

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMLC029020M
2. Name of Operator COG OPERATING LLC Contact: KELLY J HOLLY E-Mail: kholly@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-685-4384	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 3 T17S R30E Mer NMP NENE 330FNL 330FEL		8. Well Name and No. CARMEN 3 FEDERAL COM 15H
		9. API Well No. 30-015-40239 40539
		10. Field and Pool, or Exploratory LOCO HILLS
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

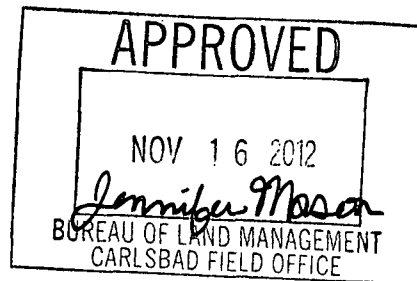
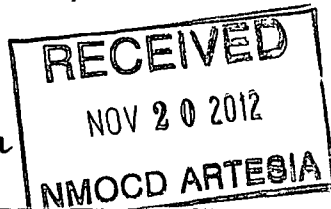
TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG Operating LLC respectfully requests permission to change the Horizontal TVD Depth:

FROM: 4800'
TO: 5650'

A revised directional plan is attached for your review.

Accepted for record
NMOCD

14. Thereby certify that the foregoing is true and correct.	
Electronic Submission #156083 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 10/29/2012 ()	
Name (Printed/Typed) KELLY J HOLLY	Title PERMITTING TECH.
Signature (Electronic Submission)	Date 10/23/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office _____		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****



COG Operating LLC

Eddy County, NM (NAN27 NME)

Carmen 3 Federal Com #15H

OH

Plan #2 8-3/4" Hole

Surface: 330' FNL, 330' FEL, Sec 3, T17S, R30E, Lot No. 1 (Unit D)

BHL: 330' FNL, 330' FWL, Sec 3, T17S, R30E, Lot No. 4 (Unit A)

Standard Planning Report

22 October, 2012





Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Carmen 3 Federal Com
Well: #15H
Wellbore: OH
Design: Plan #2 8-3/4" Hole

Local Co-ordinate Reference: Well #15H
TVD Reference: GL Elev @ 3726.00usft
MID Reference: GL Elev @ 3726.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Carmen 3 Federal Com		
Site Position:		Northing:	679,000.90 usft
From:	Map	Easting:	612,549.70 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 51' 58.029 N
		Longitude:	103° 58' 0.398 W
		Grid Convergence:	0.20 °

Well	#15H		
Well Position	+N-S	1,334.10 usft	Northing:
	+E-W	4,616.55 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,726.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	BGGM2012	10/22/2012	(°)
			7.75
			Dip Angle
			(°)
			60.65
			Field Strength
			(nT)
			48,812

Design	Plan #2 8-3/4" Hole		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	-3,726.00	0.00	0.00
			Direction
			(°)
			269.82

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,172.61	0.00	0.00	5,172.61	0.00	0.00	0.00	0.00	0.00	0.00	
5,930.94	91.00	269.82	5,650.00	-1.51	-485.80	12.00	12.00	0.00	269.82	
10,067.45	91.00	269.82	5,577.81	-14.40	-4,621.65	0.00	0.00	0.00	0.00	PBHL



Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Carmen 3 Federal Com
Well: #15H
Wellbore: OH
Design: Plan #2 8-3/4" Hole

Local Co-ordinate Reference: Well #15H
TVD Reference: GL Elev @ 3726.00usft
MD Reference: GL Elev @ 3726.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
5,172.61	0.00	0.00	5,172.61	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 12.00									
5,200.00	3.29	269.82	5,199.99	0.00	-0.79	0.79	12.00	12.00	0.00
5,300.00	15.29	269.82	5,298.49	-0.05	-16.89	16.89	12.00	12.00	0.00
5,400.00	27.29	269.82	5,391.50	-0.17	-53.13	53.13	12.00	12.00	0.00
5,500.00	39.29	269.82	5,474.94	-0.34	-107.91	107.91	12.00	12.00	0.00
5,600.00	51.29	269.82	5,545.17	-0.56	-178.85	178.85	12.00	12.00	0.00
5,700.00	63.29	269.82	5,599.11	-0.82	-262.83	262.83	12.00	12.00	0.00
5,800.00	75.29	269.82	5,634.42	-1.11	-356.20	356.20	12.00	12.00	0.00
5,900.00	87.29	269.82	5,649.54	-1.42	-454.86	454.86	12.00	12.00	0.00
5,930.94	91.00	269.82	5,650.00	-1.51	-485.80	485.80	12.00	12.00	0.00
EOC Start 4136.50 hold at 5930.94 MD									
6,000.00	91.00	269.82	5,648.80	-1.73	-554.84	554.84	0.00	0.00	0.00
6,100.00	91.00	269.82	5,647.05	-2.04	-654.83	654.83	0.00	0.00	0.00
6,200.00	91.00	269.82	5,645.31	-2.35	-754.81	754.81	0.00	0.00	0.00
6,300.00	91.00	269.82	5,643.56	-2.66	-854.79	854.80	0.00	0.00	0.00
6,400.00	91.00	269.82	5,641.82	-2.98	-954.78	954.78	0.00	0.00	0.00
6,500.00	91.00	269.82	5,640.07	-3.29	-1,054.76	1,054.77	0.00	0.00	0.00
6,600.00	91.00	269.82	5,638.33	-3.60	-1,154.75	1,154.75	0.00	0.00	0.00
6,700.00	91.00	269.82	5,636.58	-3.91	-1,254.73	1,254.74	0.00	0.00	0.00
6,800.00	91.00	269.82	5,634.83	-4.22	-1,354.72	1,354.72	0.00	0.00	0.00
6,900.00	91.00	269.82	5,633.09	-4.53	-1,454.70	1,454.71	0.00	0.00	0.00
7,000.00	91.00	269.82	5,631.34	-4.84	-1,554.68	1,554.69	0.00	0.00	0.00
7,100.00	91.00	269.82	5,629.60	-5.16	-1,654.67	1,654.68	0.00	0.00	0.00
7,200.00	91.00	269.82	5,627.85	-5.47	-1,754.65	1,754.66	0.00	0.00	0.00
7,300.00	91.00	269.82	5,626.11	-5.78	-1,854.64	1,854.65	0.00	0.00	0.00
7,400.00	91.00	269.82	5,624.36	-6.09	-1,954.62	1,954.63	0.00	0.00	0.00
7,500.00	91.00	269.82	5,622.62	-6.40	-2,054.61	2,054.62	0.00	0.00	0.00
7,600.00	91.00	269.82	5,620.87	-6.71	-2,154.59	2,154.60	0.00	0.00	0.00
7,700.00	91.00	269.82	5,619.13	-7.03	-2,254.57	2,254.59	0.00	0.00	0.00
7,800.00	91.00	269.82	5,617.38	-7.34	-2,354.56	2,354.57	0.00	0.00	0.00
7,900.00	91.00	269.82	5,615.64	-7.65	-2,454.54	2,454.55	0.00	0.00	0.00
8,000.00	91.00	269.82	5,613.89	-7.96	-2,554.53	2,554.54	0.00	0.00	0.00
8,100.00	91.00	269.82	5,612.15	-8.27	-2,654.51	2,654.52	0.00	0.00	0.00
8,200.00	91.00	269.82	5,610.40	-8.58	-2,754.50	2,754.51	0.00	0.00	0.00
8,300.00	91.00	269.82	5,608.66	-8.89	-2,854.48	2,854.49	0.00	0.00	0.00
8,400.00	91.00	269.82	5,606.91	-9.21	-2,954.46	2,954.48	0.00	0.00	0.00
8,500.00	91.00	269.82	5,605.17	-9.52	-3,054.45	3,054.46	0.00	0.00	0.00
8,600.00	91.00	269.82	5,603.42	-9.83	-3,154.43	3,154.45	0.00	0.00	0.00
8,700.00	91.00	269.82	5,601.68	-10.14	-3,254.42	3,254.43	0.00	0.00	0.00
8,800.00	91.00	269.82	5,599.93	-10.45	-3,354.40	3,354.42	0.00	0.00	0.00
8,900.00	91.00	269.82	5,598.18	-10.76	-3,454.39	3,454.40	0.00	0.00	0.00
9,000.00	91.00	269.82	5,596.44	-11.08	-3,554.37	3,554.39	0.00	0.00	0.00
9,100.00	91.00	269.82	5,594.69	-11.39	-3,654.35	3,654.37	0.00	0.00	0.00
9,200.00	91.00	269.82	5,592.95	-11.70	-3,754.34	3,754.36	0.00	0.00	0.00
9,300.00	91.00	269.82	5,591.20	-12.01	-3,854.32	3,854.34	0.00	0.00	0.00
9,400.00	91.00	269.82	5,589.46	-12.32	-3,954.31	3,954.33	0.00	0.00	0.00
9,500.00	91.00	269.82	5,587.71	-12.63	-4,054.29	4,054.31	0.00	0.00	0.00
9,600.00	91.00	269.82	5,585.97	-12.94	-4,154.28	4,154.30	0.00	0.00	0.00
9,700.00	91.00	269.82	5,584.22	-13.26	-4,254.26	4,254.28	0.00	0.00	0.00
9,800.00	91.00	269.82	5,582.48	-13.57	-4,354.24	4,354.27	0.00	0.00	0.00
9,900.00	91.00	269.82	5,580.73	-13.88	-4,454.23	4,454.25	0.00	0.00	0.00
10,000.00	91.00	269.82	5,578.99	-14.19	-4,554.21	4,554.23	0.00	0.00	0.00



Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Carmen 3 Federal Com
Well: #15H
Wellbore: OH
Design: Plan #2. 8-3/4" Hole

Local Co-ordinate Reference: Well #15H
TVD Reference: GL Elev @ 3726.00usft
MD Reference: GL Elev @ 3726.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
10,067.45	91.00	269.82	5,577.81	-14.40	-4,621.65	4,621.67	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
- bit/mix target									
- Shape									
PBHL	0.00	0.00	5,577.81	-14.40	-4,621.65	680,320.50	612,544.60	32° 52' 11.087 N	103° 58' 0.404 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
-2,376.00		9-5/8" Casing	9-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment	
		+N-S (usft)	+E-W (usft)	
5,172.61	5,172.61	0.00	0.00	KOP Start Build 12.00
5,930.94	5,650.00	-1.51	-485.80	EOC Start 4136.50 hold at 5930.94 MD



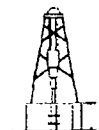
Carmen 3 Federal Com#15H
Eddy County, NM (NAN27 NME)
Northing: (Y) 680334.90
Easting: (X) 617165.90
Plan #2 8-3/4" Hole



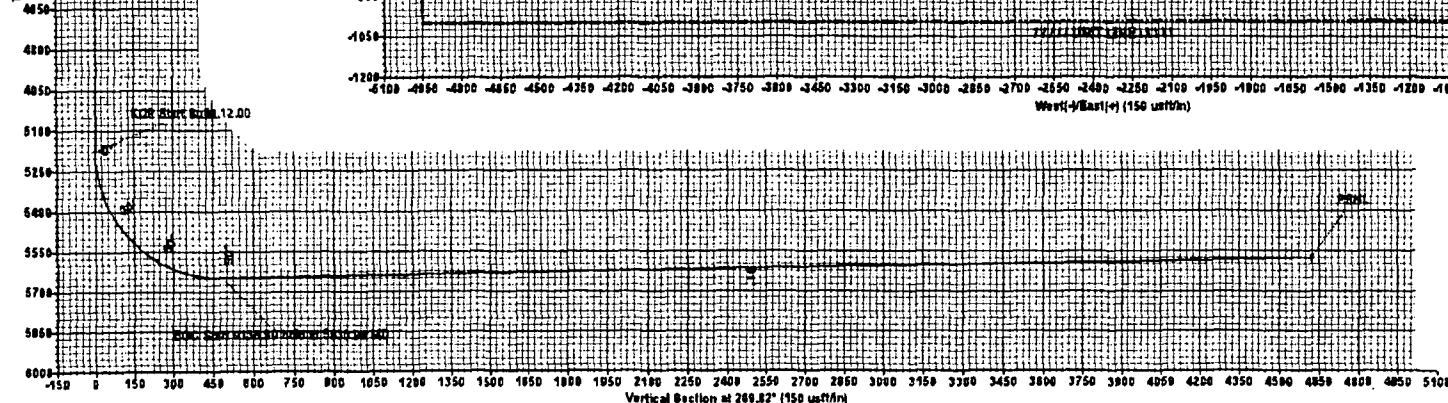
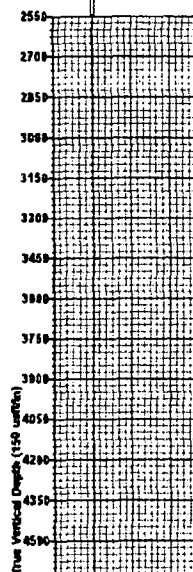
Azimuth to Grid North
True North: -0.21°
Magnetic North: 7.54°

Magnetic Field
Strength: 48811.9 nT
Dip Angle: 58.85°
Date: 10/22/2012
Model: 80GM2012

To convert a Magnetic Direction to a Grid Direction, Add 7.54°
To convert a True Direction to a Grid Direction, Subtract 0.21°



Ground Level: 3726.00



WELL DETAILS:

+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	680334.90	617165.90	32° 52' 11.068 N	103° 57' 6.219 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5172.81	0.00	0.00	5172.81	0.00	0.00	0.00	0.00	0.00	
5920.94	91.00	269.82	5850.00	-1.51	-485.80	12.00	269.82	485.80	
10087.45	91.00	269.82	5577.81	-14.40	-4821.85	0.00	0.00	4821.87	PBHL

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting
PBHL	5577.81	-14.40	-4821.85	680320.50	612544.60

SITE DETAILS: Carmen 3 Federal Com
Site Centre Northing: 678000.90
Easting: 612549.70

Positional Uncertainty: 0.00
Convergence: 0.20
Local North: Grid

PROJECT DETAILS: Eddy County, NM (NAN27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1856
Zone: New Mexico East 3001

System Datum: Mean Sea Level

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1856
Zone Name: New Mexico East 3001

Local Origin: Well #10H, Grid North

Latitude: 32° 52' 11.068 N
Longitude: 103° 57' 6.219 W

Grid East: 617165.90
Grid North: 680334.90
Scale Factor: 1.000

Geomagnetic Model: 80GM2012
Sample Date: 23-Oct-12
Magnetic Declination: 7.71°
Dip Angle from Horizontal: 60.45°
Magnetic Field Strength: 48812

To convert a Magnetic Direction to a Grid Direction, Add 7.54°
To convert a Magnetic Direction to a True Direction, Add 7.71° East
To convert a True Direction to a Grid Direction, Subtract 0.21°