

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

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

Form C-103
Revised August 1, 2011

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. 30-015-39716
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 One Concho Center - 600 W Illinois Ave Midland, TX 79701		7. Lease Name or Unit Agreement Name Patton 5 Fee
4. Well Location Unit Letter L : 1670 feet from the SOUTH line and 240 feet from the WEST line. Section 5 Township 19S Range 26E NMPM County EDDY		8. Well Number 6H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3364'		9. OGRID Number 229137
		10. Pool name or Wildcat Atoka; Glorieta-Yeso 3250

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: Change casing program ☒		OTHER: ☐	

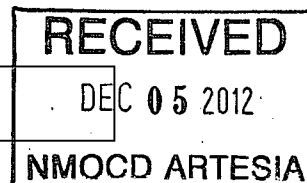
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG proposes to drill an 11" hole to 1200' w/fresh water, run 8-5/8" 32# J-55 and cement to surface. Drill a 7-7/8" hole to 2399' MD and kick off and drill curve to 2876' TVD 3153' MD. Drill a 7-7/8" lateral to new BHL @ 2839' TVD 7413' MD. Run a 5 1/2" 17# L-80 casing to TD cement to surface with 800 sacks.

A revised directional plan is attached.

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 TITLE **Permitting Tech** DATE **12/03/2012**

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

APPROVED BY: TITLE **Geologist** DATE **12/5/2012**
Conditions of Approval (if any):



COG Operating LLC

Eddy County, NM (NAN27 NME)

Patton 5 Fee #6H

OH

Plan #2 8-3/4" Hole

Surface: 1639' FSL, 200' FWL, Sec 5, T19S, R26E, Unit L

PP : 1639' FSL, 330' FWL, Sec 5, T19S, R26E, Unit L

BHL: 1645' FSL, 330' FEL, Sec 5, T19S, R26E, Unit I

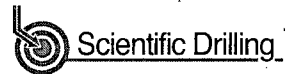
Standard Planning Report

29 November, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3364.00usft
Project:	Eddy County NM (NAN27 NME)	MD Reference:	GL Elev @ 3364.00usft
Site:	Patton 5 Fee	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 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	Patton 5 Fee		
Site Position:		Northing:	616,822.20 usft
From:	Map	Easting:	476,026.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 44.586 N
		Longitude:	104° 24' 40.546 W
		Grid Convergence:	-0.04 °

Well	#6H		
Well Position	+N/-S	-3,211.79 usft	Northing: 613,610.70 usft
	+E/-W	-106.31 usft	Easting: 475,920.20 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level: 3,364.00 usft
		Latitude:	32° 41' 12.806 N
		Longitude:	104° 24' 41.762 W

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2012	11/29/2012	7.93
			Dip Angle (°)
			60.39
			Field Strength (nT)
			48,634

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)
	0.00	0.00	0.00
			Direction (°)
			89.90

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	
2,398.70	0.00	0.00	2,398.70	0.00	0.00	0.00	0.00	0.00	0.00	
3,152.86	90.50	89.90	2,876.14	0.84	481.63	12.00	12.00	0.00	89.90	
7,412.83	90.50	89.90	2,838.97	8.30	4,741.43	0.00	0.00	0.00	0.00	PBHL



Scientific Drilling

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3364.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3364.00usft
Site:	Patton's Fee	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 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
2,398.70	0.00	0.00	2,398.70	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 12.00									
2,400.00	0.16	89.90	2,400.00	0.00	0.00	0.00	12.00	12.00	0.00
2,500.00	12.16	89.90	2,499.24	0.02	10.71	10.71	12.00	12.00	0.00
2,600.00	24.16	89.90	2,594.09	0.07	41.81	41.81	12.00	12.00	0.00
2,700.00	36.16	89.90	2,680.40	0.16	91.95	91.95	12.00	12.00	0.00
2,759.58	43.31	89.90	2,726.19	0.23	130.01	130.01	12.00	12.00	0.00
PP=330' FWL									
2,800.00	48.16	89.90	2,754.39	0.28	158.95	158.95	12.00	12.00	0.00
2,900.00	60.16	89.90	2,812.84	0.42	239.86	239.86	12.00	12.00	0.00
3,000.00	72.16	89.90	2,853.19	0.58	331.16	331.16	12.00	12.00	0.00
3,100.00	84.16	89.90	2,873.68	0.75	428.85	428.85	12.00	12.00	0.00
3,134.64	88.31	89.90	2,875.96	0.81	463.41	463.41	12.00	12.00	0.00
TL									
3,152.86	90.50	89.90	2,876.14	0.84	481.63	481.63	12.00	12.00	0.00
EOC Start 4259.97 hold at 3152.86 MD									
3,200.00	90.50	89.90	2,875.73	0.93	528.76	528.76	0.00	0.00	0.00
3,300.00	90.50	89.90	2,874.86	1.10	628.76	628.76	0.00	0.00	0.00
3,400.00	90.50	89.90	2,873.99	1.28	728.76	728.76	0.00	0.00	0.00
3,500.00	90.50	89.90	2,873.12	1.45	828.75	828.75	0.00	0.00	0.00
3,600.00	90.50	89.90	2,872.24	1.63	928.75	928.75	0.00	0.00	0.00
3,700.00	90.50	89.90	2,871.37	1.80	1,028.74	1,028.75	0.00	0.00	0.00
3,800.00	90.50	89.90	2,870.50	1.98	1,128.74	1,128.74	0.00	0.00	0.00
3,900.00	90.50	89.90	2,869.62	2.15	1,228.74	1,228.74	0.00	0.00	0.00
4,000.00	90.50	89.90	2,868.75	2.33	1,328.73	1,328.73	0.00	0.00	0.00
4,100.00	90.50	89.90	2,867.88	2.50	1,428.73	1,428.73	0.00	0.00	0.00
4,200.00	90.50	89.90	2,867.01	2.68	1,528.72	1,528.73	0.00	0.00	0.00
4,300.00	90.50	89.90	2,866.13	2.85	1,628.72	1,628.72	0.00	0.00	0.00
4,400.00	90.50	89.90	2,865.26	3.03	1,728.72	1,728.72	0.00	0.00	0.00
4,500.00	90.50	89.90	2,864.39	3.20	1,828.71	1,828.72	0.00	0.00	0.00
4,600.00	90.50	89.90	2,863.52	3.38	1,928.71	1,928.71	0.00	0.00	0.00
4,700.00	90.50	89.90	2,862.64	3.55	2,028.70	2,028.71	0.00	0.00	0.00
4,800.00	90.50	89.90	2,861.77	3.73	2,128.70	2,128.70	0.00	0.00	0.00
4,900.00	90.50	89.90	2,860.90	3.90	2,228.70	2,228.70	0.00	0.00	0.00
5,000.00	90.50	89.90	2,860.03	4.08	2,328.69	2,328.70	0.00	0.00	0.00
5,100.00	90.50	89.90	2,859.15	4.25	2,428.69	2,428.69	0.00	0.00	0.00
5,200.00	90.50	89.90	2,858.28	4.43	2,528.68	2,528.69	0.00	0.00	0.00
5,300.00	90.50	89.90	2,857.41	4.60	2,628.68	2,628.68	0.00	0.00	0.00
5,400.00	90.50	89.90	2,856.54	4.78	2,728.68	2,728.68	0.00	0.00	0.00
5,500.00	90.50	89.90	2,855.66	4.95	2,828.67	2,828.68	0.00	0.00	0.00
5,600.00	90.50	89.90	2,854.79	5.13	2,928.67	2,928.67	0.00	0.00	0.00
5,700.00	90.50	89.90	2,853.92	5.30	3,028.67	3,028.67	0.00	0.00	0.00
5,800.00	90.50	89.90	2,853.04	5.48	3,128.66	3,128.67	0.00	0.00	0.00
5,900.00	90.50	89.90	2,852.17	5.65	3,228.66	3,228.66	0.00	0.00	0.00
6,000.00	90.50	89.90	2,851.30	5.83	3,328.65	3,328.66	0.00	0.00	0.00
6,100.00	90.50	89.90	2,850.43	6.00	3,428.65	3,428.65	0.00	0.00	0.00
6,200.00	90.50	89.90	2,849.55	6.18	3,528.65	3,528.65	0.00	0.00	0.00
6,300.00	90.50	89.90	2,848.68	6.35	3,628.64	3,628.65	0.00	0.00	0.00
6,400.00	90.50	89.90	2,847.81	6.53	3,728.64	3,728.64	0.00	0.00	0.00
6,500.00	90.50	89.90	2,846.94	6.70	3,828.63	3,828.64	0.00	0.00	0.00
6,600.00	90.50	89.90	2,846.06	6.88	3,928.63	3,928.64	0.00	0.00	0.00
6,700.00	90.50	89.90	2,845.19	7.05	4,028.63	4,028.63	0.00	0.00	0.00
6,800.00	90.50	89.90	2,844.32	7.23	4,128.62	4,128.63	0.00	0.00	0.00

Database:	EDM:5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	GOG Operating, LLC	TVD Reference:	GL Elev @ 3364.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3364.00usft
Site:	Patton 5 Fee	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 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)
6,900.00	90.50	89.90	2,843.45	7.40	4,228.62	4,228.62	0.00	0.00	0.00
7,000.00	90.50	89.90	2,842.57	7.58	4,328.61	4,328.62	0.00	0.00	0.00
7,100.00	90.50	89.90	2,841.70	7.75	4,428.61	4,428.62	0.00	0.00	0.00
7,200.00	90.50	89.90	2,840.83	7.93	4,528.61	4,528.61	0.00	0.00	0.00
7,300.00	90.50	89.90	2,839.95	8.10	4,628.60	4,628.61	0.00	0.00	0.00
7,400.00	90.50	89.90	2,839.08	8.28	4,728.60	4,728.61	0.00	0.00	0.00
7,412.83	90.50	89.90	2,838.97	8.30	4,741.43	4,741.44	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=330' FWL - plan hits target center - Point	0.00	0.00	2,726.17	0.23	130.00	613,610.93	476,050.19	32° 41' 12.809 N	104° 24' 40.241 W
PBHL - plan hits target center - Point	0.00	0.00	2,838.97	8.30	4,741.43	613,619.00	480,661.20	32° 41' 12.919 N	104° 23' 46.287 W

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,134.64	2,875.96	TL		-0.50	89.61

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2,398.70	2,398.70	0.00	0.00	KOP Start Build 12.00
3,152.86	2,876.14	0.84	481.63	EOC Start 4259.97 hold at 3152.86 MD



Patton 5 Fee #6H
Eddy County, NM (NAN27 NME)
Northing: (Y) 613610.70
Easting: (X) 475920.20
Plan #2 8-3/4" Hole



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

Magnetic Field
Strength: 48633.7nT
Dip Angle: 60.39°
Date: 11/29/2012
Model: BGGM2012

To convert a Magnetic Direction to a Grid Direction, Add 7.98°
To convert a True Direction to a Grid Direction, Add 0.04°

WELL DETAILS:									
		Ground Level: 3364.00							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	613610.70	475920.20	32° 41' 12.806 N	104° 24' 41.762 W				
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2398.70	0.00	0.00	2398.70	0.00	0.00	0.00	0.00	0.00	
3152.86	90.50	89.90	2876.14	0.84	481.63	12.00	89.90	481.63	
7412.83	90.50	89.90	2838.97	8.30	4741.43	0.00	0.00	4741.44	PBHL
DESIGN TARGET DETAILS									
Name		TVD	+N/-S	+E/-W	Northing	Easting			
PP=330° FWL		2726.17	0.23	130.00	613610.93	476050.19			
PBHL		2838.97	8.30	4741.43	613619.00	480661.20			

SITE DETAILS: Patton 5 Fee
Site Centre Northing: 616822.20
Easting: 476026.50
Positional Uncertainty: 0.00
Convergence: -0.04
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 1866
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 1866
Zone Name: New Mexico East 3001

Local Origin: Well #6H, Grid North
Latitude: 32° 41' 12.806 N
Longitude: 104° 24' 41.762 W

Grid East: 475920.20
Grid North: 613610.70
Scale Factor: 1.000

Geomagnetic Model: BGGM2012
Sample Date: 29-Nov-12
Magnetic Declination: 7.93°
Dip Angle from Horizontal: 60.39°
Magnetic Field Strength: 48634

To convert a Magnetic Direction to a Grid Direction, Add 7.98°
To convert a Magnetic Direction to a True Direction, Add 7.93° East
To convert a True Direction to a Grid Direction, Add 0.04°

