

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6162

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

NM OIL CONSERVATION
ARTESIA DISTRICT Energy Minerals and Natural Resources

State of New Mexico

Form C-101
Revised July 18, 2013

DEC 28 2016

Oil Conservation Division

AMENDED REPORT

1220 South St. Francis Dr.

RECEIVED

Santa Fe, NM 87505

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 30015-32560
⁴ Property Code 29002	⁵ Property Name Gulf Federal Com	⁶ Well No. 4

7- Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
4	6	23S	27E		660	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 Carlsbad;Strawn, South (Gas)	Pool Code 74120
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Additional Well Information

¹¹ Work Type P	¹² Well Type Gas	¹³ Cable/Rotary	¹⁴ Lease Type Fee	¹⁵ Ground Level Elevation 3201'
¹⁶ Multiple	¹⁷ Proposed Depth PBD: 10402'	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	17.5	13-3/8"	54.5	407	425	45'
*Int	12.25	9-5/8"	40	3205	1000	Surface
*Prod	7.875	5-1/2"	17	11986	1650	600'

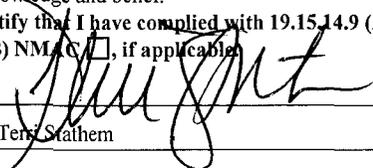
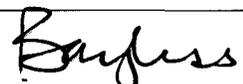
Casing/Cement Program: Additional Comments

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22. Proposed Blowout Preven

Type	Working Pressure

Acreage dedication amended. Overlaps
30-015-20335 and 30-015-20545
as submitted.

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:  Printed name: Terry Stathem Title: Manager Regulatory Compliance E-mail Address: tstathem@cimarex.com Date: 12-27-2016 Phone: 432-620-1936	OIL CONSERVATION DIVISION	
	Approved By: 	
	Title: DII SUPERVISOR	
	Approved Date: 21 DEC 16	Expiration Date: 29 DEC 18
	Conditions of Approval Attached (above)	

*Casing previously set - no new casing

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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 30-015-32560	² Pool Code 74120 ✓	³ Pool Name Carlsbad; Strawn South (Gas) ✓
⁴ Property Code 29002 ✓	⁵ Property Name Gulf Federal Com ✓	
⁷ OGRID No. 162683 ✓	⁸ Operator Name Cimarex Energy of Colorado ✓	
		⁶ Well Number 4
		⁹ Elevation 3201

¹⁰ Surface Location

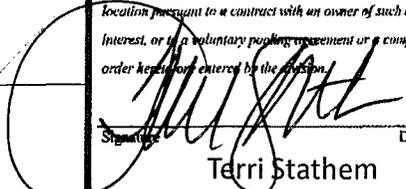
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	6	23S	27E		660	North	660	West	Eddy

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 314.88	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.

¹⁶ Lot 4 - 38.9 ac 660' 660' Lot 5 - 38.3 ac Lot 6 - 38.66 ac Lot 7 - 39.02 ac Acreage dedication amended. Overlaps 30-015-20335 and 30-015-20545 as submitted.	Lot 3	Lot 2	Lot 1	¹⁷ OPERATOR CERTIFICATION <i>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.</i>  Signature _____ Date 12/27/16 Terri Stathem Printed Name tstathem@cimarex.com E-mail Address ¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number _____
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Gulf Fed 4
Strawn Recompletion Procedure
Michael Karner 12/14/16

Well Data

KB	16'
TD	12,000'
PBTD	11,940'
Casing	13-3/8" 54.5# H-40 @ 407'. Cmt'd w/ 425 sx, cmt circ 9-5/8" 40# MS-110 @ 3,205'. Cmt'd w/ 1,000 sx, cmt circ 5-1/2" 17# P-110 & N-80 @ 11,986'. Cmt'd w/ 1,050 sx. DV Tool at 6,836' cemented w/ 850 sx. TOC @ 9,240' by CBL in first stage
Tubing	2-3/8" 4.7# L-80 8rd
Current Prod. Perfs	Morrow (11,452' – 11,752')
Proposed RC Perfs	Strawn (9,970' – 10,570')

Procedure

Notify NMOCD 24 hours prior to starting operations.

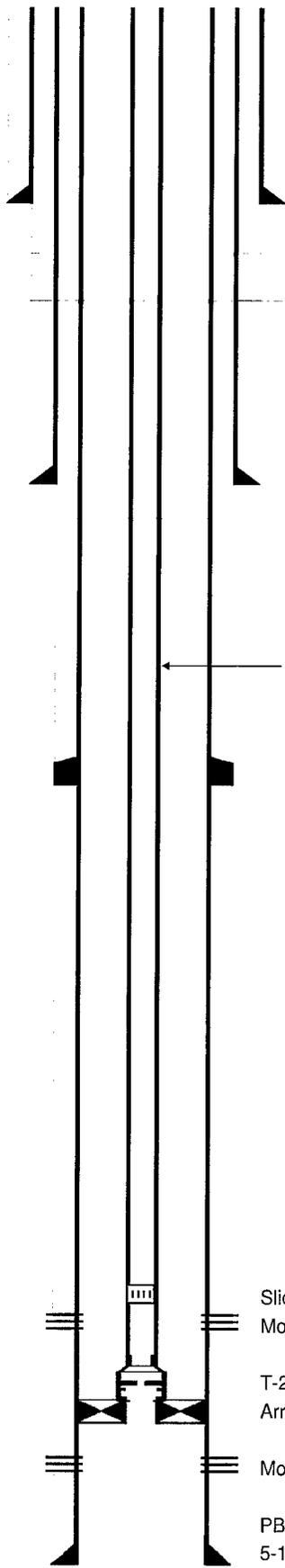
1. Test anchors prior to moving in rig.
2. Move in rig up pulling unit.
3. Kill well as necessary with 7% KCl.
4. Nipple down wellhead, nipple up 5,000 psi blow out preventer stack.
5. TOOH w/ packer and 2-3/8" 4.7# L-80 tbg. Stand back tbg. Scan tubing during TOOH.
6. TIH w/ CIBP on 2-3/8" tbg to set CIBP at +/- 10,402'
7. Pump 25 sx cement down tbg on top of CIBP at +/- 10,402' – Abandon Morrow.
8. TOOH 1,000'
9. Reverse circulate 2 tbg volumes
10. WOC 6-8 hours
11. TOOH w/ tbg and stand back tbg
12. Test casing to 5,000 psi on chart for 30 minutes with no more than 10% leakoff.
13. RIH w/ 4.6" gauge ring and junk basket on electric line to +/- 10,570'
14. RIH with 3-1/8" casing guns on electric line and perforate Strawn from 9,970' – 10,570'

15. RIH w/ BHA described below to set packer at 9,920'. 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
16. RD WL and lubricator
17. TIH w/ on/off tool overshot, GLVs, and 2-3/8" 4.7# L-80 tbg. Hydrotest in hole to 8500 psi.
18. Latch overshot onto on-off tool and space out tubing
19. ND BOP, NU WH
20. RDMO pulling unit
21. RU pump truck and pump out plug
22. MIRU Propetro acid
23. Pump 19,000 total gallons of 15% NEFE HCl with 225 ball sealers down 2-3/8" tubing
24. Flush with 1 tubing volume 2% KCl
25. Put well on production. Swab well as necessary



Current WBD
KB - 18' above GL

Cimarex Energy Co. of Colorado
Gulf Federal #4
660' FNL & 660' FWL
Sec. 6, T-23-S, R-27-E, Eddy Co., NM
S. Gengler 05/11/2009



13-3/8", 54.5# H-40 csg @ 407'
cmtd w/ 425 sx, cmt circ

9-5/8", 40# MS-110 csg @ 3205'
cmtd w/ 1000 sx, cmt circ

TOC N/A

← 345 jts 2 3/8" 4.7# L-80 Tbg

DV Tool @ 6836'
cmtd w/ 850 sx

TOC @ 9240' by CBL

Sliding Sleeve @ 11431'
Morrow perms (11452' - 11510')

T-2 On-off Tool w/ 1.81" F Profile nipple @ 11530'
Arrowset 1-XX pkr @ 11537'

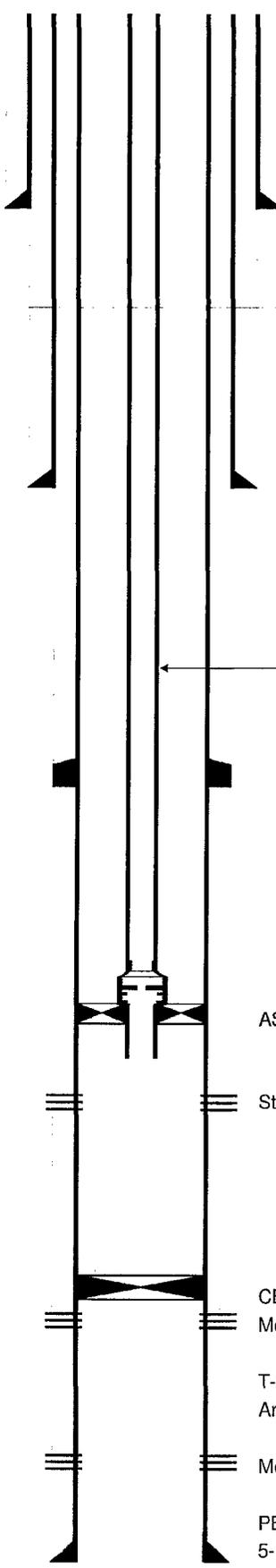
Morrow perms (11545' - 11752')

PBTD @ 11940'
5-1/2" 17# N-80 & P-110 @ 11986' cmtd w/ 1050 sx
TD @ 12000'



Proposed WBD
KB - 18' above GL

Cimarex Energy Co. of Colorado
Gulf Federal #4
660' FNL & 660' FWL
Sec. 6, T-23-S, R-27-E, Eddy Co., NM
S. Gengler 05/11/2009



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TOC N/A

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

DV Tool @ 6836'
cmtd w/ 850 sx

TOC @ 9240' by CBL

AS-1X pkr set at +/- 9,920'

Strawn perms (9970' - 10570')

CBP at 11,402'
Morrow perms (11452' - 11510')

T-2 On-off Tool w/ 1.81" F Profile nipple @ 11530'
Arrowset 1-XX pkr @ 11537'

Morrow perms (11545' - 11752')

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5-1/2" 17# N-80 & P-110 @ 11986' cmtd w/ 1050 sx
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