

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
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 COG Operating LLC One Concho Center, 600 W. Illinois Ave Midland, TX 79701		² OGRID Number 229137
⁴ Property Code		³ API Number 30-015-24067
⁵ Property Name Black River State		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
K	5	24S	27E		1980	South	1980	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
Black River: Penn	72200

Additional Well Information

¹¹ Work Type E	¹² Well Type G	¹³ Cable/Rotary Rotary	¹⁴ Lease Type S	¹⁵ Ground Level Elevation 3209
¹⁶ Multiple N	¹⁷ Proposed Depth 12,500'	¹⁸ Formation Penn Shale	¹⁹ Contractor	²⁰ Spud Date 4/1/14
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

Type	Hole Size	Casing Size	Casing Weight/lb	Setting Depth	Sacks of Cement	Estimated TOC
Surf	18 1/2	16"	65	409'	350	Surface
Inter	14 3/4	10 3/4	40 1/2	2110'	700	Surface
Prod	9 3/4	7 5/8	33.7, 39	9171	2450	Surface
Liner	6 1/2	4 1/2	11.5, 13.5	12500	625	Surface

Casing/Cement Program: Additional Comments

--

²² Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

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 checked="" type="checkbox"/> if applicable. Signature: <i>B. Maiorino</i> Printed name: Brian Maiorino Title: Regulatory Analyst E-mail Address: Bmaiorino@concho.com Date: 3/25/14	<div style="text-align: center;">OIL CONSERVATION DIVISION</div> Approved By: <i>LR Dade</i> Title: <i>DIST # Supervisor</i> Approved Date: <i>3/19/2014</i> Expiration Date: Conditions of Approval Attached
Phone: 432-221-0467	

Procedure:

- 1) Ensure all permits and procedures have been approved
- 2) Survey area to determine well location
- 3) Install anchors
- 4) MIRU
- 5) Dig out well
- 6) Weld on 10 3/4" wellhead
- 7) Install BOP
- 8) Pick up 6 1/4" mill tooth bit and drill out top surface plug (Surface - 95')
- 9) Circulate well clean
- 10) Continue on to drill out cement plug from 296' - 473'
- 11) Circulate well clean
- 12) Continue on to drill out plug from 2008' - 2236'
- 13) Circulate well clean
- 14) Continue on to drill out plug from 3883' - 4032'
- 15) Circulate well clean
- 16) Continue on to drill out plug from 4714' - 4679'
- 17) Circulate well clean
- 18) Continue on to drill out plug from 5500' - 5465'
- 19) Circulate well clean
- 20) Drill out plug from 8620' - 8655'
- 21) Pick up 3 3/4" mill tooth bit and attempt to get in 4 1/2" casing
- 22) Circulate well clean & TOH
- 23) Run 36 arm caliper from 10,915' to top of 4 1/2" liner @ 8654'
- 24) Set removable bridge plug @ 9064', cmt retainer @ 8642', cmt squeeze Bone Spring perms 8692' - 8964'
- 25) Drill out cmt, test 4 1/2" liner to 8000 psi
- 26) Dress 4 1/2" liner top @ 8654'
- 27) Set packer w/seals into liner top w/4 1/2" (11.5# P110) liner and DV tool
- 28) Cmt new 4 1/2" liner through DV tool 8654' - surface.
- 29) Perforate Penn Shale
- 30) TIH w/tbg and packer. Acidize zone with 1,500 gallons 15% NE HCl at 3 - 5 BPM.
- 31) Shut-in 1 hour & flow back
- 32) Frac well utilizing attached procedure.
- 33) Shut-in well for 24 hours
- 34) Flow well back
- 35) TIH with tubing and packer
- 36) Circulate packer fluid
- 37) Pressure test the tubing
- 38) Tree up wellhead
- 39) Place well on test

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
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 30-015-24067	² Pool Code 72200	³ Pool Name Black River; Penn
⁴ Property Code 37857	⁵ Property Name Black River State	⁶ Well Number 1
⁷ OGRID No. 229137	⁸ Operator Name COG Operating LLC	⁹ Elevation 3209'

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
K	5	24S	27E		1980	South	1980	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.

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><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></p> <p>Signature: <u>B. Maiorino</u> Date: <u>3/10/14</u></p> <p>Printed Name: <u>Brian Maiorino</u></p> <p>E-mail Address: <u>bmaiorino@concho.com</u></p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><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></p> <p>Date of Survey: _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Refer to Original Plat</p> <p>Certificate Number: _____</p>

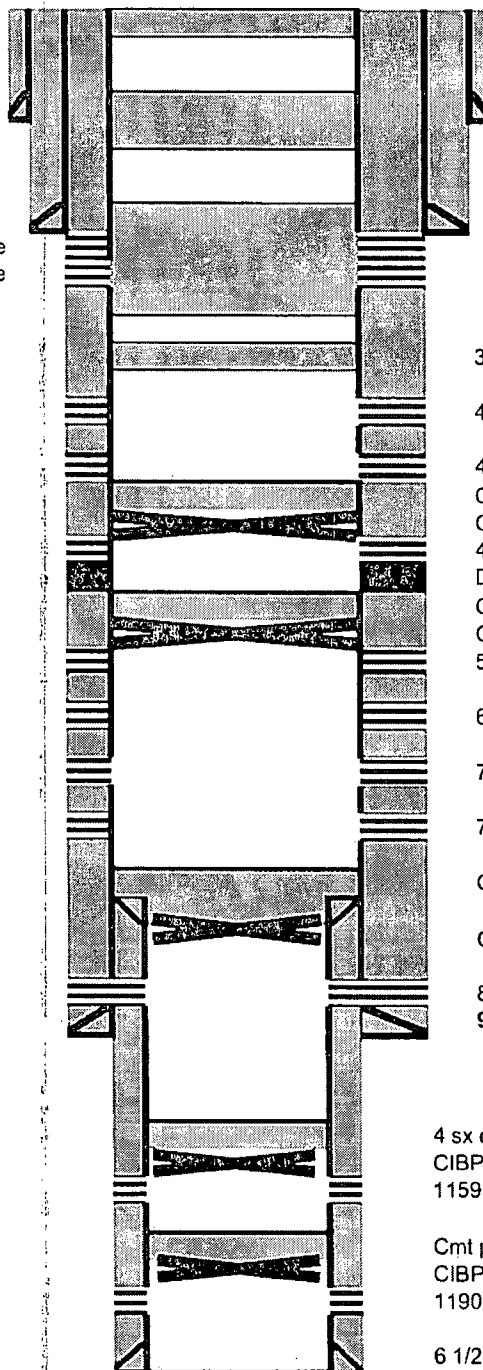
Author:	Maiorino	Well No.	#1
Well Name	Black River St	API #:	30-015-24067
Field	Black River	Prop #:	
County	Eddy	Zone:	Penn Shale
State	New Mexico		
Date	2/27/2014		
GL	3209'		
KB			

Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	16	H40	65	350	350	Surface
Inter Csg	10 3/4	K55	41	2,110	1700	Surface
Prod Csg	7 5/8	S95	33.7, 39	9,171	1,950	Surface
Liner	4 1/2	S95	13.50	12,500	625	8654

Cmt Plug 0'-95'

Cmt plug 296'-473'

Cmt plug 2008-2236'
2132'-2146' Delaware
2181'-2198' Delaware



TD @ 12500'

Current Wellbore

18 1/2" hole
16" (H40 - 65#) @ 350' w/350 sx
TOC @ surface

14 3/4" hole
10 3/4" (K55 - 40.5#) @ 2110' w/1700 sx
TOC @ surface

3883'-4032' Cmt plug

4174' Delaware

4550' Delaware
Cmt plug 4714-4679'
CIBP @ 4714'
4764'-4774' Delaware
DV 5438'
Cmt plug 5500'-5465'
CIBP @ 5500
5534'-5539'

6434'-6650' Bone Spring

7128'-7200 Bone Spring

7912'-7924' Bone Spring

Cmt plug 8620'-8655'

CIBP @ 8655'

8692'-8964' Bone Spring
9 3/4" hole
7-5/8" (S95 -33.7#,39#) @ 9171' w/1950 sx

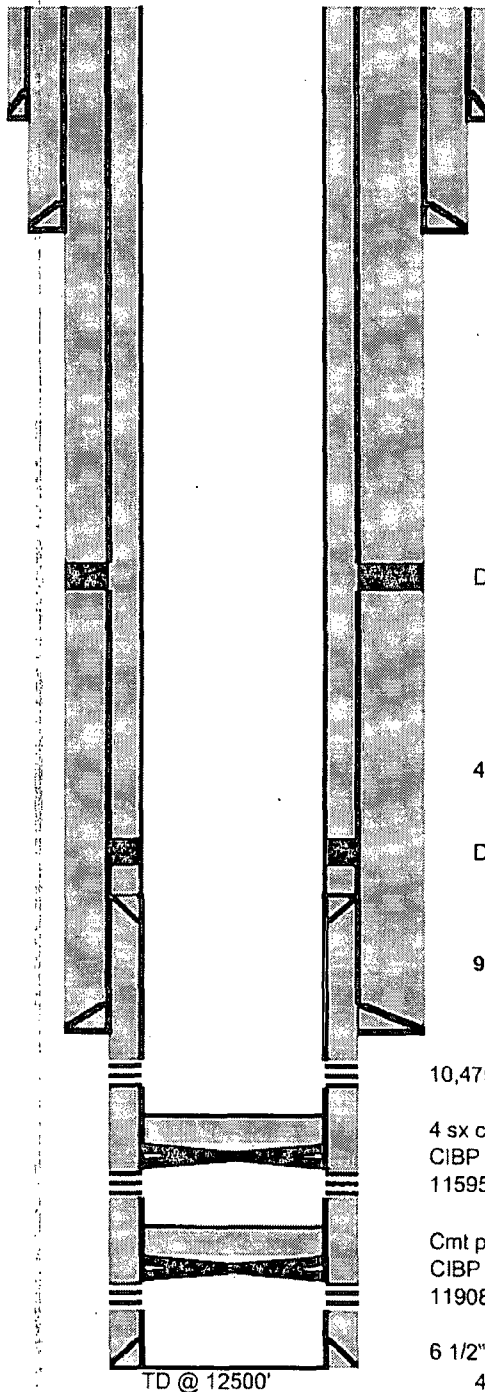
4 sx ci
CIBP @ 11540'
11595'-11851' Morrow

Cmt plug 11890'-11855'
CIBP @ 11890'
11908'-12256' Morrow

6 1/2" hole
4-1/2" (S95-13.5#) Liner 8654'-12500' w/625 sx

Author:	Maiorino	Well No.	#1
Well Name	Black River St	API #:	30-015-24067
Field	Black River	Prop #:	
County	Eddy	Zone:	Penn Shale
State	New Mexico		
Date	2/27/2014		
GL	3209'		
KB			

Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	16	H40	65	350	350	Surface
Inter Csg	10 3/4	K55	41	2,110	1700	Surface
Prod Csg	7 5/8	S95	33.7, 39	9,171	1,950	Surface
Liner	4 1/2	P110+ S95	11.5+ 13.5	12,500	625	Surface



Proposed Wellbore

18 1/2" hole
16" (H40 - 65#) @ 350' w/350 sx
TOC @ surface

14 3/4" hole
10 3/4" (K55 - 40.5#) @ 2110' w/1700 sx
TOC @ surface

DV 5438'

4 1/2" Liner 8654'-Surface
Cmt 8654'-Surface

DV 8644'

9 3/4" hole
7-5/8" (S95 -33.7#,39#) @ 9171' w/1950 sx

10,475'-10,715' Penn Shale

4 sx ci
CIBP @ 11540'
11595'-11851' Morrow

Cmt plug 11890'-11855'
CIBP @ 11890'
11908'-12256' Morrow

6 1/2" hole
4-1/2" (S95-13.5#) Liner 8654'-12500' w/625 sx