

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.

30-015-39716

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Patton 5 Fee

8. Well Number 6H

9. OGRID Number

229137

10. Pool name or Wildcat

Atoka; Glorieta-Yeso 3250

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 L : 1670 feet from the SOUTH line and 240 feet from the WEST line.
Section 5 Township 19S Range 26E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3364'

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 SHL & 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: 1670 FSL 240 FWL, Unit L

BHL: 1700 FSL 330 FEL, Unit I

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

SHL: 1639 FSL 200 FWL, Unit L

BHL: 1645 FSL 330 FEL, Unit I

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DEC 18 2012

NMOCD ARTESIA

Revision is due to skewed section and avoiding a non-standard location.

A revised Directional Plan and C102 are 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

TITLE Permitting Tech

DATE 11/19/2012

Type or print name

Kelly J. Holly

E-mail address:

kholly@concho.com

PHONE: 432-685-4384

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

Requires NSL APPROVAL

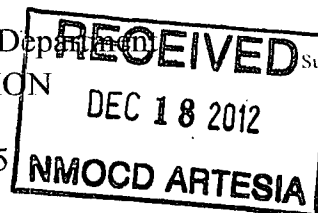
DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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Phone: (575) 748-1283 Fax: (575) 748-9720

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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 30-015-39716	Pool Code 3250	Pool Name Atoka; Glorieta-Yeso
Property Code	Property Name PATTON 5 FEE	Well Number 6H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3364

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	5	19-S	26-E		1639	SOUTH	200	WEST	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
I	5	19-S	26-E		1645	SOUTH	330	EAST	EDDY
Dedicated Acres 160	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

CORNER COORDINATES TABLE A - Y=614597.0 N, X=475708.9 E B - Y=614604.3 N, X=480986.4 E C - Y=613289.4 N, X=480992.7 E D - Y=613284.7 N, X=475724.0 E GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=613610.7 N X=475920.2 E LAT.=32.686890° N LONG.=104.411600° W BOTTOM HOLE LOCATION Y=613619.0 N X=480661.2 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 unEDDYsed 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. 12-3-12 Signature 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. OCTOBER 31, 2012 Date of Survey RONALD J. EIDSON Signature & Seal of Professional Surveyor Certificate Number 3239 Gary C. Eidson 12641 Ronald J. Eidson 3239 BKL NWSC W.O.: 12.11.1740
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DEC 18 2012

NMOCD ARTESIA

COG Operating LLC

Eddy County, NM (NAN27 NME)

Patton 5 Fee #6H

OH

Plan #3 8-3/4" Hole

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

PP: 1642' FSL, 330' FWL, Sec 5, T19S, R26E, Unit L

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

Standard Planning Report

14 December, 2012



Scientific Drilling



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 #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:	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:
	+E/-W	-106.31 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,364.00 usft

Wellbore:	OH		
Magnetics	Model Name	Sample Date	Declination
	BGGM2012	12/14/2012	(°)
			7.93
			Dip Angle
			(°)
			60.39
			Field Strength
			(nT)
			48,629

Design:	Plan #3 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	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	
2,354.50	0.00	0.00	2,354.50	0.00	0.00	0.00	0.00	0.00	0.00	
3,177.30	90.50	88.10	2,875.40	17.42	525.18	11.00	11.00	0.00	88.10	
3,245.32	90.50	90.14	2,874.81	18.47	593.17	3.00	-0.01	3.00	90.13	
7,393.74	90.50	90.14	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 5 Fee	North Reference:	Grid
Well:	#6H	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
2,354.50	0.00	0.00	2,354.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,400.00	5.00	88.10	2,399.94	0.07	1.98	1.98	11.00	11.00	0.00
2,500.00	16.00	88.10	2,498.12	0.67	20.18	20.18	11.00	11.00	0.00
2,600.00	27.00	88.10	2,591.01	1.88	56.76	56.76	11.00	11.00	0.00
2,700.00	38.00	88.10	2,675.22	3.66	110.38	110.38	11.00	11.00	0.00
2,730.50	41.36	88.10	2,698.69	4.31	129.83	129.84	11.00	11.00	0.00
PP=330' FWL									
2,800.00	49.00	88.10	2,747.65	5.94	179.07	179.08	11.00	11.00	0.00
2,900.00	60.00	88.10	2,805.63	8.64	260.31	260.33	11.00	11.00	0.00
3,000.00	71.00	88.10	2,847.03	11.65	351.12	351.14	11.00	11.00	0.00
3,100.00	82.00	88.10	2,870.35	14.87	448.15	448.18	11.00	11.00	0.00
3,177.30	90.50	88.10	2,875.40	17.42	525.18	525.21	11.00	11.00	0.00
EOC Start DLS 3.00 TFO 90.13									
3,200.00	90.50	88.78	2,875.20	18.04	547.86	547.89	3.00	-0.01	3.00
3,245.32	90.50	90.14	2,874.81	18.47	593.17	593.21	3.00	-0.01	3.00
Start 4148.42 hold at 3245.32 MD									
3,300.00	90.50	90.14	2,874.34	18.33	647.86	647.89	0.00	0.00	0.00
3,395.77	90.50	90.14	2,873.51	18.10	743.62	743.65	0.00	0.00	0.00
TL									
3,400.00	90.50	90.14	2,873.47	18.09	747.85	747.88	0.00	0.00	0.00
3,500.00	90.50	90.14	2,872.61	17.84	847.85	847.88	0.00	0.00	0.00
3,600.00	90.50	90.14	2,871.75	17.60	947.84	947.87	0.00	0.00	0.00
3,700.00	90.50	90.14	2,870.88	17.35	1,047.84	1,047.87	0.00	0.00	0.00
3,800.00	90.50	90.14	2,870.02	17.11	1,147.84	1,147.86	0.00	0.00	0.00
3,900.00	90.50	90.14	2,869.15	16.86	1,247.83	1,247.86	0.00	0.00	0.00
4,000.00	90.50	90.14	2,868.29	16.62	1,347.83	1,347.85	0.00	0.00	0.00
4,100.00	90.50	90.14	2,867.43	16.37	1,447.82	1,447.85	0.00	0.00	0.00
4,200.00	90.50	90.14	2,866.56	16.13	1,547.82	1,547.85	0.00	0.00	0.00
4,300.00	90.50	90.14	2,865.70	15.88	1,647.82	1,647.84	0.00	0.00	0.00
4,400.00	90.50	90.14	2,864.83	15.64	1,747.81	1,747.84	0.00	0.00	0.00
4,500.00	90.50	90.14	2,863.97	15.39	1,847.81	1,847.83	0.00	0.00	0.00
4,600.00	90.50	90.14	2,863.11	15.15	1,947.80	1,947.83	0.00	0.00	0.00
4,700.00	90.50	90.14	2,862.24	14.90	2,047.80	2,047.82	0.00	0.00	0.00
4,800.00	90.50	90.14	2,861.38	14.66	2,147.80	2,147.82	0.00	0.00	0.00
4,900.00	90.50	90.14	2,860.51	14.41	2,247.79	2,247.81	0.00	0.00	0.00
5,000.00	90.50	90.14	2,859.65	14.17	2,347.79	2,347.81	0.00	0.00	0.00
5,100.00	90.50	90.14	2,858.79	13.92	2,447.78	2,447.80	0.00	0.00	0.00
5,200.00	90.50	90.14	2,857.92	13.68	2,547.78	2,547.80	0.00	0.00	0.00
5,300.00	90.50	90.14	2,857.06	13.43	2,647.77	2,647.79	0.00	0.00	0.00
5,400.00	90.50	90.14	2,856.19	13.19	2,747.77	2,747.79	0.00	0.00	0.00
5,500.00	90.50	90.14	2,855.33	12.94	2,847.77	2,847.79	0.00	0.00	0.00
5,600.00	90.50	90.14	2,854.47	12.70	2,947.76	2,947.78	0.00	0.00	0.00
5,700.00	90.50	90.14	2,853.60	12.45	3,047.76	3,047.78	0.00	0.00	0.00
5,800.00	90.50	90.14	2,852.74	12.21	3,147.75	3,147.77	0.00	0.00	0.00
5,900.00	90.50	90.14	2,851.87	11.96	3,247.75	3,247.77	0.00	0.00	0.00
6,000.00	90.50	90.14	2,851.01	11.72	3,347.75	3,347.76	0.00	0.00	0.00
6,100.00	90.50	90.14	2,850.15	11.47	3,447.74	3,447.76	0.00	0.00	0.00
6,200.00	90.50	90.14	2,849.28	11.23	3,547.74	3,547.75	0.00	0.00	0.00
6,300.00	90.50	90.14	2,848.42	10.98	3,647.73	3,647.75	0.00	0.00	0.00
6,400.00	90.50	90.14	2,847.56	10.74	3,747.73	3,747.74	0.00	0.00	0.00
6,500.00	90.50	90.14	2,846.69	10.49	3,847.73	3,847.74	0.00	0.00	0.00
6,600.00	90.50	90.14	2,845.83	10.25	3,947.72	3,947.73	0.00	0.00	0.00

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 #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)	
6,700.00	90.50	90.14	2,844.96	10.00	4,047.72	4,047.73	0.00	0.00	0.00	
6,800.00	90.50	90.14	2,844.10	9.76	4,147.71	4,147.73	0.00	0.00	0.00	
6,900.00	90.50	90.14	2,843.24	9.51	4,247.71	4,247.72	0.00	0.00	0.00	
7,000.00	90.50	90.14	2,842.37	9.27	4,347.71	4,347.72	0.00	0.00	0.00	
7,100.00	90.50	90.14	2,841.51	9.02	4,447.70	4,447.71	0.00	0.00	0.00	
7,200.00	90.50	90.14	2,840.64	8.78	4,547.70	4,547.71	0.00	0.00	0.00	
7,300.00	90.50	90.14	2,839.78	8.53	4,647.69	4,647.70	0.00	0.00	0.00	
7,393.74	90.50	90.14	2,838.97	8.30	4,741.43	4,741.44	0.00	0.00	0.00	
PBHL										

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
PP=330' FWL		0.00	360.00	2,698.57	4.31	130.00	613,615.02	476,050.19	32° 41' 12.849 N	104° 24' 40.241 W
- plan misses target center by 0.21usft at 2730.53usft MD (2698.71 TVD, 4.31 N, 129.85 E)										
- Point										
PBHL		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
- plan hits target center										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,395.77	2,873.51	TL		-0.50	89.61	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
2,354.50	2,354.50	0.00	0.00	KOP Start Build 11.00	
3,177.30	2,875.40	17.42	525.18	EOC Start DLS 3.00 TFO 90.13	
3,245.32	2,874.81	18.47	593.17	Start 4148.42 hold at 3245.32 MD	



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



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

Magnetic Field
Strength: 48628.5nT
Dip Angle: 60.39°
Date: 12/14/2012
Model: BGM2012

To convert a Magnetic Direction to a Grid Direction, Add 7.97°
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	
2354.50	0.00	0.00	2354.50	0.00	0.00	0.00	0.00	0.00	
3177.30	90.50	88.10	2875.40	17.42	525.18	11.00	88.10	525.21	
3245.32	90.50	90.14	2874.81	18.47	593.17	3.00	90.13	593.21	
7393.74	90.50	90.14	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	2698.57	4.31	130.00	613615.01	476050.19
PBHL	2838.97	8.30	4741.43	613619.00	480651.20

SITE DETAILS: Patton 5 Fee
Site Centre Northing: 616822.20
Easting: 476026.50
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 #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

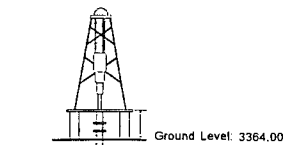
Geomagnetic Model: BGM2012
Sample Date: 14-Dec-12
Magnetic Declination: 7.93°
Dip Angle from Horizontal: 60.39°
Magnetic Field Strength: 48629

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 0.04°

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

Julio Pila
15/29, December 14 2012
Scientific Drilling
2034 Trade Drive
Midland, TX 79703



Ground Level: 3364.00

