

Submit 1 Copy To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

DEC 20 2012

NMOC D ARTESIA

State of New Mexico
Energy, Minerals and Natural Resources
OH CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
October 13, 2009

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-39060
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator COG Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator 2208 W. Main Street, Artesia, NM 88210		7. Lease Name or Unit Agreement Name Myox 28 State
4. Well Location Unit Letter <u>M</u> : <u>330</u> feet from the <u>South</u> line and <u>330</u> feet from the <u>West</u> line Section <u>28</u> Township <u>25S</u> Range <u>28E</u> NMPM <u>Eddy</u> County		8. Well Number 2H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 2962' GR		9. OGRID Number 229137
		10. Pool name or Wildcat Red Bluff; Bone Spring

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: Casing Change
☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC respectfully requests approval for the following casing change to the original APD.

Casing and Cement

String	Hole Size	Csg OD	PPF	Depth	Sx Cement	TOC
Production	7-7/8"	5-1/2"	17#	12554'	1830	2200'

Well Plan

Drill 7-7/8" vertical hole, curve, and lateral to 12554' with cut brine. Run 5-1/2" 17# P110 LTC casing to TD'. Cement with 1830 sx bringing TOC to 2200' (200' overlap into 9-5/8").

Spud Date:

Rig Release Date:

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

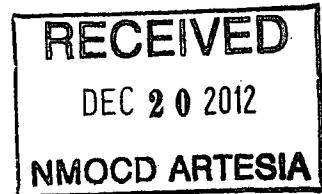
SIGNATURE Mate Reyes TITLE: Regulatory Analyst DATE: 12/19/2012

Type or print name: Mate Reyes E-mail address: mreyes1@conchoresources.com PHONE: (575) 748-6945

For State Use Only

APPROVED BY: JL Shepard TITLE: Geologist DATE: 12/21/2012

Conditions of Approval (if any):



COG Operating, LLC

Eddy County, NM (NAD 83)

Sec 28, T25S, R28E

Myox 28 State Com #2H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

13 December, 2012





DDC
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Myox 28 State Com #2H
Company:	COG Operating, LLC	TVD Reference:	WELL @ 2980.0usft (Patriot #3)
Project:	Eddy County, NM (NAD 83)	MD Reference:	WELL @ 2980.0usft (Patriot #3)
Site:	Sec 28, T25S, R28E	North Reference:	Grid
Well:	Myox 28 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 28, T25S, R28E		
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Site Position:	Map	Northing:	398,090.88 usft	Latitude:	32° 5' 39.176 N
From:		Easting:	613,719.68 usft	Longitude:	104° 5' 58.540 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.12 °

Well	Myox 28 State Com #2H					
Well Position	+N/-S	0.0 usft	Northing:	398,090.88 usft	Latitude:	32° 5' 39.176 N
	+E/-W	0.0 usft	Easting:	613,719.68 usft	Longitude:	104° 5' 58.540 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	2,963.0 usft	

Wellbore	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/13/2012	7.63	59.94	48,333

Design	Design #1				
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Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.14

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,552.5	0.00	0.00	7,552.5	0.0	0.0	0.00	0.00	0.00	0.00	
8,304.2	90.20	0.14	8,030.0	479.1	1.2	12.00	12.00	0.02	0.14	
12,554.3	90.20	0.14	8,015.0	4,729.2	11.8	0.00	0.00	0.00	0.00	PBHL Myox 28 Stat



DDC
Well Planning Report



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Well:	Myox 28 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Build 12° / 100'									
7,552.5	0.00	0.00	7,552.5	0.0	0.0	0.0	0.00	0.00	0.00
7,575.0	2.70	0.14	7,575.0	0.5	0.0	0.5	12.00	12.00	0.00
7,600.0	5.70	0.14	7,599.9	2.4	0.0	2.4	12.00	12.00	0.00
7,625.0	8.70	0.14	7,624.7	5.5	0.0	5.5	12.00	12.00	0.00
7,650.0	11.70	0.14	7,649.3	9.9	0.0	9.9	12.00	12.00	0.00
7,675.0	14.70	0.14	7,673.7	15.6	0.0	15.6	12.00	12.00	0.00
7,700.0	17.70	0.14	7,697.7	22.6	0.1	22.6	12.00	12.00	0.00
7,725.0	20.70	0.14	7,721.3	30.8	0.1	30.8	12.00	12.00	0.00
SB5G Sand									
7,749.4	23.63	0.14	7,743.9	40.0	0.1	40.0	12.00	12.00	0.00
7,750.0	23.70	0.14	7,744.4	40.3	0.1	40.3	12.00	12.00	0.00
7,775.0	26.70	0.14	7,767.0	50.9	0.1	50.9	12.00	12.00	0.00
7,800.0	29.70	0.14	7,789.1	62.7	0.2	62.7	12.00	12.00	0.00
7,825.0	32.70	0.14	7,810.4	75.7	0.2	75.7	12.00	12.00	0.00
7,850.0	35.70	0.14	7,831.1	89.7	0.2	89.7	12.00	12.00	0.00
7,875.0	38.70	0.14	7,851.0	104.8	0.3	104.8	12.00	12.00	0.00
7,900.0	41.70	0.14	7,870.1	121.0	0.3	121.0	12.00	12.00	0.00
7,925.0	44.70	0.14	7,888.3	138.1	0.3	138.1	12.00	12.00	0.00
7,950.0	47.70	0.14	7,905.6	156.1	0.4	156.1	12.00	12.00	0.00
7,975.0	50.70	0.14	7,922.0	175.0	0.4	175.0	12.00	12.00	0.00
8,000.0	53.70	0.14	7,937.3	194.8	0.5	194.8	12.00	12.00	0.00
8,025.0	56.70	0.14	7,951.6	215.3	0.5	215.3	12.00	12.00	0.00
8,050.0	59.70	0.14	7,964.7	236.6	0.6	236.6	12.00	12.00	0.00
8,075.0	62.70	0.14	7,976.8	258.5	0.6	258.5	12.00	12.00	0.00
8,100.0	65.70	0.14	7,987.7	281.0	0.7	281.0	12.00	12.00	0.00
8,125.0	68.70	0.14	7,997.3	304.0	0.8	304.0	12.00	12.00	0.00
8,150.0	71.70	0.14	8,005.8	327.5	0.8	327.5	12.00	12.00	0.00
8,175.0	74.70	0.14	8,013.0	351.5	0.9	351.5	12.00	12.00	0.00
8,200.0	77.70	0.14	8,019.0	375.7	0.9	375.8	12.00	12.00	0.00
8,225.0	80.70	0.14	8,023.7	400.3	1.0	400.3	12.00	12.00	0.00
8,250.0	83.70	0.14	8,027.1	425.1	1.1	425.1	12.00	12.00	0.00
8,275.0	86.70	0.14	8,029.2	450.0	1.1	450.0	12.00	12.00	0.00
8,300.0	89.70	0.14	8,030.0	475.0	1.2	475.0	12.00	12.00	0.00
EOB @ 90.20° Inc / .14° Azm / 8030' TVD									
8,304.2	90.20	0.14	8,030.0	479.1	1.2	479.1	12.00	12.00	0.00
8,400.0	90.20	0.14	8,029.6	575.0	1.4	575.0	0.00	0.00	0.00
8,500.0	90.20	0.14	8,029.3	675.0	1.7	675.0	0.00	0.00	0.00
8,600.0	90.20	0.14	8,028.9	775.0	1.9	775.0	0.00	0.00	0.00
8,700.0	90.20	0.14	8,028.6	875.0	2.2	875.0	0.00	0.00	0.00
8,800.0	90.20	0.14	8,028.2	975.0	2.4	975.0	0.00	0.00	0.00
8,900.0	90.20	0.14	8,027.9	1,075.0	2.7	1,075.0	0.00	0.00	0.00
9,000.0	90.20	0.14	8,027.5	1,175.0	2.9	1,175.0	0.00	0.00	0.00
9,100.0	90.20	0.14	8,027.2	1,275.0	3.2	1,275.0	0.00	0.00	0.00
9,200.0	90.20	0.14	8,026.8	1,375.0	3.4	1,375.0	0.00	0.00	0.00
9,300.0	90.20	0.14	8,026.5	1,475.0	3.7	1,475.0	0.00	0.00	0.00
9,400.0	90.20	0.14	8,026.1	1,575.0	3.9	1,575.0	0.00	0.00	0.00
9,500.0	90.20	0.14	8,025.8	1,675.0	4.2	1,675.0	0.00	0.00	0.00
9,600.0	90.20	0.14	8,025.4	1,775.0	4.4	1,775.0	0.00	0.00	0.00
9,700.0	90.20	0.14	8,025.0	1,875.0	4.7	1,875.0	0.00	0.00	0.00
9,800.0	90.20	0.14	8,024.7	1,974.9	4.9	1,975.0	0.00	0.00	0.00
9,900.0	90.20	0.14	8,024.3	2,074.9	5.2	2,075.0	0.00	0.00	0.00
10,000.0	90.20	0.14	8,024.0	2,174.9	5.4	2,175.0	0.00	0.00	0.00



DDC Well Planning Report



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Well:	Myox 28 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,100.0	90.20	0.14	8,023.6	2,274.9	5.7	2,275.0	0.00	0.00	0.00
10,200.0	90.20	0.14	8,023.3	2,374.9	5.9	2,375.0	0.00	0.00	0.00
10,300.0	90.20	0.14	8,022.9	2,474.9	6.2	2,475.0	0.00	0.00	0.00
10,400.0	90.20	0.14	8,022.6	2,574.9	6.4	2,575.0	0.00	0.00	0.00
10,500.0	90.20	0.14	8,022.2	2,674.9	6.7	2,675.0	0.00	0.00	0.00
10,600.0	90.20	0.14	8,021.9	2,774.9	6.9	2,775.0	0.00	0.00	0.00
10,700.0	90.20	0.14	8,021.5	2,874.9	7.2	2,874.9	0.00	0.00	0.00
10,800.0	90.20	0.14	8,021.2	2,974.9	7.4	2,974.9	0.00	0.00	0.00
10,900.0	90.20	0.14	8,020.8	3,074.9	7.7	3,074.9	0.00	0.00	0.00
11,000.0	90.20	0.14	8,020.5	3,174.9	7.9	3,174.9	0.00	0.00	0.00
11,100.0	90.20	0.14	8,020.1	3,274.9	8.2	3,274.9	0.00	0.00	0.00
11,200.0	90.20	0.14	8,019.8	3,374.9	8.4	3,374.9	0.00	0.00	0.00
11,300.0	90.20	0.14	8,019.4	3,474.9	8.7	3,474.9	0.00	0.00	0.00
11,400.0	90.20	0.14	8,019.1	3,574.9	8.9	3,574.9	0.00	0.00	0.00
11,500.0	90.20	0.14	8,018.7	3,674.9	9.2	3,674.9	0.00	0.00	0.00
11,600.0	90.20	0.14	8,018.4	3,774.9	9.4	3,774.9	0.00	0.00	0.00
11,700.0	90.20	0.14	8,018.0	3,874.9	9.7	3,874.9	0.00	0.00	0.00
11,800.0	90.20	0.14	8,017.7	3,974.9	9.9	3,974.9	0.00	0.00	0.00
11,900.0	90.20	0.14	8,017.3	4,074.9	10.2	4,074.9	0.00	0.00	0.00
12,000.0	90.20	0.14	8,017.0	4,174.9	10.4	4,174.9	0.00	0.00	0.00
12,100.0	90.20	0.14	8,016.6	4,274.9	10.6	4,274.9	0.00	0.00	0.00
12,200.0	90.20	0.14	8,016.2	4,374.9	10.9	4,374.9	0.00	0.00	0.00
12,300.0	90.20	0.14	8,015.9	4,474.9	11.1	4,474.9	0.00	0.00	0.00
12,400.0	90.20	0.14	8,015.5	4,574.9	11.4	4,574.9	0.00	0.00	0.00
12,500.0	90.20	0.14	8,015.2	4,674.9	11.6	4,674.9	0.00	0.00	0.00
12,554.3	90.20	0.14	8,015.0	4,729.2	11.8	4,729.3	0.00	0.00	0.00

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL Myox 28 State	0.00	0.00	8,015.0	4,729.2	11.8	402,820.13	613,731.46	32° 6' 25.978 N	104° 5' 58.284 W
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
16.0	347.0	Rustler		-0.20	0.14
650.0	981.0	TOS		-0.20	0.14
2,183.0	2,514.0	BOX		-0.20	0.14
2,372.0	2,703.0	Delaware		-0.20	0.14
6,070.0	6,401.0	Bone Spring		-0.20	0.14
6,405.0	6,736.0	U Avalon SH		-0.20	0.14
6,633.0	6,964.0	L Avalon Sh		-0.20	0.14
7,009.0	7,340.0	FBSG Sand		-0.20	0.14
7,749.4	8,074.9	SBSG Sand		-0.20	0.14



DDC
Well Planning Report



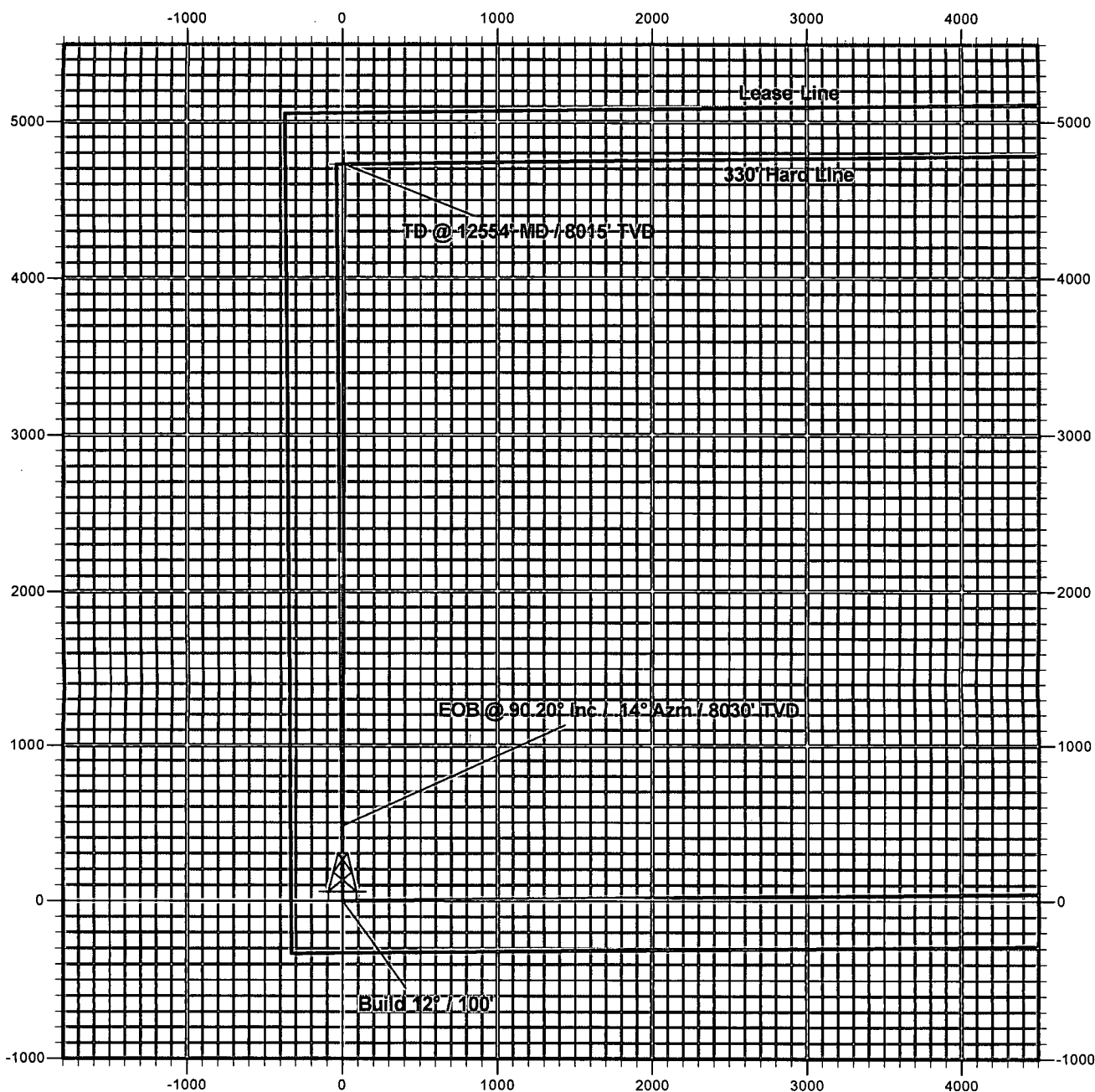
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Well:	Myox 28 State Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,552.5	7,552.5	0.0	0.0	Build 12° / 100'
8,304.2	8,030.0	479.1	1.2	EOB @ 90.20° Inc / .14° Azm / 8030' TVD
12,554.3	8,015.0	4,729.2	11.8	TD @ 12554' MD / 8015' TVD



Eddy County, NM (NAD 83)
Myox 28 State Com #2H
Quote 120945
Design #1





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