

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.**

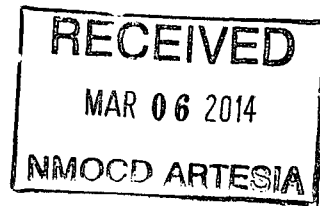
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM83591
2. Name of Operator COG OPERATING LLC Contact: ROBYN ODOM E-Mail: rododom@conchoresources.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-685-4385	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 5 T17S R30E NWSW 2310FSL 330FWL		8. Well Name and No. GISSLER FEDERAL 40H
		9. API Well No. 30-015-41225-00-X1
		10. Field and Pool, or Exploratory LOCO HILLS
		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	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	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 recompleate 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 Operating LLC respectfully requests permission to change the production string as follows:
Drill 8-3/4" hole and kick off at +/-4029', building curve at 11degrees/100' over +/-828 to horizontal at 4857'MD/4550'TVD Az 89.82degrees. Drill 7-7/8" lateral section in an Easterly direction for +/-4093' lateral to TD at +/-8949'MD/4479'TVD. Run 5-1/2" production casing. 5-1/2" casing will be run from surface to TD and will be isolated with a single stage cement job. Cement will be calculated to surface (minimum tie-back is 200' into 9-5/8" intermediate.)
Attached is the revised directional plan.



WDS 3/11/14
Accepted for record

Original COAs still stand

14. I hereby certify that the foregoing is true and correct. Electronic Submission #233051 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JENNIFER MASON on 02/06/2014 (14JAM0124SE)	
Name (Printed/Typed) ROBYN ODOM	Title PERSON RESPONSIBLE
Signature (Electronic Submission)	Date 01/23/2014
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 _____
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.	

APPROVED**FEB 27 2014**BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE



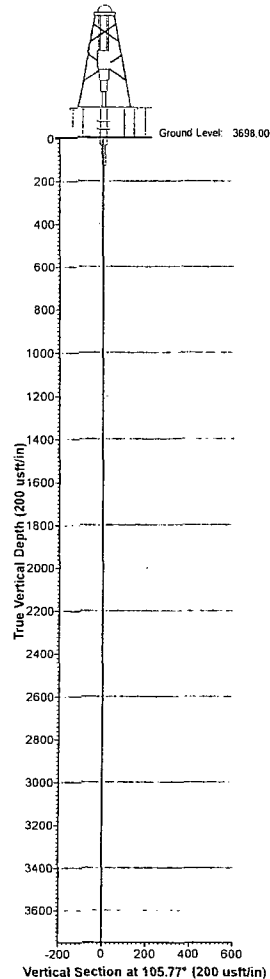
Project: Eddy County, New Mexico (NAD 27 NME)
Site: Gissler Federal
Well: #40H
Wellbore: WB1
Design: Plan #1 12-18-13



PHOENIX
TECHNOLOGY SERVICES



Azimuths to Grid North
True North: -0.18°
Magnetic North: 7.34°
Magnetic Field
Strength: 48699.9nT
Dip Angle: 60.64°
Date: 12/18/2013
Model: IGRF2010_14



WELL DETAILS											
			Ground Level: 3698.00		Latitude		Longitude				
+N-S			+E-W		Northing		Easting		32° 51' 45.17186 N		104° 0' 4.24083 W
0.00			0.00		677666.60		601991.10				

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	4029.21	0.00	0.00	4029.21	0.00	0.00	0.00	0.00	0.00		KOP, 11°/100' Build
3	4856.48	91.00	89.82	4550.00	1.64	529.96	11.00	89.82	509.56		LP, Hold 91° Inc, 89.82° Azm
4	8949.16	91.00	89.82	4478.57	14.30	4622.00	0.00	0.00	4444.13	PBHL-Gissler Federal #40H	TD at 8949.16

DESIGN TARGET DETAILS											
Name		TVD		+N-S	+E-W	Northing	Easting	Latitude		Longitude	Shape
PBHL-Gissler Federal #40H		4478.57		14.30	4622.00	677680.90	606613.10	32° 51' 45.16623 N		103° 59' 10.05209 W	Point
- plan hits target center											

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 #40H, Grid North

Latitude: 32° 51' 45.17186 N
Longitude: 104° 0' 4.24083 W

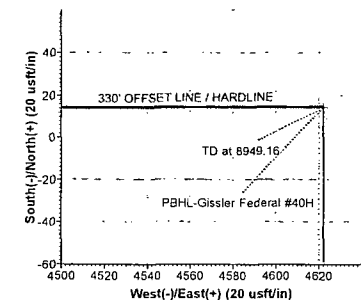
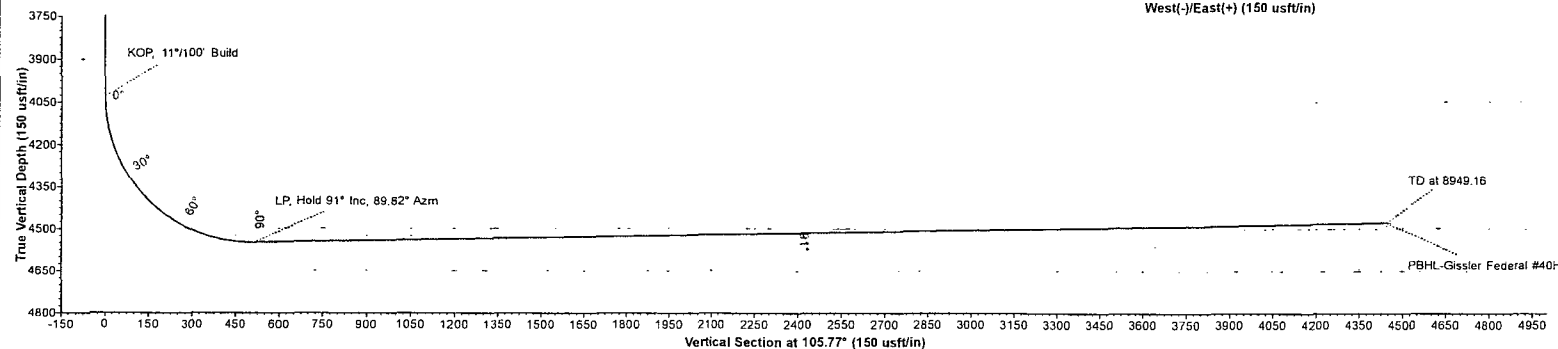
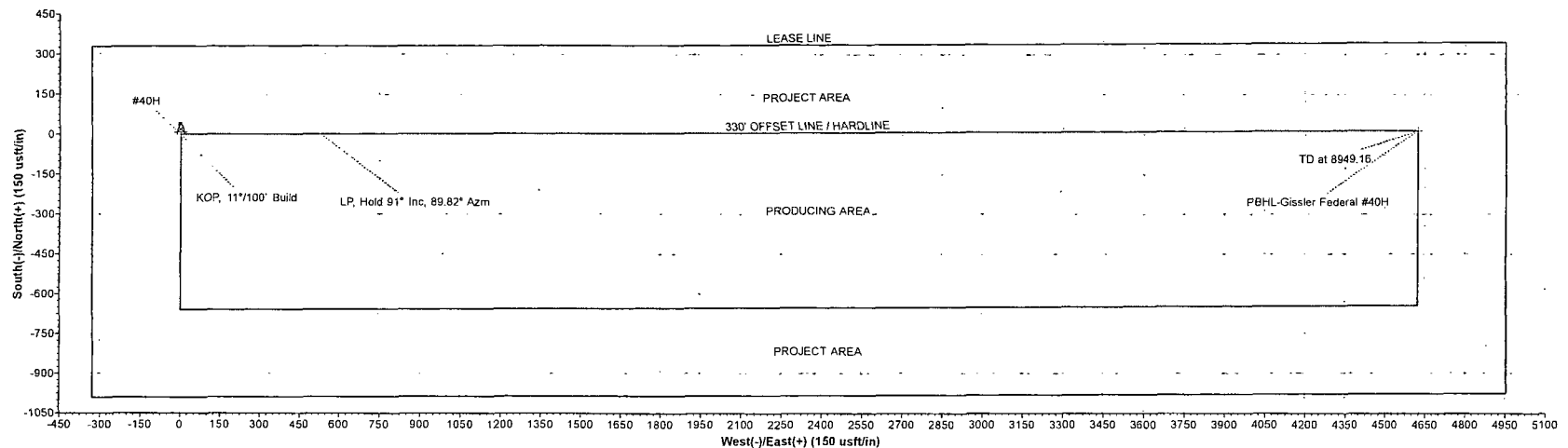
Grid East: 601991.10
Grid North: 677666.60
Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14
Sample Date: 18-Dec-13
Magnetic Declination: 7.52°
Dip Angle from Horizontal: 60.64°
Magnetic Field Strength: 48700

To convert a Magnetic Direction to a Grid Direction, Add 7.34°
To convert a Magnetic Direction to a True Direction, Add 7.52° East
To convert a True Direction to a Grid Direction, Subtract 0.18°

LEGEND

— Plan #1 12-18-13



Created By: Julio Piña Date: 15:06, December 18 2013



COG Operating LLC

Eddy County, New Mexico (NAD 27 NME)

Gissler Federal

#40H

WB1

Plan: Plan #1 12-18-13

Surface: 2310' FSL, 330' FWL, Sec 5, T17S, R30E, Unit L

BHL: 2310' FSL, 330' FEL, Sec 5, T17S, R30E, Unit I

Standard Planning Report

18 December, 2013





Phoenix Technology Services
Planning Report



Database:	GCR DB	Local Co-ordinate Reference:	Well #40H
Company:	COG Operating LLC	TVD Reference:	GL @ 3698.00usft
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	GL @ 3698.00usft
Site:	Gissler Federal	North Reference:	Grid
Well:	#40H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1 12-18-13		

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:	Gissler Federal		
Site Position:	Map	Northing:	677,666.60 usft
From:		Easting:	601,991.10 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 51' 45.17186 N
		Longitude:	104° 0' 4.24083 W
		Grid Convergence:	0.18 °

Well:	#40H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,698.00 usft

Wellbore	WB1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010_14	12/18/13	7.52
			Dip Angle
			60.64
			Field Strength
			48,700

Design:	Plan #1 12-18-13		
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
			(°)
			105.77

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(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	
4,029.21	0.00	0.00	4,029.21	0.00	0.00	0.00	0.00	0.00	0.00	
4,856.48	91.00	89.82	4,550.00	1.64	529.96	11.00	11.00	0.00	89.82	
8,949.16	91.00	89.82	4,478.57	14.30	4,622.00	0.00	0.00	0.00	0.00	PBHL-Gissler Federal



Phoenix Technology Services
Planning Report



Database:	GCR DB	Local Co-ordinate Reference:	Well #40H
Company:	COG Operating LLC	TVD Reference:	GL @ 3698.00usft
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	GL @ 3698.00usft
Site:	Gissler Federal	North Reference:	Grid
Well:	#40H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1 12-18-13		

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
4,029.21	0.00	0.00	4,029.21	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 11°/100' Build									
4,100.00	7.79	89.82	4,099.78	0.01	4.80	4.62	11.00	11.00	0.00
4,200.00	18.79	89.82	4,196.96	0.09	27.75	26.68	11.00	11.00	0.00
4,300.00	29.79	89.82	4,287.97	0.21	68.82	66.17	11.00	11.00	0.00
4,400.00	40.79	89.82	4,369.47	0.39	126.50	121.63	11.00	11.00	0.00
4,500.00	51.79	89.82	4,438.46	0.61	198.67	191.02	11.00	11.00	0.00
4,600.00	62.79	89.82	4,492.42	0.87	282.68	271.80	11.00	11.00	0.00
4,700.00	73.79	89.82	4,529.36	1.16	375.44	360.99	11.00	11.00	0.00
4,800.00	84.79	89.82	4,547.92	1.47	473.55	455.32	11.00	11.00	0.00
4,856.48	91.00	89.82	4,550.00	1.64	529.96	509.56	11.00	11.00	0.00
LP, Hold 91° Inc, 89.82° Azm									
4,900.00	91.00	89.82	4,549.24	1.77	573.47	551.40	0.00	0.00	0.00
5,000.00	91.00	89.82	4,547.49	2.08	673.46	647.54	0.00	0.00	0.00
5,100.00	91.00	89.82	4,545.75	2.39	773.44	743.68	0.00	0.00	0.00
5,200.00	91.00	89.82	4,544.00	2.70	873.43	839.81	0.00	0.00	0.00
5,300.00	91.00	89.82	4,542.26	3.01	973.41	935.95	0.00	0.00	0.00
5,400.00	91.00	89.82	4,540.51	3.32	1,073.39	1,032.09	0.00	0.00	0.00
5,500.00	91.00	89.82	4,538.77	3.63	1,173.38	1,128.22	0.00	0.00	0.00
5,600.00	91.00	89.82	4,537.02	3.94	1,273.36	1,224.36	0.00	0.00	0.00
5,700.00	91.00	89.82	4,535.28	4.25	1,373.35	1,320.50	0.00	0.00	0.00
5,800.00	91.00	89.82	4,533.53	4.56	1,473.33	1,416.63	0.00	0.00	0.00
5,900.00	91.00	89.82	4,531.79	4.87	1,573.32	1,512.77	0.00	0.00	0.00
6,000.00	91.00	89.82	4,530.04	5.18	1,673.30	1,608.91	0.00	0.00	0.00
6,100.00	91.00	89.82	4,528.29	5.49	1,773.28	1,705.04	0.00	0.00	0.00
6,200.00	91.00	89.82	4,526.55	5.80	1,873.27	1,801.18	0.00	0.00	0.00
6,300.00	91.00	89.82	4,524.80	6.11	1,973.25	1,897.32	0.00	0.00	0.00
6,400.00	91.00	89.82	4,523.06	6.41	2,073.24	1,993.45	0.00	0.00	0.00
6,500.00	91.00	89.82	4,521.31	6.72	2,173.22	2,089.59	0.00	0.00	0.00
6,600.00	91.00	89.82	4,519.57	7.03	2,273.21	2,185.73	0.00	0.00	0.00
6,700.00	91.00	89.82	4,517.82	7.34	2,373.19	2,281.86	0.00	0.00	0.00
6,800.00	91.00	89.82	4,516.08	7.65	2,473.17	2,378.00	0.00	0.00	0.00
6,900.00	91.00	89.82	4,514.33	7.96	2,573.16	2,474.14	0.00	0.00	0.00
7,000.00	91.00	89.82	4,512.59	8.27	2,673.14	2,570.27	0.00	0.00	0.00
7,100.00	91.00	89.82	4,510.84	8.58	2,773.13	2,666.41	0.00	0.00	0.00
7,200.00	91.00	89.82	4,509.10	8.89	2,873.11	2,762.55	0.00	0.00	0.00
7,300.00	91.00	89.82	4,507.35	9.20	2,973.10	2,858.68	0.00	0.00	0.00
7,400.00	91.00	89.82	4,505.61	9.51	3,073.08	2,954.82	0.00	0.00	0.00
7,500.00	91.00	89.82	4,503.86	9.82	3,173.06	3,050.96	0.00	0.00	0.00
7,600.00	91.00	89.82	4,502.12	10.13	3,273.05	3,147.09	0.00	0.00	0.00
7,700.00	91.00	89.82	4,500.37	10.44	3,373.03	3,243.23	0.00	0.00	0.00
7,800.00	91.00	89.82	4,498.63	10.75	3,473.02	3,339.36	0.00	0.00	0.00
7,900.00	91.00	89.82	4,496.88	11.05	3,573.00	3,435.50	0.00	0.00	0.00
8,000.00	91.00	89.82	4,495.14	11.36	3,672.99	3,531.64	0.00	0.00	0.00
8,100.00	91.00	89.82	4,493.39	11.67	3,772.97	3,627.77	0.00	0.00	0.00
8,200.00	91.00	89.82	4,491.64	11.98	3,872.95	3,723.91	0.00	0.00	0.00
8,300.00	91.00	89.82	4,489.90	12.29	3,972.94	3,820.05	0.00	0.00	0.00
8,400.00	91.00	89.82	4,488.15	12.60	4,072.92	3,916.18	0.00	0.00	0.00
8,500.00	91.00	89.82	4,486.41	12.91	4,172.91	4,012.32	0.00	0.00	0.00
8,600.00	91.00	89.82	4,484.66	13.22	4,272.89	4,108.46	0.00	0.00	0.00
8,700.00	91.00	89.82	4,482.92	13.53	4,372.88	4,204.59	0.00	0.00	0.00
8,800.00	91.00	89.82	4,481.17	13.84	4,472.86	4,300.73	0.00	0.00	0.00
8,900.00	91.00	89.82	4,479.43	14.15	4,572.85	4,396.87	0.00	0.00	0.00



Phoenix Technology Services
Planning Report



Database:	GCR DB	Local Co-ordinate Reference:	Well #40H
Company:	COG Operating LLC	TVD Reference:	GL @ 3698.00usft
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	GL @ 3698.00usft
Site:	Gissler Federal	North Reference:	Grid
Well:	#40H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1 12-18-13		

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)
8,949.16	91.00	89.82	4,478.57	14.30	4,622.00	4,444.13	0.00	0.00	0.00
TD at 8949.16 - PP-Dogfish Head State #3H - PBHL-Gissler Federal #40H									

Design Targets

Target Name hit/miss target Shape	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL-Gissler Federal #4 - plan hits target center - Point	0.00	0.01	4,478.57	14.30	4,622.00	677,680.90	606,613.10	32° 51' 45.16623 N	103° 59' 10.05209 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,029.21	4,029.21	0.00	0.00	KOP, 11°/100' Build
4,856.48	4,550.00	1.64	529.96	LP, Hold 91° Inc, 89.82° Azm
8,949.16	4,478.57	14.30	4,622.00	TD at 8949.16