

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. 30-015-39974
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Paint 32 Fee
8. Well Number 3H
9. OGRID Number 229137
10. Pool name or Wildcat Penasco Draw; SA-Yeso (Assoc) 50270

11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3393'
--

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 **M**: **1040** feet from the **SOUTH** line and **190** feet from the **WEST** line
Section **32** Township **18S** Range **26E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3393'

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 TVD** ☒

SUBSEQUENT REPORT OF:

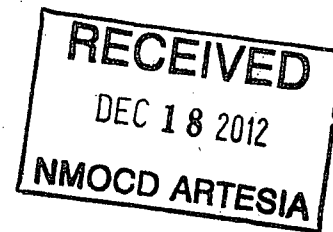
REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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 respectfully requests to change the TVD to 3066'.

A revised Directional Plan is attached for your review.



Spud Date:

Rig Release Date:

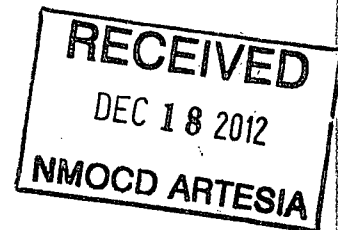
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE TITLE **Permitting Tech** DATE **12/17/2012**

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

For State Use Only

APPROVED BY: TITLE **Geophysist** DATE **12/18/2012**
Conditions of Approval (if any):



COG Operating LLC

Eddy County, NM (NAN27 NME)

Paint 32 Fee #3H

OH

Plan #6 8-3/4" Hole

Surface: 1040' FSL, 190' FWL, Sec 32, T18S, R26E, Unit M

PP: 990' FSL, 530' FWL, Sec 32, T18S, R26E, Unit M

BHL: 980' FSL, 340' FEL, Sec 32, T18S, R26E, Unit P

Standard Planning Report

13 December, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393.00usft
Site:	Paint 32 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #6 - 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:	Paint 32 Fee		
Site Position:		Northing:	619,410.60 usft
From:	Map	Easting:	475,871.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 42' 10.199 N
		Longitude:	104° 24' 42.385 W
		Grid Convergence:	-0.04 °

Well:	#3H		
Well Position	+N/-S	-1,169.71 usft	Northing:
	+E/-W	6.90 usft	Easting:
Position Uncertainty	0.00 usft		Wellhead Elevation:
			Ground Level:
			3,393.00 usft

Wellbore:	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2012	12/13/2012	7.93
			Dip Angle
			(°)
			60.40
			Field Strength
			(nT)
			48,636

Design:	Plan #6 - 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
			(°)
			90.37

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	
2,441.50	0.00	0.00	2,441.50	0.00	0.00	0.00	0.00	0.00	0.00	
3,246.93	88.60	95.00	2,962.20	-44.29	506.20	11.00	11.00	0.00	95.00	
3,423.45	88.60	89.70	2,966.52	-51.52	682.45	3.00	0.00	-3.00	-90.09	
7,496.60	88.60	89.70	3,066.20	-30.40	4,754.33	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 #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393.00usft
Site:	Paint 32 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #6 8-3/4" Hole		

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
2,441.50	0.00	0.00	2,441.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,500.00	6.44	95.00	2,499.88	-0.29	3.27	3.27	11.00	11.00	0.00
2,600.00	17.44	95.00	2,597.57	-2.09	23.84	23.85	11.00	11.00	0.00
2,700.00	28.44	95.00	2,689.52	-5.48	62.60	62.64	11.00	11.00	0.00
2,800.00	39.44	95.00	2,772.36	-10.34	118.13	118.19	11.00	11.00	0.00
2,900.00	50.44	95.00	2,843.04	-16.48	188.39	188.49	11.00	11.00	0.00
3,000.00	61.44	95.00	2,898.96	-23.69	270.79	270.93	11.00	11.00	0.00
3,076.60	69.86	95.00	2,930.52	-29.77	340.24	340.43	11.00	11.00	0.00
PP									
3,100.00	72.44	95.00	2,938.08	-31.70	362.30	362.50	11.00	11.00	0.00
3,200.00	83.44	95.00	2,958.94	-40.21	459.57	459.82	11.00	11.00	0.00
3,246.93	88.60	95.00	2,962.20	-44.29	506.20	506.47	11.00	11.00	0.00
EOC Start DLS 3.00 TFO -90.09									
3,300.00	88.60	93.41	2,963.50	-48.18	559.10	559.40	3.00	0.00	-3.00
3,400.00	88.60	90.41	2,965.95	-51.50	659.01	659.32	3.00	0.00	-3.00
3,423.45	88.60	89.70	2,966.52	-51.52	682.45	682.77	3.00	0.00	-3.00
Start 4073.15 hold at 3423.45 MD									
3,500.00	88.60	89.70	2,968.39	-51.13	758.98	759.29	0.00	0.00	0.00
3,600.00	88.60	89.70	2,970.84	-50.61	858.95	859.25	0.00	0.00	0.00
3,700.00	88.60	89.70	2,973.29	-50.09	958.91	959.22	0.00	0.00	0.00
3,800.00	88.60	89.70	2,975.73	-49.57	1,058.88	1,059.18	0.00	0.00	0.00
3,900.00	88.60	89.70	2,978.18	-49.05	1,158.85	1,159.14	0.00	0.00	0.00
4,000.00	88.60	89.70	2,980.63	-48.53	1,258.82	1,259.11	0.00	0.00	0.00
4,100.00	88.60	89.70	2,983.08	-48.02	1,358.79	1,359.07	0.00	0.00	0.00
4,200.00	88.60	89.70	2,985.52	-47.50	1,458.76	1,459.03	0.00	0.00	0.00
4,300.00	88.60	89.70	2,987.97	-46.98	1,558.73	1,559.00	0.00	0.00	0.00
4,400.00	88.60	89.70	2,990.42	-46.46	1,658.70	1,658.96	0.00	0.00	0.00
4,500.00	88.60	89.70	2,992.87	-45.94	1,758.66	1,758.92	0.00	0.00	0.00
4,600.00	88.60	89.70	2,995.31	-45.42	1,858.63	1,858.89	0.00	0.00	0.00
4,700.00	88.60	89.70	2,997.76	-44.90	1,958.60	1,958.85	0.00	0.00	0.00
4,800.00	88.60	89.70	3,000.21	-44.39	2,058.57	2,058.81	0.00	0.00	0.00
4,900.00	88.60	89.70	3,002.65	-43.87	2,158.54	2,158.78	0.00	0.00	0.00
5,000.00	88.60	89.70	3,005.10	-43.35	2,258.51	2,258.74	0.00	0.00	0.00
5,100.00	88.60	89.70	3,007.55	-42.83	2,358.48	2,358.70	0.00	0.00	0.00
5,200.00	88.60	89.70	3,010.00	-42.31	2,458.45	2,458.67	0.00	0.00	0.00
5,300.00	88.60	89.70	3,012.44	-41.79	2,558.41	2,558.63	0.00	0.00	0.00
5,400.00	88.60	89.70	3,014.89	-41.27	2,658.38	2,658.59	0.00	0.00	0.00
5,500.00	88.60	89.70	3,017.34	-40.76	2,758.35	2,758.56	0.00	0.00	0.00
5,600.00	88.60	89.70	3,019.79	-40.24	2,858.32	2,858.52	0.00	0.00	0.00
5,700.00	88.60	89.70	3,022.23	-39.72	2,958.29	2,958.48	0.00	0.00	0.00
5,800.00	88.60	89.70	3,024.68	-39.20	3,058.26	3,058.45	0.00	0.00	0.00
5,900.00	88.60	89.70	3,027.13	-38.68	3,158.23	3,158.41	0.00	0.00	0.00
6,000.00	88.60	89.70	3,029.57	-38.16	3,258.19	3,258.37	0.00	0.00	0.00
6,100.00	88.60	89.70	3,032.02	-37.64	3,358.16	3,358.34	0.00	0.00	0.00
6,200.00	88.60	89.70	3,034.47	-37.13	3,458.13	3,458.30	0.00	0.00	0.00
6,300.00	88.60	89.70	3,036.92	-36.61	3,558.10	3,558.26	0.00	0.00	0.00
6,400.00	88.60	89.70	3,039.36	-36.09	3,658.07	3,658.23	0.00	0.00	0.00
6,500.00	88.60	89.70	3,041.81	-35.57	3,758.04	3,758.19	0.00	0.00	0.00
6,600.00	88.60	89.70	3,044.26	-35.05	3,858.01	3,858.15	0.00	0.00	0.00
6,700.00	88.60	89.70	3,046.71	-34.53	3,957.98	3,958.12	0.00	0.00	0.00
6,800.00	88.60	89.70	3,049.15	-34.01	4,057.94	4,058.08	0.00	0.00	0.00
6,900.00	88.60	89.70	3,051.60	-33.50	4,157.91	4,158.04	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393.00usft
Site:	Paint 32 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #6 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)
7,000.00	88.60	89.70	3,054.05	-32.98	4,257.88	4,258.01	0.00	0.00	0.00
7,100.00	88.60	89.70	3,056.49	-32.46	4,357.85	4,357.97	0.00	0.00	0.00
7,200.00	88.60	89.70	3,058.94	-31.94	4,457.82	4,457.93	0.00	0.00	0.00
7,300.00	88.60	89.70	3,061.39	-31.42	4,557.79	4,557.90	0.00	0.00	0.00
7,400.00	88.60	89.70	3,063.84	-30.90	4,657.76	4,657.86	0.00	0.00	0.00
7,496.60	88.60	89.70	3,066.20	-30.40	4,754.33	4,754.43	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	- plan misses target center by 4.56usft at 3076.91usft MD (2930.62 TVD, -29.79 N, 340.53 E)	0.00	0.00	2,926.30	-29.92	342.00	618,211.09	476,220.07	32° 41' 58.332 N 104° 24' 38.292 W
PBHL	- plan hits target center	0.00	0.00	3,066.20	-30.40	4,754.33	618,210.60	480,632.00	32° 41' 58.356 N 104° 23' 46.660 W
	- Point								

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,393.85	3,063.69	TL		1.40	90.37

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
2,441.50	2,441.50	0.00	0.00	KOP Start Build 11.00
3,246.93	2,962.20	-44.29	506.20	EOC Start DLS 3.00 TFO -90.09
3,423.45	2,966.52	-51.52	682.45	Start 4073.15 hold at 3423.45 MD



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

Magnetic Field
Strength: 48635.3nT
Dip Angle: 60.40°
Date: 12/13/2012
Model: BGGM2012

To convert a Magnetic Direction to a Grid Direction, Add 7.97°
To convert a True Direction to a Grid Direction, Add 0.04°

Paint 32 Fee #3H
Eddy County, NM (NAN27 NME)
Northing: (Y) 618241.00
Easting: (X) 475878.10
Plan #6 8-3/4" Hole

WELL DETAILS:					
Ground Level: 3393.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	618241.00	475878.10	32° 41' 58.625 N	104° 24' 42.294 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	
244.150	0.00	0.00	244.150	0.00	0.00	0.00	0.00	0.00	
3248.93	88.60	95.00	2962.20	-44.29	506.20	11.00	95.00	506.47	
3423.45	88.60	89.70	2966.52	-51.52	682.45	3.00	-90.00	682.77	
7486.60	88.60	89.70	3066.20	-30.40	4754.33	0.00	0.00	4754.43	PBHL

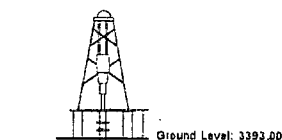
DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PP	2926.30	-28.92	342.00	618211.08	476220.07
PBHL	3066.20	-30.40	4754.33	618210.60	480632.00

SITE DETAILS: Paint 32 Fee
Site Centre Northing: 619410.60
Easting: 475871.20
Positional Uncertainty: 0.00
Convergence: -0.04
Local North: Grid

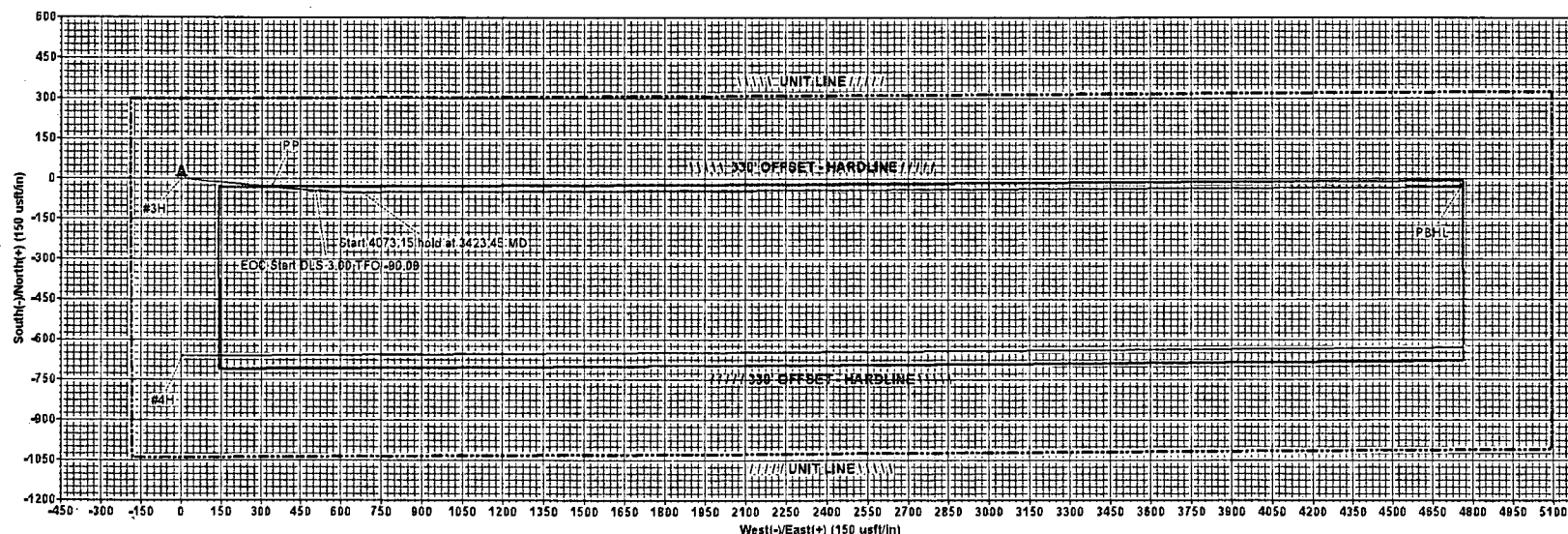
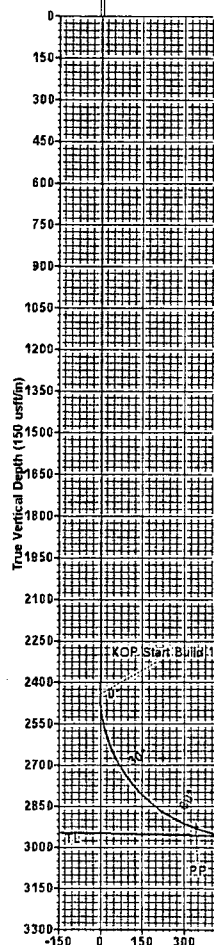
PROJECT DETAILS: Eddy County, NM (NAN27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

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 #3H, Grid North
Latitude: 32° 41' 58.625 N
Longitude: 104° 24' 42.294 W
Grid East: 475878.10
Grid North: 618241.00
Scale Factor: 1.000

Geomagnetic Model: BGGM2012
Sample Date: 13-Dec-12
Magnetic Declination: 7.93°
Dip Angle from Horizontal: 60.40°
Magnetic Field Strength: 48636
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°



Ground Level: 3393.00



Vertical Section at 90.37° (150 usf/in)