

Submit 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. 30-015-39783
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Clydesdale 1 Fee
8. Well Number 2H
9. OGRID Number 229137
10. Pool name or Wildcat Penasco Draw; SA-Yeso (Assoc) 50270

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 A : 1040 feet from the NORTH line and 150 feet from the EAST line Section 1 Township 19S Range 25E NMPM County EDDY	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3430'	

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:

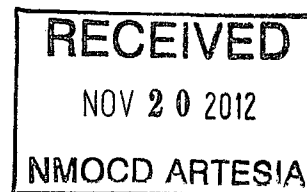
SHL: 1040 FNL 150 FEL, Unit A, Lot 1

BHL: 1040 FNL 330 FWL, Unit D, Lot 4

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

SHL: 1040 FNL 150 FEL, Unit A, Lot 1

BHL: 1093 FNL 330 FWL, Unit D, Lot 4



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 **11-14-12**

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

For State Use Only

APPROVED BY: TITLE **Bookkeeper** DATE **11/27/2012**

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 30-015-39783	Pool Code 50270	Pool Name Penasco Draw; SA-Yeso (assoc)
Property Code	Property Name CLYDESDALE 1 FEE	Well Number 2H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3430'

Surface Location

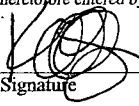
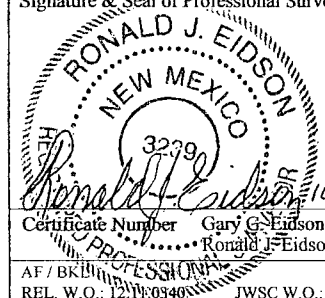
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	1	19-S	25-E		1040	NORTH	150	EAST	EDDY

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
4	1	19-S	25-E		1093	NORTH	330	WEST	EDDY

Dedicated Acres 159.2	Joint or Infill	Consolidation Code	Order No.
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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

A LOT 4 LOT 3 LOT 2 LOT 1 B Project Area Producing Area 330' B.H. GRID. AZ = 270°37'27" HORIZ. DIST. = 4886.7' 39.65 AC. 39.75 AC. 39.85 AC. 39.95 AC. 150' C D CORNER COORDINATES TABLE A - Y=617333.4 N, X=465187.4 E B - Y=617216.7 N, X=470554.5 E C - Y=615905.4 N, X=465180.4 E D - Y=615876.5 N, X=470544.7 E Estimated Completed Interval: 1011 FNL + 570 FEL GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=616180.2 N X=470397.0 E LAT. = 32.693941° N LONG. = 104.429560° W BOTTOM HOLE LOCATION Y=616233.5 N X=465511.9 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.  11-14-12 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. FEBRUARY 24, 2012 Date of Survey Signature & Seal of Professional Surveyor:  Certificate Number Gary G. Eidson 12641 Ronald J. Eidson 3239 AF / BK 11-14-12 REL. W.O.: 12.11.0340 JWSC W.O.: 12.13.1749
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COG Operating LLC

Eddy County, NM (NAN27 NME)

Clydesdale 1 Fee #2H

OH

Plan #4 8-3/4" Hole

Surface: 1040' FNL, 150' FEL, Sec 1, T19S, R25E, Unit A (Lot 1)

PP: 1011' FNL, 570' FEL, Sec 1, T19S, R25E, Unit A (Lot 1)

BHL: 1093' FNL, 330' FWL, Sec 1, T19S, R25E, Unit D (Lot 4)

Standard Planning Report

05 November, 2012





Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #2H
Company:	COG Operating LLC	TVD Reference:	GL Elev @ 3408.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL Elev @ 3408.00usft
Site:	Clydesdale 1 Fee	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4 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	Clydesdale 1 Fee		
Site Position:		Northing:	614,960.50 usft
From:	Map	Easting:	470,388.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 26.118 N
		Longitude:	104° 25' 46.509 W
		Grid Convergence:	-0.05 °

Well	#2H		
Well Position	+N/-S	1,219.81 usft	Northing:
	+E/-W	9.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,408.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2012	11/1/2012	7.95
			Dip Angle
			(°)
			60.40
			Field Strength
			(nT)
			48,645

Design	Plan #4 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
			(°)
			270.63

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	274.00	2,750.00	33.31	-476.30	12.00	12.00	0.00	274.00	
3,149.02	90.00	270.21	2,750.00	37.95	-602.68	3.00	0.00	-3.00	-90.00	
7,431.91	90.00	270.21	2,750.00	53.30	-4,885.54	0.00	0.00	0.00	0.00	PBHL



Scientific Drilling
Planning Report



Database: EDM 5000.1 Single User Db
Company: COG Operating LLC
Project: Eddy County, NM (NAN27 NME)
Site: Clydesdale 1 Fee
Well: #2H
Wellbore: OH
Design: Plan #4 8-3/4" Hole

Local Co-ordinate Reference: Well #2H
TVD Reference: GL Elev @ 3408.00usft
MD Reference: GL Elev @ 3408.00usft
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)
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									
2,300.00	3.30	274.00	2,299.98	0.06	-0.79	0.79	12.00	12.00	0.00
2,400.00	15.30	274.00	2,398.49	1.18	-16.87	16.88	12.00	12.00	0.00
2,500.00	27.30	274.00	2,491.49	3.71	-53.03	53.07	12.00	12.00	0.00
2,600.00	39.30	274.00	2,574.93	7.53	-107.70	107.77	12.00	12.00	0.00
2,700.00	51.30	274.00	2,645.14	12.48	-178.47	178.59	12.00	12.00	0.00
2,800.00	63.30	274.00	2,699.08	18.34	-262.25	262.44	12.00	12.00	0.00
2,900.00	75.30	274.00	2,734.37	24.85	-355.40	355.65	12.00	12.00	0.00
2,965.99	83.21	274.00	2,746.66	29.37	-420.03	420.32	12.00	12.00	0.00
PP=330' FSL									
3,000.00	87.30	274.00	2,749.47	31.73	-453.83	454.14	12.00	12.00	0.00
3,022.54	90.00	274.00	2,750.00	33.31	-476.30	476.64	12.00	12.00	0.00
EOC Start DLS 3.00 TFO -90.00									
3,100.00	90.00	271.68	2,750.00	37.14	-553.66	554.03	3.00	0.00	-3.00
3,149.02	90.00	270.21	2,750.00	37.95	-602.68	603.06	3.00	0.00	-3.00
Start 4282.89 hold at 3149.02 MD									
3,200.00	90.00	270.21	2,750.00	38.13	-653.65	654.03	0.00	0.00	0.00
3,300.00	90.00	270.21	2,750.00	38.49	-753.65	754.03	0.00	0.00	0.00
3,400.00	90.00	270.21	2,750.00	38.85	-853.65	854.02	0.00	0.00	0.00
3,500.00	90.00	270.21	2,750.00	39.20	-953.65	954.02	0.00	0.00	0.00
3,600.00	90.00	270.21	2,750.00	39.56	-1,053.65	1,054.02	0.00	0.00	0.00
3,700.00	90.00	270.21	2,750.00	39.92	-1,153.65	1,154.02	0.00	0.00	0.00
3,800.00	90.00	270.21	2,750.00	40.28	-1,253.65	1,254.01	0.00	0.00	0.00
3,900.00	90.00	270.21	2,750.00	40.64	-1,353.65	1,354.01	0.00	0.00	0.00
4,000.00	90.00	270.21	2,750.00	41.00	-1,453.65	1,454.01	0.00	0.00	0.00
4,100.00	90.00	270.21	2,750.00	41.36	-1,553.65	1,554.01	0.00	0.00	0.00
4,200.00	90.00	270.21	2,750.00	41.72	-1,653.65	1,654.00	0.00	0.00	0.00
4,300.00	90.00	270.21	2,750.00	42.07	-1,753.65	1,754.00	0.00	0.00	0.00
4,400.00	90.00	270.21	2,750.00	42.43	-1,853.65	1,854.00	0.00	0.00	0.00
4,500.00	90.00	270.21	2,750.00	42.79	-1,953.64	1,954.00	0.00	0.00	0.00
4,600.00	90.00	270.21	2,750.00	43.15	-2,053.64	2,053.99	0.00	0.00	0.00
4,700.00	90.00	270.21	2,750.00	43.51	-2,153.64	2,153.99	0.00	0.00	0.00
4,800.00	90.00	270.21	2,750.00	43.87	-2,253.64	2,253.99	0.00	0.00	0.00
4,900.00	90.00	270.21	2,750.00	44.23	-2,353.64	2,353.98	0.00	0.00	0.00
5,000.00	90.00	270.21	2,750.00	44.58	-2,453.64	2,453.98	0.00	0.00	0.00
5,100.00	90.00	270.21	2,750.00	44.94	-2,553.64	2,553.98	0.00	0.00	0.00
5,200.00	90.00	270.21	2,750.00	45.30	-2,653.64	2,653.98	0.00	0.00	0.00
5,300.00	90.00	270.21	2,750.00	45.66	-2,753.64	2,753.97	0.00	0.00	0.00
5,400.00	90.00	270.21	2,750.00	46.02	-2,853.64	2,853.97	0.00	0.00	0.00
5,500.00	90.00	270.21	2,750.00	46.38	-2,953.64	2,953.97	0.00	0.00	0.00
5,600.00	90.00	270.21	2,750.00	46.74	-3,053.64	3,053.97	0.00	0.00	0.00
5,700.00	90.00	270.21	2,750.00	47.09	-3,153.64	3,153.96	0.00	0.00	0.00
5,800.00	90.00	270.21	2,750.00	47.45	-3,253.64	3,253.96	0.00	0.00	0.00
5,900.00	90.00	270.21	2,750.00	47.81	-3,353.64	3,353.96	0.00	0.00	0.00
6,000.00	90.00	270.21	2,750.00	48.17	-3,453.64	3,453.96	0.00	0.00	0.00
6,100.00	90.00	270.21	2,750.00	48.53	-3,553.63	3,553.95	0.00	0.00	0.00
6,200.00	90.00	270.21	2,750.00	48.89	-3,653.63	3,653.95	0.00	0.00	0.00
6,300.00	90.00	270.21	2,750.00	49.25	-3,753.63	3,753.95	0.00	0.00	0.00
6,400.00	90.00	270.21	2,750.00	49.60	-3,853.63	3,853.94	0.00	0.00	0.00
6,500.00	90.00	270.21	2,750.00	49.96	-3,953.63	3,953.94	0.00	0.00	0.00
6,600.00	90.00	270.21	2,750.00	50.32	-4,053.63	4,053.94	0.00	0.00	0.00
6,700.00	90.00	270.21	2,750.00	50.68	-4,153.63	4,153.94	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: Clydesdale 1 Fee
Well: #2H
Wellbore: OH
Design: Plan #4 8-3/4" Hole

Local Co-ordinate Reference: Well #2H
TVD Reference: GL Elev @ 3408.00usft
MD Reference: GL Elev @ 3408.00usft
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)
6,800.00	90.00	270.21	2,750.00	51.04	-4,253.63	4,253.93	0.00	0.00	0.00
6,900.00	90.00	270.21	2,750.00	51.40	-4,353.63	4,353.93	0.00	0.00	0.00
7,000.00	90.00	270.21	2,750.00	51.76	-4,453.63	4,453.93	0.00	0.00	0.00
7,100.00	90.00	270.21	2,750.00	52.11	-4,553.63	4,553.93	0.00	0.00	0.00
7,200.00	90.00	270.21	2,750.00	52.47	-4,653.63	4,653.92	0.00	0.00	0.00
7,300.00	90.00	270.21	2,750.00	52.83	-4,753.63	4,753.92	0.00	0.00	0.00
7,400.00	90.00	270.21	2,750.00	53.19	-4,853.63	4,853.92	0.00	0.00	0.00
7,431.91	90.00	270.21	2,750.00	53.30	-4,885.54	4,885.83	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
- Shape									
PP=330° FSL	0.00	0.00	2,746.66	29.37	-420.00	616,209.57	469,977.04	32° 41' 38.474 N	104° 25' 51.332 W
- plan hits target center									
- Point									
PBHL	0.00	0.00	2,750.00	53.30	-4,885.54	616,233.50	465,511.90	32° 41' 38.668 N	104° 26' 43.583 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
		+N/-S (usft)	+E/-W (usft)	Comment
2,272.54	2,272.54	0.00	0.00	KOP Start Build 12.00
3,022.54	2,750.00	33.31	-476.30	EOC Start DLS 3.00 TFO -90.00
3,149.02	2,750.00	37.95	-602.68	Start 4282.89 hold at 3149.02 MD



Azimuths to Grid North
 True North: 0.05°
 Magnetic North: 8.00°
 Magnetic Field
 Strength: 48645.0nT
 Dip Angle: 59.40°
 Date: 11/12/2012
 Model: BGGM2012

To convert a Magnetic Direction to a Grid Direction, Add 8.00°
 To convert a True Direction to a Grid Direction, Add 0.05°

Clydesdale 1 Fee #2H
 Eddy County, NM (NAN27 NME)
 Northing: (Y) 616180.20
 Easting: (X) 470397.00
 Plan #4 8-3/4" Hole

WELL DETAILS:									
Ground Level:				3408.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	616180.20	470397.00	32° 41' 38.188 N	104° 25' 46.417 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	
2272.54	0.00	0.00	2272.54	0.00	0.00	0.00	0.00	0.00	
3022.54	90.00	274.00	2750.00	33.31	-478.30	12.00	274.00	478.84	
3149.02	90.00	270.21	2750.00	37.95	-602.88	3.00	-90.00	603.08	
7431.91	90.00	270.21	2750.00	53.30	-4885.54	0.00	0.00	4885.83	PBHL

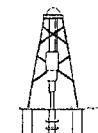
DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PP=330' FSL	2746.68	29.37	-420.00	616209.57	469877.04
PBHL	2750.00	53.30	-4885.54	616233.50	465511.90

SITE DETAILS: Clydesdale 1 Fee
 Site Centre Northing: 614980.50
 Easting: 470388.00
 Positional Uncertainty: 0.00
 Convergence: -0.05
 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 #2H, Grid North
 Latitude: 32° 41' 38.188 N
 Longitude: 104° 25' 46.417 W
 Grid East: 470387.00
 Grid North: 616180.20
 Scale Factor: 1.000

Geomagnetic Model: BGGM2012
 Sample Date: 01-Nov-12
 Magnetic Declination: 7.95°
 Dip Angle from Horizontal: 59.40°
 Magnetic Field Strength: 48645
 To convert a Magnetic Direction to a Grid Direction, Add 8.00°
 To convert a Magnetic Direction to a True Direction, Add 7.95° East
 To convert a True Direction to a Grid Direction, Add 0.05°



Ground Level: 3408.00

