

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

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	

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:		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 BHL ☒		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: 150 FSL 1040 FEL, Unit P
BHL: 330 FNL 1040 FEL, Unit A, Lot 1

COG Operating LLC respectfully requests permission to change the BHL to:
SHL: 150 FSL 1040 FEL, Unit P
BHL: 330 FNL 988 FEL, Unit A, Lot 1

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

A revised Directional Plan and C102 is attached for your review.

Spud Date:

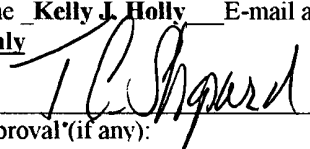
Rig Release Date:

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

SIGNATURE  TITLE **Permitting Tech** DATE **11-7-12**

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 **11/15/2012**

Conditions of Approval (if any):

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
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 30-015-39720	Pool Code 3250	Pool Name Atoka; Glorieta Yeso
Property Code	Property Name SHERMAN 4 FEE	Well Number 4H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3340'

Surface Location

UL or lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
P	4	19-S	26-E		150	SOUTH	1040	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
1	4	19-S	26-E		330	NORTH	988	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
159.03			

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

LOT 4 39.07 AC.	LOT 3 39.06 AC.	LOT 2 39.04 AC.	LOT 1 39.03 AC.
CORNER COORDINATES TABLE A - Y=617257.6 N, X=484933.1 E B - Y=617265.8 N, X=486252.9 E C - Y=612000.1 N, X=484939.5 E D - Y=612008.6 N, X=486253.0 E		GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=612151.8 N X=485212.4 E LAT.=32.682896° N LONG.=104.381396° W BOTTOM HOLE LOCATION Y=616929.7 N X=485263.4 E	
		Estimated Completed Interval: 699 FSL+ 984 FEL	
CR. AZ.=00°36'36" HORIZ. DIST.=4779.5 Producing Area Project Area			

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 unleased 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.

 11-15-12
Signature Date

Kelly J. Holly
Printed Name

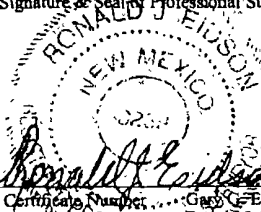
kholly@concho.com
E-mail Address

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

NOVEMBER 2, 2011

Date of Survey

Signature & Seal of Professional Surveyor:

Ronald J. Eidson 10/25/2012

Certificate Number: 12641
Ronald J. Eidson 3239

AF REL W.O. 1213708 JWSC W.O. 12131767



COG Operating LLC

Eddy County, NM (NAN27 NME)

Sherman 4 Fee #4H

OH

Plan #2 8-3/4" Hole

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

PP: 699' FSL, 984' FEL, Sec 4, T19S, R26E, Unit P

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

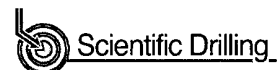
Standard Planning Report

02 November, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3340 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3340 00usft
Site:	Sherman 4 Fee	North Reference:	Grid
Well:	#4H	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:	Sherman 4 Fee		
Site Position:		Northing:	612,143.90 usft
From:	Map	Easting:	483,992.80 usft
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 40' 58.340 N
		Longitude:	104° 23' 7.295 W
		Grid Convergence:	-0 03 °

Well	#4H					
Well Position	+N/-S	7.90 usft	Northing:	612,151.80 usft	Latitude:	32° 40' 58.424 N
	+E/-W	1,219.71 usft	Easting:	485,212.40 usft	Longitude:	104° 22' 53.025 W
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level:	3,340.00 usft	

Wellbore: OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	11/1/2012	7 93	60 40	48,645

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	Direction
	(usft)	(usft)	(usft)	(°)
	0 00	0 00	0 00	0 61

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	
2,272.54	0 00	0 00	2,272.54	0.00	0 00	0 00	0 00	0 00	0 00	
3,022.54	90 00	6 00	2,750.00	474.85	49.91	12 00	12 00	0 00	6 00	
3,226.90	90 00	359.87	2,750.00	678.85	60.37	3 00	0 00	-3 00	-90 00	
7,326.40	90 00	359.87	2,750.00	4,778.33	51 00	0 00	0 00	0 00	0 00 PBHL	



Scientific Drilling
Planning Report

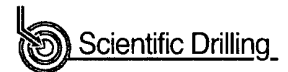


Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3340.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3340.00usft
Site:	Sherman 4 Fee	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
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	
2,272.54	0.00	0.00	2,272.54	0.00	0.00	0.00	0.00	0.00	0.00	
KOP Start Build 12.00°/100'										
2,300.00	3.30	6.00	2,299.98	0.79	0.08	0.79	12.00	12.00	0.00	
2,400.00	15.30	6.00	2,398.49	16.82	1.77	16.84	12.00	12.00	0.00	
2,500.00	27.30	6.00	2,491.49	52.87	5.56	52.93	12.00	12.00	0.00	
2,600.00	39.30	6.00	2,574.93	107.37	11.28	107.48	12.00	12.00	0.00	
2,700.00	51.30	6.00	2,645.14	177.92	18.70	178.11	12.00	12.00	0.00	
2,800.00	63.30	6.00	2,699.08	261.45	27.48	261.73	12.00	12.00	0.00	
2,900.00	75.30	6.00	2,734.37	354.31	37.24	354.69	12.00	12.00	0.00	
3,000.00	87.30	6.00	2,749.47	452.44	47.55	452.92	12.00	12.00	0.00	
3,022.54	90.00	6.00	2,750.00	474.85	49.91	475.35	12.00	12.00	0.00	
Land EOC hold 90.00°										
3,096.97	90.00	3.77	2,750.00	549.00	56.24	549.57	3.00	0.00	-3.00	
PP=330° FSL										
3,100.00	90.00	3.68	2,750.00	552.03	56.44	552.60	3.00	0.00	-3.00	
3,200.00	90.00	0.68	2,750.00	651.94	60.24	652.55	3.00	0.00	-3.00	
3,226.90	90.00	359.87	2,750.00	678.85	60.37	679.45	3.00	0.00	-3.00	
3,300.00	90.00	359.87	2,750.00	751.94	60.20	752.54	0.00	0.00	0.00	
3,400.00	90.00	359.87	2,750.00	851.94	59.97	852.54	0.00	0.00	0.00	
3,500.00	90.00	359.87	2,750.00	951.94	59.74	952.53	0.00	0.00	0.00	
3,600.00	90.00	359.87	2,750.00	1,051.94	59.51	1,052.52	0.00	0.00	0.00	
3,700.00	90.00	359.87	2,750.00	1,151.94	59.29	1,152.51	0.00	0.00	0.00	
3,800.00	90.00	359.87	2,750.00	1,251.94	59.06	1,252.50	0.00	0.00	0.00	
3,900.00	90.00	359.87	2,750.00	1,351.94	58.83	1,352.49	0.00	0.00	0.00	
4,000.00	90.00	359.87	2,750.00	1,451.94	58.60	1,452.48	0.00	0.00	0.00	
4,100.00	90.00	359.87	2,750.00	1,551.94	58.37	1,552.48	0.00	0.00	0.00	
4,200.00	90.00	359.87	2,750.00	1,651.94	58.14	1,652.47	0.00	0.00	0.00	
4,300.00	90.00	359.87	2,750.00	1,751.94	57.92	1,752.46	0.00	0.00	0.00	
4,400.00	90.00	359.87	2,750.00	1,851.94	57.69	1,852.45	0.00	0.00	0.00	
4,500.00	90.00	359.87	2,750.00	1,951.94	57.46	1,952.44	0.00	0.00	0.00	
4,600.00	90.00	359.87	2,750.00	2,051.94	57.23	2,052.43	0.00	0.00	0.00	
4,700.00	90.00	359.87	2,750.00	2,151.94	57.00	2,152.43	0.00	0.00	0.00	
4,800.00	90.00	359.87	2,750.00	2,251.94	56.77	2,252.42	0.00	0.00	0.00	
4,900.00	90.00	359.87	2,750.00	2,351.94	56.55	2,352.41	0.00	0.00	0.00	
5,000.00	90.00	359.87	2,750.00	2,451.94	56.32	2,452.40	0.00	0.00	0.00	
5,100.00	90.00	359.87	2,750.00	2,551.94	56.09	2,552.39	0.00	0.00	0.00	
5,200.00	90.00	359.87	2,750.00	2,651.94	55.86	2,652.38	0.00	0.00	0.00	
5,300.00	90.00	359.87	2,750.00	2,751.94	55.63	2,752.38	0.00	0.00	0.00	
5,400.00	90.00	359.87	2,750.00	2,851.94	55.40	2,852.37	0.00	0.00	0.00	
5,500.00	90.00	359.87	2,750.00	2,951.94	55.18	2,952.36	0.00	0.00	0.00	
5,600.00	90.00	359.87	2,750.00	3,051.94	54.95	3,052.35	0.00	0.00	0.00	
5,700.00	90.00	359.87	2,750.00	3,151.94	54.72	3,152.34	0.00	0.00	0.00	
5,800.00	90.00	359.87	2,750.00	3,251.94	54.49	3,252.33	0.00	0.00	0.00	
5,900.00	90.00	359.87	2,750.00	3,351.94	54.26	3,352.33	0.00	0.00	0.00	
6,000.00	90.00	359.87	2,750.00	3,451.94	54.03	3,452.32	0.00	0.00	0.00	
6,100.00	90.00	359.87	2,750.00	3,551.94	53.81	3,552.31	0.00	0.00	0.00	
6,200.00	90.00	359.87	2,750.00	3,651.94	53.58	3,652.30	0.00	0.00	0.00	
6,300.00	90.00	359.87	2,750.00	3,751.94	53.35	3,752.29	0.00	0.00	0.00	
6,400.00	90.00	359.87	2,750.00	3,851.94	53.12	3,852.28	0.00	0.00	0.00	
6,500.00	90.00	359.87	2,750.00	3,951.94	52.89	3,952.27	0.00	0.00	0.00	
6,600.00	90.00	359.87	2,750.00	4,051.94	52.66	4,052.27	0.00	0.00	0.00	
6,700.00	90.00	359.87	2,750.00	4,151.93	52.44	4,152.26	0.00	0.00	0.00	



Scientific Drilling
Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3340 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3340 00usft
Site:	Sherman 4 Fee	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 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)
6,800 00	90 00	359.87	2,750 00	4,251 93	52 21	4,252 25	0 00	0 00	0 00
6,900 00	90 00	359 87	2,750 00	4,351 93	51 98	4,352 24	0 00	0 00	0 00
7,000 00	90 00	359.87	2,750 00	4,451 93	51 75	4,452 23	0 00	0 00	0 00
7,100 00	90 00	359 87	2,750 00	4,551 93	51 52	4,552 22	0 00	0 00	0 00
7,200 00	90 00	359 87	2,750 00	4,651 93	51 29	4,652 22	0 00	0 00	0 00
7,300 00	90 00	359.87	2,750 00	4,751 93	51 06	4,752.21	0 00	0.00	0 00
7,326 40	90 00	359.87	2,750 00	4,778 33	51 00	4,778 61	0 00	0 00	0 00
PBHL									

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' FSL	- plan hits target center	0 00	360 00	2,750 00	549 00	56 24	612,700 75	485,268 64	32° 41' 3 856 N	104° 22' 52 369 W
	- Point									
PBHL	- plan hits target center	0 00	0 00	2,750 00	4,778.33	51 00	616,929 70	485,263 40	32° 41' 45.704 N	104° 22' 52 453 W
	- Point									

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
2,272 54	2,272 54	0 00	KOP Start Build 12 00°/100'
3,022 54	2,750 00	474 85	Land EOC hold 90 00°



Sherman 4 Fee #4H
Eddy County, NM (NAN27 NME)
Northing: (Y) 612151.80
Easting: (X) 485212.40
Plan #2 8-3/4" Hole



Azimuths to Gnd North
True North 0.03°
Magnetic North 7.95°

Magnetic Field
Strength 48644.9 nT
Dip Angle 60.40°
Date 11/1/2012
Model BGGM2012

To convert a Magnetic Direction to a Gnd Direction, Add 7.95°
To convert a True Direction to a Gnd Direction, Add 0.03°

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	VSecl	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2272.54	0.00	0.00	2272.54	0.00	0.00	0.00	0.00	0.00	
3022.54	90.00	6.00	2750.00	474.85	49.91	12.00	6.00	475.35	
3226.90	90.00	359.87	2750.00	678.85	60.37	3.00	-90.00	679.45	
7326.40	90.00	359.87	2750.00	4778.33	51.00	0.00	0.00	4778.61	PBHL

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL	2750.00	4778.33	51.00	616929.70	485263.40
PP=330' FSL	2750.00	549.00	56.24	612700.75	485268.64

SITE DETAILS, Sherman 4 Fee
Site Centre Northing 612143.90
Easting 483992.80

Positional Uncertainty 0.00
Convergence -0.03
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 #4H, Gnd North
Latitude 32° 40' 58.424 N
Longitude 104° 22' 53.025 W

Gnd East 485212.40
Gnd North 612151.80
Scale Factor 1.000

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

Geomagnetic Model BGGM2012
Sample Date 01-Nov-12
Magnetic Declination 7.93°
Dip Angle from Horizontal 60.40°
Magnetic Field Strength 48645

To convert a Magnetic Direction to a Gnd Direction, Add 7.95°
To convert a Magnetic Direction to a True Direction, Add 7.93° East
To convert a True Direction to a Gnd Direction, Add 0.03°

July 19th
14 24, November 01 2012
Scientific Drilling
2034 Trade Drive
Medford, TX 79703

