

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ 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 600 N. Marienfeld, Ste. 600 Midland, TX 79701		² OGRID Number 162683
		³ API Number 30-015-33963
⁴ Property Code 34631	⁵ Property Name Park State 36 Com	⁶ Well No. 001
⁹ Proposed Pool 1 Black River; Wolfcamp, NW (Gas)		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. 1	Section 8	Township 24S	Range 25E	Lot Idn	Feet from the 1500	North/South line South	Feet from the 1100	East/West line West	County Eddy
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8 Proposed 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
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Additional Well Information

¹¹ Work Type Code Plug Back to WC	¹² Well Type Code G	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3539 GL
¹⁶ Multiple N	¹⁷ Proposed Depth 11385 (PBSD)	¹⁸ Formation Wolfcamp	¹⁹ Contractor N/A	²⁰ Spud Date When Approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> ___mils thick Clay <input type="checkbox"/> Pit Volume: ___bbls Drilling Method:				
Closed-Loop System <input checked="" type="checkbox"/> Flowback Tanks Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17½	13¾	54.5	203	225	Circ
12¼	9¾	40	1945	700	Circ
8¾	5½	17	12074	2610	1900

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Well currently producing from Morrow perms @ 11458-11807. Cimarex proposes to set a CIBP @ 11420 w/ 35' cmt and recompleat to Wolfcamp per the attached procedure, WBD, and C-102.

RECEIVED

MAR 03 2011

NMOCD ARTESIA

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 the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Signature: <i>Natalie Krueger</i>		Approved by: <i>Jacques R.</i>	
Printed name: Natalie Krueger		Title: <i>Geologist</i>	
Title: Regulatory		Approval Date: 3/18/2011 Expiration Date: 3/18/2013	
E-mail Address: nkrueger@cimarex.com			
Date: February 22, 2011	Phone: 432-620-1936	Conditions of Approval Attached <input type="checkbox"/>	

Park State 36 Com #1
Wolfcamp Recompletion Procedure

Well Data:

KB	23' above GL
TD	12073'
PBTD	12007'
Casing	13-3/8" 54.5# J-55 @ 200'. Cmt'd w/ 225 sx. Cmt circ. 9-5/8" 40# N-80 & P-110 @ 1940'. Cmt'd w/ 700 sx. Cmt circ. 5-1/2" 17# P-110 @ 12072'. Cmt'd w/ 1260 sx. Cmt circ. DV Tool @ 7005'. Cmt'd w/ 1350 sx. TOC @ 650' by CBL.
Perforations	Morrow (11458' – 11807')

Procedure:

1. MIRU pulling unit. Kill well, ND WH, NU BOP. TOOH and LD 2-3/8" tbg. RU wireline and run CIBP and set @ \pm 11420'. Dump 35' of cmt on top of CIBP. RU pump truck and pressure test csg to 5000 psig w/ FW. ND BOP, Change out 5K wellhead for 10K wellhead, and RU 10K goat head frac valve.
2. Perforate Wolfcamp (9416' – 9419', 9435' – 9438', 9459' – 9461', 9466' – 9474', 9477' – 9479', 9493' – 9496') (9413' – 9416', 9432' – 9435', 9456' – 9458', 9463' – 9471', 9474' – 9476', 9490' – 9493') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 15, 2005. Depth reference Halliburton Cement Bond Log dated June 6, 2005.
3. Acidize and frac Wolfcamp perfs (9416' – 9496') down 5-1/2" csg w/ 8000 gals acid followed by 285,272 gals slick water containing 30,000# 100 mesh & 200,000# 30/50 sand. Set 10K flow thru composite plug @ 9405'.
4. Perforate Wolfcamp (9258' – 9260', 9266' – 9268', 9282' – 9284', 9292' – 9294', 9304' – 9306', 9326' – 9328', 9342' – 9344', 9359' – 9361', 9376' – 9380') (9255' – 9257', 9263' – 9265', 9279' – 9281', 9289' – 9291', 9301' – 9303', 9323' – 9325', 9339' – 9341', 9356' – 9358', 9373' – 9377') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 15, 2005. Depth reference Halliburton Cement Bond Log dated June 6, 2005.
5. Acidize and frac Wolfcamp perfs (9258' – 9380') down 5-1/2" csg w/ 8000 gals acid followed by 222,099 gals slick water containing 25,000# 100 mesh & 175,000# 30/50 sand. Set 10K flow thru composite plug @ 9240'.

6. Perforate Wolfcamp (9029' – 9031', 9044' – 9046', 9065' – 9067', 9100' – 9102', 9121' – 9123', 9155' – 9157', 9180' – 9182', 9186' – 9188', 9202' – 9204', 9210' – 9212') (9025' – 9027', 9040' – 9042', 9061' – 9063', 9097' – 9099', 9118' – 9120', 9152' – 9154', 9197' – 9199', 9183' – 9185', 9199' – 9201', 9207' – 9209') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 57 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated May 15, 2005. Depth reference Halliburton Cement Bond Log dated June 6, 2005. RD wireline.
7. Acidize and frac Wolfcamp perms (9029' – 9212') down 5-1/2" csg w/ 8000 gals acid followed by 338,816 gals slick water containing 35,000# 100 mesh & 250,000# 30/50 sand. RD Cudd.
8. RU 1-3/4" coiled tbg unit. TIH w/ 4-3/4" butterfly mill & extreme downhole motor on 1-3/4" CT and drill out sand and composite plugs @ 9240', 9405'. Make a minimum of 2 gel sweeps while drilling out composite plugs. FIH w/ coiled tbg and CO sand to 9700'. TOOH w/ 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 w/ 4-3/4" GR to 9000'. TIH w/ 10K pkr w/ on-off tool, and a pump out plug (pinned for 7500 psi BHP) in place and set @ \pm 8950'. RD wireline and full lubricator.
11. ND goat head and NU BOP. TIH w/ on-off tool, tbg and gas lift valves as per recommendation testing tubing below slips to 8000 psi. Tag pkr and PU 1 jt. RU PT and establish circ w/ FW. Pickle tbg w/ 500 gals 15% HCl and reverse out acid. Circ hole until good clean wtr is left in annulus. FIH w/ 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.



Current
KB : 23' above GL

Cimarex Energy Co. of Colorado

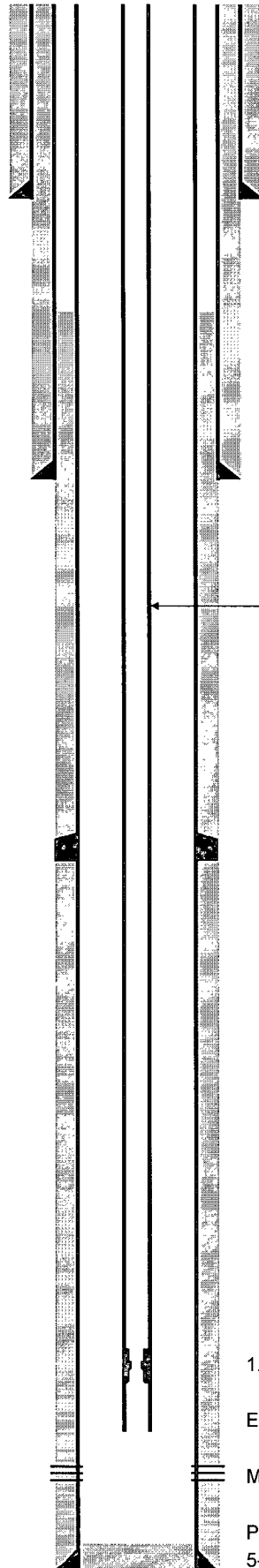
Park State 36 Com #1

1500' FSL & 1100' FEL

Sec. 36, T-24-S, R-25-E, Eddy Co., NM

S. Gengler

11/05/2011



13-3/8", 54.5# J-55 csg @ 200'
cmtd w/ 225 sx, cmt circ

TOC @ 650' by CBL

9-5/8", 40# N-80 & P-110 csg @ 1940'
cmtd w/ 700 sx, cmt circ

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

DV Tool @ 7005'
cmtd w/ 1350 sx

1.81" Baker F profile nipple @ 11400'

End of tbg @ 11434'

Morrow perfs (11458' - 11807')

PBTD @ 12007'

5-1/2" 17# P-110 @ 12072' cmtd w/ 1260 sx, cmt circ
TD @ 12073'



Proposed
KB : 23' above GL

Cimarex Energy Co. of Colorado

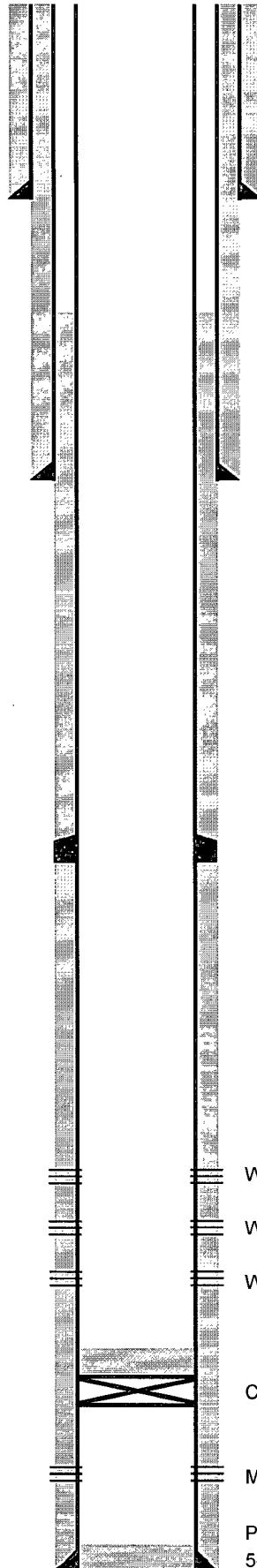
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Wolfcamp Perfs (9029' - 9212')

Wolfcamp Perfs (9258' - 9380')

Wolfcamp Perfs (9416' - 9496')

CIBP @ 11420 w/ 35' cmt

Morrow perfs (11458' - 11807')

PBTB @ 12007'
5-1/2" 17# P-110 @ 12072' cmtd w/ 1260 sx, cmt circ
TD @ 12073'