

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMLC029415B
2. Name of Operator COG OPERATING LLC.		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVE MIDLAND, TX 79701		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 432-685-4384		8. Well Name and No. PUCKETT 13 FEDERAL COM 6H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 13 T17S R31E Mer NMP NWNE 36FNL 1627FEL		9. API Well No. 30-015-40736
		10. Field and Pool, or Exploratory FREN; GLORIETA YESO-EAST
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
☒ Notice of Intent	☐ Acidize
☐ Subsequent Report	☐ Deepen
☐ Final Abandonment Notice	☐ Fracture Treat
	☐ New Construction
	☐ Plug and Abandon
	☐ Plug Back
	☐ Production (Start/Resume)
	☐ Reclamation
	☐ Recomplete
	☐ Temporarily Abandon
	☐ Water Disposal
	☐ Water Shut-Off
	☐ Well Integrity
	☒ Other Change to Original A PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG proposes to change 7" X 5 1/2" isolation plan from combination external casing packers and cement to single stage 100% cement. The procedure as follows: lead 500 sks 35:65:6 C:Pozgel w/additives yield 2.01 cf/sk, wt 12.5 ppg (0'-3400' MD) followed by 400 sks 50:50:2 C Poz Gel w/ additives yield 1.37 cf/sk, wt. 14.0 ppg (3400' MD-6123' MD KOP) followed by 750 sks tail cement Class "H" Solucem-H w/additives yield 2.62 cf/sk, wt. 15.0 ppg (11309' MD TD to KOP @ 6123' MD). Cement calculated to surface. min-tie back 200' above 9 5/8" casing shoe.

Directional plan is attached for your review.

Accepted for record
NMOCD

RECEIVED

JAN 31 2013

NMOCD ARTESIA

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #180277 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 01/11/2013 ()

Name (Printed/Typed) KELLY J HOLLY

Title PERMITTING TECH

Signature (Electronic Submission)

Date 01/10/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

APPROVED

JAN 29 2013

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

COG Operating LLC

Eddy County, NM

Puckett 13 Federal Com 6H

Puckett 13 Federal Com 6H

Wellbore #1

Surface: 36' FNL, 1627' FEL, Sec 13, T17S, R31E, Unit B

BHL: 330' FSL, 1650' FEL, Sec 13, T17S, R31E, Unit O

PP: 330' FNL, 1628' FEL, Sec 13 T17S R31E, Unit B

Plan: Plan #1

Standard Planning Report

12 April, 2012

Crescent Directional Drilling Planning Report

Database:	R5000 Houston DB	Local Co-ordinate Reference:	Site Puckett 13 Federal Com 6H
Company:	COC Operating LLC	TVD Reference:	WELL @ 3981.00ft (Original Well Elev)
Project:	Eddy County NM	MD Reference:	WELL @ 3981.00ft (Original Well Elev)
Site:	Puckett 13 Federal Com 6H	North Reference:	Grid
Well:	Puckett 13 Federal Com 6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project:	Eddy County NM	System Datum:	Mean Sea Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:		Puckett-13 Federal Com 6H			
Site Position:		Northing:	670,312.40 ft	Latitude:	32° 50' 30.17 N
From:	Map	Easting:	657,876.90 ft	Longitude:	103° 49' 9.48 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.28 °

Well:		Puckett 13 Federal Com 6H				
Well Position	+N/-S	0.00 ft	Northing:	670,312.40 ft	Latitude:	32° 50' 30.17 N
	+E/-W	0.00 ft	Easting:	657,876.90 ft	Longitude:	103° 49' 9.48 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	3,963.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/3/2012	7.65	60.70	48,877

Design: Plan #1				
Audit Notes:				
Version:		Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	179.94

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,122.54	0.00	0.00	6,122.54	0.00	0.00	0.00	0.00	0.00	0.00	
6,872.54	90.00	179.94	6,600.00	-477.46	0.51	12.00	12.00	0.00	179.94	
11,308.97	90.00	179.94	6,600.00	-4,913.90	5.30	0.00	0.00	0.00	0.00	PBHL (Puckett 13 Fed

Crescent Directional Drilling

Planning Report

Database:	R5000 Houston DB	Local Co-ordinate Reference:	Site: Puckett 13 Federal Com 6H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3981.00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3981.00ft (Original Well Elev)
Site:	Puckett 13 Federal Com 6H	North Reference:	Grid
Well:	Puckett 13 Federal Com 6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
6,122.54	0.00	0.00	6,122.54	0.00	0.00	0.00	0.00	0.00	0.00	
KOP: Start Build @ 12.00°/100°										
6,200.00	9.30	179.94	6,199.66	-6.27	0.01	6.27	12.00	12.00	0.00	
6,300.00	21.30	179.94	6,295.94	-32.60	0.04	32.60	12.00	12.00	0.00	
6,400.00	33.30	179.94	6,384.65	-78.38	0.08	78.38	12.00	12.00	0.00	
6,500.00	45.30	179.94	6,461.89	-141.59	0.15	141.59	12.00	12.00	0.00	
6,600.00	57.30	179.94	6,524.31	-219.49	0.24	219.49	12.00	12.00	0.00	
6,684.23	67.40	179.94	6,563.35	-294.00	0.32	294.00	12.00	12.00	0.00	
PP: @ 6684.23 MD: 6663.35 TVD: 67.40 INC: 179.94 AZ: 294.00 VS										
6,700.00	69.30	179.94	6,569.16	-308.66	0.33	308.66	12.00	12.00	0.00	
6,800.00	81.30	179.94	6,594.50	-405.21	0.44	405.21	12.00	12.00	0.00	
6,872.54	90.00	179.94	6,600.00	-477.46	0.51	477.46	12.00	12.00	0.00	
Landing Point: Hold @ 90.00° INC: 179.94° AZ										
6,900.00	90.00	179.94	6,600.00	-504.93	0.54	504.93	0.00	0.00	0.00	
7,000.00	90.00	179.94	6,600.00	-604.93	0.65	604.93	0.00	0.00	0.00	
7,100.00	90.00	179.94	6,600.00	-704.93	0.76	704.93	0.00	0.00	0.00	
7,200.00	90.00	179.94	6,600.00	-804.93	0.87	804.93	0.00	0.00	0.00	
7,300.00	90.00	179.94	6,600.00	-904.93	0.98	904.93	0.00	0.00	0.00	
7,400.00	90.00	179.94	6,600.00	-1,004.93	1.08	1,004.93	0.00	0.00	0.00	
7,500.00	90.00	179.94	6,600.00	-1,104.93	1.19	1,104.93	0.00	0.00	0.00	
7,600.00	90.00	179.94	6,600.00	-1,204.93	1.30	1,204.93	0.00	0.00	0.00	
7,700.00	90.00	179.94	6,600.00	-1,304.93	1.41	1,304.93	0.00	0.00	0.00	
7,800.00	90.00	179.94	6,600.00	-1,404.93	1.52	1,404.93	0.00	0.00	0.00	
7,900.00	90.00	179.94	6,600.00	-1,504.93	1.62	1,504.93	0.00	0.00	0.00	
8,000.00	90.00	179.94	6,600.00	-1,604.93	1.73	1,604.93	0.00	0.00	0.00	
8,100.00	90.00	179.94	6,600.00	-1,704.93	1.84	1,704.93	0.00	0.00	0.00	
8,200.00	90.00	179.94	6,600.00	-1,804.93	1.95	1,804.93	0.00	0.00	0.00	
8,300.00	90.00	179.94	6,600.00	-1,904.93	2.05	1,904.93	0.00	0.00	0.00	
8,400.00	90.00	179.94	6,600.00	-2,004.93	2.16	2,004.93	0.00	0.00	0.00	
8,500.00	90.00	179.94	6,600.00	-2,104.93	2.27	2,104.93	0.00	0.00	0.00	
8,600.00	90.00	179.94	6,600.00	-2,204.93	2.38	2,204.93	0.00	0.00	0.00	
8,700.00	90.00	179.94	6,600.00	-2,304.93	2.49	2,304.93	0.00	0.00	0.00	
8,800.00	90.00	179.94	6,600.00	-2,404.93	2.59	2,404.93	0.00	0.00	0.00	
8,900.00	90.00	179.94	6,600.00	-2,504.93	2.70	2,504.93	0.00	0.00	0.00	
9,000.00	90.00	179.94	6,600.00	-2,604.93	2.81	2,604.93	0.00	0.00	0.00	
9,100.00	90.00	179.94	6,600.00	-2,704.93	2.92	2,704.93	0.00	0.00	0.00	
9,200.00	90.00	179.94	6,600.00	-2,804.93	3.03	2,804.93	0.00	0.00	0.00	
9,300.00	90.00	179.94	6,600.00	-2,904.93	3.13	2,904.93	0.00	0.00	0.00	
9,400.00	90.00	179.94	6,600.00	-3,004.93	3.24	3,004.93	0.00	0.00	0.00	
9,500.00	90.00	179.94	6,600.00	-3,104.93	3.35	3,104.93	0.00	0.00	0.00	
9,600.00	90.00	179.94	6,600.00	-3,204.93	3.46	3,204.93	0.00	0.00	0.00	
9,700.00	90.00	179.94	6,600.00	-3,304.93	3.56	3,304.93	0.00	0.00	0.00	
9,800.00	90.00	179.94	6,600.00	-3,404.93	3.67	3,404.93	0.00	0.00	0.00	
9,900.00	90.00	179.94	6,600.00	-3,504.93	3.78	3,504.93	0.00	0.00	0.00	
10,000.00	90.00	179.94	6,600.00	-3,604.93	3.89	3,604.93	0.00	0.00	0.00	
10,100.00	90.00	179.94	6,600.00	-3,704.93	4.00	3,704.93	0.00	0.00	0.00	
10,200.00	90.00	179.94	6,600.00	-3,804.93	4.10	3,804.93	0.00	0.00	0.00	
10,300.00	90.00	179.94	6,600.00	-3,904.93	4.21	3,904.93	0.00	0.00	0.00	
10,400.00	90.00	179.94	6,600.00	-4,004.93	4.32	4,004.93	0.00	0.00	0.00	
10,500.00	90.00	179.94	6,600.00	-4,104.93	4.43	4,104.93	0.00	0.00	0.00	
10,600.00	90.00	179.94	6,600.00	-4,204.93	4.54	4,204.93	0.00	0.00	0.00	
10,700.00	90.00	179.94	6,600.00	-4,304.93	4.64	4,304.93	0.00	0.00	0.00	
10,800.00	90.00	179.94	6,600.00	-4,404.93	4.75	4,404.93	0.00	0.00	0.00	

Crescent Directional Drilling Planning Report

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Project:	Eddy County, NM	MD Reference:	WELL @ 3981.00ft (Original Well Elev)
Site:	Puckett 13 Federal Com 6H	North Reference:	Grid
Well:	Puckett 13 Federal Com 6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,900.00	90.00	179.94	6,600.00	-4,504.93	4.86	4,504.93	0.00	0.00	0.00
11,000.00	90.00	179.94	6,600.00	-4,604.93	4.97	4,604.93	0.00	0.00	0.00
11,100.00	90.00	179.94	6,600.00	-4,704.93	5.07	4,704.93	0.00	0.00	0.00
11,200.00	90.00	179.94	6,600.00	-4,804.93	5.18	4,804.93	0.00	0.00	0.00
11,300.00	90.00	179.94	6,600.00	-4,904.93	5.29	4,904.93	0.00	0.00	0.00
11,308.97	90.00	179.94	6,600.00	-4,913.90	5.30	4,913.90	0.00	0.00	0.00
TD @ 11308.97 MD: 6600.00 TVD: PBHL (Puckett 13 Federal Com 6H Plan 1)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
hit/miss target									
Shape									
PBHL (Puckett 13 Feder	0.00	0.00	6,600.00	-4,913.90	5.30	665,398.50	657,882.20	32° 49' 41.55 N	103° 49' 9.70 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,122.54	6,122.54	0.00	0.00	KOP - Start Build @ 12.00°/100'
6,684.23	6,563.35	-294.00	0.32	PP @ 6684.23 MD, 6563.35 TVD, 67.40 INC, 179.94 AZ, 294.00 VS
6,872.54	6,600.00	-477.46	0.51	Landing Point - Hold @ 90.00° INC, 179.94° AZ
11,308.97	6,600.00	-4,913.90	5.30	TD @ 11308.97 MD, 6600.00 TVD



COG Operating LLC
Puckett 13 Federal Com 6H
Eddy County, NM
Plan #1



Surface Location		Ground Elev: 3963.00 WELL @ 3981.00ft (Original Well Elev)			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	670312.40	657876.90	32° 50' 30.17 N	103° 49' 9.48 W

TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL (Puckett 13 Federal Com 6H Plan 1)	6600.00	-4913.90	5.30	665398.50	657882.20	32° 49' 41.55 N	103° 49' 9.70 W

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP - Start Build @ 12.00°/100'	
2	6122.54	0.00	0.00	6122.54	0.00	0.00	0.00	0.00	0.00	KOP - Start Build @ 12.00°/100'	
3	6872.54	90.00	179.94	6600.00	-477.46	0.51	12.00	179.94	477.46	Landing Point - Hold @ 90.00° INC, 179.94° AZ	
4	11308.97	90.00	179.94	6600.00	-4913.90	5.30	0.00	0.00	4913.90	TD @ 11308.97' MD, 6600.00' TVD	



Azimuths to Grid North
 True North: -0.28°
 Magnetic North: 7.37°

Magnetic Field
 Strength: 48876.7snT
 Dip Angle: 60.70°
 Date: 4/3/2012
 Model: IGRF2010

