

Submit 1 Copy To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
October 13, 2009

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

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. 30-015-44006
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 2208 W. Main Street, Artesia, NM 88210		7. Lease Name or Unit Agreement Name Myox 21 State Com
4. Well Location Unit Letter <u>N</u> : <u>200</u> feet from the <u>South</u> line and <u>1709</u> feet from the <u>West</u> line Section <u>21</u> Township <u>25S</u> Range <u>28E</u> NMPM <u>Eddy</u> County		8. Well Number 36H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 2977.2		9. OGRID Number 229137
		10. Pool name or Wildcat Purple Sage; Wolfcamp

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: ☐	
OTHER: ☒ BHL & Pool Change			

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 respectfully requests approval for the following changes to the original approved APD..

POOL From: WC-05 G-06 S26280500; UPR Wolfcamp 98195
To: Purple Sage; Wolfcamp 98220

NM OIL CONSERVATION
ARTESIA DISTRICT

BHL From: 200' FNL & 2310' FWL Section 16, T25S, R28E
To: 200' FNL & 1980' FWL Section 16, T25S, R28E

APR 24 2018

C102 attached.

RECEIVED

DRILLING CHANGES: Operator will drill to TD at 19,454' MD.

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 Mayte Reyes TITLE: Regulatory Analyst DATE: 8/10/2017
Type or print name: Mayte Reyes E-mail address: mreyes1@conchoresources.com PHONE: (575) 748-6945

For State Use Only

APPROVED BY: Raymond M. Rodary TITLE: Geologist DATE: 4-24-18
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, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

APR 24 2018
☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44006		² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp
⁴ Property Code 38521	⁵ Property Name MYOX 21 STATE COM		⁶ Well Number 36H
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING, LLC.		⁹ Elevation 2977.2

¹⁰ Surface Location

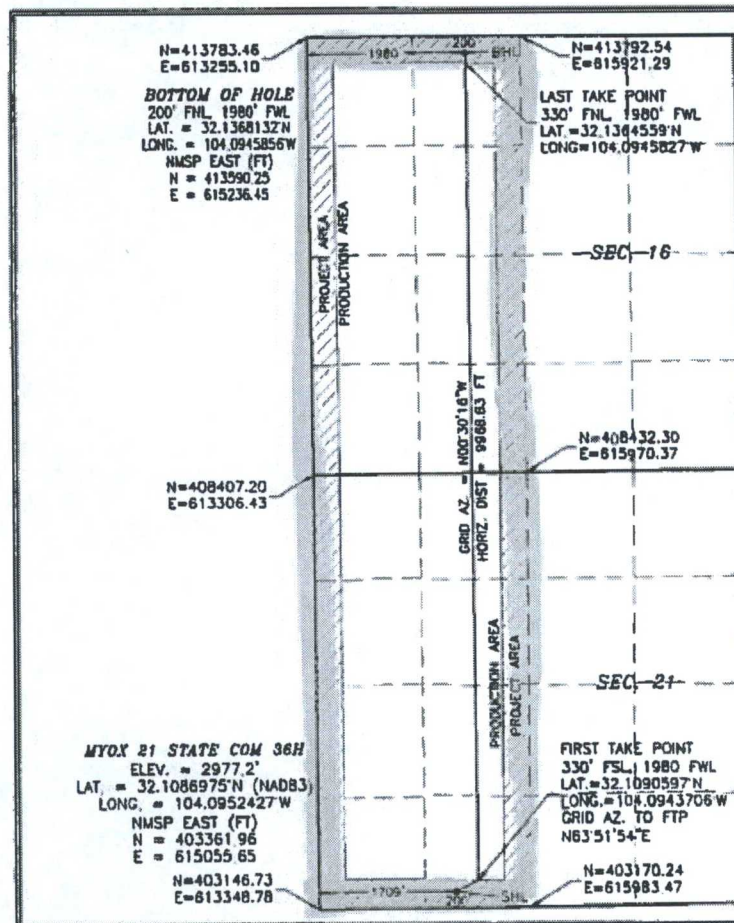
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	25 S	28 E		200	SOUTH	1709	WEST	EDDY

¹¹ 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
C	16	25 S	28 E		200	NORTH	1980	WEST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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.



¹⁶ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Mayte Reyes Date: 8-10-17

Printed Name

Mayte Reyes

E-mail Address

mreyes1@concho.com

¹⁷ 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.

Signature: ELIMON F. JARAMILLO

Date of survey

JUNE 8, 2017

12797

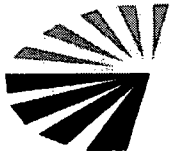
Signature and Seal of Registered Surveyor:

ELIMON F. JARAMILLO, PLS 12797

Certificate Number:

ELIMON F. JARAMILLO, PLS 12797

SURVEY NO. 4892D



CONCHO

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 24 2018

RECEIVED

COG OPERATING LLC

EDDY COUNTY, NM

ATLAS

MYOX 21 ST COM #36H

OWB

Plan: PWP1

Survey Report - Geographic

08 August, 2017



COG Operating LLC

Survey Report - Geographic

Company:	COG OPERATING LLC	Local Co-ordinate Reference:	Well MYOX 21 ST COM #36H
Project:	EDDY COUNTY, NM	TVD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Site:	ATLAS	MD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Well:	MYOX 21 ST COM #36H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

Project	EDDY COUNTY, NM		
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		ATLAS			
Site Position:		Northing:	371,480.80 usft	Latitude:	32° 1' 15.933 N
From:	Map	Easting:	573,599.60 usft	Longitude:	104° 5' 45.086 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well	MYOX 21 ST COM #36H					
Well Position	+N/-S	0.0 usft	Northing:	403,304.22 usf	Latitude:	32° 6' 30.869 N
	+E/-W	0.0 usft	Easting:	573,871.47 usf	Longitude:	104° 5' 41.111 W
Position Uncertainty	3.0 usft	Wellhead Elevation:	usf	Ground Level:	2,977.2 usf	

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM2015	12/19/2016	7.26	59.86	47,856.71250466

Design	PWP1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.01

Survey Tool Program	Date 8/8/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,453.4	PWP1 (OWB)	MWD	OWSG MWD - Standard

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
100.0	0.00	0.00	100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
200.0	0.00	0.00	200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
300.0	0.00	0.00	300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
400.0	0.00	0.00	400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
500.0	0.00	0.00	500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
600.0	0.00	0.00	600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
700.0	0.00	0.00	700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
800.0	0.00	0.00	800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
900.0	0.00	0.00	900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W



COG Operating LLC
Survey Report - Geographic

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Well:	MYOX 21 ST COM #36H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,200.0	0.00	0.00	1,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,500.0	0.00	0.00	5,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,700.0	0.00	0.00	5,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,800.0	0.00	0.00	5,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
5,900.0	0.00	0.00	5,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,000.0	0.00	0.00	6,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,100.0	0.00	0.00	6,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,200.0	0.00	0.00	6,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,300.0	0.00	0.00	6,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,400.0	0.00	0.00	6,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,500.0	0.00	0.00	6,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,600.0	0.00	0.00	6,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W



COG Operating LLC

Survey Report - Geographic

Company:	COG OPERATING LLC	Local Co-ordinate Reference:	Well MYOX 21 ST COM #36H
Project:	EDDY COUNTY, NM	TVD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Site:	ATLAS	MD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Well:	MYOX 21 ST COM #36H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,700.0	0.00	0.00	6,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,800.0	0.00	0.00	6,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
6,900.0	0.00	0.00	6,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,000.0	0.00	0.00	7,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,100.0	0.00	0.00	7,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,200.0	0.00	0.00	7,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,300.0	0.00	0.00	7,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,400.0	0.00	0.00	7,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,500.0	0.00	0.00	7,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,600.0	0.00	0.00	7,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,700.0	0.00	0.00	7,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,800.0	0.00	0.00	7,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
7,900.0	0.00	0.00	7,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,000.0	0.00	0.00	8,000.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,100.0	0.00	0.00	8,100.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,200.0	0.00	0.00	8,200.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,300.0	0.00	0.00	8,300.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,400.0	0.00	0.00	8,400.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,500.0	0.00	0.00	8,500.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,600.0	0.00	0.00	8,600.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,700.0	0.00	0.00	8,700.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,800.0	0.00	0.00	8,800.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,900.0	0.00	0.00	8,900.0	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
8,945.5	0.00	0.00	8,945.5	0.0	0.0	403,304.22	573,871.47	32° 6' 30.869 N	104° 5' 41.111 W
9,000.0	6.54	9.50	8,999.9	3.1	0.5	403,307.28	573,871.99	32° 6' 30.900 N	104° 5' 41.104 W
9,100.0	18.54	9.50	9,097.3	24.4	4.1	403,328.66	573,875.56	32° 6' 31.111 N	104° 5' 41.062 W
9,200.0	30.54	9.50	9,188.1	65.3	10.9	403,369.54	573,882.40	32° 6' 31.515 N	104° 5' 40.982 W
9,300.0	42.54	9.50	9,268.3	123.9	20.7	403,428.15	573,892.21	32° 6' 32.095 N	104° 5' 40.866 W
9,400.0	54.54	9.50	9,334.4	197.7	33.1	403,501.93	573,904.56	32° 6' 32.825 N	104° 5' 40.721 W
9,500.0	66.54	9.50	9,383.5	283.4	47.4	403,587.64	573,918.90	32° 6' 33.673 N	104° 5' 40.552 W
9,600.0	78.53	9.50	9,413.5	377.3	63.1	403,681.55	573,934.62	32° 6' 34.602 N	104° 5' 40.367 W
9,695.1	89.95	9.50	9,423.0	470.5	78.7	403,774.76	573,950.21	32° 6' 35.524 N	104° 5' 40.183 W
9,700.0	89.95	9.31	9,423.0	475.3	79.5	403,779.56	573,951.01	32° 6' 35.572 N	104° 5' 40.174 W
9,800.0	89.95	5.31	9,423.1	574.5	92.2	403,878.72	573,963.72	32° 6' 36.553 N	104° 5' 40.023 W
9,900.0	89.95	1.31	9,423.2	674.3	98.0	403,978.54	573,969.49	32° 6' 37.540 N	104° 5' 39.954 W
9,920.2	89.95	0.50	9,423.2	694.5	98.3	403,998.75	573,969.80	32° 6' 37.740 N	104° 5' 39.949 W
10,000.0	89.95	0.50	9,423.3	774.3	99.0	404,078.53	573,970.50	32° 6' 38.530 N	104° 5' 39.939 W
10,100.0	89.95	0.50	9,423.4	874.3	99.9	404,178.53	573,971.36	32° 6' 39.520 N	104° 5' 39.927 W
10,200.0	89.95	0.50	9,423.5	974.3	100.8	404,278.52	573,972.23	32° 6' 40.509 N	104° 5' 39.914 W
10,300.0	89.95	0.50	9,423.6	1,074.3	101.6	404,378.52	573,973.10	32° 6' 41.499 N	104° 5' 39.901 W
10,400.0	89.95	0.50	9,423.6	1,174.3	102.5	404,478.52	573,973.83	32° 6' 42.488 N	104° 5' 39.889 W
10,500.0	89.95	0.50	9,423.7	1,274.3	103.4	404,578.51	573,974.93	32° 6' 43.478 N	104° 5' 39.876 W
10,600.0	89.95	0.50	9,423.8	1,374.3	104.2	404,678.51	573,975.70	32° 6' 44.468 N	104° 5' 39.863 W
10,700.0	89.95	0.50	9,423.9	1,474.3	105.1	404,778.50	573,976.57	32° 6' 45.457 N	104° 5' 39.851 W
10,800.0	89.95	0.50	9,424.0	1,574.3	106.0	404,878.50	573,977.43	32° 6' 46.447 N	104° 5' 39.838 W
10,900.0	89.95	0.50	9,424.1	1,674.3	106.8	404,978.50	573,978.30	32° 6' 47.436 N	104° 5' 39.825 W
11,000.0	89.95	0.50	9,424.2	1,774.3	107.7	405,078.49	573,979.17	32° 6' 48.426 N	104° 5' 39.813 W
11,100.0	89.95	0.50	9,424.3	1,874.3	108.6	405,178.49	573,980.04	32° 6' 49.416 N	104° 5' 39.800 W
11,200.0	89.95	0.50	9,424.4	1,974.3	109.4	405,278.49	573,980.90	32° 6' 50.405 N	104° 5' 39.787 W
11,300.0	89.95	0.50	9,424.5	2,074.3	110.3	405,378.48	573,981.77	32° 6' 51.395 N	104° 5' 39.775 W
11,400.0	89.95	0.50	9,424.6	2,174.3	111.2	405,478.48	573,982.64	32° 6' 52.384 N	104° 5' 39.762 W
11,500.0	89.95	0.50	9,424.7	2,274.3	112.0	405,578.47	573,983.50	32° 6' 53.374 N	104° 5' 39.749 W
11,600.0	89.95	0.50	9,424.8	2,374.3	112.9	405,678.47	573,984.37	32° 6' 54.363 N	104° 5' 39.737 W
11,700.0	89.95	0.50	9,424.8	2,474.2	113.8	405,778.47	573,985.24	32° 6' 55.353 N	104° 5' 39.724 W
11,800.0	89.95	0.50	9,424.9	2,574.2	114.6	405,878.46	573,986.11	32° 6' 56.343 N	104° 5' 39.711 W



COG Operating LLC

Survey Report - Geographic

Company:	COG OPERATING LLC	Local Co-ordinate Reference:	Well MYOX 21 ST COM #36H
Project:	EDDY COUNTY, NM	TVD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Site:	ATLAS	MD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Well:	MYOX 21 ST COM #36H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,900.0	89.95	0.50	9,425.0	2,674.2	115.5	405,978.46	573,986.97	32° 6' 57.332 N	104° 5' 39.699 W
12,000.0	89.95	0.50	9,425.1	2,774.2	116.4	406,078.46	573,987.84	32° 6' 58.322 N	104° 5' 39.686 W
12,100.0	89.95	0.50	9,425.2	2,874.2	117.2	406,178.45	573,988.71	32° 6' 59.311 N	104° 5' 39.673 W
12,200.0	89.95	0.50	9,425.3	2,974.2	118.1	406,278.45	573,989.58	32° 7' 0.301 N	104° 5' 39.661 W
12,300.0	89.95	0.50	9,425.4	3,074.2	119.0	406,378.44	573,990.44	32° 7' 1.291 N	104° 5' 39.648 W
12,400.0	89.95	0.50	9,425.5	3,174.2	119.8	406,478.44	573,991.31	32° 7' 2.280 N	104° 5' 39.635 W
12,500.0	89.95	0.50	9,425.6	3,274.2	120.7	406,578.44	573,992.18	32° 7' 3.270 N	104° 5' 39.623 W
12,600.0	89.95	0.50	9,425.7	3,374.2	121.6	406,678.43	573,993.04	32° 7' 4.259 N	104° 5' 39.610 W
12,700.0	89.95	0.50	9,425.8	3,474.2	122.4	406,778.43	573,993.91	32° 7' 5.249 N	104° 5' 39.597 W
12,800.0	89.95	0.50	9,425.9	3,574.2	123.3	406,878.42	573,994.78	32° 7' 6.239 N	104° 5' 39.585 W
12,900.0	89.95	0.50	9,426.0	3,674.2	124.2	406,978.42	573,995.65	32° 7' 7.228 N	104° 5' 39.572 W
13,000.0	89.95	0.50	9,426.0	3,774.2	125.0	407,078.42	573,996.51	32° 7' 8.218 N	104° 5' 39.559 W
13,100.0	89.95	0.50	9,426.1	3,874.2	125.9	407,178.41	573,997.38	32° 7' 9.207 N	104° 5' 39.547 W
13,200.0	89.95	0.50	9,426.2	3,974.2	126.8	407,278.41	573,998.25	32° 7' 10.197 N	104° 5' 39.534 W
13,300.0	89.95	0.50	9,426.3	4,074.2	127.6	407,378.41	573,999.11	32° 7' 11.187 N	104° 5' 39.521 W
13,400.0	89.95	0.50	9,426.4	4,174.2	128.5	407,478.40	573,999.98	32° 7' 12.176 N	104° 5' 39.509 W
13,500.0	89.95	0.50	9,426.5	4,274.2	129.4	407,578.40	574,000.85	32° 7' 13.166 N	104° 5' 39.496 W
13,600.0	89.95	0.50	9,426.6	4,374.2	130.2	407,678.39	574,001.72	32° 7' 14.155 N	104° 5' 39.483 W
13,700.0	89.95	0.50	9,426.7	4,474.2	131.1	407,778.39	574,002.58	32° 7' 15.145 N	104° 5' 39.471 W
13,800.0	89.95	0.50	9,426.8	4,574.2	132.0	407,878.39	574,003.45	32° 7' 16.134 N	104° 5' 39.458 W
13,900.0	89.95	0.50	9,426.9	4,674.2	132.8	407,978.38	574,004.32	32° 7' 17.124 N	104° 5' 39.445 W
14,000.0	89.95	0.50	9,427.0	4,774.2	133.7	408,078.38	574,005.18	32° 7' 18.114 N	104° 5' 39.433 W
14,100.0	89.95	0.50	9,427.1	4,874.2	134.6	408,178.38	574,006.05	32° 7' 19.103 N	104° 5' 39.420 W
14,200.0	89.95	0.50	9,427.2	4,974.2	135.4	408,278.37	574,006.92	32° 7' 20.093 N	104° 5' 39.407 W
14,300.0	89.95	0.50	9,427.2	5,074.1	136.3	408,378.37	574,007.79	32° 7' 21.082 N	104° 5' 39.395 W
14,400.0	89.95	0.50	9,427.3	5,174.1	137.2	408,478.36	574,008.65	32° 7' 22.072 N	104° 5' 39.382 W
14,500.0	89.95	0.50	9,427.4	5,274.1	138.0	408,578.36	574,009.52	32° 7' 23.062 N	104° 5' 39.369 W
14,600.0	89.95	0.50	9,427.5	5,374.1	138.9	408,678.36	574,010.39	32° 7' 24.051 N	104° 5' 39.357 W
14,700.0	89.95	0.50	9,427.6	5,474.1	139.8	408,778.35	574,011.26	32° 7' 25.041 N	104° 5' 39.344 W
14,800.0	89.95	0.50	9,427.7	5,574.1	140.6	408,878.35	574,012.12	32° 7' 26.030 N	104° 5' 39.331 W
14,900.0	89.95	0.50	9,427.8	5,674.1	141.5	408,978.34	574,012.99	32° 7' 27.020 N	104° 5' 39.319 W
15,000.0	89.95	0.50	9,427.9	5,774.1	142.4	409,078.34	574,013.86	32° 7' 28.010 N	104° 5' 39.306 W
15,100.0	89.95	0.50	9,428.0	5,874.1	143.3	409,178.34	574,014.72	32° 7' 28.999 N	104° 5' 39.293 W
15,200.0	89.95	0.50	9,428.1	5,974.1	144.1	409,278.33	574,015.59	32° 7' 29.989 N	104° 5' 39.281 W
15,300.0	89.95	0.50	9,428.2	6,074.1	145.0	409,378.33	574,016.46	32° 7' 30.978 N	104° 5' 39.268 W
15,400.0	89.95	0.50	9,428.3	6,174.1	145.9	409,478.33	574,017.33	32° 7' 31.968 N	104° 5' 39.255 W
15,500.0	89.95	0.50	9,428.4	6,274.1	146.7	409,578.32	574,018.19	32° 7' 32.957 N	104° 5' 39.243 W
15,600.0	89.95	0.50	9,428.4	6,374.1	147.6	409,678.32	574,019.06	32° 7' 33.947 N	104° 5' 39.230 W
15,700.0	89.95	0.50	9,428.5	6,474.1	148.5	409,778.31	574,019.93	32° 7' 34.937 N	104° 5' 39.217 W
15,800.0	89.95	0.50	9,428.6	6,574.1	149.3	409,878.31	574,020.79	32° 7' 35.926 N	104° 5' 39.205 W
15,900.0	89.95	0.50	9,428.7	6,674.1	150.2	409,978.31	574,021.66	32° 7' 36.916 N	104° 5' 39.192 W
16,000.0	89.95	0.50	9,428.8	6,774.1	151.1	410,078.30	574,022.53	32° 7' 37.905 N	104° 5' 39.179 W
16,100.0	89.95	0.50	9,428.9	6,874.1	151.9	410,178.30	574,023.40	32° 7' 38.895 N	104° 5' 39.167 W
16,200.0	89.95	0.50	9,429.0	6,974.1	152.8	410,278.30	574,024.26	32° 7' 39.885 N	104° 5' 39.154 W
16,300.0	89.95	0.50	9,429.1	7,074.1	153.7	410,378.29	574,025.13	32° 7' 40.874 N	104° 5' 39.141 W
16,400.0	89.95	0.50	9,429.2	7,174.1	154.5	410,478.29	574,026.00	32° 7' 41.864 N	104° 5' 39.129 W
16,500.0	89.95	0.50	9,429.3	7,274.1	155.4	410,578.28	574,026.86	32° 7' 42.853 N	104° 5' 39.116 W
16,600.0	89.95	0.50	9,429.4	7,374.1	156.3	410,678.28	574,027.73	32° 7' 43.843 N	104° 5' 39.103 W
16,700.0	89.95	0.50	9,429.5	7,474.1	157.1	410,778.28	574,028.60	32° 7' 44.833 N	104° 5' 39.091 W
16,800.0	89.95	0.50	9,429.6	7,574.1	158.0	410,878.27	574,029.47	32° 7' 45.822 N	104° 5' 39.078 W
16,900.0	89.95	0.50	9,429.6	7,674.0	158.9	410,978.27	574,030.33	32° 7' 46.812 N	104° 5' 39.065 W
17,000.0	89.95	0.50	9,429.7	7,774.0	159.7	411,078.27	574,031.20	32° 7' 47.801 N	104° 5' 39.053 W
17,100.0	89.95	0.50	9,429.8	7,874.0	160.6	411,178.26	574,032.07	32° 7' 48.791 N	104° 5' 39.040 W
17,200.0	89.95	0.50	9,429.9	7,974.0	161.5	411,278.26	574,032.93	32° 7' 49.780 N	104° 5' 39.027 W
17,300.0	89.95	0.50	9,430.0	8,074.0	162.3	411,378.25	574,033.80	32° 7' 50.770 N	104° 5' 39.015 W



COG Operating LLC

Survey Report - Geographic

Company:	COG OPERATING LLC	Local Co-ordinate Reference:	Well MYOX 21 ST COM #36H
Project:	EDDY COUNTY, NM	TVD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Site:	ATLAS	MD Reference:	RKB=2977.2+25 @ 3002.2usft (LATSHAW 44)
Well:	MYOX 21 ST COM #36H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,400.0	89.95	0.50	9,430.1	8,174.0	163.2	411,478.25	574,034.67	32° 7' 51.760 N	104° 5' 39.002 W
17,500.0	89.95	0.50	9,430.2	8,274.0	164.1	411,578.25	574,035.54	32° 7' 52.749 N	104° 5' 38.989 W
17,600.0	89.95	0.50	9,430.3	8,374.0	164.9	411,678.24	574,036.40	32° 7' 53.739 N	104° 5' 38.977 W
17,700.0	89.95	0.50	9,430.4	8,474.0	165.8	411,778.24	574,037.27	32° 7' 54.728 N	104° 5' 38.964 W
17,800.0	89.95	0.50	9,430.5	8,574.0	166.7	411,878.23	574,038.14	32° 7' 55.718 N	104° 5' 38.951 W
17,900.0	89.95	0.50	9,430.6	8,674.0	167.5	411,978.23	574,039.01	32° 7' 56.708 N	104° 5' 38.939 W
18,000.0	89.95	0.50	9,430.7	8,774.0	168.4	412,078.23	574,039.87	32° 7' 57.697 N	104° 5' 38.926 W
18,100.0	89.95	0.50	9,430.8	8,874.0	169.3	412,178.22	574,040.74	32° 7' 58.687 N	104° 5' 38.913 W
18,200.0	89.95	0.50	9,430.8	8,974.0	170.1	412,278.22	574,041.61	32° 7' 59.676 N	104° 5' 38.901 W
18,300.0	89.95	0.50	9,430.9	9,074.0	171.0	412,378.22	574,042.47	32° 8' 0.666 N	104° 5' 38.888 W
18,400.0	89.95	0.50	9,431.0	9,174.0	171.9	412,478.21	574,043.34	32° 8' 1.656 N	104° 5' 38.875 W
18,500.0	89.95	0.50	9,431.1	9,274.0	172.7	412,578.21	574,044.21	32° 8' 2.645 N	104° 5' 38.863 W
18,600.0	89.95	0.50	9,431.2	9,374.0	173.6	412,678.20	574,045.08	32° 8' 3.635 N	104° 5' 38.850 W
18,700.0	89.95	0.50	9,431.3	9,474.0	174.5	412,778.20	574,045.94	32° 8' 4.624 N	104° 5' 38.837 W
18,800.0	89.95	0.50	9,431.4	9,574.0	175.3	412,878.20	574,046.81	32° 8' 5.614 N	104° 5' 38.825 W
18,900.0	89.95	0.50	9,431.5	9,674.0	176.2	412,978.19	574,047.68	32° 8' 6.603 N	104° 5' 38.812 W
19,000.0	89.95	0.50	9,431.6	9,774.0	177.1	413,078.19	574,048.54	32° 8' 7.593 N	104° 5' 38.799 W
19,100.0	89.95	0.50	9,431.7	9,874.0	177.9	413,178.19	574,049.41	32° 8' 8.583 N	104° 5' 38.787 W
19,200.0	89.95	0.50	9,431.8	9,974.0	178.8	413,278.18	574,050.28	32° 8' 9.572 N	104° 5' 38.774 W
19,300.0	89.95	0.50	9,431.9	10,074.0	179.7	413,378.18	574,051.15	32° 8' 10.562 N	104° 5' 38.761 W
19,400.0	89.95	0.50	9,431.9	10,174.0	180.5	413,478.17	574,052.01	32° 8' 11.551 N	104° 5' 38.749 W
19,454.1	89.95	0.50	9,432.0	10,228.1	181.0	413,532.31	574,052.48	32° 8' 12.087 N	104° 5' 38.742 W

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-Myox 21 St	0.00	0.00	9,432.0	10,228.1	181.0	413,532.31	574,052.48	32° 8' 12.087 N	104° 5' 38.742 W
- plan hits target center									
- Point									

Checked By: _____ Approved By: _____ Date: _____



WELL DETAILS: MYOX 21 ST COM #36H 2977.2

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	403304.22	573871.47	32° 6' 30.869 N	104° 5' 41.111 W	

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	8945.5	0.00	0.00	8945.5	0.0	0.0	0.00	0.00	0.0
3	9695.1	89.95	9.50	9423.0	470.5	78.7	12.00	9.50	471.9
4	9920.2	89.95	0.50	9423.2	694.5	98.3	4.00	-90.02	696.2
5	19454.1	89.95	0.50	9432.0	10228.1	181.0	0.00	0.00	10229.7

Project: EDDY COUNTY, NM
Site: ATLAS
Well: MYOX 21 ST COM #36H
Wellbore: QWB
Design: PWP1

