

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

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.)		WELL API NO. 30-015-40057
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator COG Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator One Concho Center - 600 W Illinois Ave Midland, TX 79701		7. Lease Name or Unit Agreement Name Tarpan 33 Fee
4. Well Location: Unit Letter M 150 feet from the SOUTH line and 1040 feet from the WEST line Section 33 Township 18S Range 26E NMPM County EDDY		8. Well Number 2H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3377'		9. OGRID Number 229137
		10. Pool name or Wildcat Atoka; Glorieta Yeso 3250

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: **CHG BHL & CASING/CEMENT PROG** ☒

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 Operating LLC submitted APD for this well at this location:

SHL: 150' FSL 1040' FWL, Unit M

BHL: 330' FNL 1040' FWL, Unit D

COG Operating LLC respectfully requests permission to change the BHL:

SHL: 150' FSL 1040' FWL, Unit M

BHL: 330' FNL 998' FWL, Unit D

Reason for changing the BHL is to be 330' from the internal lease line.

COG proposes to drill an 11" hole to 1200' w/fresh water, run 8-5/8" 32# J-55 and cement to surface. Drill a 7-7/8" hole to 3412' MD and kick off and drill curve to 3082' TVD 3656' MD. Drill a 7-7/8" lateral to new BHL @ 2912' TVD 7719' MD. Run a 5 1/2" 17# L-80 casing to TD cement to surface with 800 sacks.

A revised C-102 and directional plan are attached for your review.

Spud Date:

Rig Release Date:

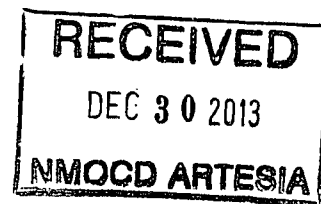
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Permitting Tech DATE 12/12/13

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

For State Use Only

APPROVED BY: [Signature] TITLE Geologist DATE 12-30-2013



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DISTRICT IV
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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

RECEIVED

DEC 30 2013

RECOMMENDED REPORT

NMOCD ARTESIA

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40057	Pool Code 3250	Pool Name Atoka; Glorieta Yeso
Property Code	Property Name TARPAN 33 FEE	Well Number 2H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3377'

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	33	18-S	26-E		150	SOUTH	1040	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	33	18-S	26-E		330	NORTH	998	WEST	EDDY
Dedicated Acres		Joint or Infill	Consolidation Code	Order No.					
160									

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

CORNER COORDINATES TABLE A - Y=622564.8 N, X=480964.6 E B - Y=622558.9 N, X=482293.1 E C - Y=617241.1 N, X=482293.4 E D - Y=617232.9 N, X=480973.6 E GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=617389.4 N X=482013.1 E BOTTOM HOLE LOCATION LAT.=32.697288° N LONG.=104.391803° W Y=622230.5 N X=481963.2 E Estimated Completed Interval: 555 FSL 990 FWL GRID AZ.=359°24'31" HORIZ. DIST.=4842.6' Project Area Producing Area 998' 330' 330' 150' 1040'	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. 12-12-13 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 22, 2013 Date of Survey Signature & Seal of Professional Surveyor: Certificate Number Gary G. Eidson 12641 Ronald J. Eidson 3239 BK/JACK REL W.O. 11/25/72 JWSC W.O. 13.11.1337
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COG Operating LLC

Eddy County, New Mexico (NAD 27 NME)

Tarpan 33 Fee

#2H

WB1

RECEIVED

DEC 30 2013

NMOCD ARTESIA

Plan: Plan #3 11-27-13

Surface: 150' FSL, 1040' FWL, Sec 33, T18S, R26E, Unit M

PP: 555' FSL, 990' FWL, Sec 33, T18S, R26E, Unit M

BHL: 330' FNL, 990' FWL, Sec 33, T18S, R26E, Unit D

Standard Planning Report

27 November, 2013





Phoenix Technology Services
Planning Report



Database: GCR DB
Company: COG Operating LLC
Project: Eddy County, New Mexico (NAD 27 NME)
Site: Tarpan 33 Fee
Well: #2H
Wellbore: WB1
Design: Plan #3 11-27-13

Local Co-ordinate Reference: Well #2H
TVD Reference: GL @ 3378.00usft
MD Reference: GL @ 3378.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project: Eddy County, New Mexico (NAD 27 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

Site: Tarpan 33 Fee

Site Position: Northing: 617,397.20 usft Latitude: 32° 41' 50.32117 N
From: Map Easting: 483,282.60 usft Longitude: 104° 23' 15.63587 W
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16" Grid Convergence: -0.03°

Well: #2H

Well Position: +N/-S: -7.80 usft Northing: 617,389.40 usft Latitude: 32° 41' 50.23730 N
+E/-W: -1,269.50 usft Easting: 482,013.10 usft Longitude: 104° 23' 30.49217 W
Position Uncertainty: 0.00 usft Wellhead Elevation: Ground Level: 3,378.00 usft

Wellbore: WB1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	11/27/13	7.70	60.42	48,565

Design: Plan #3 11-27-13

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.31

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	
2,572.00	0.00	0.00	2,572.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,412.00	92.40	353.00	3,092.41	538.64	-66.14	11.00	11.00	0.00	353.00	
3,655.52	92.40	0.31	3,082.21	781.37	-80.32	3.00	0.00	3.00	89.86	
7,718.88	92.40	0.31	2,912.15	4,841.10	-58.20	0.00	0.00	0.00	0.00	PBHL-Tarpan 33 Fee



Phoenix Technology Services
Planning Report



Database: GCR DB
Company: COG Operating LLC
Project: Eddy County, New Mexico (NAD 27 NME)
Site: Tarpan 33 Fee
Well: #2H
Wellbore: WB1
Design: Plan #3 11-27-13

Local Co-ordinate Reference:
TVD Reference: GL @ 3378.00usft
MD Reference: GL @ 3378.00usft
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
2,572.00	0.00	0.00	2,572.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,600.00	3.08	353.00	2,599.99	0.75	-0.09	0.75	11.00	11.00	0.00
2,700.00	14.08	353.00	2,698.72	15.53	-1.91	15.55	11.00	11.00	0.00
2,800.00	25.08	353.00	2,792.79	48.74	-5.98	48.81	11.00	11.00	0.00
2,900.00	36.08	353.00	2,878.75	99.16	-12.18	99.30	11.00	11.00	0.00
3,000.00	47.08	353.00	2,953.44	164.93	-20.25	165.16	11.00	11.00	0.00
3,100.00	58.08	353.00	3,014.11	243.64	-29.92	243.98	11.00	11.00	0.00
3,200.00	69.08	353.00	3,058.53	332.39	-40.81	332.86	11.00	11.00	0.00
3,276.48	77.49	353.00	3,080.51	405.03	-49.73	405.60	11.00	11.00	0.00
PP-Tarpan 33 Fee #2H									
3,300.00	80.08	353.00	3,085.08	427.93	-52.54	428.53	11.00	11.00	0.00
3,400.00	91.08	353.00	3,092.78	526.73	-64.67	527.47	11.00	11.00	0.00
3,412.00	92.40	353.00	3,092.41	538.64	-66.14	539.39	11.00	11.00	0.00
LP Start DLS 3.00 TFO 89.86									
3,500.00	92.40	355.64	3,088.73	626.12	-74.84	626.98	3.00	0.00	3.00
3,600.00	92.40	358.64	3,084.53	725.90	-79.81	726.80	3.00	0.00	3.00
3,655.52	92.40	0.31	3,082.21	781.37	-80.32	782.28	3.00	-0.01	3.00
Start 4063.35 hold at 3655.52 MD									
3,700.00	92.40	0.31	3,080.34	825.80	-80.08	826.71	0.00	0.00	0.00
3,800.00	92.40	0.31	3,076.16	925.72	-79.53	926.60	0.00	0.00	0.00
3,900.00	92.40	0.31	3,071.97	1,025.63	-78.99	1,026.50	0.00	0.00	0.00
4,000.00	92.40	0.31	3,067.79	1,125.54	-78.44	1,126.40	0.00	0.00	0.00
4,100.00	92.40	0.31	3,063.60	1,225.45	-77.90	1,226.30	0.00	0.00	0.00
4,200.00	92.40	0.31	3,059.42	1,325.36	-77.36	1,326.19	0.00	0.00	0.00
4,300.00	92.40	0.31	3,055.23	1,425.27	-76.81	1,426.09	0.00	0.00	0.00
4,400.00	92.40	0.31	3,051.05	1,525.18	-76.27	1,525.99	0.00	0.00	0.00
4,500.00	92.40	0.31	3,046.86	1,625.09	-75.72	1,625.88	0.00	0.00	0.00
4,600.00	92.40	0.31	3,042.68	1,725.00	-75.18	1,725.78	0.00	0.00	0.00
4,700.00	92.40	0.31	3,038.49	1,824.91	-74.63	1,825.68	0.00	0.00	0.00
4,800.00	92.40	0.31	3,034.31	1,924.82	-74.09	1,925.58	0.00	0.00	0.00
4,900.00	92.40	0.31	3,030.12	2,024.74	-73.54	2,025.47	0.00	0.00	0.00
5,000.00	92.40	0.31	3,025.94	2,124.65	-73.00	2,125.37	0.00	0.00	0.00
5,100.00	92.40	0.31	3,021.75	2,224.56	-72.46	2,225.27	0.00	0.00	0.00
5,200.00	92.40	0.31	3,017.57	2,324.47	-71.91	2,325.16	0.00	0.00	0.00
5,300.00	92.40	0.31	3,013.38	2,424.38	-71.37	2,425.06	0.00	0.00	0.00
5,342.54	92.40	0.31	3,011.60	2,466.88	-71.14	2,467.56	0.00	0.00	0.00
TL, 3115' TVD @ 0 VZ, 92.40° Inc									
5,400.00	92.40	0.31	3,009.20	2,524.29	-70.82	2,524.96	0.00	0.00	0.00
5,500.00	92.40	0.31	3,005.01	2,624.20	-70.28	2,624.86	0.00	0.00	0.00
5,600.00	92.40	0.31	3,000.83	2,724.11	-69.73	2,724.75	0.00	0.00	0.00
5,700.00	92.40	0.31	2,996.64	2,824.02	-69.19	2,824.65	0.00	0.00	0.00
5,800.00	92.40	0.31	2,992.46	2,923.93	-68.65	2,924.55	0.00	0.00	0.00
5,900.00	92.40	0.31	2,988.27	3,023.84	-68.10	3,024.44	0.00	0.00	0.00
6,000.00	92.40	0.31	2,984.09	3,123.76	-67.56	3,124.34	0.00	0.00	0.00
6,100.00	92.40	0.31	2,979.90	3,223.67	-67.01	3,224.24	0.00	0.00	0.00
6,200.00	92.40	0.31	2,975.72	3,323.58	-66.47	3,324.14	0.00	0.00	0.00
6,300.00	92.40	0.31	2,971.53	3,423.49	-65.92	3,424.03	0.00	0.00	0.00
6,400.00	92.40	0.31	2,967.35	3,523.40	-65.38	3,523.93	0.00	0.00	0.00
6,500.00	92.40	0.31	2,963.16	3,623.31	-64.83	3,623.83	0.00	0.00	0.00
6,600.00	92.40	0.31	2,958.98	3,723.22	-64.29	3,723.72	0.00	0.00	0.00
6,700.00	92.40	0.31	2,954.79	3,823.13	-63.75	3,823.62	0.00	0.00	0.00
6,800.00	92.40	0.31	2,950.61	3,923.04	-63.20	3,923.52	0.00	0.00	0.00



Phoenix Technology Services
Planning Report



Database: GCR DB
Company: COG Operating LLC
Project: Eddy County, New Mexico (NAD 27 NME)
Site: Tarpan 33 Fee
Well: #2H
Wellbore: WB1
Design: Plan #3 11-27-13

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

Well #2H
GL @ 3378.00usft
GL @ 3378.00usft
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)
6,900.00	92.40	0.31	2,946.42	4,022.95	-62.66	4,023.42	0.00	0.00	0.00
7,000.00	92.40	0.31	2,942.24	4,122.86	-62.11	4,123.31	0.00	0.00	0.00
7,100.00	92.40	0.31	2,938.05	4,222.78	-61.57	4,223.21	0.00	0.00	0.00
7,200.00	92.40	0.31	2,933.87	4,322.69	-61.02	4,323.11	0.00	0.00	0.00
7,300.00	92.40	0.31	2,929.68	4,422.60	-60.48	4,423.00	0.00	0.00	0.00
7,400.00	92.40	0.31	2,925.50	4,522.51	-59.94	4,522.90	0.00	0.00	0.00
7,500.00	92.40	0.31	2,921.31	4,622.42	-59.39	4,622.80	0.00	0.00	0.00
7,600.00	92.40	0.31	2,917.13	4,722.33	-58.85	4,722.70	0.00	0.00	0.00
7,700.00	92.40	0.31	2,912.94	4,822.24	-58.30	4,822.59	0.00	0.00	0.00
7,718.88	92.40	0.31	2,912.15	4,841.10	-58.20	4,841.45	0.00	0.00	0.00

TD at 7718.88 - PBHL-Tarpan 33 Fee #2H

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-Tarpan 33 Fee #2 - plan hits target center - Point	0.00	360.00	2,912.15	4,841.10	-58.20	622,230.50	481,954.90	32° 42' 38.14264 N	104° 23' 31.20460 W
PP-Tarpan 33 Fee #2H - plan hits target center - Point	0.00	360.00	3,080.50	405.00	-49.73	617,794.40	481,963.37	32° 41' 54.24476 N	104° 23' 31.07673 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,342.54	3,011.60	TL, 3115' TVD @ 0 VZ, 92.40° Inc		-2.40	359.90

Plan Annotations

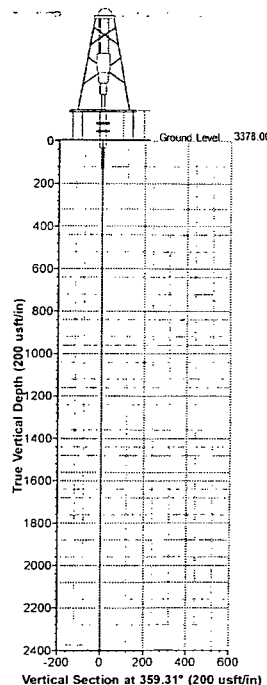
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,572.00	2,572.00	0.00	0.00	KOP Start Build 11.00
3,412.00	3,092.41	538.64	-66.14	LP Start DLS 3.00 TFO 89.86
3,655.52	3,082.21	781.37	-80.32	Start 4063.35 hold at 3655.52 MD
7,718.88	2,912.15	4,841.10	-58.20	TD at 7718.88



Project: Eddy County, New Mexico (NAD 27 NME)
Site: Tarpan 33 Fee
Well: #2H
Wellbore: WB1
Design: Plan #3 11-27-13



Azimuths to Grid North
True North: 0.03°
Magnetic North: 7.73°
Magnetic Field
Strength: 48565.3nT
Dip Angle: 60.42°
Date: 11/27/2013
Model: IGRF2010_14



WELL DETAILS						
-N-S	-E-W	North	Ground Level	Latitude	Longitude	
0.00	0.00	617389.40	3378.00	32° 41' 50.23730 N	104° 23' 30.49217 W	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	-N-S	-E-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2572.00	0.00	0.00	2572.00	0.00	0.00	0.00	0.00	0.00	KOP Start Build 11.00
3	3412.00	92.40	353.00	3092.41	538.64	-65.14	11.00	353.00	539.39	LP Start DLS 3.00 TFO 89.86
4	3655.52	92.40	0.31	3082.21	781.37	-80.32	3.00	89.86	782.28	Start 4063.35 hold at 3655.52 MD
5	7718.88	92.40	0.31	2912.15	4841.10	-58.20	0.00	0.00	4841.45	PBHL-Tarpan 33 Fee #2H

DESIGN TARGET DETAILS									
Name	TVD	-N-S	-E-W	North	Easting	Latitude	Longitude	Shape	
PBHL-Tarpan 33 Fee #2H	2912.15	4841.10	-58.20	622230.50	481954.90	32° 42' 38.14264 N	104° 23' 31.20450 W	Point	
PP-Tarpan 33 Fee #2H	3080.50	405.00	-49.73	617794.40	481963.37	32° 41' 54.24475 N	104° 23' 31.07673 W	Point	

FORMATION TOP DETAILS				
TVDPath	MDPath	Formation	DipAngle	DipDir
3011.60	5342.54	TL 3115 TVD @ 0 VZ 92.40° Inc	-2.40	359.90

LEGEND	
—	Plan #3 11-27-13

