

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. 30-015-39720
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Sherman 4 Fee
8. Well Number 4H
9. OGRID Number 229137
10. Pool name or Wildcat Atoka; Glorieta-Yeso 3250

4. Well Location Unit Letter P : 150 feet from the SOUTH line and 1040 feet from the EAST line Section 4 Township 19S Range 26E NMPM County EDDY	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3340'	

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** : **150** feet from the **SOUTH** line and **1040** feet from the **EAST** line
Section **4** Township **19S** Range **26E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3340'

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER: **Change Casing Program & TVD** ☒

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 a 11" hole to 1200' w/fresh water, run 8 5/8" 32# J-56 and cement to surface. Drill a 7 7/8" hole to 2654' MD and kick off and drill curve to 3647' MD. Drill a 7-7/8" lateral to new BHL @ 3131' TVD 7709' 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:

RECEIVED

DEC 04 2012

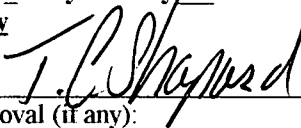
NMOCD ARTESIA

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

SIGNATURE  TITLE Permitting Tech DATE 11/29/2012

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 12/4/2012

Conditions of Approval (if any):



COG Operating LLC

Eddy County, NM (NAN27 NME)

Sherman 4 Fee #4H

OH

Plan #3 8-3/4" Hole

Surface: 150' FSL, 1040' FEL, Sec 4, T19S, R26E, Unit P

PP: 609' FSL, 984' FEL, Sec 4, T19S, R26E, Unit P

BHL: 330' FNL, 988' FEL, Sec 4, T19S, R26E, Unit A (Lot #1)

Standard Planning Report

26 November, 2012





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	
2,653.50	0.00	0.00	2,653.50	0.00	0.00	0.00	0.00	0.00	0.00	
3,403.50	90.00	7.00	3,130.96	473.91	58.19	12.00	12.00	0.00	7.00	
3,647.27	90.40	359.70	3,130.11	717.09	72.42	3.00	0.16	-3.00	-86.84	
7,708.67	90.40	359.70	3,101.60	4,778.33	51.00	0.00	0.00	0.00	0.00	PBHL-Sherman 4 Feet



Scientific Drilling

Planning Report



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

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #4H
GL Elev @ 3340.00usft
GL Elev @ 3340.00usft
Grid
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
2,653.50	0.00	0.00	2,653.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 12.00									
2,700.00	5.58	7.00	2,699.93	2.25	0.28	2.25	12.00	12.00	0.00
2,800.00	17.58	7.00	2,797.71	22.13	2.72	22.16	12.00	12.00	0.00
2,900.00	29.58	7.00	2,889.20	61.77	7.58	61.84	12.00	12.00	0.00
3,000.00	41.58	7.00	2,970.38	119.41	14.66	119.56	12.00	12.00	0.00
3,100.00	53.58	7.00	3,037.71	192.55	23.64	192.79	12.00	12.00	0.00
3,200.00	65.58	7.00	3,088.25	277.98	34.13	278.33	12.00	12.00	0.00
3,300.00	77.58	7.00	3,119.79	371.98	45.67	372.45	12.00	12.00	0.00
3,388.51	88.20	7.00	3,130.73	459.03	56.36	459.60	12.00	12.00	0.00
PP									
3,400.00	89.58	7.00	3,130.95	470.43	57.76	471.02	12.00	12.00	0.00
3,403.50	90.00	7.00	3,130.96	473.91	58.19	474.50	12.00	12.00	0.00
EOC Start DLS 3.00 TFO -86.84									
3,500.00	90.16	4.11	3,130.83	569.94	67.53	570.63	3.00	0.17	-3.00
3,600.00	90.32	1.11	3,130.41	669.83	72.08	670.56	3.00	0.16	-3.00
3,647.27	90.40	359.70	3,130.11	717.09	72.42	717.83	3.00	0.16	-3.00
Start 4061.40 hold at 3647.27 MD									
3,700.00	90.40	359.70	3,129.74	769.82	72.14	770.55	0.00	0.00	0.00
3,800.00	90.40	359.70	3,129.04	869.82	71.61	870.53	0.00	0.00	0.00
3,900.00	90.40	359.70	3,128.33	969.81	71.09	970.52	0.00	0.00	0.00
4,000.00	90.40	359.70	3,127.63	1,069.81	70.56	1,070.50	0.00	0.00	0.00
4,100.00	90.40	359.70	3,126.93	1,169.81	70.03	1,170.49	0.00	0.00	0.00
4,200.00	90.40	359.70	3,126.23	1,269.80	69.50	1,270.47	0.00	0.00	0.00
4,300.00	90.40	359.70	3,125.53	1,369.80	68.98	1,370.46	0.00	0.00	0.00
4,400.00	90.40	359.70	3,124.82	1,469.79	68.45	1,470.44	0.00	0.00	0.00
4,500.00	90.40	359.70	3,124.12	1,569.79	67.92	1,570.43	0.00	0.00	0.00
4,600.00	90.40	359.70	3,123.42	1,669.79	67.40	1,670.41	0.00	0.00	0.00
4,700.00	90.40	359.70	3,122.72	1,769.78	66.87	1,770.40	0.00	0.00	0.00
4,800.00	90.40	359.70	3,122.02	1,869.78	66.34	1,870.38	0.00	0.00	0.00
4,900.00	90.40	359.70	3,121.31	1,969.77	65.81	1,970.36	0.00	0.00	0.00
5,000.00	90.40	359.70	3,120.61	2,069.77	65.29	2,070.35	0.00	0.00	0.00
5,100.00	90.40	359.70	3,119.91	2,169.77	64.76	2,170.33	0.00	0.00	0.00
5,200.00	90.40	359.70	3,119.21	2,269.76	64.23	2,270.32	0.00	0.00	0.00
5,300.00	90.40	359.70	3,118.51	2,369.76	63.70	2,370.30	0.00	0.00	0.00
5,400.00	90.40	359.70	3,117.81	2,469.76	63.18	2,470.29	0.00	0.00	0.00
5,500.00	90.40	359.70	3,117.10	2,569.75	62.65	2,570.27	0.00	0.00	0.00
5,600.00	90.40	359.70	3,116.40	2,669.75	62.12	2,670.26	0.00	0.00	0.00
5,700.00	90.40	359.70	3,115.70	2,769.74	61.60	2,770.24	0.00	0.00	0.00
5,800.00	90.40	359.70	3,115.00	2,869.74	61.07	2,870.23	0.00	0.00	0.00
5,900.00	90.40	359.70	3,114.30	2,969.74	60.54	2,970.21	0.00	0.00	0.00
6,000.00	90.40	359.70	3,113.59	3,069.73	60.01	3,070.20	0.00	0.00	0.00
6,100.00	90.40	359.70	3,112.89	3,169.73	59.49	3,170.18	0.00	0.00	0.00
6,200.00	90.40	359.70	3,112.19	3,269.72	58.96	3,270.17	0.00	0.00	0.00
6,300.00	90.40	359.70	3,111.49	3,369.72	58.43	3,370.15	0.00	0.00	0.00
6,400.00	90.40	359.70	3,110.79	3,469.72	57.90	3,470.14	0.00	0.00	0.00
6,500.00	90.40	359.70	3,110.08	3,569.71	57.38	3,570.12	0.00	0.00	0.00
6,600.00	90.40	359.70	3,109.38	3,669.71	56.85	3,670.11	0.00	0.00	0.00
6,700.00	90.40	359.70	3,108.68	3,769.71	56.32	3,770.09	0.00	0.00	0.00
6,800.00	90.40	359.70	3,107.98	3,869.70	55.80	3,870.08	0.00	0.00	0.00
6,900.00	90.40	359.70	3,107.28	3,969.70	55.27	3,970.06	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: Sherman 4 Fee
Well: #4H
Wellbore: OH
Design: Plan #3 8-3/4" Hole

Local Co-ordinate Reference: Well #4H
TVD Reference: GL Elev @ 3340.00usft
MD Reference: GL Elev @ 3340.00usft
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)
7,000.00	90.40	359.70	3,106.57	4,069.69	54.74	4,070.05	0.00	0.00	0.00
7,100.00	90.40	359.70	3,105.87	4,169.69	54.21	4,170.03	0.00	0.00	0.00
7,200.00	90.40	359.70	3,105.17	4,269.69	53.69	4,270.02	0.00	0.00	0.00
7,300.00	90.40	359.70	3,104.47	4,369.68	53.16	4,370.00	0.00	0.00	0.00
7,400.00	90.40	359.70	3,103.77	4,469.68	52.63	4,469.99	0.00	0.00	0.00
7,500.00	90.40	359.70	3,103.06	4,569.67	52.10	4,569.97	0.00	0.00	0.00
7,600.00	90.40	359.70	3,102.36	4,669.67	51.58	4,669.96	0.00	0.00	0.00
7,700.00	90.40	359.70	3,101.66	4,769.67	51.05	4,769.94	0.00	0.00	0.00
7,708.67	90.40	359.70	3,101.60	4,778.33	51.00	4,778.61	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									
PBHL	0.00	0.00	3,101.60	4,778.33	51.00	616,929.70	485,263.40	32° 41' 45.704 N	104° 22' 52.453 W
- plan hits target center									
- Point									
PP	0.00	360.00	3,130.73	459.00	56.36	612,610.76	485,268.75	32° 41' 2.966 N	104° 22' 52.368 W
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,556.99	3,130.62	TL		-0.40	359

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,653.50	2,653.50	0.00	0.00	KOP Start Build 12.00
3,403.50	3,130.96	473.91	58.19	EOC Start DLS 3.00 TFO -86.84
3,647.27	3,130.11	717.09	72.42	Start 4061.40 hold at 3647.27 MD



Azimuths to Grid North
True North: 0.03°
Magnetic North: 7.95°
Magnetic Field
Strength: 48636.3 nT
Dip Angle: 60.40°
Date: 4/12/2012
Model: BGGM2012

Sherman 4 Fee #4H
Eddy County, NM (NAN27 NME)
Northing: (Y) 612151.80
Easting: (X) 485212.40
Plan #3 8-3/4" Hole

WELL DETAILS:									
		Ground Level:		3340.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	612151.80	485212.40	32° 40' 58.424 N	104° 22' 53.025 W				

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2653.50	0.00	0.00	2653.50	0.00	0.00	0.00	0.00	0.00	0.00
3403.50	90.00	7.00	3130.98	473.91	58.19	12.00	7.00	474.50	
3647.27	90.40	359.70	3130.11	717.09	72.42	3.00	-86.84	717.83	
7708.67	90.40	359.70	3101.60	4778.33	51.00	0.00	0.00	4778.61	PBHL

DESIGN TARGET DETAILS						
Name	TVD		+N/-S	+E/-W	Northing	Easting
PBHL	3101.60		4778.33	51.00	618929.70	485263.40
PP	3130.73		459.00	56.36	612810.76	485268.75

SITE DETAILS: Sherman 4 Fee		Map System: US State Plane 1927 (Exact solution)	
Site Centre Northing: 612143.80		Datum: NAD 1927 (NADCON CONUS)	
Easting: 483982.80		Ellipsoid: Clarke 1866	
Zone Name: New Mexico East 3001		Local Origin: Well #4H, Grid North	
Positional Uncertainty: 0.00		Latitude: 32° 40' 58.424 N	
Convergence: -0.03		Longitude: 104° 22' 53.025 W	
Local North: Grid		Grid East: 485212.40	
		Grid North: 612151.80	
		Scale Factor: 1.000	

PROJECT DETAILS: Eddy County, NM (NAN27 NME)		Geomagnetic Model: BGGM2012	
Geodetic System: US State Plane 1927 (Exact solution)		Sample Date: 26-Nov-12	
Datum: NAD 1927 (NADCON CONUS)		Magnetic Declination: 7.92°	
Ellipsoid: Clarke 1866		Dip Angle from Horizontal: 60.40°	
Zone: New Mexico East 3001		Magnetic Field Strength: 48636	
System Datum: Mean Sea Level			

To convert a Magnetic Direction to a Grid Direction, Add 7.95°

To convert a Magnetic Direction to a True Direction, Add 7.92° East

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

