

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
Operator Copy

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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 page 2

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM120907
2. Name of Operator COG PRODUCTION LLC Contact: MAYTE X REYES E-Mail: mreyes1@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address 2208 W MAIN STREET ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6945	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 23 T24S R32E NWNE 435FNL 1995FEL 32.209187 N Lat, 103.643280 W Lon		8. Well Name and No. EIDER 23 FEDERAL 602H
		9. API Well No. 30-025-46379-00-X1
		10. Field and Pool or Exploratory Area WILDCAT
		11. County or Parish, State LEA COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ 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 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must 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 respectfully requests approval for the following changes to the originally approved APD.

BHL CHANGE
FROM: 2590' FNL & 2310' FEL Section 26. T24S. R32E
TO: 2590' FNL & 1980' FEL Section 26. T24S. T32E.

C102 Attached.
Directional plan attached.
AC attached.

All previous Conditions of Approval still apply. DR

14. I hereby certify that the foregoing is true and correct. Electronic Submission #485288 verified by the BLM Well Information System For COG PRODUCTION LLC, sent to the Hobbs Committed to AFMSS for processing by PRISCILLA PEREZ on 09/26/2019 (19PP3291SE)	
Name (Printed/Typed) MAYTE X REYES	Title SENIOR REGULATORY ANALYST
Signature (Electronic Submission)	Date 09/26/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>DYLAN ROSSMANGO</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>10/03/2019</u>
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 Hobbs

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.



PHOENIX
TECHNOLOGY SERVICES

COG Operating LLC

Lea County, NM (NAD27 NME)

Eider 23 Federal

602H

OH

Plan: Plan 1 09-25-19

Standard Planning Report

25 September, 2019





Planning Report



Database: USA Compass
 Company: COG Operating LLC
 Project: Lea County, NM (NAD27 NME)
 Site: Eider 23 Federal
 Well: 602H
 Wellbore: OH
 Design: Plan 1 09-25-19

Local Co-ordinate Reference: Well 602H
 TVD Reference: RKB @ 3597.30usft (Permitting)
 MD Reference: RKB @ 3597.30usft (Permitting)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project	Lea County, NM (NAD27 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	Eider 23 Federal		
Site Position:	Map	Northing:	440,462.00 usft
From:		Easting:	713,576.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 12' 32.620628 N
		Longitude:	103° 38' 34.086957 W
		Grid Convergence:	0.37 "

Well	602H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	1.00 usft	Wellhead Elevation:	
		Latitude:	32° 12' 32.620628 N
		Longitude:	103° 38' 34.086957 W
		Ground Level:	3,567.30 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	MVHD	11/24/2019	6.57
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,824.05142320

Design	Plan 1 09-25-19		
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
			(°)
			179.65

Plan Survey Tool Program Date 9/25/2019

Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1 0.00	19,894.60	Plan 1 09-25-19 (OH)	MWD+HRGM	
			OWSG MWD + HRGM	

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	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,799.82	6.00	1.83	2,799.28	15.67	0.50	2.00	2.00	0.00	1.83	
6,189.82	6.00	1.83	6,170.72	369.63	11.81	0.00	0.00	0.00	0.00	
6,489.64	0.00	0.00	6,470.00	385.30	12.32	2.00	-2.00	0.00	180.00	
11,746.69	0.00	0.00	11,727.04	385.30	12.32	0.00	0.00	0.00	0.00	
12,647.32	90.06	179.76	12,300.00	-188.29	14.74	10.00	10.00	19.96	179.76	
19,894.60	90.06	179.76	12,292.00	-7,435.50	45.40	0.00	0.00	0.00	0.00	BHL - Eider 23 Feder



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Wellbore: OH
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Local Co-ordinate Reference: Well 602H
TVD Reference: RKB @ 3597.30usft (Permitting)
MD Reference: RKB @ 3597.30usft (Permitting)
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
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 2.00°/100' Build									
2,600.00	2.00	1.83	2,599.98	1.74	0.06	-1.74	2.00	2.00	0.00
2,700.00	4.00	1.83	2,699.84	6.97	0.22	-6.97	2.00	2.00	0.00
2,799.82	6.00	1.83	2,799.28	15.67	0.50	-15.66	2.00	2.00	0.00
Hold 6.00° Inc at 1.83° Azm									
2,800.00	6.00	1.83	2,799.45	15.69	0.50	-15.68	0.00	0.00	0.00
2,900.00	6.00	1.83	2,898.90	26.13	0.84	-26.12	0.00	0.00	0.00
3,000.00	6.00	1.83	2,998.36	36.57	1.17	-36.56	0.00	0.00	0.00
3,100.00	6.00	1.83	3,097.81	47.01	1.50	-47.00	0.00	0.00	0.00
3,200.00	6.00	1.83	3,197.26	57.45	1.84	-57.44	0.00	0.00	0.00
3,300.00	6.00	1.83	3,296.72	67.89	2.17	-67.88	0.00	0.00	0.00
3,400.00	6.00	1.83	3,396.17	78.33	2.50	-78.32	0.00	0.00	0.00
3,500.00	6.00	1.83	3,495.62	88.78	2.84	-88.76	0.00	0.00	0.00
3,600.00	6.00	1.83	3,595.07	99.22	3.17	-99.20	0.00	0.00	0.00
3,700.00	6.00	1.83	3,694.53	109.66	3.50	-109.64	0.00	0.00	0.00
3,800.00	6.00	1.83	3,793.98	120.10	3.84	-120.07	0.00	0.00	0.00
3,900.00	6.00	1.83	3,893.43	130.54	4.17	-130.51	0.00	0.00	0.00
4,000.00	6.00	1.83	3,992.89	140.98	4.51	-140.95	0.00	0.00	0.00
4,100.00	6.00	1.83	4,092.34	151.42	4.84	-151.39	0.00	0.00	0.00
4,200.00	6.00	1.83	4,191.79	161.87	5.17	-161.83	0.00	0.00	0.00
4,300.00	6.00	1.83	4,291.24	172.31	5.51	-172.27	0.00	0.00	0.00
4,400.00	6.00	1.83	4,390.70	182.75	5.84	-182.71	0.00	0.00	0.00
4,500.00	6.00	1.83	4,490.15	193.19	6.17	-193.15	0.00	0.00	0.00
4,600.00	6.00	1.83	4,589.60	203.63	6.51	-203.59	0.00	0.00	0.00
4,700.00	6.00	1.83	4,689.06	214.07	6.84	-214.03	0.00	0.00	0.00
4,800.00	6.00	1.83	4,788.51	224.51	7.18	-224.47	0.00	0.00	0.00
4,900.00	6.00	1.83	4,887.96	234.96	7.51	-234.91	0.00	0.00	0.00
5,000.00	6.00	1.83	4,987.41	245.40	7.84	-245.34	0.00	0.00	0.00
5,100.00	6.00	1.83	5,086.87	255.84	8.18	-255.78	0.00	0.00	0.00
5,200.00	6.00	1.83	5,186.32	266.28	8.51	-266.22	0.00	0.00	0.00
5,300.00	6.00	1.83	5,285.77	276.72	8.84	-276.66	0.00	0.00	0.00
5,400.00	6.00	1.83	5,385.23	287.16	9.18	-287.10	0.00	0.00	0.00
5,500.00	6.00	1.83	5,484.68	297.60	9.51	-297.54	0.00	0.00	0.00
5,600.00	6.00	1.83	5,584.13	308.05	9.85	-307.98	0.00	0.00	0.00
5,700.00	6.00	1.83	5,683.58	318.49	10.18	-318.42	0.00	0.00	0.00
5,800.00	6.00	1.83	5,783.04	328.93	10.51	-328.86	0.00	0.00	0.00
5,900.00	6.00	1.83	5,882.49	339.37	10.85	-339.30	0.00	0.00	0.00
6,000.00	6.00	1.83	5,981.94	349.81	11.18	-349.74	0.00	0.00	0.00
6,100.00	6.00	1.83	6,081.40	360.25	11.51	-360.18	0.00	0.00	0.00
6,189.82	6.00	1.83	6,170.72	369.63	11.81	-369.55	0.00	0.00	0.00
Begin 2.00°/100' Drop									
6,200.00	5.79	1.83	6,180.85	370.68	11.85	-370.60	2.00	-2.00	0.00
6,300.00	3.79	1.83	6,280.50	379.03	12.11	-378.95	2.00	-2.00	0.00
6,400.00	1.79	1.83	6,380.37	383.90	12.27	-383.81	2.00	-2.00	0.00
6,489.64	0.00	0.00	6,470.00	385.30	12.32	-385.22	2.00	-2.00	0.00
Begin Vertical Hold									
11,746.69	0.00	0.00	11,727.04	385.30	12.32	-385.22	0.00	0.00	0.00
KOP2, Begin 10.00°/100' Build									
11,800.00	5.33	179.76	11,780.28	382.82	12.33	-382.74	10.00	10.00	0.00
11,900.00	15.33	179.76	11,878.53	364.91	12.40	-364.83	10.00	10.00	0.00
12,000.00	25.33	179.76	11,972.18	330.21	12.55	-330.13	10.00	10.00	0.00



Planning Report



Database: USA Compass
Company: COG Operating LLC
Project: Lea County, NM (NAD27 NME)
Site: Eider 23 Federal
Well: 602H
Wellbore: OH
Design: Plan 1 09-25-19

Local Co-ordinate Reference: Well 602H
TVD Reference: RKB @ 3597.30usft (Permitting)
MD Reference: RKB @ 3597.30usft (Permitting)
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)
12,100.00	35.33	179.76	12,058.39	279.77	12.76	-279.69	10.00	10.00	0.00
12,200.00	45.33	179.76	12,134.52	215.13	13.03	-215.05	10.00	10.00	0.00
12,300.00	55.33	179.76	12,198.28	138.26	13.36	-138.17	10.00	10.00	0.00
12,400.00	65.33	179.76	12,247.71	51.48	13.73	-51.39	10.00	10.00	0.00
12,500.00	75.33	179.76	12,281.33	-42.57	14.13	42.65	10.00	10.00	0.00
12,600.00	85.33	179.76	12,298.10	-141.02	14.54	141.11	10.00	10.00	0.00
12,647.32	90.06	179.76	12,300.00	-188.29	14.74	188.37	10.00	10.00	0.00
LP, Hold 90.06° Inc at 179.76° Azm									
12,700.00	90.06	179.76	12,299.94	-240.97	14.96	241.05	0.00	0.00	0.00
12,800.00	90.06	179.76	12,299.83	-340.97	15.39	341.05	0.00	0.00	0.00
12,900.00	90.06	179.76	12,299.72	-440.97	15.81	441.05	0.00	0.00	0.00
13,000.00	90.06	179.76	12,299.61	-540.97	16.23	541.05	0.00	0.00	0.00
13,100.00	90.06	179.76	12,299.50	-640.96	16.66	641.05	0.00	0.00	0.00
13,200.00	90.06	179.76	12,299.39	-740.96	17.08	741.05	0.00	0.00	0.00
13,300.00	90.06	179.76	12,299.28	-840.96	17.50	841.05	0.00	0.00	0.00
13,400.00	90.06	179.76	12,299.17	-940.96	17.93	941.05	0.00	0.00	0.00
13,500.00	90.06	179.76	12,299.06	-1,040.96	18.35	1,041.05	0.00	0.00	0.00
13,600.00	90.06	179.76	12,298.95	-1,140.96	18.77	1,141.05	0.00	0.00	0.00
13,700.00	90.06	179.76	12,298.84	-1,240.96	19.19	1,241.05	0.00	0.00	0.00
13,800.00	90.06	179.76	12,298.73	-1,340.96	19.62	1,341.05	0.00	0.00	0.00
13,900.00	90.06	179.76	12,298.62	-1,440.96	20.04	1,441.05	0.00	0.00	0.00
14,000.00	90.06	179.76	12,298.51	-1,540.96	20.46	1,541.05	0.00	0.00	0.00
14,100.00	90.06	179.76	12,298.40	-1,640.95	20.89	1,641.05	0.00	0.00	0.00
14,200.00	90.06	179.76	12,298.29	-1,740.95	21.31	1,741.05	0.00	0.00	0.00
14,300.00	90.06	179.76	12,298.18	-1,840.95	21.73	1,841.05	0.00	0.00	0.00
14,400.00	90.06	179.76	12,298.07	-1,940.95	22.16	1,941.05	0.00	0.00	0.00
14,500.00	90.06	179.76	12,297.95	-2,040.95	22.58	2,041.05	0.00	0.00	0.00
14,600.00	90.06	179.76	12,297.84	-2,140.95	23.00	2,141.05	0.00	0.00	0.00
14,700.00	90.06	179.76	12,297.73	-2,240.95	23.43	2,241.05	0.00	0.00	0.00
14,800.00	90.06	179.76	12,297.62	-2,340.95	23.85	2,341.05	0.00	0.00	0.00
14,900.00	90.06	179.76	12,297.51	-2,440.95	24.27	2,441.05	0.00	0.00	0.00
15,000.00	90.06	179.76	12,297.40	-2,540.95	24.69	2,541.05	0.00	0.00	0.00
15,100.00	90.06	179.76	12,297.29	-2,640.95	25.12	2,641.05	0.00	0.00	0.00
15,200.00	90.06	179.76	12,297.18	-2,740.94	25.54	2,741.05	0.00	0.00	0.00
15,300.00	90.06	179.76	12,297.07	-2,840.94	25.96	2,841.05	0.00	0.00	0.00
15,400.00	90.06	179.76	12,296.96	-2,940.94	26.39	2,941.05	0.00	0.00	0.00
15,500.00	90.06	179.76	12,296.85	-3,040.94	26.81	3,041.05	0.00	0.00	0.00
15,600.00	90.06	179.76	12,296.74	-3,140.94	27.23	3,141.05	0.00	0.00	0.00
15,700.00	90.06	179.76	12,296.63	-3,240.94	27.66	3,241.05	0.00	0.00	0.00
15,800.00	90.06	179.76	12,296.52	-3,340.94	28.08	3,341.05	0.00	0.00	0.00
15,900.00	90.06	179.76	12,296.41	-3,440.94	28.50	3,441.05	0.00	0.00	0.00
16,000.00	90.06	179.76	12,296.30	-3,540.94	28.92	3,541.05	0.00	0.00	0.00
16,100.00	90.06	179.76	12,296.19	-3,640.94	29.35	3,641.05	0.00	0.00	0.00
16,200.00	90.06	179.76	12,296.08	-3,740.93	29.77	3,741.05	0.00	0.00	0.00
16,300.00	90.06	179.76	12,295.97	-3,840.93	30.19	3,841.05	0.00	0.00	0.00
16,400.00	90.06	179.76	12,295.86	-3,940.93	30.62	3,941.05	0.00	0.00	0.00
16,500.00	90.06	179.76	12,295.75	-4,040.93	31.04	4,041.05	0.00	0.00	0.00
16,600.00	90.06	179.76	12,295.64	-4,140.93	31.46	4,141.05	0.00	0.00	0.00
16,700.00	90.06	179.76	12,295.53	-4,240.93	31.89	4,241.05	0.00	0.00	0.00
16,800.00	90.06	179.76	12,295.42	-4,340.93	32.31	4,341.05	0.00	0.00	0.00
16,900.00	90.06	179.76	12,295.31	-4,440.93	32.73	4,441.05	0.00	0.00	0.00
17,000.00	90.06	179.76	12,295.20	-4,540.93	33.15	4,541.04	0.00	0.00	0.00
17,100.00	90.06	179.76	12,295.08	-4,640.93	33.58	4,641.04	0.00	0.00	0.00



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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)
17,200.00	90.06	179.76	12,294.97	-4,740.93	34.00	4,741.04	0.00	0.00	0.00
17,300.00	90.06	179.76	12,294.86	-4,840.92	34.42	4,841.04	0.00	0.00	0.00
17,400.00	90.06	179.76	12,294.75	-4,940.92	34.85	4,941.04	0.00	0.00	0.00
17,500.00	90.06	179.76	12,294.64	-5,040.92	35.27	5,041.04	0.00	0.00	0.00
17,600.00	90.06	179.76	12,294.53	-5,140.92	35.69	5,141.04	0.00	0.00	0.00
17,700.00	90.06	179.76	12,294.42	-5,240.92	36.12	5,241.04	0.00	0.00	0.00
17,800.00	90.06	179.76	12,294.31	-5,340.92	36.54	5,341.04	0.00	0.00	0.00
17,900.00	90.06	179.76	12,294.20	-5,440.92	36.96	5,441.04	0.00	0.00	0.00
18,000.00	90.06	179.76	12,294.09	-5,540.92	37.39	5,541.04	0.00	0.00	0.00
18,100.00	90.06	179.76	12,293.98	-5,640.92	37.81	5,641.04	0.00	0.00	0.00
18,200.00	90.06	179.76	12,293.87	-5,740.92	38.23	5,741.04	0.00	0.00	0.00
18,300.00	90.06	179.76	12,293.76	-5,840.91	38.65	5,841.04	0.00	0.00	0.00
18,400.00	90.06	179.76	12,293.65	-5,940.91	39.08	5,941.04	0.00	0.00	0.00
18,500.00	90.06	179.76	12,293.54	-6,040.91	39.50	6,041.04	0.00	0.00	0.00
18,600.00	90.06	179.76	12,293.43	-6,140.91	39.92	6,141.04	0.00	0.00	0.00
18,700.00	90.06	179.76	12,293.32	-6,240.91	40.35	6,241.04	0.00	0.00	0.00
18,800.00	90.06	179.76	12,293.21	-6,340.91	40.77	6,341.04	0.00	0.00	0.00
18,900.00	90.06	179.76	12,293.10	-6,440.91	41.19	6,441.04	0.00	0.00	0.00
19,000.00	90.06	179.76	12,292.99	-6,540.91	41.62	6,541.04	0.00	0.00	0.00
19,100.00	90.06	179.76	12,292.88	-6,640.91	42.04	6,641.04	0.00	0.00	0.00
19,200.00	90.06	179.76	12,292.77	-6,740.91	42.46	6,741.04	0.00	0.00	0.00
19,300.00	90.06	179.76	12,292.66	-6,840.91	42.88	6,841.04	0.00	0.00	0.00
19,400.00	90.06	179.76	12,292.55	-6,940.90	43.31	6,941.04	0.00	0.00	0.00
19,500.00	90.06	179.76	12,292.44	-7,040.90	43.73	7,041.04	0.00	0.00	0.00
19,600.00	90.06	179.76	12,292.33	-7,140.90	44.15	7,141.04	0.00	0.00	0.00
19,700.00	90.06	179.76	12,292.22	-7,240.90	44.58	7,241.04	0.00	0.00	0.00
19,800.00	90.06	179.76	12,292.10	-7,340.90	45.00	7,341.04	0.00	0.00	0.00
19,894.60	90.06	179.76	12,292.00	-7,435.50	45.40	7,435.64	0.00	0.00	0.00

TD at 19894.60

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - Eider 23 Federal 6 - hit/miss target - Shape - Point	0.00	0.00	12,292.00	-7,435.50	45.40	433,026.50	713,621.60	32° 11' 19.038250 N 103° 38' 34.114342 W	
LTP - Eider 23 Federal 6 - plan misses target center by 44.60usft at 19800.00usft MD (12292.10 TVD, -7340.90 N, 45.00 E) - Point	0.00	0.00	12,292.06	-7,385.50	45.20	433,076.50	713,621.40	32° 11' 19.533048 N 103° 38' 34.112934 W	
FTP - Eider 23 Federal 6 - plan misses target center by 70.59usft at 12379.18usft MD (12238.68 TVD, 70.24 N, 13.65 E) - Point	0.00	0.00	12,300.00	105.20	13.50	440,567.20	713,589.70	32° 12' 33.660796 N 103° 38' 33.921968 W	

Database: USA Compass
 Company: COG Operating LLC
 Project: Lea County, NM (NAD27 NME)
 Site: Eider 23 Federal
 Well: 602H
 Wellbore: OH
 Design: Plan 1 09-25-19

Local Co-ordinate Reference: Well 602H
 TVD Reference: RKB @ 3597.30usft (Permitting)
 MD Reference: RKB @ 3597.30usft (Permitting)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,110.30	1,110.30	Rustler		-0.06	179.65	
1,430.30	1,430.30	TOS		-0.06	179.65	
4,687.40	4,676.52	BOS (Fletcher)		-0.06	179.65	
4,918.69	4,906.55	LMAR (Top Delaware)		-0.06	179.65	
4,955.90	4,943.55	BLCN		-0.06	179.65	
5,855.92	5,838.65	CYCN		-0.06	179.65	
7,291.35	7,271.70	BYCN		-0.06	179.65	
8,849.35	8,829.70	Bone Sprg (BSGL)		-0.06	179.65	
9,219.35	9,199.70	Middle Avalon Shale		-0.06	179.65	
9,380.35	9,360.70	Lower Avalon Shale		-0.06	179.65	
9,970.35	9,950.70	FBSG_sand		-0.06	179.65	
10,568.35	10,548.70	SBSG_sand		-0.06	179.65	
11,091.35	11,071.70	SBSG_sand_Base		-0.06	179.65	
11,841.77	11,821.70	TBSG_sand		-0.06	179.65	
12,418.96	12,255.34	WFMP		-0.06	179.65	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,500.00	2,500.00	0.00	0.00	KOP, Begin 2.00°/100' Build	
2,799.82	2,799.28	15.67	0.50	Hold 6.00° Inc at 1.83° Azm	
6,189.82	6,170.72	369.63	11.81	Begin 2.00°/100' Drop	
6,489.64	6,470.00	385.30	12.32	Begin Vertical Hold	
11,746.69	11,727.04	385.30	12.32	KOP2, Begin 10.00°/100' Build	
12,647.32	12,300.00	-188.29	14.74	LP, Hold 90.06° Inc at 179.76° Azm	
19,894.60	12,292.00	-7,435.50	45.40	TD at 19894.60	

DISTRICT I
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Phone: (505) 748-1283 Fax: (505) 748-0720

DISTRICT III
1000 RIO BRAZOS RD., 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) 476-3465

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 30-025-46379	Pool Code 98309	Pool Name WC-025 G-08 S243213C; WOLFCAMP
Property Code 326116	Property Name EIDER 23 FEDERAL	Well Number 602H
GRID No. 217955	Operator Name COG PRODUCTION, LLC	Elevation 3567.3'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	23	24-S	32-E		435	NORTH	1995	EAST	LEA

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
G	26	24-S	32-E		2590	NORTH	1980	EAST	LEA

Dedicated Acres 240	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**

