

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-39813
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Bradley 8 Fee
8. Well Number 4H
9. OGRID Number 229137
10. Pool name or Wildcat Atoka; Glorieta-Yeso 3250
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3370'

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.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
COG Operating LLC

3. Address of Operator
One Concho Center - 600 W Illinois Ave Midland, TX 79701

4. Well Location
Unit Letter **P** : **160** feet from the **SOUTH** line and **1040** feet from the **EAST** line
Section **8** Township **19S** Range **26E** NMPM County **EDDY**

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: **Change BHL** ☒

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 submitted APD for this well at this location:

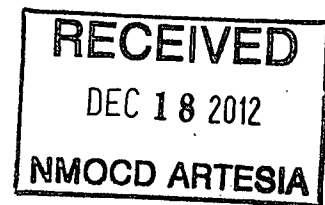
SHL: 160 FSL 1040 FEL, Unit P

BHL: 330 FNL 1040 FEL, Unit A

COG Operating LLC respectfully requests permission to change the BHL to:

SHL: 160 FSL 1040 FEL, Unit P

BHL: 330 FNL 986 FEL, Unit A



Revision is due to skewed section and avoiding a non-standard location. Estimated Completed Interval is within the 330' hard line due to skewed section.

A revised Directional Plan and C102 is attached for your review.

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 [Signature] TITLE Permitting Tech DATE 12/14/2012

Type or print name Kelly J. Holly E-mail address: kholly@concho.com PHONE: 432-685-4384

For State Use Only

APPROVED BY: [Signature] TITLE Geologist DATE 12/18/2012

Conditions of Approval (if any):

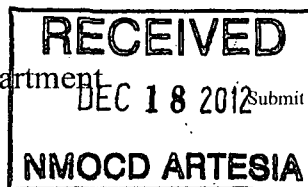
DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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, New Mexico 87505



Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-39813	Pool Code 3250	Pool Name Atoka; Glorieta-Yeso
Property Code	Property Name BRADLEY 8 FEE	Well Number 4H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3370'

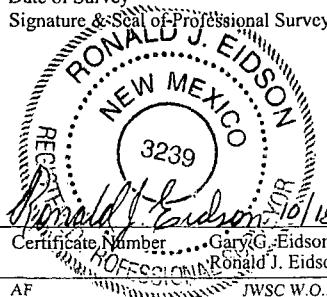
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	19-S	26-E		160	SOUTH	1040	EAST	EDDY

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
A	8	19-S	26-E		330	NORTH	986	EAST	EDDY
Dedicated Acres 161.8	Joint or Infill	Consolidation Code	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

GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=606800.0 N X=480067.8 E LAT.=32.668177° N LONG.=104.398106° W BOTTOM HOLE LOCATION Y=611644.2 N X=480020.6 E CORNER COORDINATES TABLE <table> <tr> <td>A -</td> <td>Y=611974.0 N, X=479684.1 E</td> </tr> <tr> <td>B -</td> <td>Y=611974.5 N, X=480999.1 E</td> </tr> <tr> <td>C -</td> <td>Y=606641.7 N, X=479788.6 E</td> </tr> <tr> <td>D -</td> <td>Y=606633.7 N, X=481111.2 E</td> </tr> </table> Estimated Completed Interval: 543 FSL+ 990 FEL GRID: AZ.=359°26'29" HORIZ. DIST.=4845.8 Producing Area Project Area 160' 1040'	A -	Y=611974.0 N, X=479684.1 E	B -	Y=611974.5 N, X=480999.1 E	C -	Y=606641.7 N, X=479788.6 E	D -	Y=606633.7 N, X=481111.2 E	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Signature 12-14-12 Date Kelly J. Holly Printed Name kholly@concho.com E-mail Address 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. NOVEMBER 4, 2011 Date of Survey Signature & Seal of Professional Surveyor:  Certificate Number: Gary G. Eidson 12641 Ronald J. Eidson 3239 AF JWSC W.O.: 12.13.1747
A -	Y=611974.0 N, X=479684.1 E								
B -	Y=611974.5 N, X=480999.1 E								
C -	Y=606641.7 N, X=479788.6 E								
D -	Y=606633.7 N, X=481111.2 E								



COG Operating LLC

Eddy County, NM (NAN27 NME)

Bradley 8 Fee #4H

OH

Plan #3 8-3/4" Hole

Surface: 160' FSL, 1040' FEL, Sec 8, T19S, R26E, Unit P

PP: 543' FSL, 990' FEL, Sec 8, T19S, R26E, Unit P

BHL: 330' FNL, 986' FEL, Sec 8, T19S, R26E, Unit A

Standard Planning Report

01 November, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db.	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3370.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3370.00usft
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 8-3/4" Hole		

Project:	Eddy County, NM (NAN27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site:	Bradley 8 Fee		
Site Position:		Northing:	606,805.40 usft
From:	Map	Easting:	477,518.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 40' 5.474 N
		Longitude:	104° 24' 23.005 W
		Grid Convergence:	-0.04 °

Well:	#4H		
Well Position	+N/-S	-5.40 usft	Northing:
	+E/-W	2,549.53 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	
		Latitude:	32° 40' 5.437 N
		Longitude:	104° 23' 53.181 W
		Ground Level:	3,370.00 usft

Wellbore	OH		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	11/1/2012	7.93	60.38	48,634

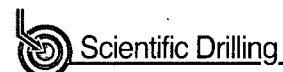
Design	Plan #3 8-3/4" Hole		
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Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			359.44

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,272.54	0.00	0.00	2,272.54	0.00	0.00	0.00	0.00	0.00	0.00	



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev. @ 3370.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev. @ 3370.00usft
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 8-3/4" Hole		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,272.54	0.00	0.00	2,272.54	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 12.00°/100'									
2,300.00	3.30	6.00	2,299.98	0.79	0.08	0.78	12.00	12.00	0.00
2,400.00	15.30	6.00	2,398.49	16.82	1.77	16.80	12.00	12.00	0.00
2,500.00	27.30	6.00	2,491.49	52.87	5.56	52.82	12.00	12.00	0.00
2,600.00	39.30	6.00	2,574.93	107.37	11.28	107.25	12.00	12.00	0.00
2,700.00	51.30	6.00	2,645.14	177.92	18.70	177.73	12.00	12.00	0.00
2,800.00	63.30	6.00	2,699.08	261.45	27.48	261.17	12.00	12.00	0.00
2,900.00	75.30	6.00	2,734.37	354.31	37.24	353.93	12.00	12.00	0.00
2,929.57	78.84	6.00	2,740.98	382.97	40.25	382.56	12.00	12.00	0.00
PP									
3,000.00	87.30	6.00	2,749.47	452.44	47.55	451.96	12.00	12.00	0.00
3,022.54	90.00	6.00	2,750.00	474.85	49.91	474.34	12.00	12.00	0.00
Land EOC hold 90.00°									
3,100.00	90.00	3.68	2,750.00	552.03	56.44	551.45	3.00	0.00	-3.00
3,200.00	90.00	0.68	2,750.00	651.94	60.24	651.33	3.00	0.00	-3.00
3,272.09	90.00	358.51	2,750.00	724.03	59.73	723.41	3.00	0.00	-3.00
3,300.00	90.00	358.51	2,750.00	751.93	59.00	751.32	0.00	0.00	0.00
3,400.00	90.00	358.51	2,750.00	851.90	56.41	851.31	0.00	0.00	0.00
3,500.00	90.00	358.51	2,750.00	951.86	53.82	951.29	0.00	0.00	0.00
3,600.00	90.00	358.51	2,750.00	1,051.83	51.22	1,051.28	0.00	0.00	0.00
3,700.00	90.00	358.51	2,750.00	1,151.79	48.63	1,151.27	0.00	0.00	0.00
3,800.00	90.00	358.51	2,750.00	1,251.76	46.03	1,251.25	0.00	0.00	0.00
3,900.00	90.00	358.51	2,750.00	1,351.73	43.44	1,351.24	0.00	0.00	0.00
4,000.00	90.00	358.51	2,750.00	1,451.69	40.84	1,451.23	0.00	0.00	0.00
4,100.00	90.00	358.51	2,750.00	1,551.66	38.25	1,551.21	0.00	0.00	0.00
4,200.00	90.00	358.51	2,750.00	1,651.63	35.66	1,651.20	0.00	0.00	0.00
4,300.00	90.00	358.51	2,750.00	1,751.59	33.06	1,751.19	0.00	0.00	0.00
4,400.00	90.00	358.51	2,750.00	1,851.56	30.47	1,851.17	0.00	0.00	0.00
4,500.00	90.00	358.51	2,750.00	1,951.53	27.87	1,951.16	0.00	0.00	0.00
4,600.00	90.00	358.51	2,750.00	2,051.49	25.28	2,051.15	0.00	0.00	0.00
4,700.00	90.00	358.51	2,750.00	2,151.46	22.69	2,151.13	0.00	0.00	0.00
4,800.00	90.00	358.51	2,750.00	2,251.42	20.09	2,251.12	0.00	0.00	0.00
4,900.00	90.00	358.51	2,750.00	2,351.39	17.50	2,351.11	0.00	0.00	0.00
5,000.00	90.00	358.51	2,750.00	2,451.36	14.90	2,451.10	0.00	0.00	0.00
5,100.00	90.00	358.51	2,750.00	2,551.32	12.31	2,551.08	0.00	0.00	0.00
5,200.00	90.00	358.51	2,750.00	2,651.29	9.71	2,651.07	0.00	0.00	0.00
5,300.00	90.00	358.51	2,750.00	2,751.26	7.12	2,751.06	0.00	0.00	0.00
5,400.00	90.00	358.51	2,750.00	2,851.22	4.53	2,851.04	0.00	0.00	0.00
5,500.00	90.00	358.51	2,750.00	2,951.19	1.93	2,951.03	0.00	0.00	0.00
5,600.00	90.00	358.51	2,750.00	3,051.15	-0.66	3,051.02	0.00	0.00	0.00
5,700.00	90.00	358.51	2,750.00	3,151.12	-3.26	3,151.00	0.00	0.00	0.00
5,800.00	90.00	358.51	2,750.00	3,251.09	-5.85	3,250.99	0.00	0.00	0.00
5,900.00	90.00	358.51	2,750.00	3,351.05	-8.44	3,350.98	0.00	0.00	0.00
6,000.00	90.00	358.51	2,750.00	3,451.02	-11.04	3,450.96	0.00	0.00	0.00
6,100.00	90.00	358.51	2,750.00	3,550.99	-13.63	3,550.95	0.00	0.00	0.00
6,200.00	90.00	358.51	2,750.00	3,650.95	-16.23	3,650.94	0.00	0.00	0.00
6,300.00	90.00	358.51	2,750.00	3,750.92	-18.82	3,750.92	0.00	0.00	0.00
6,400.00	90.00	358.51	2,750.00	3,850.89	-21.42	3,850.91	0.00	0.00	0.00
6,500.00	90.00	358.51	2,750.00	3,950.85	-24.01	3,950.90	0.00	0.00	0.00
6,600.00	90.00	358.51	2,750.00	4,050.82	-26.60	4,050.89	0.00	0.00	0.00
6,700.00	90.00	358.51	2,750.00	4,150.78	-29.20	4,150.87	0.00	0.00	0.00



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3370.00usft
Project:	Eddy County, NM (NAN27' NME)	MD Reference:	GL Elev @ 3370.00usft
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 8-3/4" Hole		

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)	
6,800.00	90.00	358.51	2,750.00	4,250.75	-31.79	4,250.86	0.00	0.00	0.00	
6,900.00	90.00	358.51	2,750.00	4,350.72	-34.39	4,350.85	0.00	0.00	0.00	
7,000.00	90.00	358.51	2,750.00	4,450.68	-36.98	4,450.83	0.00	0.00	0.00	
7,100.00	90.00	358.51	2,750.00	4,550.65	-39.58	4,550.82	0.00	0.00	0.00	
7,200.00	90.00	358.51	2,750.00	4,650.62	-42.17	4,650.81	0.00	0.00	0.00	
7,300.00	90.00	358.51	2,750.00	4,750.58	-44.76	4,750.79	0.00	0.00	0.00	
7,394.09	90.00	358.51	2,750.00	4,844.64	-47.20	4,844.87	0.00	0.00	0.00	
PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
hit/miss target										
Shape										
PP	0.00	360.00	2,740.99	383.00	40.25	607,182.97	480,108.05	32° 40' 9.227 N	104° 23' 52.713 W	
- plan hits target center										
- Point										
PBHL	0.00	0.00	2,750.00	4,844.64	-47.20	611,644.20	480,020.60	32° 40' 53.373 N	104° 23' 53.768 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	E/-W (usft)	Comment	
2,272.54	2,272.54	0.00	0.00	KOP Start Build 12.00°/100'	
3,022.54	2,750.00	477.45	-4.65	Land EOC hold 90.00°	



Bradley 8 Fee #4H
Eddy County, NM (NAN27 NME)
Northing: (Y) 606800.00
Easting: (X) 480067.80
Plan #3 8-3/4" Hole



Azimuths to Grid North
True North: 0.04°
Magnetic North: 7.97°

Magnetic-Field
Strength: 48633.7 nT
Dip Angle: 60.38°
Date: 11/1/2012
Model: BGGM2012

To convert a Magnetic Direction to a Grid Direction, Add 7.97°
To convert a True Direction to a Grid Direction, Add 0.03°

WELL DETAILS:					
Ground Level: 3370.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	606800.00	480067.80	32° 40' 5.437 N	104° 23' 53.181 W

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2272.54	0.00	0.00	2272.54	0.00	0.00	0.00	0.00	0.00	0.00

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PP	2740.99	383.00	40.25	607182.97	480108.05
PBHL	2750.00	4844.64	-47.20	611644.20	480020.60

SITE DETAILS: Bradley 8 Fee
Site Centre Northing: 606805.40
Easting: 477518.50

Positional Uncertainty: 0.00
Convergence: -0.04
Local North: Grid

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well #4H, Grid North

Latitude: 32° 40' 5.437 N
Longitude: 104° 23' 53.181 W

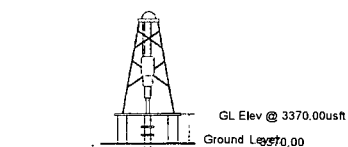
Grid East: 480067.80
Grid North: 606800.00
Scale Factor: 1.000

Geomagnetic Model: BGGM2012
Sample Date: 01-Nov-12
Magnetic Declination: 7.93°
Dip Angle from Horizontal: 60.38°
Magnetic Field Strength: 48634

To convert a Magnetic Direction to a Grid Direction, Add 7.97°
To convert a Magnetic Direction to a True Direction, Add 7.93° East
To convert a True Direction to a Grid Direction, Add 0.03°

PROJECT DETAILS: Eddy County, NM (NAN27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level



GL Elev @ 3370.00usft
Ground Layer: 0.00

Julio Pila
14.33, November 01 2012
Scientific Drilling
2014 Trade Drive
Midland, TX 79703

