District I
1625 N. French Dr., Hobbs, NM 88240
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 282386

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address		2. OGRID Number
COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701		229137
		3. API Number 30-015-47094
4. Property Code 328236	5. Property Name MYOX 30 19 STATE COM	6. Well No. 705H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	18	25S	28E		380	S	1326	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	30	25S	28E	M	200	S	1326	W	Eddy

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		State	3045
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	19603	Wolfcamp		9/19/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	10.75	45.5	550	450	0
Int1	9.875	7.625	29.7	8500	1200	0
Prod	6.75	5.5	20	19603	1300	8000

Casing/Cement Program: Additional Comments

Drill 14-3/4" hole to ~550' w/ fresh water. Run 10-3/4" 45.5# J-55 BTC casing to TD and cement to surface in one stage. Drill 9-7/8" hole to ~8,500' with cut brine emulsion. Run 7-5/8 29.7# L-80 BTC to TD and cement to surface in one stage. Drill 6-3/4" vertical hole, curve & lateral to 19603' with OBM. Run 5-1/2" 20# P110 CDC HTQ from surfaced to 8,400' and TLW casing from 8,400' to TD and cement to 8,000' in one stage.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Diane Kuykendall	Approved By:	Raymond Podany
Title:	Production Accounting Director	Title:	Geologist
Email Address:	dkuykendall@concho.com	Approved Date:	5/12/2020 Expiration Date: 5/12/2022
Date:	5/12/2020 Phone: 432-685-4372	Conditions of Approval Attached	

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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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-	98220	Purple Sage; Wolfcamp

4 Property Code	5 Property Name	6 Well Number
	MYOX 30 19 STATE COM	705H

7 OGRID No.	8 Operator Name	9 Elevation
229137	COG OPERATING LLC	3045'

[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
M	18	25-S	28-E		380'	SOUTH	1326'	WEST	EDDY

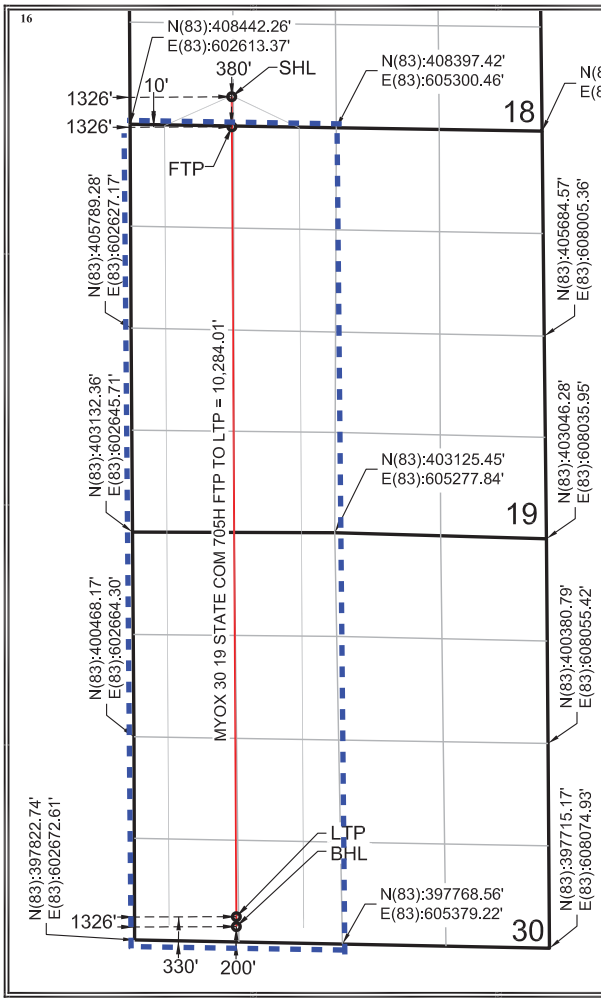
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	30	25-S	28-E		200'	SOUTH	1326'	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
642.72			

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]



SURFACE HOLE LOCATION (SHL)
NEW MEXICO EAST - NAD 83
X=603937.89 LAT.= 32.12370904° N
Y=408800.11 LONG.= 104.13111702° W
380' FSL, 1326' FWL - SECTION 18

FIRST TAKE POINT (FTP)
NEW MEXICO EAST - NAD 83
X=603939.56 LAT.= 32.12263699° N
Y=408410.13 LONG.= 104.13111400° W
10' FNL, 1326' FWL - SECTION 19

LAST TAKE POINT (LTP)
NEW MEXICO EAST - NAD 83
X=603997.66 LAT.= 32.09436702° N
Y=398126.28 LONG.= 104.13098867° W
330' FSL, 1326' FWL - SECTION 30

BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST - NAD 83
X=603998.07 LAT.= 32.09400956° N
Y=397996.25 LONG.= 104.13098814° W
200' FSL, 1326' FWL - SECTION 30

17 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 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 5/11/2020 Date

Robyn M. Russell
Printed Name

Rrussell@concho.com
E-mail Address

[18] 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.

Date of Survey

Signature and Seal of Professional Surveyor

GARRETT J SMELKER
NEW MEXICO
25036
04/15/2020
PROFESSIONAL SURVEYOR

Certificate Number

District I
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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 5/12/2020

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: [229137] COG OPERATING LLC

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
MYOX 30 19 STATE COM #705H	30-015-47094	M-18-25S-28E	0380S 1326W	3415	None	It will require additional line to connect to the facility but the amount is unknown currently. Processing Plant Location: Sec 35, Blk 57, T2S, Culberson County, TX.

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to ETC Texas Pipeline, Ltd. and will be connected to ETC Texas Pipeline, Ltd. Low Pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to Low Pressure gathering system. COG OPERATING LLC provides (periodically) to ETC Texas Pipeline, Ltd. a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, COG OPERATING LLC and ETC Texas Pipeline, Ltd. have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ETC Texas Pipeline, Ltd. Processing Plant located in Sec. 18, Twn. 25S, Rng. 28E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ETC Texas Pipeline, Ltd. system at that time. Based on current information, it is COG OPERATING LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 282386

PERMIT COMMENTS

Operator Name and Address:	API Number:
COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	30-015-47094
	Well: MYOX 30 19 STATE COM #705H

Created By	Comment	Comment Date
rodom	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	5/12/2020

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Oil Conservation Division
1220 S. St Francis Dr.
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Form APD Conditions

Permit 282386

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	30-015-47094
	Well: MYOX 30 19 STATE COM #705H

OCD Reviewer	Condition
rpodany	Will require a directional survey with the C-104
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing
rpodany	NSL required

NDB WEST

EDDY COUNTY, NM
MYOX 30 19 ST COM
MYOX 30 19 ST COM #705H

OWB

Plan: PWP1

Standard Survey Report

29 April, 2020

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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		

Well MYOX 30 19 ST COM #705H

Well Position	**+N/-S**	0.0 usft	**Northing:**	408,742.41 usft	**Latitude:**	32° 7' 24.913 N
	+E/-W	0.0 usft	**Easting:**	562,754.08 usft	**Longitude:**	104° 7' 50.251 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,045.0 usft

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/29/2020	6.90	59.85	47,528.14025822

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	179.68

Survey Tool Program **Date** 4/29/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	8,712.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
8,712.0	19,603.4	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
5,600.0	2.00	180.32	5,600.0	-1.7	0.0	1.7	2.00	2.00	0.00

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
5,686.9	3.74	180.32	5,686.7	-6.1	0.0	6.1	2.00	2.00	0.00
Start 3025.1 hold at 5686.9 MD									
5,700.0	3.74	180.32	5,699.8	-6.9	0.0	6.9	0.00	0.00	0.00
5,800.0	3.74	180.32	5,799.6	-13.5	-0.1	13.5	0.00	0.00	0.00
5,900.0	3.74	180.32	5,899.4	-20.0	-0.1	20.0	0.00	0.00	0.00
6,000.0	3.74	180.32	5,999.2	-26.5	-0.1	26.5	0.00	0.00	0.00
6,100.0	3.74	180.32	6,099.0	-33.0	-0.2	33.0	0.00	0.00	0.00
6,200.0	3.74	180.32	6,198.8	-39.5	-0.2	39.5	0.00	0.00	0.00
6,300.0	3.74	180.32	6,298.6	-46.1	-0.3	46.1	0.00	0.00	0.00
6,400.0	3.74	180.32	6,398.4	-52.6	-0.3	52.6	0.00	0.00	0.00
6,500.0	3.74	180.32	6,498.1	-59.1	-0.3	59.1	0.00	0.00	0.00
6,600.0	3.74	180.32	6,597.9	-65.6	-0.4	65.6	0.00	0.00	0.00
6,700.0	3.74	180.32	6,697.7	-72.1	-0.4	72.1	0.00	0.00	0.00
6,800.0	3.74	180.32	6,797.5	-78.6	-0.4	78.6	0.00	0.00	0.00
6,900.0	3.74	180.32	6,897.3	-85.2	-0.5	85.2	0.00	0.00	0.00
7,000.0	3.74	180.32	6,997.1	-91.7	-0.5	91.7	0.00	0.00	0.00
7,100.0	3.74	180.32	7,096.9	-98.2	-0.6	98.2	0.00	0.00	0.00
7,200.0	3.74	180.32	7,196.6	-104.7	-0.6	104.7	0.00	0.00	0.00
7,300.0	3.74	180.32	7,296.4	-111.2	-0.6	111.2	0.00	0.00	0.00
7,400.0	3.74	180.32	7,396.2	-117.8	-0.7	117.7	0.00	0.00	0.00
7,500.0	3.74	180.32	7,496.0	-124.3	-0.7	124.3	0.00	0.00	0.00
7,600.0	3.74	180.32	7,595.8	-130.8	-0.7	130.8	0.00	0.00	0.00
7,700.0	3.74	180.32	7,695.6	-137.3	-0.8	137.3	0.00	0.00	0.00
7,800.0	3.74	180.32	7,795.4	-143.8	-0.8	143.8	0.00	0.00	0.00
7,900.0	3.74	180.32	7,895.2	-150.3	-0.8	150.3	0.00	0.00	0.00
8,000.0	3.74	180.32	7,994.9	-156.9	-0.9	156.9	0.00	0.00	0.00
8,100.0	3.74	180.32	8,094.7	-163.4	-0.9	163.4	0.00	0.00	0.00
8,200.0	3.74	180.32	8,194.5	-169.9	-1.0	169.9	0.00	0.00	0.00
8,300.0	3.74	180.32	8,294.3	-176.4	-1.0	176.4	0.00	0.00	0.00
8,400.0	3.74	180.32	8,394.1	-182.9	-1.0	182.9	0.00	0.00	0.00
8,500.0	3.74	180.32	8,493.9	-189.5	-1.1	189.4	0.00	0.00	0.00
8,600.0	3.74	180.32	8,593.7	-196.0	-1.1	196.0	0.00	0.00	0.00
8,700.0	3.74	180.32	8,693.5	-202.5	-1.1	202.5	0.00	0.00	0.00
8,712.0	3.74	180.32	8,705.4	-203.3	-1.1	203.3	0.00	0.00	0.00
Start DLS 10.00 TFO -0.65									
8,800.0	12.54	179.87	8,792.5	-215.7	-1.1	215.7	10.00	10.00	-0.52
8,900.0	22.54	179.78	8,887.7	-245.8	-1.0	245.8	10.00	10.00	-0.09
9,000.0	32.54	179.75	8,976.2	-292.0	-0.8	292.0	10.00	10.00	-0.04
9,100.0	42.54	179.73	9,055.4	-352.9	-0.6	352.9	10.00	10.00	-0.02
9,200.0	52.54	179.71	9,122.9	-426.5	-0.2	426.5	10.00	10.00	-0.01
9,300.0	62.54	179.70	9,176.5	-510.8	0.2	510.8	10.00	10.00	-0.01
9,400.0	72.54	179.69	9,214.6	-603.1	0.7	603.1	10.00	10.00	-0.01
9,500.0	82.54	179.68	9,236.2	-700.6	1.2	700.6	10.00	10.00	-0.01
9,574.6	90.00	179.68	9,241.0	-775.0	1.7	775.0	10.00	10.00	-0.01

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
Start 10028.8 hold at 9574.6 MD									
9,600.0	90.00	179.68	9,241.0	-800.4	1.8	800.4	0.00	0.00	0.00
9,700.0	90.00	179.68	9,241.0	-900.4	2.4	900.4	0.00	0.00	0.00
9,800.0	90.00	179.68	9,241.0	-1,000.4	2.9	1,000.4	0.00	0.00	0.00
9,900.0	90.00	179.68	9,241.0	-1,100.4	3.5	1,100.4	0.00	0.00	0.00
10,000.0	90.00	179.68	9,241.0	-1,200.4	4.0	1,200.4	0.00	0.00	0.00
10,100.0	90.00	179.68	9,241.0	-1,300.4	4.6	1,300.4	0.00	0.00	0.00
10,200.0	90.00	179.68	9,241.0	-1,400.4	5.2	1,400.4	0.00	0.00	0.00
10,300.0	90.00	179.68	9,241.0	-1,500.4	5.7	1,500.4	0.00	0.00	0.00
10,400.0	90.00	179.68	9,241.0	-1,600.4	6.3	1,600.4	0.00	0.00	0.00
10,500.0	90.00	179.68	9,241.0	-1,700.4	6.8	1,700.4	0.00	0.00	0.00
10,600.0	90.00	179.68	9,241.0	-1,800.4	7.4	1,800.4	0.00	0.00	0.00
10,700.0	90.00	179.68	9,241.0	-1,900.4	8.0	1,900.4	0.00	0.00	0.00
10,800.0	90.00	179.68	9,241.0	-2,000.4	8.5	2,000.4	0.00	0.00	0.00
10,900.0	90.00	179.68	9,241.0	-2,100.4	9.1	2,100.4	0.00	0.00	0.00
11,000.0	90.00	179.68	9,241.0	-2,200.4	9.6	2,200.4	0.00	0.00	0.00
11,100.0	90.00	179.68	9,241.0	-2,300.4	10.2	2,300.4	0.00	0.00	0.00
11,200.0	90.00	179.68	9,241.0	-2,400.4	10.8	2,400.4	0.00	0.00	0.00
11,300.0	90.00	179.68	9,241.0	-2,500.4	11.3	2,500.4	0.00	0.00	0.00
11,400.0	90.00	179.68	9,241.0	-2,600.4	11.9	2,600.4	0.00	0.00	0.00
11,500.0	90.00	179.68	9,241.0	-2,700.4	12.4	2,700.4	0.00	0.00	0.00
11,600.0	90.00	179.68	9,241.0	-2,800.4	13.0	2,800.4	0.00	0.00	0.00
11,700.0	90.00	179.68	9,241.0	-2,900.4	13.6	2,900.4	0.00	0.00	0.00
11,800.0	90.00	179.68	9,241.0	-3,000.4	14.1	3,000.4	0.00	0.00	0.00
11,900.0	90.00	179.68	9,241.0	-3,100.4	14.7	3,100.4	0.00	0.00	0.00
12,000.0	90.00	179.68	9,241.0	-3,200.4	15.2	3,200.4	0.00	0.00	0.00
12,100.0	90.00	179.68	9,241.0	-3,300.4	15.8	3,300.4	0.00	0.00	0.00
12,200.0	90.00	179.68	9,241.0	-3,400.4	16.4	3,400.4	0.00	0.00	0.00
12,300.0	90.00	179.68	9,241.0	-3,500.4	16.9	3,500.4	0.00	0.00	0.00
12,400.0	90.00	179.68	9,241.0	-3,600.4	17.5	3,600.4	0.00	0.00	0.00
12,500.0	90.00	179.68	9,241.0	-3,700.4	18.0	3,700.4	0.00	0.00	0.00
12,600.0	90.00	179.68	9,241.0	-3,800.4	18.6	3,800.4	0.00	0.00	0.00
12,700.0	90.00	179.68	9,241.0	-3,900.4	19.2	3,900.4	0.00	0.00	0.00
12,800.0	90.00	179.68	9,241.0	-4,000.4	19.7	4,000.4	0.00	0.00	0.00
12,900.0	90.00	179.68	9,241.0	-4,100.4	20.3	4,100.4	0.00	0.00	0.00
13,000.0	90.00	179.68	9,241.0	-4,200.4	20.8	4,200.4	0.00	0.00	0.00
13,100.0	90.00	179.68	9,241.0	-4,300.4	21.4	4,300.4	0.00	0.00	0.00
13,200.0	90.00	179.68	9,241.0	-4,400.4	22.0	4,400.4	0.00	0.00	0.00
13,300.0	90.00	179.68	9,241.0	-4,500.4	22.5	4,500.4	0.00	0.00	0.00
13,400.0	90.00	179.68	9,241.0	-4,600.4	23.1	4,600.4	0.00	0.00	0.00
13,500.0	90.00	179.68	9,241.0	-4,700.4	23.6	4,700.4	0.00	0.00	0.00
13,600.0	90.00	179.68	9,241.0	-4,800.4	24.2	4,800.4	0.00	0.00	0.00
13,700.0	90.00	179.68	9,241.0	-4,900.4	24.8	4,900.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
13,800.0	90.00	179.68	9,241.0	-5,000.4	25.3	5,000.4	0.00	0.00	0.00
13,900.0	90.00	179.68	9,241.0	-5,100.4	25.9	5,100.4	0.00	0.00	0.00
14,000.0	90.00	179.68	9,241.0	-5,200.3	26.4	5,200.4	0.00	0.00	0.00
14,100.0	90.00	179.68	9,241.0	-5,300.3	27.0	5,300.4	0.00	0.00	0.00
14,200.0	90.00	179.68	9,241.0	-5,400.3	27.6	5,400.4	0.00	0.00	0.00
14,300.0	90.00	179.68	9,241.0	-5,500.3	28.1	5,500.4	0.00	0.00	0.00
14,400.0	90.00	179.68	9,241.0	-5,600.3	28.7	5,600.4	0.00	0.00	0.00
14,500.0	90.00	179.68	9,241.0	-5,700.3	29.2	5,700.4	0.00	0.00	0.00
14,600.0	90.00	179.68	9,241.0	-5,800.3	29.8	5,800.4	0.00	0.00	0.00
14,700.0	90.00	179.68	9,241.0	-5,900.3	30.4	5,900.4	0.00	0.00	0.00
14,800.0	90.00	179.68	9,241.0	-6,000.3	30.9	6,000.4	0.00	0.00	0.00
14,900.0	90.00	179.68	9,241.0	-6,100.3	31.5	6,100.4	0.00	0.00	0.00
15,000.0	90.00	179.68	9,241.0	-6,200.3	32.0	6,200.4	0.00	0.00	0.00
15,100.0	90.00	179.68	9,241.0	-6,300.3	32.6	6,300.4	0.00	0.00	0.00
15,200.0	90.00	179.68	9,241.0	-6,400.3	33.2	6,400.4	0.00	0.00	0.00
15,300.0	90.00	179.68	9,241.0	-6,500.3	33.7	6,500.4	0.00	0.00	0.00
15,400.0	90.00	179.68	9,241.0	-6,600.3	34.3	6,600.4	0.00	0.00	0.00
15,500.0	90.00	179.68	9,241.0	-6,700.3	34.8	6,700.4	0.00	0.00	0.00
15,600.0	90.00	179.68	9,241.0	-6,800.3	35.4	6,800.4	0.00	0.00	0.00
15,700.0	90.00	179.68	9,241.0	-6,900.3	36.0	6,900.4	0.00	0.00	0.00
15,800.0	90.00	179.68	9,241.0	-7,000.3	36.5	7,000.4	0.00	0.00	0.00
15,900.0	90.00	179.68	9,241.0	-7,100.3	37.1	7,100.4	0.00	0.00	0.00
16,000.0	90.00	179.68	9,241.0	-7,200.3	37.6	7,200.4	0.00	0.00	0.00
16,100.0	90.00	179.68	9,241.0	-7,300.3	38.2	7,300.4	0.00	0.00	0.00
16,200.0	90.00	179.68	9,241.0	-7,400.3	38.8	7,400.4	0.00	0.00	0.00
16,300.0	90.00	179.68	9,241.0	-7,500.3	39.3	7,500.4	0.00	0.00	0.00
16,400.0	90.00	179.68	9,241.0	-7,600.3	39.9	7,600.4	0.00	0.00	0.00
16,500.0	90.00	179.68	9,241.0	-7,700.3	40.4	7,700.4	0.00	0.00	0.00
16,600.0	90.00	179.68	9,241.0	-7,800.3	41.0	7,800.4	0.00	0.00	0.00
16,700.0	90.00	179.68	9,241.0	-7,900.3	41.6	7,900.4	0.00	0.00	0.00
16,800.0	90.00	179.68	9,241.0	-8,000.3	42.1	8,000.4	0.00	0.00	0.00
16,900.0	90.00	179.68	9,241.0	-8,100.3	42.7	8,100.4	0.00	0.00	0.00
17,000.0	90.00	179.68	9,241.0	-8,200.3	43.2	8,200.4	0.00	0.00	0.00
17,100.0	90.00	179.68	9,241.0	-8,300.3	43.8	8,300.4	0.00	0.00	0.00
17,200.0	90.00	179.68	9,241.0	-8,400.3	44.3	8,400.4	0.00	0.00	0.00
17,300.0	90.00	179.68	9,241.0	-8,500.3	44.9	8,500.4	0.00	0.00	0.00
17,400.0	90.00	179.68	9,241.0	-8,600.3	45.5	8,600.4	0.00	0.00	0.00
17,500.0	90.00	179.68	9,241.0	-8,700.3	46.0	8,700.4	0.00	0.00	0.00
17,600.0	90.00	179.68	9,241.0	-8,800.3	46.6	8,800.4	0.00	0.00	0.00
17,700.0	90.00	179.68	9,241.0	-8,900.3	47.1	8,900.4	0.00	0.00	0.00
17,800.0	90.00	179.68	9,241.0	-9,000.3	47.7	9,000.4	0.00	0.00	0.00
17,900.0	90.00	179.68	9,241.0	-9,100.3	48.3	9,100.4	0.00	0.00	0.00
18,000.0	90.00	179.68	9,241.0	-9,200.3	48.8	9,200.4	0.00	0.00	0.00
18,100.0	90.00	179.68	9,241.0	-9,300.3	49.4	9,300.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NDB WEST	**Local Co-ordinate Reference:**	Well MYOX 30 19 ST COM #705H
Project:	EDDY COUNTY, NM	**TVD Reference:**	*KB=30' @ 3075.0usft (TBD)
Site:	MYOX 30 19 ST COM	**MD Reference:**	*KB=30' @ 3075.0usft (TBD)
Well:	MYOX 30 19 ST COM #705H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
18,200.0	90.00	179.68	9,241.0	-9,400.3	49.9	9,400.4	0.00	0.00	0.00
18,300.0	90.00	179.68	9,241.0	-9,500.3	50.5	9,500.4	0.00	0.00	0.00
18,400.0	90.00	179.68	9,241.0	-9,600.3	51.1	9,600.4	0.00	0.00	0.00
18,500.0	90.00	179.68	9,241.0	-9,700.3	51.6	9,700.4	0.00	0.00	0.00
18,600.0	90.00	179.68	9,241.0	-9,800.3	52.2	9,800.4	0.00	0.00	0.00
18,700.0	90.00	179.68	9,241.0	-9,900.3	52.7	9,900.4	0.00	0.00	0.00
18,800.0	90.00	179.68	9,241.0	-10,000.3	53.3	10,000.4	0.00	0.00	0.00
18,900.0	90.00	179.68	9,241.0	-10,100.3	53.9	10,100.4	0.00	0.00	0.00
19,000.0	90.00	179.68	9,241.0	-10,200.3	54.4	10,200.4	0.00	0.00	0.00
19,100.0	90.00	179.68	9,241.0	-10,300.3	55.0	10,300.4	0.00	0.00	0.00
19,200.0	90.00	179.68	9,241.0	-10,400.3	55.5	10,400.4	0.00	0.00	0.00
19,300.0	90.00	179.68	9,241.0	-10,500.3	56.1	10,500.4	0.00	0.00	0.00
19,400.0	90.00	179.68	9,241.0	-10,600.3	56.7	10,600.4	0.00	0.00	0.00
19,500.0	90.00	179.68	9,241.0	-10,700.3	57.2	10,700.4	0.00	0.00	0.00
19,600.0	90.00	179.68	9,241.0	-10,800.3	57.8	10,800.4	0.00	0.00	0.00
19,603.4	90.00	179.68	9,241.0	-10,803.7	57.8	10,803.8	0.00	0.00	0.00
TD at 19603.4									

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
FTP (MYOX 30 19 ST	0.00	0.00	9,241.0	-390.0	1.7	408,352.43	562,755.74	32° 7' 21.054 N	104° 7' 50.240 W
- plan misses target center by 117.4usft at 9232.6usft MD (9141.9 TVD, -453.0 N, -0.1 E)									
- Circle (radius 50.0)									
PBHL (MYOX 30 19 S	0.00	359.67	9,241.0	-10,803.7	60.0	397,938.75	562,814.04	32° 5' 37.994 N	104° 7' 49.790 W
- plan misses target center by 2.2usft at 19603.4usft MD (9241.0 TVD, -10803.7 N, 57.8 E)									
- Rectangle (sides W100.0 H10,414.0 D20.0)									
LTP (MYOX 30 19 ST	0.00	0.00	9,241.0	-10,673.6	59.6	398,068.78	562,813.64	32° 5' 39.281 N	104° 7' 49.792 W
- plan misses target center by 2.5usft at 19473.4usft MD (9241.0 TVD, -10673.6 N, 57.1 E)									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
5500	5500	0	0	Start Build 2.00
5687	5687	-6	0	Start 3025.1 hold at 5686.9 MD
8712	8705	-203	-1	Start DLS 10.00 TFO -0.65
9575	9241	-775	2	Start 10028.8 hold at 9574.6 MD
19,603	9241	-10,804	58	TD at 19603.4

Checked By: _____ Approved By: _____ Date: _____

CONCHO

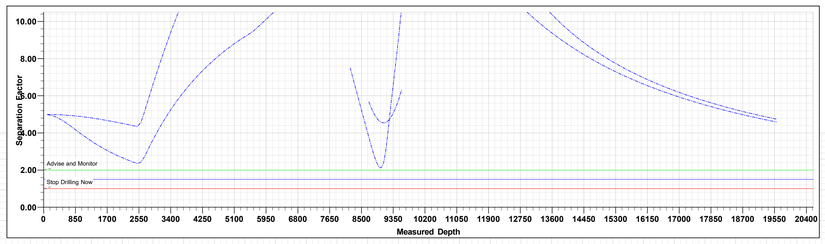
Project: EDDY COUNTY, NM
Site: MYOX 30 19 ST COM
Well: MYOX 30 19 ST COM #705H
Wellbore: OWB
Design: PWP1
GL: 3045.0
*KB=30' @ 3075.0usft (TBD)

WELL DETAILS: MYOX 30 19 ST COM #705H

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	408742.41	562754.08	32° 7' 24.913 N	104° 7' 50.251 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP (MYOX 30 19 ST COM #705H)	9241.0	-390.0	1.7	408352.43	562755.74	32° 7' 21.054 N	104° 7' 50.240 W
LTP (MYOX 30 19 ST COM #705H)	9241.0	-10673.6	59.6	398068.78	562813.64	32° 5' 39.281 N	104° 7' 49.792 W
PBHL (MYOX 30 19 ST COM #705H)	9241.0	-10803.7	60.0	397938.75	562814.04	32° 5' 37.994 N	104° 7' 49.790 W

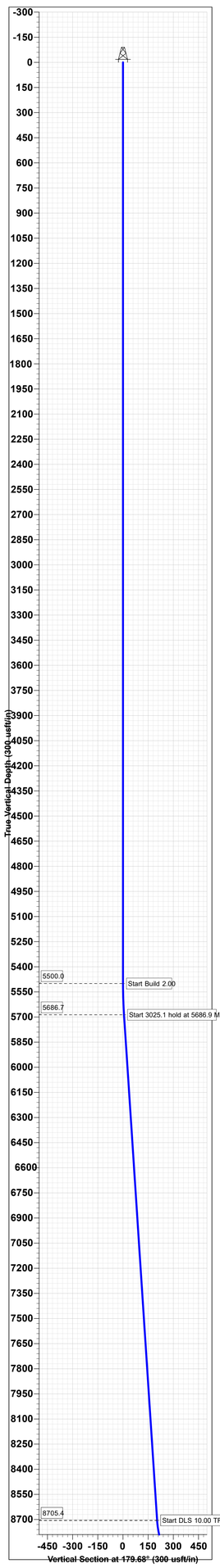


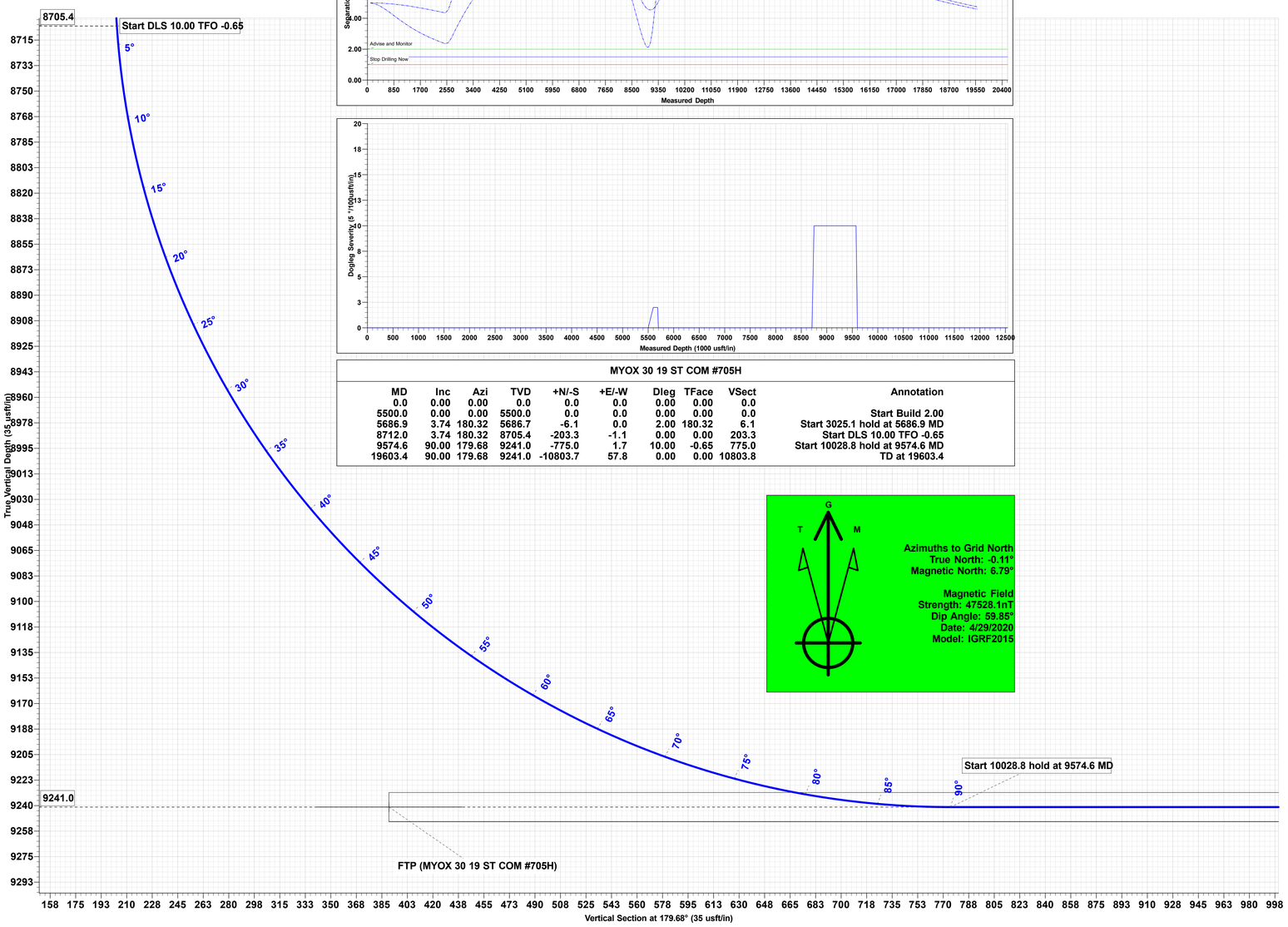
MYOX 30 19 ST COM #705H

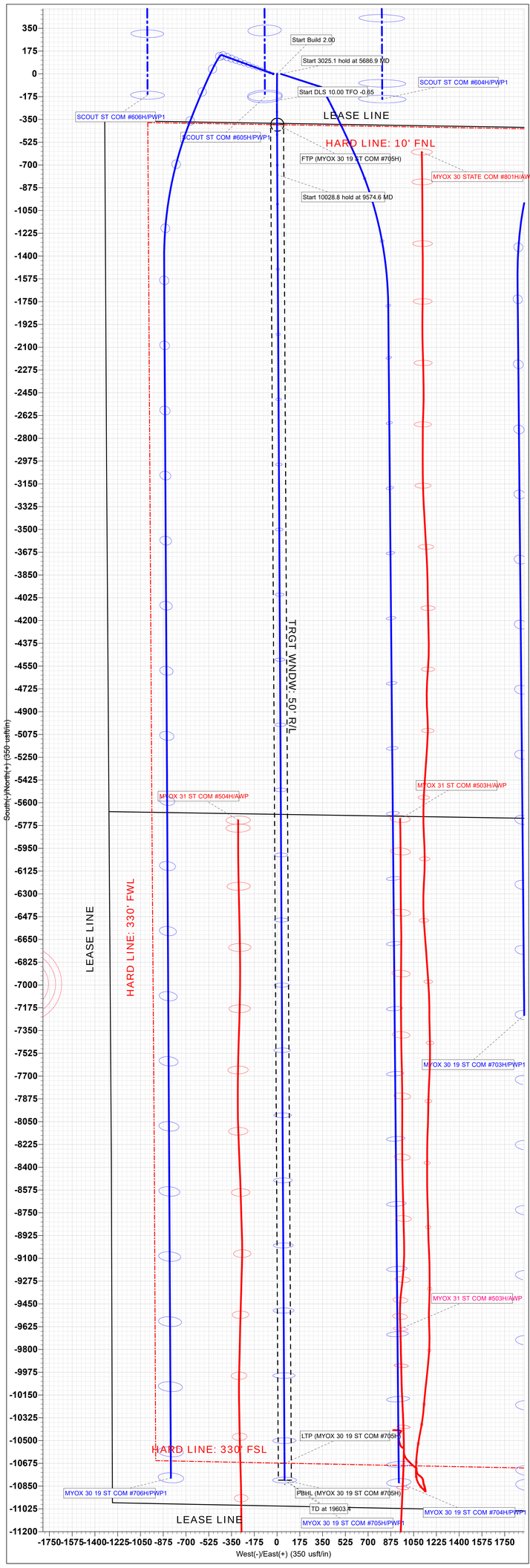
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
5500.0	0.00	0.00	5500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
5686.9	3.74	180.32	5686.7	-6.1	0.0	2.00	180.32	6.1	Start 3025.1 hold at 5686.9 MD
8712.0	3.74	180.32	8705.4	-203.3	-1.1	0.00	0.00	203.3	Start DLS 10.00 TFO -0.65
9574.6	90.00	179.68	9241.0	-775.0	1.7	10.00	-0.65	775.0	Start 10028.8 hold at 9574.6 MD
19603.4	90.00	179.68	9241.0	-10803.7	57.8	0.00	0.00	10803.8	TD at 19603.4

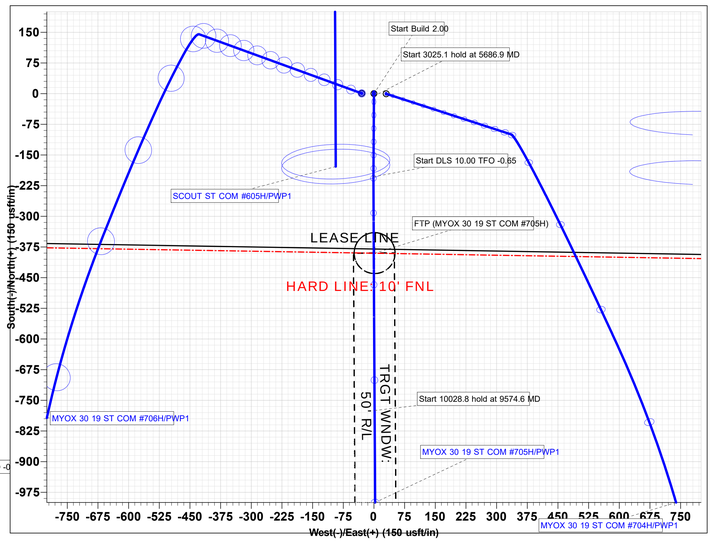
Azimuths to Grid North
True North: -0.11°
Magnetic North: 6.79°

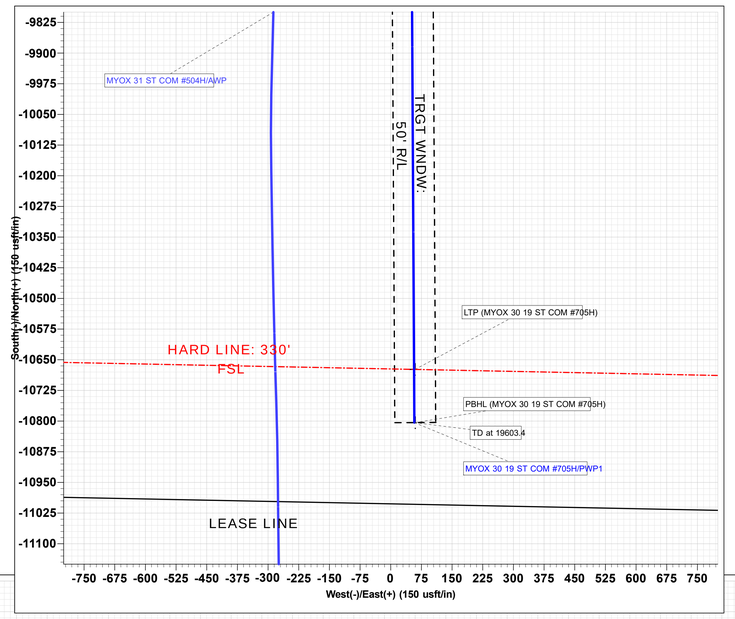
Magnetic Field
Strength: 47528.1nT
Dip Angle: 59.85°
Date: 4/29/2020
Model: IGRF2015

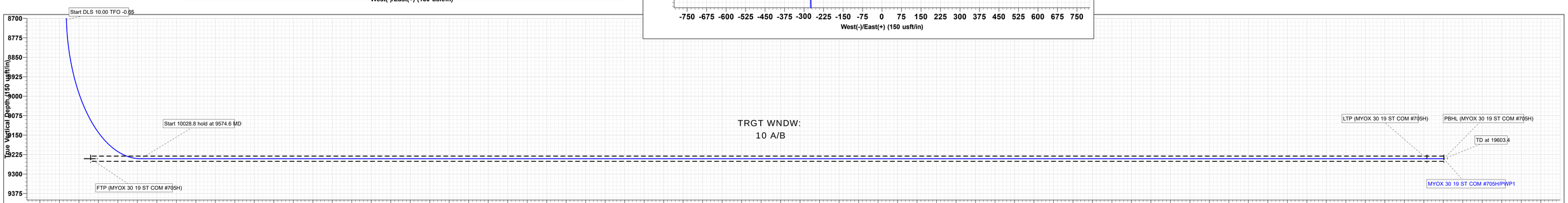












Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
COG Operating LLC	Myox 30 19 State Com	705H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	18	25S	28E		380	FSL	1326	FWL	Eddy

Latitude	Longitude	NAD
32.12370904	-104.13111702	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	19	25S	28E		10	FNL	1326	FWL	Eddy

Latitude	Longitude	NAD
32.12263699	-104.13111400	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	30	25S	28E		330	FSL	1326	FWL	Eddy

Latitude	Longitude	NAD
32.09436702	-104.13098867	83

Is this well the defining well for the Horizontal Spacing Unit? [Y]

Is this well an infill well? [N]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018