

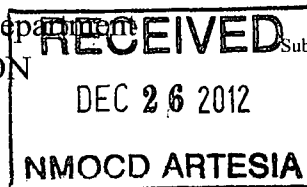
DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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 30-015-40925	Pool Code 3250	Pool Name Atoka; Glorieta Yeso
Property Code 38976	Property Name STONEWALL 9 FEE	Well Number 1H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3360'

Surface Location

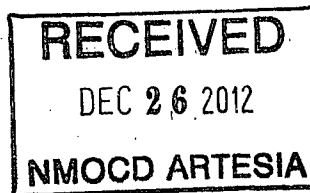
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	19-S	26-E		300	SOUTH	330	WEST	EDDY

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
D	9	19-S	26-E		330	NORTH	330	WEST	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

GRID. AZ. = 358°47'50" HORIZ. DIST. = 4715.1' Producing Area Project Area Estimated Completed Interval: 330 FSL + 330 FWL	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=606933.9 N X=481434.9 E LAT.=32.668547° N LONG.=104.393664° W BOTTOM HOLE LOCATION Y=611646.7 N X=481336.0 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 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. Signature: Date: 12-21-12 Printed Name: Kelly J. Holly E-mail Address: kholly@concho.com
	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 14, 2012 Date of Survey Signature & Seal of Professional Surveyor: Certificate Number: Gary C. Eidson 12641 Ronald J. Eidson 3239 AF WSC W.O.: 12.11.1559	
	CORNER COORDINATES TABLE A - Y=611974.5 N, X=480999.1 E B - Y=611983.0 N, X=482312.6 E C - Y=606633.7 N, X=481111.2 E D - Y=606635.0 N, X=482433.5 E	



COG Operating LLC

**Eddy County, NM (NAN27 NME)
Stonewall 9 Fee #1H**

OH

Plan #1 8-3/4" Hole

Surface: 300' FSL, 330' FWL, Sec 9, T19S, R26E, Unit M

PP: 330' FSL, 330' FWL, Sec 9, T19S, R26E, Unit M

BHL: 330' FNL, 330' FWL, Sec 9, T19S, R26E, Unit D

Standard Planning Report

20 December, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db.	Local Co-ordinate Reference:	Well #1H
Company:	COG Operating LLC	TVD Reference:	GL @ 3360.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3360.00usft
Site:	Stonewall 9 Fee	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 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

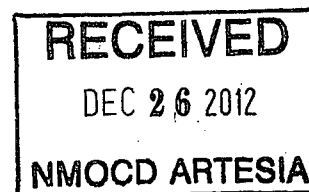
Site:	Stonewall 9 Fee		
Site Position:		Northing:	611,835.50 usft
From:	Map	Easting:	482,702.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 40' 55.282 N
		Longitude:	104° 23' 22.396 W
		Grid Convergence:	-0.03 °

Well:	#1H		
Well Position	+N/-S	-4,902.04 usft	Northing:
	+E/-W	-1,267.21 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,360.00 usft

Wellbore:	OH		
Magnetics	Model Name	Sample Date	Declination
	BGGM2012	12/20/2012	7.92
			Dip Angle
			60.38
			Field Strength
			48,618

Design:	Plan #1 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
			358.80

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	
2,587.85	0.00	0.00	2,587.85	0.00	0.00	0.00	0.00	0.00	0.00	
3,396.94	89.00	358.80	3,108.65	511.67	-10.74	11.00	11.00	0.00	358.80	
7,600.07	89.00	358.80	3,182.00	4,713.23	-98.91	0.00	0.00	0.00	0.00	PBHL





Scientific Drilling
Planning Report

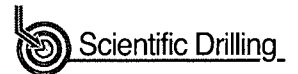


Database:	EDM:5000.1-Single User Db	Local Co-ordinate Reference:	Well #1H7
Company:	COG Operating LLC	TVD Reference:	GL @ 3360.00usft
Project:	Eddy County, NM (NAN27.NME)	MD Reference:	GL @ 3360.00usft
Site:	Stonewall 9 Fee	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1, 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
2,587.85	0.00	0.00	2,587.85	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,600.00	1.34	358.80	2,600.00	0.14	0.00	0.14	11.00	11.00	0.00
2,700.00	12.34	358.80	2,699.14	12.02	-0.25	12.03	11.00	11.00	0.00
2,765.54	19.55	358.80	2,762.11	30.01	-0.63	30.01	11.00	11.00	0.00
PP									
2,800.00	23.34	358.80	2,794.18	42.60	-0.89	42.61	11.00	11.00	0.00
2,900.00	34.34	358.80	2,881.65	90.75	-1.90	90.77	11.00	11.00	0.00
3,000.00	45.34	358.80	2,958.32	154.69	-3.25	154.73	11.00	11.00	0.00
3,100.00	56.34	358.80	3,021.38	232.09	-4.87	232.14	11.00	11.00	0.00
3,200.00	67.34	358.80	3,068.50	320.10	-6.72	320.17	11.00	11.00	0.00
3,300.00	78.34	358.80	3,097.97	415.47	-8.72	415.57	11.00	11.00	0.00
3,396.94	89.00	358.80	3,108.65	511.67	-10.74	511.78	11.00	11.00	0.00
EOC Start 4203.12 hold at 3396.94 MD									
3,400.00	89.00	358.80	3,108.70	514.72	-10.80	514.83	0.00	0.00	0.00
3,500.00	89.00	358.80	3,110.44	614.68	-12.90	614.82	0.00	0.00	0.00
3,600.00	89.00	358.80	3,112.19	714.65	-15.00	714.80	0.00	0.00	0.00
3,700.00	89.00	358.80	3,113.93	814.61	-17.09	814.79	0.00	0.00	0.00
3,800.00	89.00	358.80	3,115.68	914.57	-19.19	914.77	0.00	0.00	0.00
3,900.00	89.00	358.80	3,117.42	1,014.54	-21.29	1,014.76	0.00	0.00	0.00
4,000.00	89.00	358.80	3,119.17	1,114.50	-23.39	1,114.74	0.00	0.00	0.00
4,100.00	89.00	358.80	3,120.92	1,214.46	-25.49	1,214.73	0.00	0.00	0.00
4,200.00	89.00	358.80	3,122.66	1,314.42	-27.58	1,314.71	0.00	0.00	0.00
4,300.00	89.00	358.80	3,124.41	1,414.39	-29.68	1,414.70	0.00	0.00	0.00
4,400.00	89.00	358.80	3,126.15	1,514.35	-31.78	1,514.68	0.00	0.00	0.00
4,500.00	89.00	358.80	3,127.90	1,614.31	-33.88	1,614.67	0.00	0.00	0.00
4,600.00	89.00	358.80	3,129.64	1,714.27	-35.97	1,714.65	0.00	0.00	0.00
4,700.00	89.00	358.80	3,131.39	1,814.24	-38.07	1,814.64	0.00	0.00	0.00
4,800.00	89.00	358.80	3,133.13	1,914.20	-40.17	1,914.62	0.00	0.00	0.00
4,900.00	89.00	358.80	3,134.88	2,014.16	-42.27	2,014.61	0.00	0.00	0.00
5,000.00	89.00	358.80	3,136.62	2,114.13	-44.37	2,114.59	0.00	0.00	0.00
5,100.00	89.00	358.80	3,138.37	2,214.09	-46.46	2,214.58	0.00	0.00	0.00
5,200.00	89.00	358.80	3,140.11	2,314.05	-48.56	2,314.56	0.00	0.00	0.00
5,300.00	89.00	358.80	3,141.86	2,414.01	-50.66	2,414.55	0.00	0.00	0.00
5,400.00	89.00	358.80	3,143.60	2,513.98	-52.76	2,514.53	0.00	0.00	0.00
5,500.00	89.00	358.80	3,145.35	2,613.94	-54.85	2,614.52	0.00	0.00	0.00
5,600.00	89.00	358.80	3,147.09	2,713.90	-56.95	2,714.50	0.00	0.00	0.00
5,700.00	89.00	358.80	3,148.84	2,813.87	-59.05	2,814.48	0.00	0.00	0.00
5,800.00	89.00	358.80	3,150.58	2,913.83	-61.15	2,914.47	0.00	0.00	0.00
5,900.00	89.00	358.80	3,152.33	3,013.79	-63.25	3,014.45	0.00	0.00	0.00
6,000.00	89.00	358.80	3,154.08	3,113.75	-65.34	3,114.44	0.00	0.00	0.00
6,100.00	89.00	358.80	3,155.82	3,213.72	-67.44	3,214.42	0.00	0.00	0.00
6,200.00	89.00	358.80	3,157.57	3,313.68	-69.54	3,314.41	0.00	0.00	0.00
6,300.00	89.00	358.80	3,159.31	3,413.64	-71.64	3,414.39	0.00	0.00	0.00
6,400.00	89.00	358.80	3,161.06	3,513.60	-73.73	3,514.38	0.00	0.00	0.00
6,500.00	89.00	358.80	3,162.80	3,613.57	-75.83	3,614.36	0.00	0.00	0.00
6,600.00	89.00	358.80	3,164.55	3,713.53	-77.93	3,714.35	0.00	0.00	0.00
6,700.00	89.00	358.80	3,166.29	3,813.49	-80.03	3,814.33	0.00	0.00	0.00
6,800.00	89.00	358.80	3,168.04	3,913.46	-82.13	3,914.32	0.00	0.00	0.00
6,900.00	89.00	358.80	3,169.78	4,013.42	-84.22	4,014.30	0.00	0.00	0.00
7,000.00	89.00	358.80	3,171.53	4,113.38	-86.32	4,114.29	0.00	0.00	0.00
7,100.00	89.00	358.80	3,173.27	4,213.34	-88.42	4,214.27	0.00	0.00	0.00



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	COG Operating LLC	TVD Reference:	GL @ 3360.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3360.00usft
Site:	Stonewall 9 Fee	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 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)
7,200.00	89.00	358.80	3,175.02	4,313.31	-90.52	4,314.26	0.00	0.00	0.00
7,300.00	89.00	358.80	3,176.76	4,413.27	-92.61	4,414.24	0.00	0.00	0.00
7,400.00	89.00	358.80	3,178.51	4,513.23	-94.71	4,514.23	0.00	0.00	0.00
7,500.00	89.00	358.80	3,180.25	4,613.19	-96.81	4,614.21	0.00	0.00	0.00
7,600.00	89.00	358.80	3,182.00	4,713.16	-98.91	4,714.20	0.00	0.00	0.00
7,600.07	89.00	358.80	3,182.00	4,713.23	-98.91	4,714.26	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)	
PP	- plan hits target center - Point	0.00	360.00	2,762.09	30.00	-0.63	606,963.90	481,434.27	32° 40' 7.067 N 104° 23' 37.197 W
PBHL	- plan hits target center - Point	0.00	0.00	3,182.00	4,713.23	-98.91	611,646.70	481,336.00	32° 40' 53.406 N 104° 23' 38.378 W

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,587.85	2,587.85	0.00	0.00	KOP Start Build 11.00
3,396.94	3,108.65	511.67	-10.74	EOC Start 4203.12 hold at 3396.94 MD



Azimuths to Grid North
True North: 0.03°
Magnetic North: 7.95°

Magnetic Field
Strength: 49617.7 nT
Dip Angle: 60.38°
Date: 12/20/2012
Model: BGGM2012

Stonewall 9 Fee #1H
Eddy County, NM (NAN27 NME)
Northing: (Y) 606933.90
Easting: (X) 481434.90
Plan #1 8-3/4" Hole

WELL DETAILS:					
Ground Level: 3360.00					
+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	606933.90	481434.90	32° 40' 6.770 N	104° 23' 37.189 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
2587.85	0.00	0.00	2587.85	0.00	0.00	0.00	0.00	0.00
3396.94	89.00	358.80	3108.65	511.67	-10.74	11.00	358.80	511.78
7600.07	89.00	358.80	3182.00	4713.23	-98.91	0.00	0.00	4714.26 PBHL

DESIGN TARGET DETAILS					
Name	TVD	+N-S	+E-W	Northing	Easting
PP	2762.09	30.00	-0.63	606963.90	481434.27
PBHL	3182.00	4713.23	-98.91	611646.70	481336.00

SITE DETAILS: Stonewall 9 Fee Site Centre Northing: 611835.50 Easting: 482702.00 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 #1H, Grid North Latitude: 32° 40' 6.770 N Longitude: 104° 23' 37.189 W Grid East: 481434.90 Grid North: 606933.90 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: 20-Dec-12 Magnetic Declination: 7.92° Dip Angle from Horizontal: 60.38° Magnetic Field Strength: 48618 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°	

