frac tanks to contain water to be pumped from frac pond
14. Test frac valves and flow cross prior to frac job.
a. 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 successful test the following day.
15. RU frac valves, flow cross, goat head, and wireline lubricator.
16. RIH w/ gauge ring/junk basket for 5-1/2" 17# P-110 csg to +/- 10,200'
17. Perforate Cisco Canyon from 9,710' – 9,941'.
18. RU frac and flowback equipment.



CONFIDENTIAL. August 17, 2017

Production Operations – Carlsbad Region, Permian Basin
New Mexico DD State Com #3 - Cisco Canyon and Wolfcamp
(Ciscamp) Proposed Commingling Allocation Factors. Eddy County, NM

19. Acidize and frac Cisco Canyon perms down casing.
20. Set 10k flow through composite plug 15' uphole of top perforation
21. Test to 8,500 psi
22. Perforate Wolfcamp from 8,397' – 9,676'.
23. Acidize and frac Wolfcamp perms down casing.
24. RD frac
25. MIRU 2" coiled tbg unit.
26. RIH w/ blade mill & downhole motor on 2" CT and drill out sand and composite plugs using freshwater for circulation. Pump sweeps each time a plug is tagged, each time a plug is drilled out, and every 60 bbls pumped.
27. Clean out to PBTD 10,781'
28. POOH w/ blade mill, motor & CT
29. RDMO coiled tbg unit.
30. Flow back well for 24 hours, then SI well overnight.
31. RU wireline and lubricator.
32. RIH w/ GR/JB for 7" 26# P-110 to +/- 8,300'
33. RIH w/ 2-7/8" WEG, 2-7/8" pump out plug pinned for 1,500 – 2,000 psi differential pressure, 10' 2-3/8" 4.7# L-80 tbg sub w/ 1.875" XN profile nipple w/ blanking plug in place, 7" Arrowset 1X packer and on-off tool stinger w/ 1.875" X profile nipple. Set packer +/- 8,300'. From downhole up:
 - a. 2-3/8" WEG
 - b. 2-3/8" pump out plug pinned for 1,500 – 2,000 psi differential pressure
 - c. 1.875" XN profile nipple
 - d. 10' 2-3/8" 4.7# L-80 tbg sub
 - e. 5-1/2" x 2-3/8" Arrowset 1X packer and on-off tool stinger w/ 1.875" X profile nipple
34. RD WL and lubricator
35. ND goat head and frac valve, NU BOP, MIRU Pulling Unit
36. TIH w/ on/off tool overshot, GLVs, and 2-3/8" 4.7# L-80 tbg.
37. Latch overshot onto on-off tool and space out tubing
38. ND BOP, NU WH
39. RDMO pulling unit
40. RU pump truck and pump out plug. Put well on production.
41. **Run Production Log for allocation purposes after recovering load. Run additional production logs if actual production varies significantly from expected performance.**